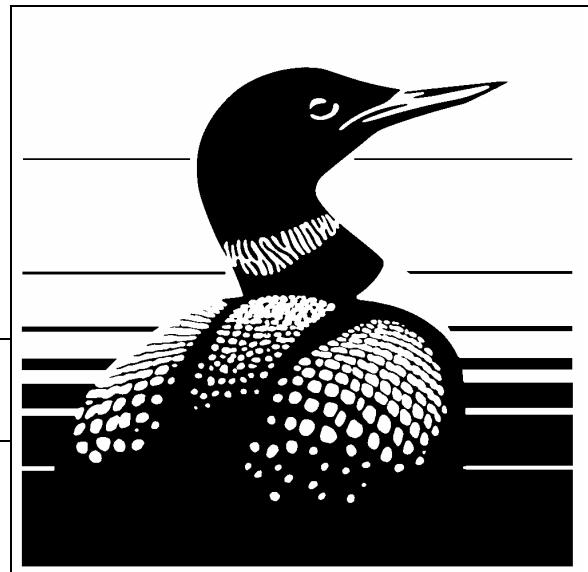

AN ATLAS OF CONTAMINANTS IN EGGS OF FISH-EATING COLONIAL BIRDS OF THE GREAT LAKES (1998-2001)

Volume I. Accounts by Location

Jermyn-Gee, K.¹, C. Pekarik², T. Havelka¹, G. Barrett², D.V. Weseloh¹

Canadian Wildlife Service 2005
Environmental Conservation Branch
Ontario Region

Technical Report Series Number 417



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Canadian Wildlife Service
Environmental Conservation Branch
Ontario Region
Environment Canada

¹ Canadian Wildlife Service (Ontario Region), Environment Canada, 4905
Dufferin St., Downsview, Ontario M3H 5T4

² Canadian Wildlife Service (Ontario Region), Environment Canada, P.O. Box
5050, 867 Lakeshore Rd., Burlington, Ontario L7R 4A6

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Environment Canada
4905 Dufferin Street
Downsview, Ontario, Canada
M3H 5T4

EXECUTIVE SUMMARY

During 1998-2001, Canadian Wildlife Service – Ontario Region (CWS), collected 936 eggs from 26 sites. Five species of fish-eating colonial waterbirds were sampled:

- Herring Gull (*Larus argentatus*)
- Great Black-backed Gull (*Larus marinus*)
- Black-crowned Night-Heron (*Nycticorax nycticorax*)
- Black Tern (*Chlidonias niger*)
- Forster's Tern (*Sterna forsteri*)

The purpose was to measure the levels of the following compounds:

- organochlorine pesticides
- chlorinated benzenes
- polychlorinated biphenyls
- dioxins and furans
- lipid and moisture

The data presented in this report were generated as part of a monitoring program initiated in 1970 to understand the temporal and spatial trends of environmental contaminant levels in Great Lakes wildlife. Since the 1970s, the levels of most chlorinated hydrocarbons have decreased significantly at most colonies on the Great Lakes. The change-point regression analysis, which we have used since 1997, continues to show that most contaminant levels at most sites (72.4%) are declining as fast as or faster now than they did in the past. This is particularly evident for dieldrin, HCB, HE and DDE. The rates of decline have slowed for some compound-site comparisons (21.9%), particularly PCBs and mirex. Since the last Atlas was published (Pekarik *et al.* 1998 a; b) levels and trends of a relatively new contaminant, brominated diphenyl ethers (BDEs), have been documented in Great Lakes Herring Gull eggs (Norstrom *et al.* 2002). At the time of this writing in early 2004, routine analysis for BDEs was just being incorporated into CWS protocols. Hence, the data of Norstrom *et al.* (2002) are not included here. The BDE data for Herring Gull eggs will be included for 2004 onwards in the next Atlas.

The data from 1998-2001 are summarized in two volumes. Volume I contains contaminant data for all five species summarized by location as well as non-coplanar PCB data for all species. Volume II contains contaminant data for all five species summarized by compound. Both volumes contain maps of sample locations and the means and standard deviations or the pooled analysis values for organochlorine pesticides, chlorinated benzenes, non-ortho polychlorinated biphenyls, dioxins and furans, and percent lipid and moisture. Non-coplanar PCB data are presented only in Volume I and are only summarized by location. Additionally, contaminant data for Black and Forster's Terns from 1996 have been added, since they were not included in Pekarik *et al.* (1998a; b).

Since the last Atlas (Pekarik *et al.* 1998a; b), several papers have been published or are in press from the Herring Gull database. These include: DiMaio *et al.* 1999; Weseloh and Pekarik 1999; Hebert *et al.* 1999; Weseloh *et al.* 2002; Hebert and Weseloh 2003; Weseloh *et al.* 2003; Weseloh *et al.* (In Review).

RESUME ADMINISTRATIF

Entre 1998 et 2001, le Service canadien de la faune (SCF) – Région de l’Ontario a collecté 936 œufs dans 26 sites. Cinq espèces d’oiseaux aquatiques piscivores ont été échantillonnées :

- le Goéland argenté (*Larus argentatus*)
- le Goéland marin (*Larus marinus*)
- le Bihoreau gris (*Nycticorax nycticorax*)
- la Guifette noire (*Chlidonias niger*)
- la Sterne de Foster (*Sterna forsteri*)

Le but de l’opération était de mesurer les concentrations des composés suivants :

- les pesticides organochlorés
- les benzènes chlorés
- les polychlorobiphényles
- les dioxines et les furanes
- les teneurs en lipides et en humidité

Les données présentées dans ce rapport ont été obtenues dans le cadre d’un programme de surveillance amorcé en 1970 dans le but de mieux comprendre les tendances temporelles et spatiales des concentrations de contaminants environnementaux chez les espèces sauvages des Grands Lacs. L’analyse de régression au point de changement que nous utilisons depuis 1997 continue de montrer que la concentration de la plupart des contaminants diminue aussi vite que par le passé, sinon plus, dans la majorité des endroits (72,4 %). Cela est particulièrement évident pour la diieldrine, le HCB, le HE et le DDE. Le rythme de la diminution a ralenti pour certaines comparaisons composé-site (21,9 %), notamment pour les PCB et le mirex. Depuis la parution du dernier atlas (Pekarik *et al.* 1998a; b), on relève les concentrations et les tendances d’un contaminant relativement nouveau, les diphenyléthers bromés (BDE), dans les œufs des Goélands argentés des Grands Lacs (Norstrom *et al.* 2002). Au moment de la rédaction du présent rapport, au début de 2004, les analyses de routine pour les BDE viennent tout juste d’être incorporées dans les protocoles du SCF. Par conséquent, les données de Norstrom *et al.* (2002) n’y sont pas incluses. Les données sur les BDE dans les œufs de Goélands argentés figureront dans le prochain atlas de l’année 2004 et dans les suivants.

Les données pour la période 1998-2001 sont présentées sommairement en deux volumes. Le volume I contient les données sur les contaminants pour les cinq espèces, en fonction du lieu, de même que des données sur les PCB non-coplanaires pour toutes les espèces. Le volume II contient les données sur les contaminants pour les cinq espèces, en fonction du composé. Les deux volumes comprennent des cartes des lieux d’échantillonnage, de même que les moyennes et les écarts types ou les valeurs d’analyse groupées pour les pesticides organochlorés, les benzènes chlorés, les polychlorobiphényles non-ortho, les dioxines et les furanes, et la teneur en lipides et en humidité. Les données sur les PCB non-coplanaires ne sont présentées que dans le volume I, et uniquement sous forme de résumé, en fonction du lieu. On a en outre ajouté les données sur les contaminants chez la Guifette noire et la Sterne de Forster depuis 1996, qui ne figuraient pas dans Pekarik *et al.* (1998a; b).

Depuis la parution du dernier atlas (Pekarik *et al.* 1998a; b), plusieurs articles ont paru ou sont sous presse à propos de la base de données sur le Goéland argenté, notamment des articles de DiMaio *et al.* 1999; Weseloh et Pekarik 1999; Hebert *et al.* 1999; Weseloh *et al.* 2002; Hebert et Weseloh 2003; Weseloh *et al.* 2003; Weseloh *et al.* (en cours d’examen).

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Editing of the final draft and associated revisions were done by Ian Parsons and Julie Suzanne Pollock.

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INTRODUCTION

During 1998-2001, Canadian Wildlife Service – Ontario Region (CWS) collected eggs from five species of colonial waterbirds from 26 colonies (sites) throughout the Great Lakes to measure the concentrations of chlorinated hydrocarbons. These data were generated as part of a monitoring program initiated in 1970 to understand the temporal and spatial trends of environmental contaminant levels in the Great Lakes. Since the 1970s, the levels of most chlorinated hydrocarbons have decreased significantly at most colonies on the Great Lakes. The Herring Gull monitoring program, which was started in 1974, contributes a great deal of information to these Atlases. The annual monitoring colonies are shown on page 11.

Black Terns and Forster's Terns nest in the marshes on the Great Lakes as well as some inland lakes. Data are included here from both these types of sites from 1996 and 1999. The 1996 data were not included in the previous Atlas.

The present documents, *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1998-2001) Volume I, Accounts by Location* and *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1998-2001) Volume II, Accounts by Chemical*, are meant to continue six earlier volumes:

- *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988). Volume I. Accounts by Species and Locations* (Bishop et al. 1992a)
- *An atlas of contaminants in the eggs of fish-eating colonial birds of the Great Lakes (1989-1992). Volume I. Accounts by Location* (Pettit et al. 1994a)
- *An atlas of contaminants in the eggs of fish-eating colonial birds of the Great Lakes (1993-1997). Volume I. Accounts by Location* (Pekarik et al. 1998a)
- *An atlas of contaminants in eggs of fish-eating colonial birds of the Great Lakes (1970-1988). Volume II. Accounts by Chemical* (Bishop et al. 1992b)
- *An atlas of contaminants in the eggs of fish-eating colonial birds of the Great Lakes (1989-1992). Volume II. Accounts by Chemical* (Pettit et al. 1994b)
- *An atlas of contaminants in the eggs of fish-eating colonial birds of the Great Lakes (1993-1997). Volume II. Accounts by Chemical* (Pekarik et al. 1998b)

To facilitate access to the data, the text and tables are organized as in the earlier reports. These reports contain the means and standard deviations or pooled analysis values for organochlorine pesticides, polychlorinated biphenyls, polychlorinated dioxins and furans for the five species of colonial waterbirds sampled between 1998-2001.

Data from specific sampling locations or for specific compounds can be retrieved in a stepwise manner. Instructions for data retrieval are detailed below. In both volumes, maps are provided showing the locations of the sampling sites (Section 1, Figures 2-12) and tables summarizing the number of eggs collected at each colony (Section 1, Tables 2-12). In Volume I, the data are summarized by location; in Volume II, the data are summarized by chemical. The PCB congener data are presented by location as well as graphically (Volume I).

DOCUMENT OUTLINES

OUTLINE OF DOCUMENT - VOLUME I

Section 1 - Data Summary by Sample Size

For each area, a map (Figures 2-12) and a corresponding table (Tables 2-12) present sampling sites and compounds analyzed by species and year.

Section 2 - Data Summary by Location Sampled

The index (page 36) lists the pages in Table 13 where all contaminant data can be found concerning each species at each colony. Following the index, Table 13 presents contaminant data for eggs of fish-eating birds summarized by water body, colony, species and years sampled.

Section 3 - Non-Coplanar PCB Congener Patterns in Herring Gull Eggs

The index (page 197) lists the pages in Table 14 where PCB congener data can be found for each site and species. Following the index, Table 14 presents non-coplanar PCB congener data summarized by water body, colony and years sampled. Figures 13-27 (pages 182-196), are graphic representations of the means (1998-2001) of the percentage that each PCB congener contributes to total PCB congeners. These data are given only for Herring Gull eggs from 15 annual monitoring colonies.

OUTLINE OF DOCUMENT - VOLUME II

Section 1 - Data Summary by Sample Size

For each area, a map (Figures 2-12) and a corresponding table (Tables 2-12) present sampling sites and the compounds analyzed by species and year.

Section 2 - Data Summary by Compound

The indices on pages 36 and 108 list the pages in Tables 13a and b, respectively, where data can be found for each compound. Tables 13a and b present contaminant data for eggs of fish-eating birds summarized by compound, water body, colony, species and years sampled.

INSTRUCTIONS FOR USERS OF THIS ATLAS

GENERAL NOTES

1. It is important that the summary of methodologies and statistical notes (page 9) be examined by all readers to facilitate proper interpretation of the data.
2. The locations, chemicals analyzed, and species are listed in the following order in all indices and tables:
 - The water bodies and colony locations are generally listed in east to west order.
 - The contaminants measured are generally listed in alphabetical order. A list of the order of the contaminants and the abbreviations used in the tables begins on page 5.
 - The species sampled are listed:
 - Herring Gull (*Larus argentatus*)
 - Great Black-backed Gull (*Larus marinus*)
 - Black-crowned Night-Heron (*Nycticorax nycticorax*)
 - Black Tern (*Chlidonias niger*)
 - Forster's Tern (*Sterna forsteri*)

While contaminant levels in Herring Gull eggs are monitored on an annual basis at each of the 15 annual monitoring colonies, contaminants in eggs of other colonial waterbirds are monitored on a much less frequent schedule, usually every five to 10 years. During the current Atlas period (1998-2001), eggs from the four species listed above (in addition to Herring Gulls) were sampled and analyzed. Four other species not included here will be sampled and analyzed during the next Atlas period: Common and Caspian terns, Double-crested Cormorant and Ring-billed Gull.

3. The Atlas is designed to be used in a stepwise manner. The quickest methods of finding the data available for a specific location or chemical are described below.

Tables 2-12 are designed to indicate the data that are available. They summarize the locations where eggs were collected and the contaminants analyzed, by species and year. The accompanying maps (Figures 2-12) illustrate the locations of the sampling sites. The colony names are numbered on the maps, corresponding to numbers on the accompanying tables. These tables and figures are included in both volumes (Section 1). In Tables 2-12, colonies that are part of the Herring Gull annual monitoring program are indicated by an asterisk (*).

5. In both volumes, Table 13 summarizes the data either by location (Volume I) or by chemical (Volume II). In Volume I, Table 14 summarizes (by location) the data for non-coplanar PCBs.

EXAMPLES OF HOW TO LOCATE DATA

EXAMPLE 1: LOCATING DATA BY LOCATION (VOLUME I)

If you were interested in types of contaminants and the concentrations found in eggs of fish-eating birds in the Kingston area, you would do the following:

1. Locate the map that covers the area of interest.
For Kingston you would refer to Figure 3 (page 15). Four colonies, from which eggs have been collected, are located near Kingston:
 - Snake Island (colony 3)
 - Little Galloo Island (colony 4)
 - Pigeon Island (colony 5)
 - Bath (colony 6)
2. Refer to the accompanying table and the sampling site(s) based on the colony number(s) determined in step 1.
In this case you would refer to Table 3 (page 16). You would then locate the appropriate colony numbers (in this case 3, 4, 5 and 6) and determine which species were sampled, the years and the contaminants for which data are available.

3. Locate the appropriate page that contains the contaminant data.

Beginning on page 36 (Volume I) there is an index for the sampling sites presented in Table 13. You would locate the colonies of interest (in this case Snake Island, Pigeon Island, Little Galloo Island and Bath) and turn to the appropriate page(s) to locate the contaminant data.

EXAMPLE 2: LOCATING DATA FOR NON-COPLANAR PCBs (VOLUME I)

For example, if you were interested in the levels of non-coplanar PCBs in Herring Gull eggs from the Kingston area, you would do the following:

1. Locate the map and the Herring Gull colonies that cover the area of interest.

For Kingston you would refer to Figure 3 (page 15). One annual monitoring colony from which Herring Gull eggs have been collected is located near Kingston (Snake Island), as well as two other sites in 2001 only:

- Little Galloo Island (colony 4)
- Pigeon Island (colony 5)

2. Locate the appropriate page that contains the non-coplanar PCB data.

On page 197 (Volume I) there is an index for the Herring Gull annual monitoring colonies presented in Table 14. Determine the page(s) where the non-coplanar PCB data for Snake Island are summarized. In this case you would refer to page 207 (Volume I) to find the pooled values for non-coplanar PCB congeners in Herring Gull eggs from Snake Island.

EXAMPLE 3: LOCATING DATA BY CHEMICAL (VOLUME II)

For example, if you were interested in the data available for PCB 1254:1260, you would do the following:

1. In Volume II (Accounts by Chemical) refer to the indices beginning on page 36 for Table 13a and page 108 for Table 13b. For PCB 1254:1260 you would determine that the data begin on page 88 in Table 13a and 135 in Table 13b.
2. Refer to the appropriate page in Section 2, Tables 13a and 13b to find the means and standard deviations or pooled values for PCB 1254:1260 at the various sampling sites and for various species.

COMPOUNDS ANALYZED IN EGGS OF FISH-EATING BIRDS OF THE GREAT LAKES

The following compounds are listed in alphabetical order except for "percent lipid in egg" and "percent moisture in egg", coplanar PCBs, dioxins and furans. The underlined sections of the chemical names are the words that were used to place the chemicals in their alphabetical positions. Chemical congeners are listed in order of increasing chlorination. Values for dioxin and furan congeners whose names are preceded by an asterisk (*) are only given in Volume I. Values for 2,3,7,8-TCDD and 2,3,7,8,-TCDF are given in Volume II, however for values of all other dioxin and furan congeners please refer to Volume I. The order of names in this list is used consistently throughout the tables in this document. Abbreviations correspond to those on Tables 2-12. Chemical Abstract System (CAS) numbers have been included, when they were available. PCB congener numbering follows Ballschmiter and Zell 1980.

CAS #	COMPOUNDS	ABBREVIATION
	Percent lipid in egg.....	% Lip
	Percent moisture in egg	% Mois
5103-71-9	Alpha(<i>cis</i>)- <u>chlordane</u>	a-CHL
5103-74-2	Gamma(<i>trans</i>)- <u>chlordane</u>	g-CHL
7304-13-8	Oxy- <u>chlordane</u>	o-CHL
634-66-2	1,2,3,4-tetrachlorobenzene	1234-CB
95-94-2	1,2,4,5-tetrachlorobenzene	1245-CB
608-93-5	Pentachlorobenzene.....	PeCB
118-74-1	Hexachlorobenzene	HCB
72-54-8	pp'- <u>DDD</u>	DDD
72-55-9	pp'- <u>DDE</u>	DDE
50-29-3	pp'- <u>DDT</u>	DDT
60-57-1	Dieldrin	DIEL
1024-57-3	<u>Heptachlor</u> epoxide	HEP EPX
39-84-6	Alpha- <u>hexachlorocyclohexane</u>	a-HCH
39-85-7	Beta- <u>hexachlorocyclohexane</u>	b-HCH
58-89-8	Gamma- <u>hexachlorocyclohexane</u>	g-HCH
7439-97-6	Total <u>mercury</u>	Hg
3010-80-8	Tris (4-chlorophenyl) <u>methanol</u>	TCPM
2385-85-5	<u>Mirex</u>	MIR
39801-14-4	<u>Photomirex</u>	P-MIR
5103-73-1	<u>Cis-nonachlor</u>	c-NON
39765-80-5	<u>Trans-nonachlor</u>	t-NON
29082-74-4	<u>Octachlorostyrene</u>	OCS
11097-69-1	<u>PCB</u> :1260	PCB 1260
11096-82-5	<u>PCB</u> 1254:1260	PCB 1254:1260
7782-49-2	Total (sum of) <u>PCB</u> congeners (non-coplanar).....	SUM PCB

Coplanar PCB Congeners

38444-90-5	PCB #37 3,4,4'-trichlorobiphenyl	COP PCB
32598-13-3	PCB #77 3,3',4,4' -tetrachlorobiphenyl	COP PCB
70362-50-4	PCB #81 3,4,4',5-tetrachlorobiphenyl.....	COP PCB
57465-28-8	PCB #126 3,3',4,4',5-pentachlorobiphenyl.....	COP PCB
32774-16-6	PCB #169 3,3',4,4',5,5'-hexachlorobiphenyl	COP PCB
39635-31-9	PCB #189 2,3,3',4,4',5,5'-heptachlorobiphenyl	COP PCB

Dioxins

1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin.....	DIOXIN
	* 1,3,7,9-tetrachlorodibenzo-p-dioxin	DIOXIN
	* 1,3,7,8-tetrachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,7,8-tetrachlorodibenzo-p-dioxin	DIOXIN

* Values for dioxin and furan congeners preceded by an asterisk are not given in Volume II- for values for these compounds please refer to Volume I.

	* 1,2,4,7,9/1,2,4,6,8-pentachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,3,6,8-pentachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,4,7,8-pentachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,3,7,9-pentachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,3,8,9-pentachlorodibenzo-p-dioxin	DIOXIN
40321-76-4	* 1,2,3,7,8-pentachlorodibenzo-p-dioxin	DIOXIN
39227-26-8	* 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin.....	DIOXIN
39227-28-6	* 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin.....	DIOXIN
19408-74-3	* 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin.....	DIOXIN
	* 1,2,4,6,7,9/1,2,4,6,8,9-hexachlorodibenzo-p-dioxin.....	DIOXIN
	* 1,2,3,6,7,9/1,2,3,6,8,9-hexachlorodibenzo-p-dioxin.....	DIOXIN
35822-46-9	* 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	DIOXIN
	* 1,2,3,4,6,7,9-heptachlorodibenzo-p-dioxin	DIOXIN
3268-87-9	* Octachlorodibenzo-p-dioxin.....	DIOXIN

Furans

51207-31-9	* 2,4,6,8-tetrachlorodibenzofuran.....	FURAN
	* 2,3,6,8-tetrachlorodibenzofuran.....	FURAN
	* 1,2,7,8-tetrachlorodibenzofuran	FURAN
	* 2,3,6,7-tetrachlorodibenzofuran	FURAN
	2,3,7,8-tetrachlorodibenzofuran.	FURAN
	* 1,2,3,6,8-pentachlorodibenzofuran.....	FURAN
	* 2,3,4,6,8-pentachlorodibenzofuran.....	FURAN
51207-31-4	* 2,3,4,7,8-pentachlorodibenzofuran.....	FURAN
69698-57-3	* 1,2,4,6,8-pentachlorodibenzofuran.....	FURAN
58802-15-6	* 1,2,4,7,8-pentachlorodibenzofuran.....	FURAN
57117-41-6	* 1,2,3,7,8-pentachlorodibenzofuran.....	FURAN
	* 2,3,4,6,7-pentachlorodibenzofuran.....	FURAN
	* 1,2,3,4,6,8-hexachlorodibenzofuran	FURAN
70658-26-9	* 1,2,3,4,7,8-hexachlorodibenzofuran	FURAN
	* 1,2,3,6,8,9-hexachlorodibenzofuran	FURAN
69698-59-5	* 1,2,4,6,8,9-hexachlorodibenzofuran	FURAN
	* 2,3,4,6,7,8-hexachlorodibenzofuran	FURAN
67562-40-7	* 1,2,4,6,7,8-hexachlorodibenzofuran	FURAN
57117-44-9	* 1,2,3,6,7,8-hexachlorodibenzofuran	FURAN
	* 1,2,3,6,7,9-hexachlorodibenzofuran	FURAN
67462-39-4	* 1,2,3,4,6,7,8-heptachlorodibenzofuran.....	FURAN
55673-89-7	* 1,2,3,4,7,8,9-heptachlorodibenzofuran	FURAN
39001-02-0	* Octachlorodibenzofuran	FURAN

* Values for dioxin and furan congeners preceded by an asterisk are not given in Volume II- for values for these compounds please refer to Volume I.

Non-coplanar PCB congeners reported for Herring Gulls at annual monitoring colonies in Table 14 (Volume I)

Non-coplanar PCB congeners	CAS #	COMPOUNDS	ABBREVIATION (not applicable)
38444-78-9/38444-77-8	PCB #16/32	2,2',3-trichlorobiphenyl/2,4',6-trichlorobiphenyl	
37680-66-3	PCB #17	2,2',4-trichlorobiphenyl	
37680-65-2	PCB #18	2,2',5-trichlorobiphenyl	
38444-85-8	PCB #22	2,3,4'-trichlorobiphenyl	
7012-37-5	PCB #28	2,4,4'-trichlorobiphenyl	
16606-02-3	PCB #31	2,4',5-trichlorobiphenyl	
38444-86-9/38444-84-7	PCB #33/20	2',3,4-trichlorobiphenyl/2,3,3'-trichlorobiphenyl	
36559-22-5	PCB #42	2,2',3,4'-tetrachlorobiphenyl	
41464-39-5	PCB #44	2,2',3,5'-tetrachlorobiphenyl	
2437798/70362-47-9	PCB #47/48	2,2',4,4'-tetrachlorobiphenyl/2,2',4,5-tetrachlorobiphenyl	
	PCB #47	2,2',4,4'-tetrachlorobiphenyl	
41464-40-8	PCB #49	2,2',4,5'-tetrachlorobiphenyl	
35693-99-3	PCB #52	2,2',5,5'-tetrachlorobiphenyl	
41464-43-9/33025-41-1	PCB #56/60	2,3,3',4'-tetrachlorobiphenyl /2,3,4,4'-tetrachlorobiphenyl	
33025-41-1	PCB #60	2,3,4,4'-tetrachlorobiphenyl	
52663-58-8	PCB #64	2,3,4',6-tetrachlorobiphenyl	
32598-10-0	PCB #66	2,3',4,4'-tetrachlorobiphenyl	
	PCB #66/95	2,3',4,4'-tetrachlorobiphenyl/2,2',3,5',6-pentachlorobiphenyl	
32598-11-1/70362-48-0	PCB #70/76	2,3',4',5-tetrachlorobiphenyl/2',3,4,5-tetrachlorobiphenyl	
32690-93-0	PCB #74	2,4,4',5-tetrachlorobiphenyl	
65510-45-4	PCB #85	2,2',3,4,4'-pentachlorobiphenyl	
38380-02-8	PCB #87	2,2',3,4,5'-pentachlorobiphenyl	
52663-61-3	PCB #92	2,2',3,5,5'-pentachlorobiphenyl	
38379-99-6	PCB #95	2,2',3,5',6-pentachlorobiphenyl	
41464-51-1	PCB #97	2,2',3',4,5-pentachlorobiphenyl	
38380-01-7	PCB #99	2,2',4,4',5-pentachlorobiphenyl	
37680-73-2	PCB #101	2,2',4,5,5'-pentachlorobiphenyl	
37680-72-3/68194-07-0	PCB #101/90	2,2',4,5,5'-pentachlorobiphenyl/2,2',3,4',5-pentachlorobiphenyl	
32598-14-4	PCB #105	2,3,3',4,4'-pentachlorobiphenyl	
38380-03-9	PCB #110	2,3,3',4',6-pentachlorobiphenyl	
31508-00-6	PCB #118	2,3',4,4',5-pentachlorobiphenyl	
38380-07-3	PCB #128	2,2',3,3',4,4'-hexachlorobiphenyl	
55215-18-4	PCB #129	2,2',3,3',4,5-hexachlorobiphenyl	
52663-66-8	PCB #130	2,2',3,3',4,5'-hexachlorobiphenyl	
35694-06-5	PCB #137	2,2',3,4,4',5-hexachlorobiphenyl	
35065-28-2	PCB #138	2,2',3,4,4',5'-hexachlorobiphenyl	
52712-04-6	PCB #141	2,2',3,4,5,5'-hexachlorobiphenyl	
51908-16-8	PCB #146	2,2',3,4',5,5'-hexachlorobiphenyl	
38380-04-0	PCB #149	2,2',3,4',5',6-hexachlorobiphenyl	
52663-63-5	PCB #151	2,2',3,5,5',6-hexachlorobiphenyl	
35065-27-1	PCB #153	2,2',4,4',5,5'-hexachlorobiphenyl	

Non-coplanar PCB congeners reported for Herring Gulls at annual monitoring colonies in Table 14 (Volume I)

Non-coplanar PCB congeners CAS #	COMPOUNDS	ABBREVIATION (not applicable)
38380-08-4	PCB #156	2,3,3',4,4',5-hexachlorobiphenyl
69782-90-7	PCB #157	2,3,3',4,4',5'-hexachlorobiphenyl
74472-42-7	PCB #158	2,3,3',4,4',6-hexachlorobiphenyl
35065-30-6	PCB #170	2,2',3,3',4,4',5-heptachlorobiphenyl
35065-30-6/41411-64-7	PCB #170 /190	2,2',3,3',4,4',5-heptachlorobiphenyl/ 2,3,3',4,4',5,6-heptachlorobiphenyl
52663-71-5	PCB #171	2,2',3,3',4,4',6-heptachlorobiphenyl
52663-74-8	PCB #172	2,2',3,3',4,5,5'-heptachlorobiphenyl
38411-25-5	PCB #174	2,2',3,3',4,5,6'-heptachlorobiphenyl
52663-65-7	PCB #176	2,2',3,3',4,6,6'-heptachlorobiphenyl
52663-70-4	PCB #177	2,2',3,3',4',5,6-heptachlorobiphenyl
52663-67-9	PCB #178	2,2',3,3',5,5',6-heptachlorobiphenyl
52663-64-6	PCB #179	2,2',3,3',5,6,6'-heptachlorobiphenyl
35065-29-3	PCB #180	2,2',3,4,4',5,5'-heptachlorobiphenyl
60145-23-5	PCB #182	2,2',3,4,4',5,6'-heptachlorobiphenyl
	PCB#182/187	
	2,2',3,4,4',5,6'-heptachlorobiphenyl/2,2',3,4',5,5',6-heptachlorobiphenyl	
52663-69-1	PCB #183	2,2',3,4,4',5',6-heptachlorobiphenyl
52712-05-7	PCB #185	2,2',3,4,5,5',6-heptachlorobiphenyl
52663-68-0	PCB #187	2,2',3,4',5,5',6-heptachlorobiphenyl
35694-08-7	PCB #194	2,2',3,3',4,4',5,5'-octachlorobiphenyl
52663-78-2	PCB #195	2,2',3,3',4,4',5,6-octachlorobiphenyl
42740-50-1/52663-76-0	PCB #196/203	2,2',3,3',4,4',5,6'-octachlorobiphenyl/ 2,2',3,4,4',5,5',6 octachlorobiphenyl
52663-73-9	PCB #200	2,2',3,3',4,5',6,6'-octachlorobiphenyl
40186-71-8	PCB #201	2,2',3,3',4,5',6,6'-octachlorobiphenyl
2136-99-4	PCB #202	2,2',3,3',5,5',6,6'-octachlorobiphenyl
52663-76-0	PCB #203	2,2',3,4,4',5,5',6-octachlorobiphenyl
40186-72-9	PCB #206	2,2',3,3',4,4',5,5',6-nonachlorobiphenyl
52663-79-3	PCB #207	2,2',3,3',4,4',5,6,6'-nonachlorobiphenyl
52663-77-1	PCB #208	2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl

**METHODOLOGICAL AND STATISTICAL NOTES SPECIFIC TO TABLES 13-14
(VOLUMES I & II)**

1. The following abbreviations are used for species:

Herring Gull	HERG
Great Black-backed Gull	GBBG
Black-crowned Night-Heron	BCNH
Black Tern	BLTE
Forster's Tern	FOTE
2. All analytical data have been calculated on a wet weight basis.
3. Means and standard deviations for contaminant data are reported to four decimal places. For percent lipid and percent moisture they are reported to two decimal places. Trailing zeros in numerical values are truncated.
4. Dioxin, furan and non-ortho PCB compounds are reported in pg/g (parts per trillion). All other compounds are reported in µg/g (parts per million).
5. All sample sizes reported as 1 represent a pooled sample of 6-16 eggs that were analyzed together as one sample unless otherwise indicated. Sample sizes reported greater than 1 were individual samples and the mean and standard deviation are given.
6. Detection limits used in analytical determination of all chlorinated hydrocarbons were 0.0001 µg/g. Trace levels were determined to be between 0.0001 and 0.0009 µg/g.

For dioxin and furan concentrations the minimum detection limits vary by compound and are subject to fluctuation. This fluctuation can be due to the cleanliness of the samples at the time of analysis and/or the condition of the ion source of the mass spectrometer at any given time. All samples were measured on a high resolution mass spectrometer.

Dioxin and furan minimum detection levels occur between the ranges of:

Tetrachlorodioxins/furans	0.1 – 2 pg/g
Pentachlorodioxins/furans	0.1 – 2 pg/g
Hexachlorodioxins/furans	0.1 – 4 pg/g
Heptachlorodioxins/furans	0.1 – 6 pg/g
Octachlorodioxins/furans	0.1 – 7 pg/g

7. Chlordane isomers have been presented as alpha-chlordane, trans-chlordane, and oxy-chlordane. Alpha-chlordane is synonymous with cis-chlordane, and trans-chlordane is synonymous with gamma-chlordane.
8. In 1997, the gas chromatographic instrument used for the analysis was coupled to a Mass Selective Detector. This affected the results of PCB congener analysis. Therefore, the PCB congeners detected in Black Tern and Forster's Tern eggs from 1996 are different than the rest of the data. In 1996, 42 non-coplanar PCBs were detected:

#28, 31, 42, 44, 49, 52, 60, 64, 66, 70, 74, 87, 97, 99, 101, 105, 110,
118, 128, 129, 137, 138, 141, 146, 149, 151, 153, 158, 170, 171, 172,
174, 180, 182, 183, 185, 194, 195, 200, 201, 203, 206

Many changes were made to PCB identification with the new method. These are attributed to refinements in methodology and the greater specificity of congener identification possible with the new technology. Congener 129 was re-identified as PCB 178, and congener 182 was re-identified as PCB 187. Five congeners reported individually with the old method and which co-elute from the gas chromatographic column were more properly identified in the newer reporting system, which coincided with the adoption of the new methodology. PCB 60 co-elutes with PCB 56 and is reported as PCB 56/60; PCB 70 co-elutes with PCB 76 and is reported as PCB 70/76; PCB 101 is reported as PCB 101/90; PCB 170 is reported as PCB

170/190; PCB 203 is reported as PCB 196/203. Congeners 156, 171 and 202 co-eluted and were reported as PCB 171 with the old methodology, under the new methods and reporting system they are detected individually. Sixteen additional congeners were first reported in 1997:

16/32, 17, 18, 22, 33/20, 47/48, 85, 92, 95, 130, 157, 176, 177, 179, 207, 208

The total number of congeners reported after 1997 was 59. The 1996 data for Black Terns and Forster's Terns are reported under the old methodology (42 PCB congeners), all other data are under the new methodology (59 PCB congeners).

9. All PCB data are expressed as Aroclor 1254:1260 1:1 mixture and/or Aroclor 1260 and total PCB congeners. It should be noted that the sum PCB values for 1996 data are the result of 42 PCB congeners, while all other data are the result of 59 PCB congeners.
10. In 1996, the organochlorine and PCB analyses were performed by Henry Won at the Canadian Wildlife Service National Wildlife Research Centre (NWRC) and dioxin, furans and coplanar PCB congener analyses were performed by Mary Simon at NWRC. Organochlorine and PCB analyses from 1998-2001 were performed by Henry Won and Michael Mulvihill at NWRC. Dioxins, furans and coplanar PCB congeners were analyzed in 1998-2001 by Mary Simon and Abde Miftah-Idrissi at NWRC (Won *et al.* 2001; Simon and Wakeford 2000).

Figure 1. Herring Gull Annual Monitoring Colonies

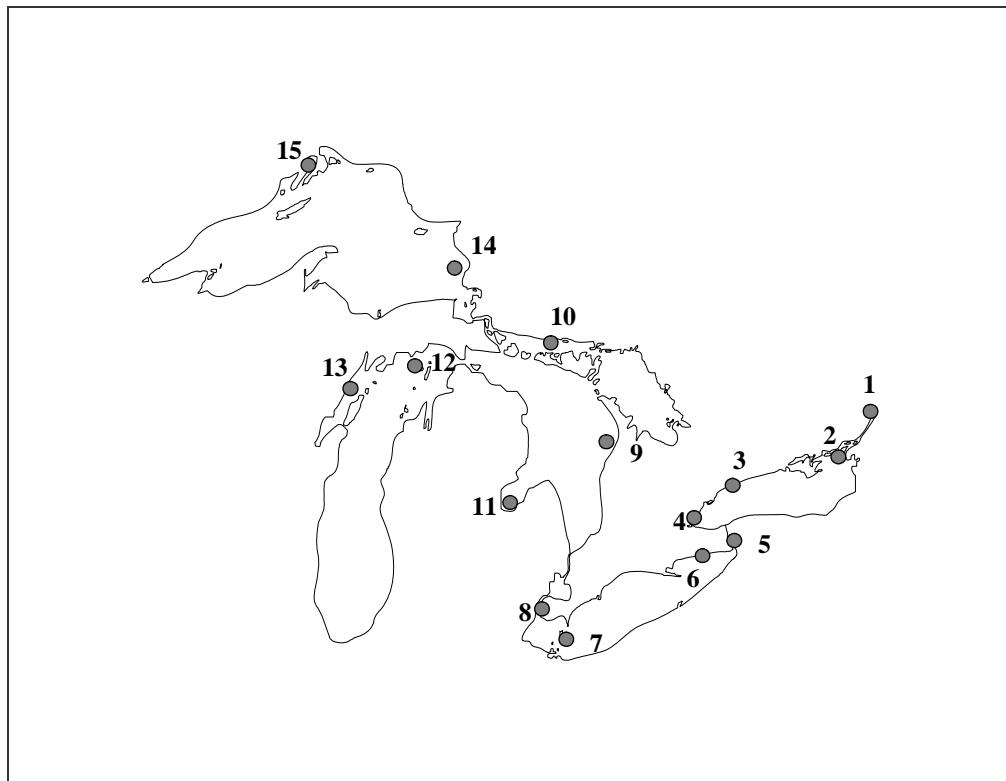


Table 1. Herring Gull Annual Monitoring Colonies

Number	Site	Location	First Year
1	Strachan Island	St. Lawrence River	1986
2	Snake Island	Lake Ontario	1974
3	Toronto Harbour *	Lake Ontario	1974
4	Hamilton Harbour	Lake Ontario	1981
5	Niagara River	Niagara River	1979
6	Port Colborne Lighthouse	Lake Erie	1974
7	Middle Island	Lake Erie	1974
8	Fighting Island	Detroit River	1978
9	Chantry Island	Lake Huron – Canada	1974
10	Double Island	Lake Huron – North Channel	1974
11	Channel Shelter Island	Lake Huron – US	1980
12	Gull Island	Lake Michigan	1977
13	Big Sister Island	Lake Michigan	1976
14	Agawa Rocks	Lake Superior	1974
15	Granite Island	Lake Superior	1974

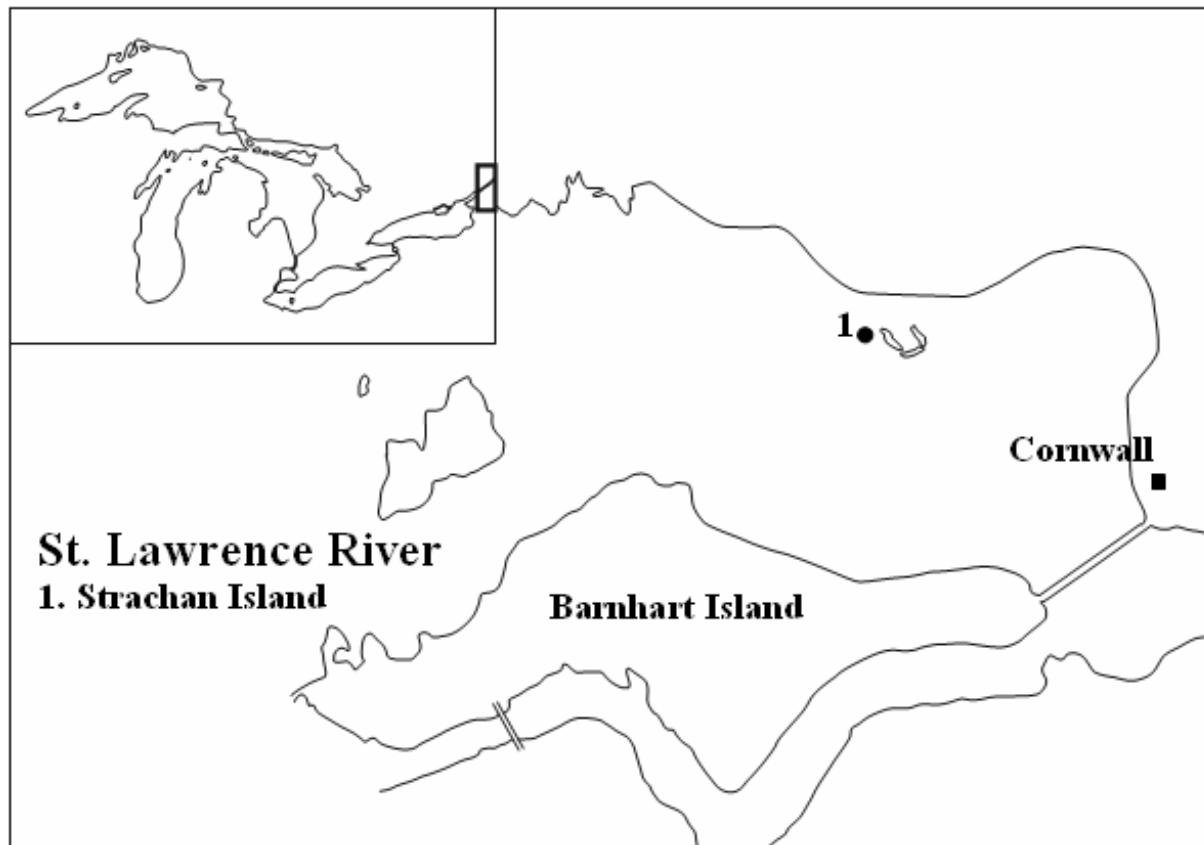
* Mugg's Island 1974-1987, Leslie Street Spit 1988-present

SECTION 1
DATA SUMMARIZED BY SAMPLE SIZE

Figures 2-12. Location of colonies from which eggs were collected

Tables 2-12. Sample sizes

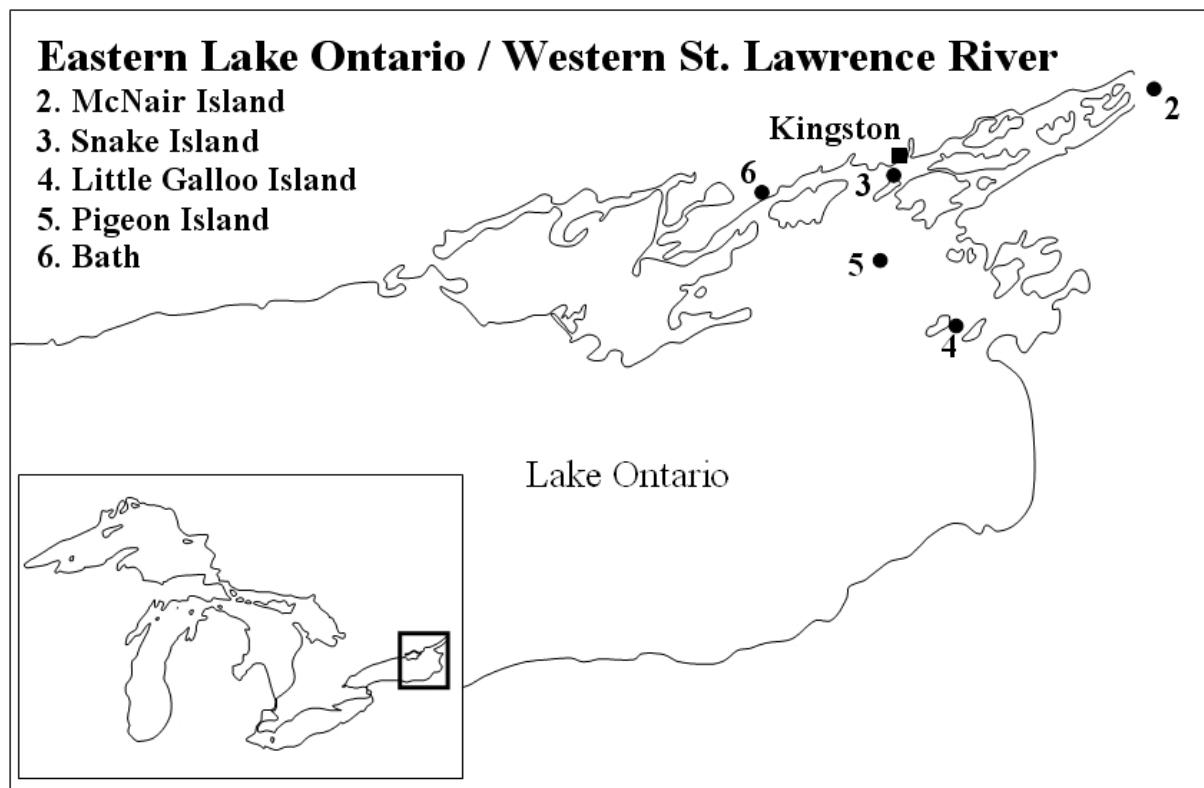
Figure 2. Colonies in the St. Lawrence River



Col. No.	Spec.	Yr.	% Lip	% Mois	a- chl	g- chl	o- chl	1234- CB	1245- CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a- HCH	b- HCH	g- HCH	Hg	TCPM	MIR	P- MIR	c- non	t- non	OCS	PCB 1260	PCB 1254:	SUM	PCBs	NO	Dioxin	Furan
1*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		

Table 2. The sample sizes of eggs analyzed in each year (1998-2001) from the St. Lawrence River, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

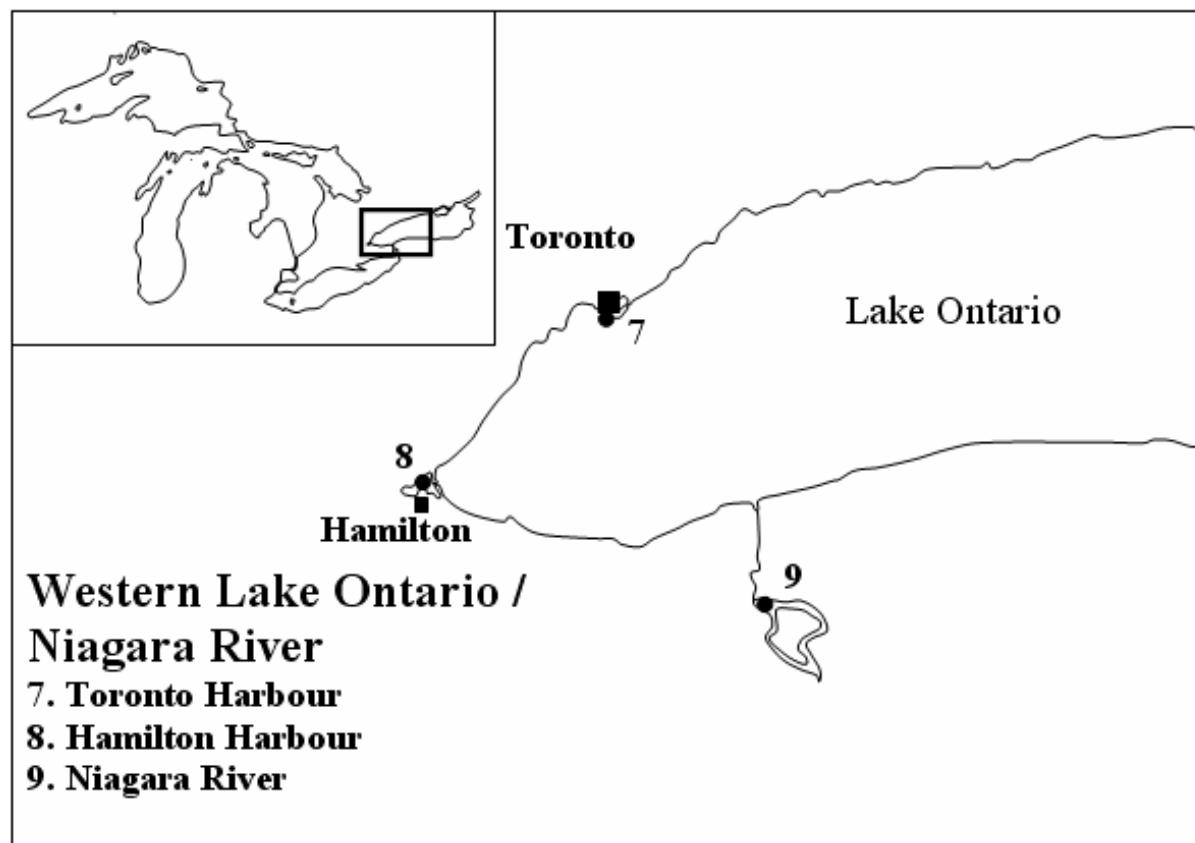
Figure 3. Colonies in Eastern Lake Ontario and Western St. Lawrence River



Col. No.	Spec.	Yr.	% Lip		% Mois		a-chl	g-chl	o-chl	1234-CB	1245-CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-HCH	b-HCH	g-HCH	Hg	TCPM	MIR	P-MIR	c-non	t-non	OCS	PCB 1260	PCB 1254:	SUM PCBs	PCBs NO	Dioxin	Furan
			Lip	Mois	chl	chl	chl	chl	chl	CB	CB																	PCB	PCB					
2	BCNH	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0			
3*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1			
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1				
4	HERG	01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	1	1	1			
	GBBG	01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	1	1	1			
5	HERG	01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	1	1	1			
	GBBG	01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	1	1	1			
6	BLTE	96	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			

Table 3. The sample sizes of eggs analyzed in each year (1998-2001) from Eastern Lake Ontario, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

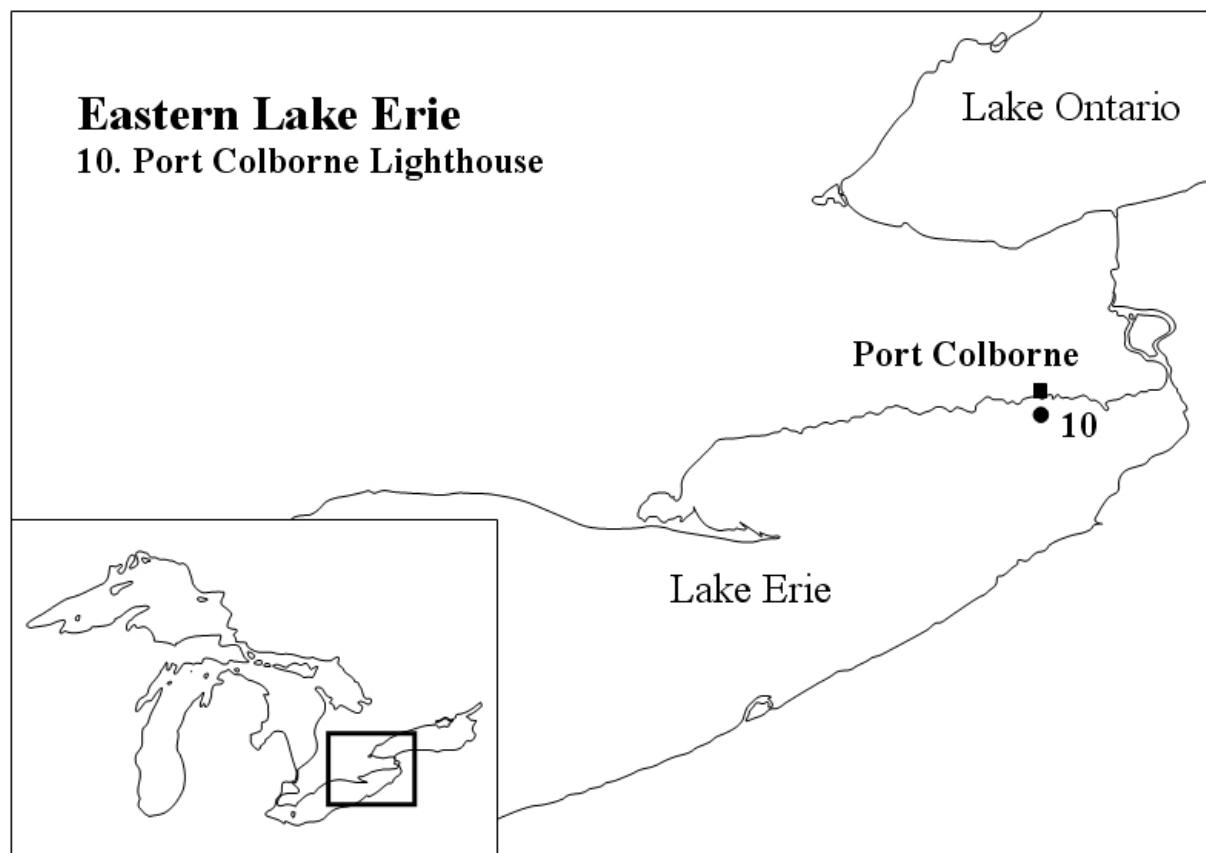
Figure 4. Colonies in Western Lake Ontario and the Niagara River



Col.	Spec.	Yr.	%	%	a-	g-	o-	1234-	1245-	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-	b-	g-	Hg	TCPM	MIR	P-	c-	t-	OCS	PCB	PCB	SUM PCBs	NO	Dioxin	Furan
No.		Lip	Mois	chl	chl	chl	chl	CB	CB								HCH	HCH	HCH				MIR	non	non	1260	1254:	PCB	PCB			
7*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1		
8*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
9*	BCNH	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0		
		98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
9*	BCNH	01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0		

Table 4. The sample sizes of eggs analyzed in each year (1998-2001) from the Western Lake Ontario and the Niagara River, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

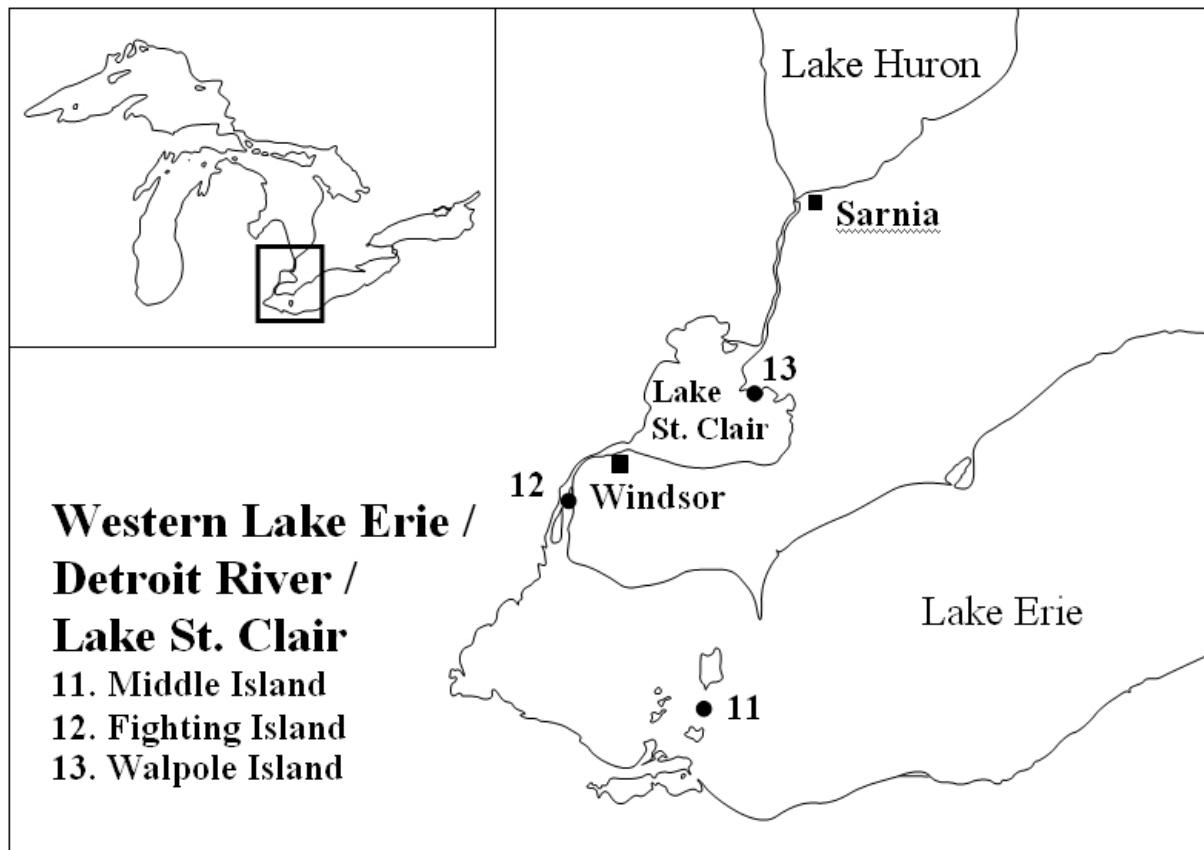
Figure 5. Colonies in Eastern Lake Erie



Col. No.	Spec.	Yr.	% Lip	% Mois	a- chl	g- chl	o- chl	1234- CB	1245- CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a- HCH	b- HCH	g- HCH	Hg	TCPM	MIR	P- MIR	c- non	t- non	OCS	PCB 1260	PCB 1254:	SUM PCBs	NO	Dioxin	Furan
10*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		

Table 5. The sample sizes of eggs analyzed in each year (1998-2001) from the Eastern Lake Erie, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

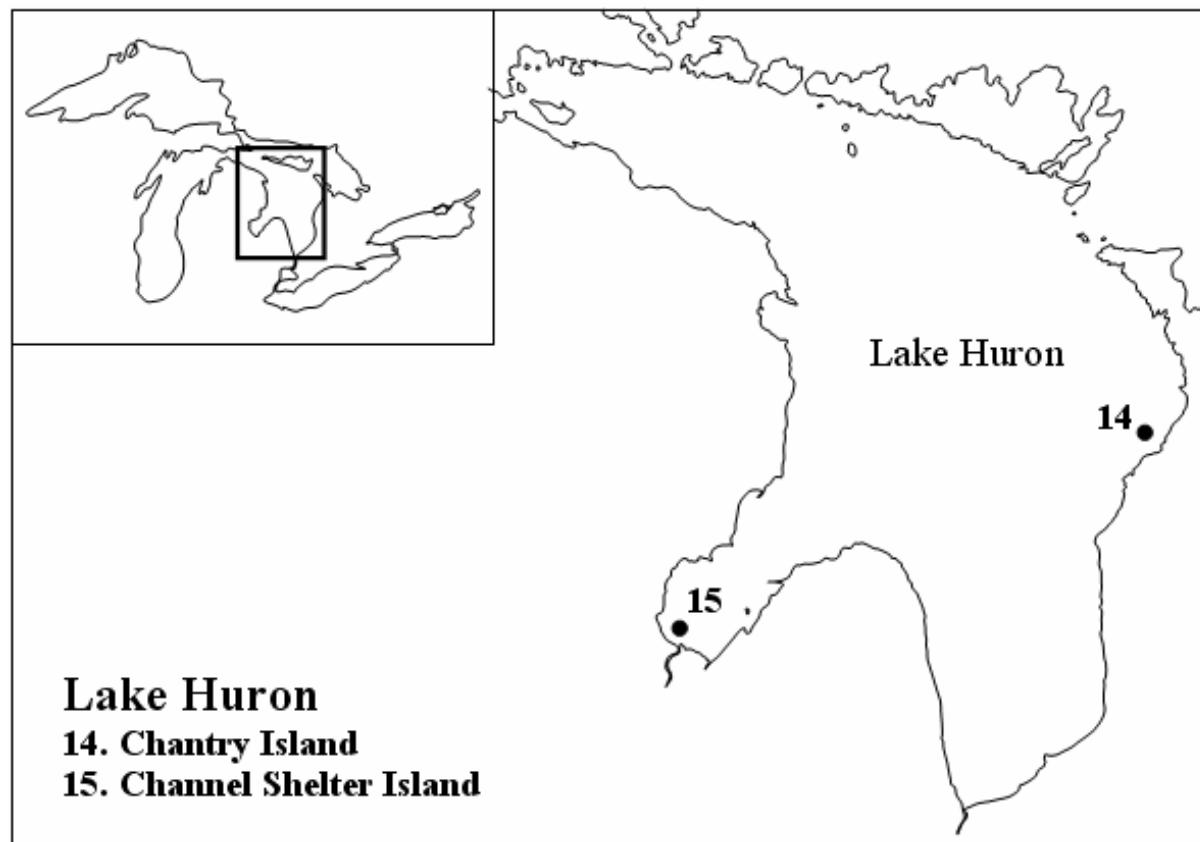
Figure 6. Colonies in Western Lake Erie, Detroit River and Lake St. Clair



Col. No.	Spec.	Yr.	%	%	a-	g-	o-	1234-	1245-	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-	b-	g-	Hg	TCPM	MIR	P-	c-	t-	OCS	PCB	PCB	SUM	PCBs	NO	Dioxin	Furan
			Lip	Mois	chl	chl	chl	CB	CB								HCH	HCH	HCH								1260	1254:	PCB	PCB			
11*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		BCNH	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	
12*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
13	BLTE	99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
	FOTE	99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 6. The sample sizes of eggs analyzed in each year (1998-2001) from Western Lake Erie and the Detroit River, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

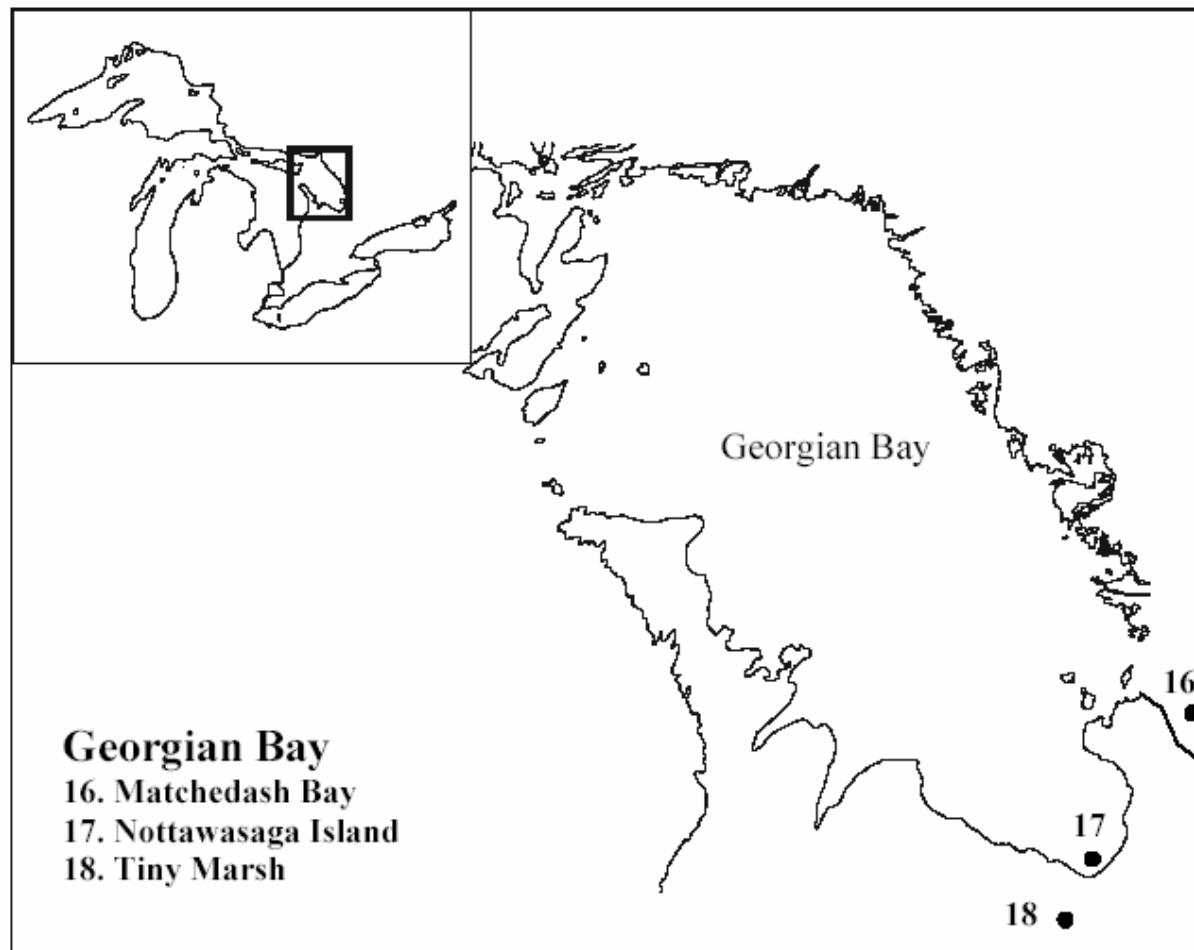
Figure 7. Colonies in Lake Huron



Col. No.	Spec.	Yr.	% Lip	% Mois	a- chl	g- chl	o- chl	1234- CB	1245- CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a- HCH	b- HCH	g- HCH	Hg	TCPM	MIR	P- MIR	c- non	t- non	OCS	PCB	PCB	SUM	PCBs	NO	Dioxin	Furan
14*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
15*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
	BCNH	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	

Table 7. The sample sizes of eggs analyzed in each year (1998-2001) from Lake Huron, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

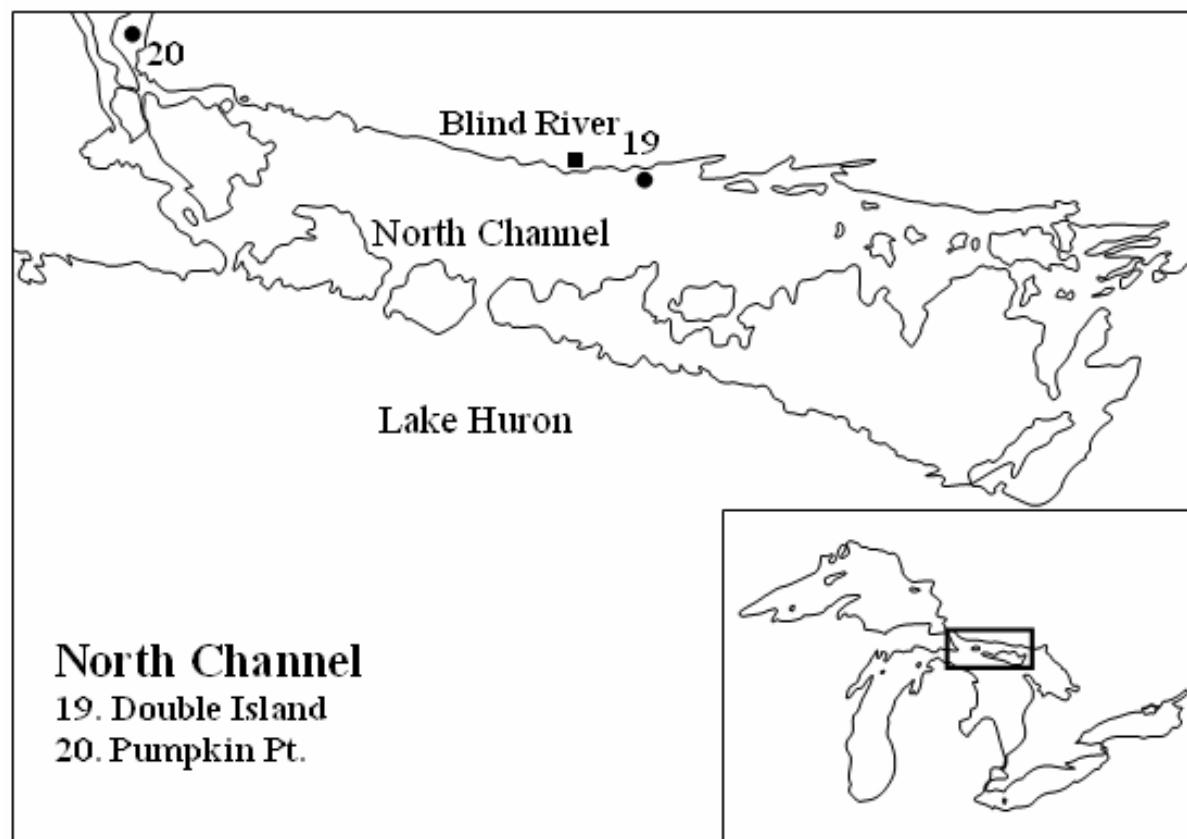
Figure 8. Colonies in Georgian Bay



Col. No.	Spec. Lip	Yr. Mois	% chl	% chl	a- chl	g- chl	o- chl	1234- CB	1245- CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a- HCH	b- HCH	g- HCH	Hg	TCPM	MIR	P- MIR	c- non	t- non	OCS	PCB 1260	PCB 1254:	SUM	PCBs	NO	Dioxin	Furan
16	BLTE	96	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
17	BCNH	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0			
18	BLTE	99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0			

Table 8. The sample sizes of eggs analyzed in each year (1998-2001) from Georgian Bay, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

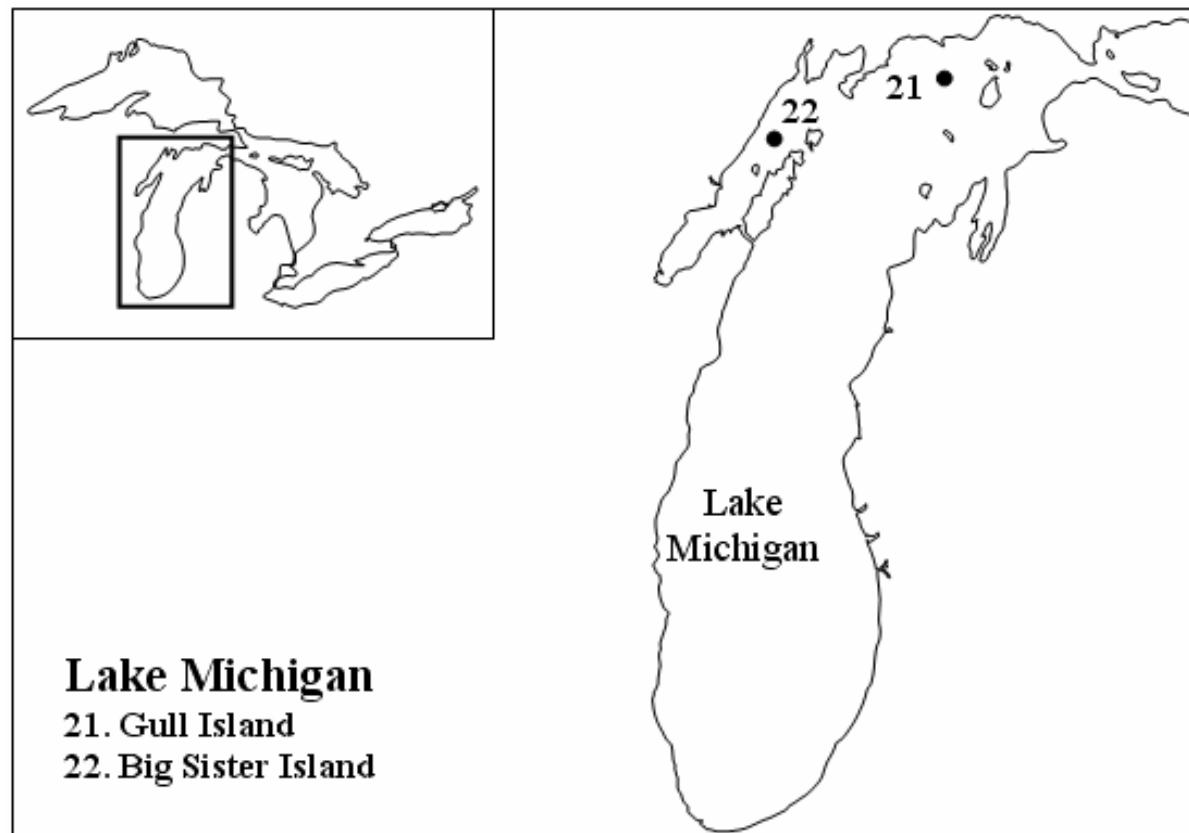
Figure 9. Colonies in the North Channel



Col. No.	Spec. Yr.	% Lip	% Mois	a- chl	g- chl	o- chl	1234- CB	1245- CB	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a- HCH	b- HCH	g- HCH	Hg	TCPM	MIR	P- MIR	c- non	t- non	OCS	PCB 1260	PCB 1254:	SUM	PCBs	NO	Dioxin	Furan
19*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
20	HERG	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	

Table 9. The sample sizes of eggs analyzed in each year (1998-2001) from the North Channel, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

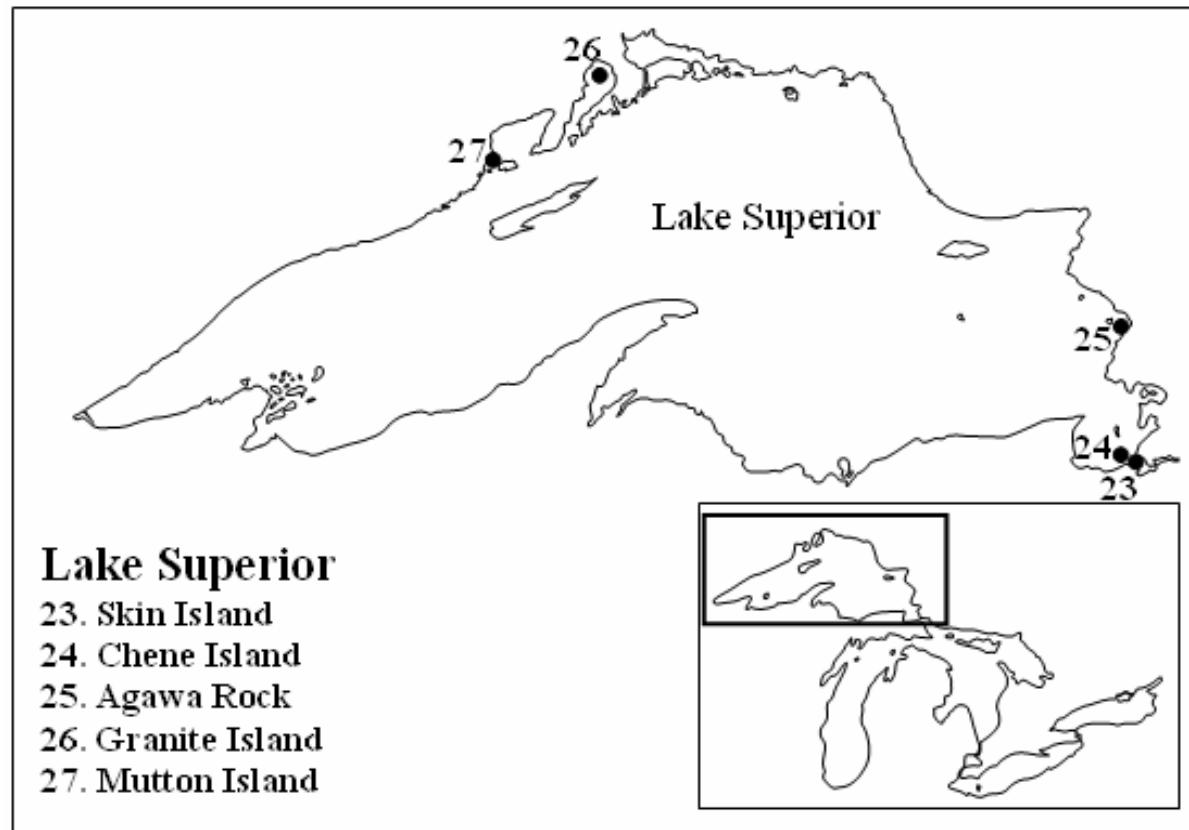
Figure 10. Colonies in Lake Michigan



Col. No.	Spec. Yr.	%	%	a-	g-	o-	1234-	1245-	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-	b-	g-	Hg	TCPM	MIR	P-	c-	t-	OCS	PCB	PCB	SUM	PCBs	NO	Dioxin	Furan
				Lip	Mois	chl	chl	chl	CB	CB						HCH	HCH	HCH				MIR	non	non	1260	1254:	PCB	PCB				
21*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
22*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1		

Table 10. The sample sizes of eggs analyzed in each year (1998-2001) from the Lake Michigan, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

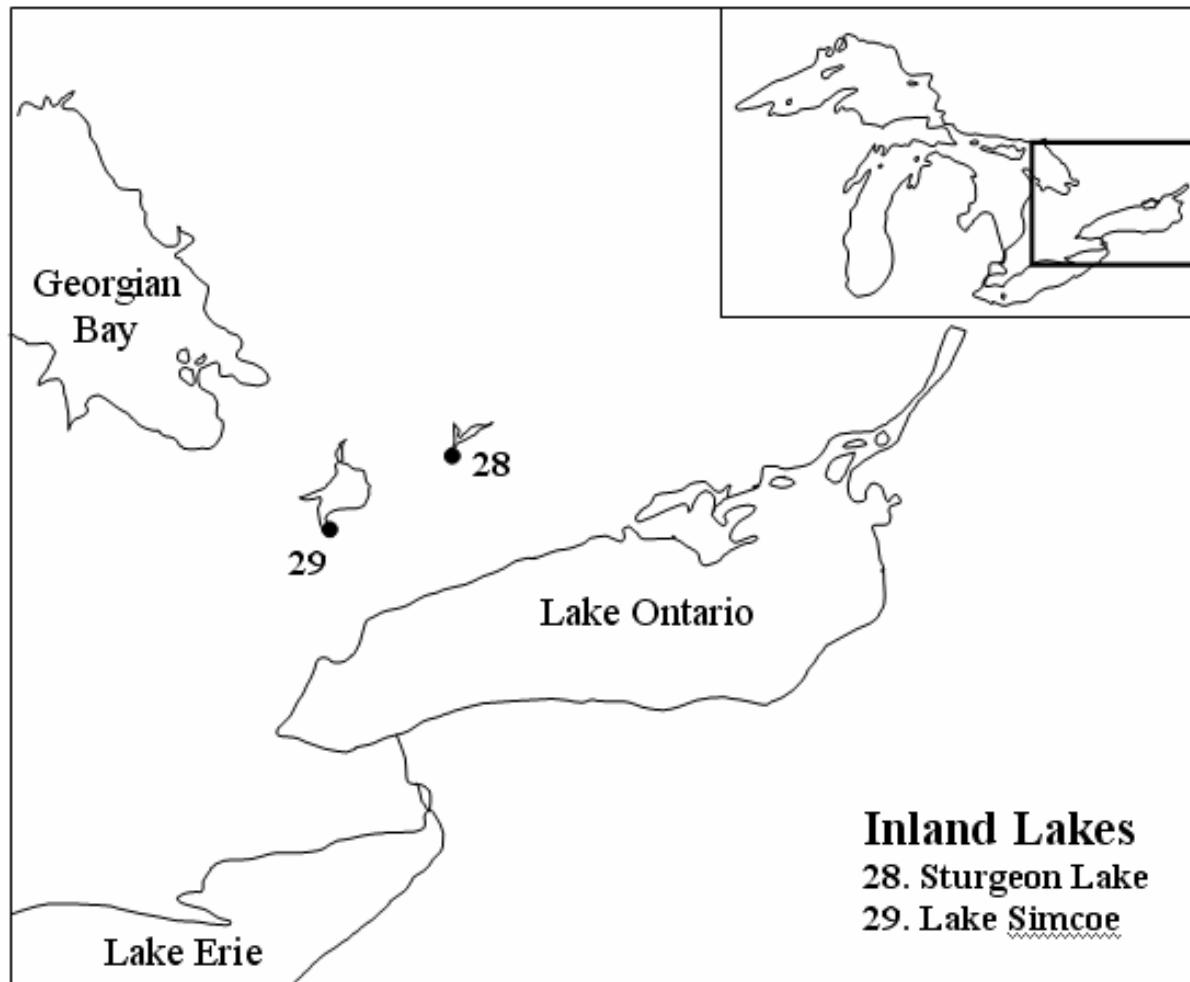
Figure 11. Colonies in Lake Superior



Col. No.	Spec. Yr.	%	%	a-	g-	o-	1234-	1245-	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-	b-	g-	Hg	TCPM	MIR	P-	c-	t-	OCS	PCB	PCB	SUM	PCBs	NO	Dioxin	Furan
		Lip	Mois	chl	chl	chl	CB	CB								HCH	HCH	HCH				MIR	non	non	1260	1254:	PCB	PCB				
23	HERG	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0		
24	HERG	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0		
25*	HERG	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1		
		99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1		
		26*	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
26*	HERG	99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1			
		01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1			
27	HERG	00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0		

Table 11. The sample sizes of eggs analyzed in each year (1998-2001) from Lake Superior, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

Figure 12. Colonies in Inland Lakes



Col. No.	Spec.	Yr.	%	%	a-	g-	o-	1234-	1245-	PeCB	HCB	DDD	DDE	DDT	Diel	HE	a-	b-	g-	Hg	TCPM	MIR	P-	c-	t-	OCS	PCB	PCB	SUM	PCBs	NO	Dioxin	Furan
			Lip	Mois	chl	chl	chl	CB	CB								HCH	HCH	HCH				MIR		non	non		1260	1254:	PCB	PCB		
28	BLTE	96	2+	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0	0	0	0		
29	FOTE	99	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	BLTE	96	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	

Table 12. The sample sizes of eggs analyzed in each year (1998-2001) from Sturgeon Lake and Lake Simcoe, arranged by collection site, species sampled and compound analyzed. Herring Gull annual monitoring colonies are indicated by an asterisk (*). All samples with a value of 1 refer to a pooled sample.

+ Represents the same egg analyzed twice

SECTION 2
DATA SUMMARIZED BY LOCATION

Index to contaminant data, summarized by location

Table 13. Contaminant data, summarized by location

INDEX TO CONTAMINANT DATA, SUMMARIZED BY LOCATION

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TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, STRACHAN ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.19	8.77	10	8.89
	SD				
PERCENT MOISTURE IN	N	1	1	1	1
EGG	MEAN	75.95	76.16	76.1	75.80
	SD				
CIS/ALPHA-	N	1	1	1	1
CHLORDANE	MEAN	0.002	0.001	TR	0.001
	SD				
TRANS/GAMMA-	N	1	1	1	1
CHLORDANE	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.029	0.044	0.032	0.036
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	0.001	0.001	0.001
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.016	0.015	0.012	0.015
	SD				
DDD	N	1	1	1	1
	MEAN	0.002	0.001	0.001	0.004
	SD				
DDE	N	1	1	1	1
	MEAN	1.946	2.231	1.639	1.832
	SD				
DDT	N	1	1	1	1
	MEAN	0.007	0.01	0.006	0.009
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.023	0.052	0.03	0.024
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.013	0.022	0.016	0.020
	SD				
ALPHA-	N	1	1	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
BETA-	N	1	1	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	0.001	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, STRACHAN ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.8298	0.8543	1.37
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.003	0.002	0.002
	SD				
MIREX	N	1	1	1	1
	MEAN	0.406	0.494	0.328	0.317
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.14	0.174	0.128	0.111
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.015	0.026	0.016	0.023
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.011	0.018	0.012	0.021
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.005	0.007	0.005	0.006
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	8.34	7.573	6.651	4.881
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	17.128	16.8356	14.712	13.726
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	11.207	10.328	9.138	8.659
	SD				
PCB 37	N	1	1	1	1
	MEAN	5.94	1.83	1.26	2.46
	SD				
PCB 77	N	1	1	1	1
	MEAN	464.14	317.83	262.21	416.95
	SD				
PCB 81	N	1	1	1	1
	MEAN	176.72	191.35	169.67	215.19
	SD				
PCB 126	N	1	1	1	1
	MEAN	1977.86	1956.75	2062.65	1852.15
	SD				
PCB 169	N	1	1	1	1
	MEAN	155.86	176.84	164.72	183.12
	SD				
PCB 189	N	1	1	1	1
	MEAN	114.3	54.65	48.42	42.05
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, STRACHAN ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	13.73	25.64	19.14	16.39
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	2.85	5.38	2.98	3.01
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLODIBENZO-	MEAN	3.13	3.71	3.27	4.22
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLODIBENZO-	MEAN	0.4	0.39	0.23	0.71
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	2.56	1.67	1.6	3.48
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, STRACHAN ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	4	2.76	3.62	6.71
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.25	0.24	0.19	0.32
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.83	4.64	3.5	3.62
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.05	0.13	ND	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.68	1.71	0.72	1.17
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.12	0.12	ND	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.1	0.4	ND	0.36
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.15	2.96	2.3	1.47
FURAN	SD				
123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.08	0.22	0.15	ND
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.08	0.22	0.15	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, STRACHAN ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.31	ND	ND	ND
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.07	0.13	ND	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.25	1.65	1.16	1.11
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.46	0.61	0.5	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.71	0.65	0.54	0.96
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.16	0.16	ND	0.17
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.41	0.16	ND	0.8
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, MCNAIR ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	7
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	79.71
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	TR
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.015
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.003
	SD	
DDD	N	1
	MEAN	0.001
	SD	
DDE	N	1
	MEAN	0.601
	SD	
DDT	N	1
	MEAN	0.002
	SD	
DIELDRIN	N	1
	MEAN	0.019
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.005
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	0.004
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
ST. LAWRENCE RIVER, MCNAIR ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	1.127
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.029
	SD	
PHOTOMIREX	N	1
	MEAN	0.02
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.004
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.011
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	ND
	SD	
PCB: 1260	N	1
	MEAN	2.235
	SD	
PCB 1254:1260	N	1
	MEAN	3.548
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	2.188
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, SNAKE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.1	8.56	9.7	9.05
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.22	76.39	76.4	75.52
	SD				
CIS/ALPHA- CHLORDANE	N	1	1	1	1
	MEAN	0.001	0.001	TR	TR
	SD				
TRANS/GAMMA- CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.039	0.059	0.039	0.041
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.003	0.002	0.001	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.019	0.02	0.014	0.010
	SD				
DDD	N	1	1	1	1
	MEAN	0.002	0.002	0.002	0.002
	SD				
DDE	N	1	1	1	1
	MEAN	2.357	2.594	1.968	2.150
	SD				
DDT	N	1	1	1	1
	MEAN	0.005	0.015	0.005	0.004
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.031	0.05	0.036	0.024
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.018	0.029	0.02	0.018
	SD				
ALPHA- HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA- HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	0.002	ND	ND
	SD				
GAMMA- HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, SNAKE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
TOTAL MERCURY	N		1	1	1
	MEAN		1.1	0.6761	0.856
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.006	0.004	0.004
	SD				
MIREX	N	1	1	1	1
	MEAN	0.45	0.482	0.366	0.358
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.182	0.201	0.166	0.133
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.021	0.037	0.023	0.023
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.011	0.018	0.014	0.011
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.007	0.007	0.006	0.007
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	6.2087	5.21	4.599	4.307
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	15.1247	13.75	11.411	11.808
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	7.856	7.168	5.941	5.919
	SD				
PCB 37	N	1	1	1	1
	MEAN	ND	0.7	1.23	3.6
	SD				
PCB 77	N	1	1	1	1
	MEAN	248.69	167.42	388.8	158.58
	SD				
PCB 81	N	1	1	1	1
	MEAN	179.88	207.14	201.04	198.3
	SD				
PCB 126	N	1	1	1	1
	MEAN	2117.97	1685.64	2000.42	1925.73
	SD				
PCB 169	N	1	1	1	1
	MEAN	195.89	149.06	177.61	231.54
	SD				
PCB 189	N	1	1	1	1
	MEAN	18.91	19.3	35.93	50.95
	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	18.08	30.76	32.36	25.55
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, SNAKE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	4.89	5.97	5.09	4.57
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	5.18	4.99	6.53	4.92
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	0.45	0.44	0.85	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	2.25	2.64	1.75	2.63
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	3.09	3.53	5.41	4.68
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, SNAKE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.22	0.19	0.55	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	3.28	5.15	5.06	4.31
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.06	ND	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.12	1.2	1.65	4.51
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.19	ND	ND	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.14	0.36	0.22	0.93
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.78	3.84	4.63	1.89
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.17	0.31	0.31	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.32	ND	ND	ND
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	0.13	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, SNAKE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.71	2.01	2.44	1.59
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.12	0.89	1.14	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.84	0.51	0.54	0.55
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.17	ND	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.17	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	ND	0.32	ND	0.95
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

HERRING GULL		YEAR
		2001
PERCENT LIPID IN EGG	N	6
	MEAN	8.2917
	SD	1.6151
PERCENT MOISTURE IN	N	6
EGG	MEAN	77.0917
	SD	2.2787
CIS/ALPHA-	N	6
CHLORDANE	MEAN	0.0079
	SD	0.0153
TRANS/GAMMA-	N	6
CHLORDANE	MEAN	ND
	SD	0
OXYCHLORDANE	N	6
	MEAN	0.0528
	SD	0.0123
1234-CHLOROBENZENE	N	6
	MEAN	0.0005
	SD	0.0003
1245-CHLOROBENZENE	N	6
	MEAN	TR
	SD	0
PENTACHLOROBENZENE	N	6
	MEAN	0.0033
	SD	0.0057
HEXACHLOROBENZENE	N	6
	MEAN	0.0145
	SD	0.0071
DDD	N	6
	MEAN	0.0063
	SD	0.006
DDE	N	6
	MEAN	3.6665
	SD	1.5378
DDT	N	6
	MEAN	0.0095
	SD	0.0051
DIELDRIN	N	6
	MEAN	0.0345
	SD	0.0065
HEPTACHLOR EPOXIDE	N	6
	MEAN	0.0195
	SD	0.0055
ALPHA-	N	6
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	0
BETA-	N	6
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	0
GAMMA-	N	6
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	0

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

HERRING GULL		YEAR
		2001
TOTAL MERCURY	N	6
	MEAN	0.2303
	SD	0.2158
TRIS (4-CHLOROPHENYL)	N	6
METHANOL	MEAN	0.0057
	SD	0.0023
MIREX	N	6
	MEAN	0.7287
	SD	0.3136
PHOTOMIREX	N	6
	MEAN	0.2823
	SD	0.1283
CIS-NONACHLOR	N	6
	MEAN	0.0245
	SD	0.012
TRANS-NONACHLOR	N	6
	MEAN	0.016
	SD	0.0119
OCTACHLOROSTYRENE	N	6
	MEAN	0.0147
	SD	0.0146
PCB: 1260	N	6
	MEAN	7.3936
	SD	3.0553
PCB 1254:1260	N	6
	MEAN	20.79
	SD	9.4475
TOTAL PCB	N	6
CONGENERS	MEAN	10.5805
	SD	4.9230
PCB 37	N	1
	MEAN	2.55
	SD	
PCB 77	N	1
	MEAN	249.8
	SD	
PCB 81	N	1
	MEAN	220.27
	SD	
PCB 126	N	1
	MEAN	3027.29
	SD	
PCB 169	N	1
	MEAN	369.47
	SD	
PCB 189	N	1
	MEAN	87.29
	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	25.45
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

HERRING GULL		YEAR
		2001
1379-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	4.82
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	3.9
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	0.64
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	2.58
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	3.67
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

HERRING GULL		YEAR
		2001
2468-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.42
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	4.29
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.34
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	5.44
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	1.05
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	1.59
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.4
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

HERRING GULL		YEAR
		2001
123678-	N	1
HEXACHLORODIBENZO-	MEAN	1.08
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	0.69
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	1.23
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	1.69
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
PERCENT LIPID IN EGG	N	6
	MEAN	7.645
	SD	1.4537
PERCENT MOISTURE IN EGG	N	6
	MEAN	76.645
	SD	0.6179
CIS/ALPHA-CHLORDANE	N	6
	MEAN	0.012
	SD	0.0078
TRANS/GAMMA-CHLORDANE	N	6
	MEAN	ND
	SD	0
OXYCHLORDANE	N	6
	MEAN	0.067
	SD	0.0187
1234-CHLOROBENZENE	N	6
	MEAN	TR
	SD	0
1245-CHLOROBENZENE	N	6
	MEAN	0.0008
	SD	0.0006
PENTACHLOROBENZENE	N	6
	MEAN	0.0043
	SD	0.0041
HEXACHLOROBENZENE	N	6
	MEAN	0.0407
	SD	0.0292
DDD	N	6
	MEAN	0.0052
	SD	0.0027
DDE	N	6
	MEAN	9.7973
	SD	3.1474
DDT	N	6
	MEAN	0.0265
	SD	0.0488
DIELDRIN	N	6
	MEAN	0.1218
	SD	0.0848
HEPTACHLOR EPOXIDE	N	6
	MEAN	0.0327
	SD	0.0106
ALPHA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
BETA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
GAMMA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
TOTAL MERCURY	N	6
	MEAN	0.6847
	SD	0.2503

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
TRIS (4-CHLOROPHENYL)	N	6
METHANOL	MEAN	0.0125
	SD	0.0054
MIREX	N	6
	MEAN	1.9997
	SD	0.7644
PHOTOMIREX	N	6
	MEAN	0.7618
	SD	0.3287
CIS-NONACHLOR	N	6
	MEAN	0.0582
	SD	0.0263
TRANS-NONACHLOR	N	6
	MEAN	0.1407
	SD	0.1227
OCTACHLOROSTYRENE	N	6
	MEAN	0.0323
	SD	0.0118
PCB: 1260	N	6
	MEAN	21.8872
	SD	8.0662
PCB 1254:1260	N	6
	MEAN	51.9498
	SD	16.3429
TOTAL PCB	N	6
CONGENERS	MEAN	26.4633
	SD	7.9950
PCB 37	N	1
	MEAN	4.55
	SD	
PCB 77	N	1
	MEAN	888.16
	SD	
PCB 81	N	1
	MEAN	270.75
	SD	
PCB 126	N	1
	MEAN	3497.06
	SD	
PCB 169	N	1
	MEAN	207.51
	SD	
PCB 189	N	1
	MEAN	182.23
	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	33.76
p-DIOXIN	SD	
1379-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	4.36
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	3.45
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	0.78
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	1.13
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	2.14
	SD	
2468-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
2367-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.65
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	1.25
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.16
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	4.07
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	1.15
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	0.67
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.42
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	0.71
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.54
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	0.53
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LITTLE GALLOO ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	1.29
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

HERRING GULL		YEAR
		2001
PERCENT LIPID IN EGG	N	6
	MEAN	9.845
	SD	1.3265
PERCENT MOISTURE IN EGG	N	6
	MEAN	74.9217
	SD	3.1518
CIS/ALPHA-CHLORDANE	N	6
	MEAN	0.0062
	SD	0.0132
TRANS/GAMMA-CHLORDANE	N	6
	MEAN	ND
	SD	0
OXYCHLORDANE	N	6
	MEAN	0.0422
	SD	0.0169
1234-CHLOROBENZENE	N	6
	MEAN	0.0006
	SD	0.0002
1245-CHLOROBENZENE	N	6
	MEAN	TR
	SD	0
PENTACHLOROBENZENE	N	6
	MEAN	0.0036
	SD	0.0071
HEXACHLOROBENZENE	N	6
	MEAN	0.0118
	SD	0.0042
DDD	N	6
	MEAN	0.0023
	SD	0.0030
DDE	N	6
	MEAN	2.6703
	SD	1.6606
DDT	N	6
	MEAN	0.0030
	SD	0.0040
DIELDRIN	N	6
	MEAN	0.0398
	SD	0.0307
HEPTACHLOR EPOXIDE	N	6
	MEAN	0.0205
	SD	0.0087
ALPHA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
BETA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
GAMMA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

HERRING GULL		YEAR
		2001
TOTAL MERCURY	N	6
	MEAN	0.1949
	SD	0.0550
TRIS (4-CHLOROPHENYL)	N	6
METHANOL	MEAN	0.0088
	SD	0.0109
MIREX	N	6
	MEAN	0.4785
	SD	0.2744
PHOTOMIREX	N	6
	MEAN	0.1873
	SD	0.1050
CIS-NONACHLOR	N	6
	MEAN	0.0232
	SD	0.0124
TRANS-NONACHLOR	N	6
	MEAN	0.0122
	SD	0.0101
OCTACHLOROSTYRENE	N	6
	MEAN	0.0053
	SD	0.0022
PCB: 1260	N	6
	MEAN	4.8616
	SD	3.6818
PCB 1254:1260	N	6
	MEAN	14.1918
	SD	10.1471
TOTAL PCB	N	6
CONGENERS	MEAN	7.182
	SD	5.1928
PCB 37	N	1
	MEAN	1.83
	SD	
PCB 77	N	1
	MEAN	156.28
	SD	
PCB 81	N	1
	MEAN	148.39
	SD	
PCB 126	N	1
	MEAN	2196.63
	SD	
PCB 169	N	1
	MEAN	306.35
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

HERRING GULL		YEAR
		2001
PCB 189	N	1
	MEAN	69.49
	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	20.15
p-DIOXIN	SD	
1379-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	4.14
p-DIOXIN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	0.65
p-DIOXIN	SD	
124679/124689-	N	1
HEXACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

HERRING GULL		YEAR
		2001
123679/123689-	N	1
HEXACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	1.62
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	2.6
	SD	
2468-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.51
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	3.3
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.14
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	3.56
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	0.84
FURAN	SD	
123468-	N	1
HEXAChLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

HERRING GULL		YEAR
		2001
123478-	N	1
HEXACHLORODIBENZO-	MEAN	2.09
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.27
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	1.15
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	INT
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.91
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	0.53
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	0.89
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
PERCENT LIPID IN EGG	N	6
	MEAN	7.445
	SD	1.1796
PERCENT MOISTURE IN EGG	N	6
	MEAN	76.07
	SD	2.2357
CIS/ALPHA-CHLORDANE	N	6
	MEAN	0.0078
	SD	0.0060
TRANS/GAMMA-CHLORDANE	N	6
	MEAN	ND
	SD	0
OXYCHLORDANE	N	6
	MEAN	0.0628
	SD	0.0171
1234-CHLOROBENZENE	N	6
	MEAN	0.0007
	SD	0.0007
1245-CHLOROBENZENE	N	6
	MEAN	0.0008
	SD	0.0006
PENTACHLOROBENZENE	N	6
	MEAN	0.0039
	SD	0.0055
HEXACHLOROBENZENE	N	6
	MEAN	0.0405
	SD	0.0492
DDD	N	6
	MEAN	0.0048
	SD	0.0031
DDE	N	6
	MEAN	7.0017
	SD	1.5491
DDT	N	6
	MEAN	0.0075
	SD	0.0055
DIELDRIN	N	6
	MEAN	0.0833
	SD	0.0724
HEPTACHLOR EPOXIDE	N	6
	MEAN	0.0268
	SD	0.0115
ALPHA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
BETA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0
GAMMA-HEXACHLOROCYCLOHEXANE	N	6
	MEAN	ND
	SD	0

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
TOTAL MERCURY	N	6
	MEAN	0.5945
	SD	0.3501
TRIS (4-CHLOROPHENYL)	N	6
METHANOL	MEAN	0.0158
	SD	0.0071
MIREX	N	6
	MEAN	1.9757
	SD	0.5077
PHOTOMIREX	N	6
	MEAN	0.7257
	SD	0.2099
CIS-NONACHLOR	N	6
	MEAN	0.046
	SD	0.0262
TRANS-NONACHLOR	N	6
	MEAN	0.0997
	SD	0.1168
OCTACHLOROSTYRENE	N	6
	MEAN	0.0207
	SD	0.0079
PCB: 1260	N	6
	MEAN	18.0170
	SD	5.3174
PCB 1254:1260	N	6
	MEAN	44.3607
	SD	7.8565
TOTAL PCB	N	6
CONGENERS	MEAN	22.7132
	SD	4.6454
PCB 37	N	1
	MEAN	4.47
	SD	
PCB 77	N	1
	MEAN	955.9
	SD	
PCB 81	N	1
	MEAN	271.1
	SD	
PCB 126	N	1
	MEAN	3247.83
	SD	
PCB 169	N	1
	MEAN	245.88
	SD	
PCB 189	N	1
	MEAN	207.5
	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	34.94
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
1379-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	4.22
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	4.05
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	0.78
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.93
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	2.07
	SD	
2468-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.81
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	1.47
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.18
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	2.34
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	0.54
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, PIGEON ISLAND

GREAT BLACK-BACKED GULL		YEAR
		2001
123478-	N	1
HEXACHLORODIBENZO-	MEAN	1.36
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.43
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	1.21
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.29
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	0.85
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, BATH

BLACK TERN	YEAR	
	1996	
PERCENT LIPID IN EGG	N	1
	MEAN	8.9
	SD	
PERCENT MOISTURE IN	N	1
EGG	MEAN	74.9
	SD	
CIS/ALPHA-	N	1
CHLORDANE	MEAN	0.0009
	SD	
TRANS/GAMMA-	N	1
CHLORDANE	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.0058
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	ND
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.005
	SD	
DDD	N	1
	MEAN	ND
	SD	
DDE	N	1
	MEAN	0.1767
	SD	
DDT	N	1
	MEAN	0.0032
	SD	
DIELDRIN	N	1
	MEAN	0.0174
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.0052
	SD	
ALPHA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
BETA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
GAMMA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, BATH

BLACK TERN		YEAR
		1996
TOTAL MERCURY	N	
	MEAN	
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.0206
	SD	
PHOTOMIREX	N	1
	MEAN	0.0091
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.0043
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.01
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.0014
	SD	
PCB: 1260	N	1
	MEAN	0.4108
	SD	
PCB 1254:1260	N	1
	MEAN	0.9435
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	0.4616
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.96	8.36	9.5	9.27
	SD				
PERCENT MOISTURE IN	N	1	1	1	1
EGG	MEAN	76.66	76.04	76.5	75.79
	SD				
CIS/ALPHA-	N	1	1	1	1
CHLORDANE	MEAN	0.002	0.002	0.002	0.002
	SD				
TRANS/GAMMA-	N	1	1	1	1
CHLORDANE	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.027	0.05	0.041	0.031
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	ND	0.002	0.001	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.001	0.015	0.011	0.008
	SD				
DDD	N	1	1	1	1
	MEAN	0.001	0.002	0.002	0.002
	SD				
DDE	N	1	1	1	1
	MEAN	1.661	1.814	1.741	1.631
	SD				
DDT	N	1	1	1	1
	MEAN	0.003	0.011	0.005	0.004
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.024	0.049	0.032	0.028
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.012	0.021	0.014	0.013
	SD				
ALPHA-	N	1	1	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
BETA-	N	1	1	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	0.001	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.52	0.6403	0.64
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.005	0.003	0.008
	SD				
MIREX	N	1	1	1	1
	MEAN	0.334	0.424	0.335	0.349
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.133	0.159	0.134	0.121
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.014	0.027	0.018	0.017
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.009	0.02	0.014	0.014
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.004	0.005	0.003	0.004
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	5.5545	4.69	4.398	4.215
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	11.4496	10.07	8.74	9.973
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	5.713	5.329	4.613	4.903
	SD				
PCB 37	N	1	1	1	1
	MEAN	ND	1.96	1.1	1.93
	SD				
PCB 77	N	1	1	1	1
	MEAN	160.41	142.78	163.98	150.4
	SD				
PCB 81	N	1	1	1	1
	MEAN	62.47	140.51	72.52	94.21
	SD				
PCB 126	N	1	1	1	1
	MEAN	1505.51	1192.77	1213.79	1256.96
	SD				
PCB 169	N	1	1	1	1
	MEAN	165.13	139.2	135.84	218.7
	SD				
PCB 189	N	1	1	1	1
	MEAN	26.83	40.6	31.72	23.64
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	9.6	24.67	16.62	14.04
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	6.1	3.68	2.53	2.59
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.1	0.7	0.29	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	4.81	2.55	1.52	3.34
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	5.71	2.52	2.37	6.12
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	2.4	4.74	2.3	2.31
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.21	0.2	0.18
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.46	2.57	2.57	4.01
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.34	0.13	ND	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.2	0.84	0.66	0.78
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	2	4.76	1.2	0.58
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.08	0.64	0.35	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.66	ND	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.12	0.29	0.17	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	2.28	2.16	0.69	ND
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.54	0.89	0.63	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.99	0.68	0.53	0.68
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.45	0.29	ND	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.31	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.9	0.62	ND	1.08
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.47	9.04	9.1	8.07
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	75.79	74.68	77.1	76.04
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.002	0.005	0.002	0.003
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.022	0.045	0.029	0.040
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	0.001	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	0.003	0.002	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.014	0.019	0.014	0.009
	SD				
DDD	N	1	1	1	1
	MEAN	0.002	0.003	0.005	0.003
	SD				
DDE	N	1	1	1	1
	MEAN	1.96	2.174	1.987	1.758
	SD				
DDT	N	1	1	1	1
	MEAN	0.006	0.012	0.005	0.004
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.017	0.074	0.038	0.049
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.009	0.022	0.015	0.017
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	0.002	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.634	0.6874	0.74
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.003	0.006	0.004
	SD				
MIREX	N	1	1	1	1
	MEAN	0.321	0.419	0.369	0.218
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.122	0.16	0.144	0.085
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.015	0.03	0.022	0.020
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.01	0.02	0.013	0.012
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.004	0.007	0.006	0.004
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	9.4449	8.157	7.172	5.411
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	16.4897	16.26	15.479	13.644
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	8.595	8.78	8.135	6.676
	SD				
PCB 37	N	1	1	1	1
	MEAN	ND	1.16	ND	4.51
	SD				
PCB 77	N	1	1	1	1
	MEAN	78.82	401.44	293.51	266.43
	SD				
PCB 81	N	1	1	1	1
	MEAN	42.33	165.96	139.24	134.7
	SD				
PCB 126	N	1	1	1	1
	MEAN	1042.5	1357.69	1795.72	1592.4
	SD				
PCB 169	N	1	1	1	1
	MEAN	109.6	145.74	181.58	217
	SD				
PCB 189	N	1	1	1	1
	MEAN	34.85	43.24	81.2	54.83
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	4.38	17.26	20.28	13.21
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	0.39	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	4.21	4.39	5.2	4.78
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.7	0.67	0.76	0.75
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	5.2	1.39	1.97	2.2
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.27	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	8.14	1.7	3.46	3
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.47	4.85	3.29	3.34
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.06	0.15	0.13	0.23
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.53	1.04	0.8	4.4
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.16	0.23	0.15	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.08	0.26	0.22	1.18
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.1	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.82	2.12	1.59	1.31
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	0.23	0.21	0.33
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.41	ND	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.14	0.15	ND	0.24
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.42	1.33	1.27	1.01
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.55	0.9	0.75	0.93
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.82	0.62	0.76	1.09
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.44	0.14	0.21	0.28
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.27	0.1	ND	0.43
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	1.77	0.34	0.28	0.55
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	6.17
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	81.84
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.004
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.027
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.007
	SD	
DDD	N	1
	MEAN	0.02
	SD	
DDE	N	1
	MEAN	1.771
	SD	
DDT	N	1
	MEAN	0.002
	SD	
DIELDRIN	N	1
	MEAN	0.031
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.013
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ONTARIO, HAMILTON HARBOUR

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.727
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.292
	SD	
PHOTOMIREX	N	1
	MEAN	0.117
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.025
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.046
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.003
	SD	
PCB: 1260	N	1
	MEAN	6.268
	SD	
PCB 1254:1260	N	1
	MEAN	15.534
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	7.735
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.94	8.7	9	9.45
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.41	76.48	76.2	75.33
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.001	0.003	0.002	0.001
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.023	0.03	0.025	0.022
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	0.002	0.001	0.002
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.028	0.014	0.013	0.019
	SD				
DDD	N	1	1	1	1
	MEAN	0.026	0.003	0.003	0.001
	SD				
DDE	N	1	1	1	1
	MEAN	1.637	1.016	0.725	0.774
	SD				
DDT	N	1	1	1	1
	MEAN	0.881	0.011	0.002	0.002
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.019	0.054	0.038	0.026
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.01	0.02	0.013	0.011
	SD				
ALPHA-HEXAChlorocyclohexane	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAChlorocyclohexane	N	1	1	1	1
	MEAN	ND	0.002	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.535	0.4706	0.506
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.002	0.002	0.002
	SD				
MIREX	N	1	1	1	1
	MEAN	0.096	0.104	0.066	0.067
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.04	0.041	0.033	0.034
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.013	0.022	0.012	0.013
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.007	0.016	0.007	0.006
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.005	0.005	0.003	0.004
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	6.2318	3.723	4.307	3.157
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	10.8331	7.493	7.164	6.548
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	5.802	4.18	3.98	3.489
	SD				
PCB 37	N	1	1	1	1
	MEAN	2.35	1.27	2.18	2.35
	SD				
PCB 77	N	1	1	1	1
	MEAN	76.27	429.17	391.73	127.41
	SD				
PCB 81	N	1	1	1	1
	MEAN	41.13	127.93	74.82	85.81
	SD				
PCB 126	N	1	1	1	1
	MEAN	1036.08	790.45	1128.35	1411.22
	SD				
PCB 169	N	1	1	1	1
	MEAN	122.04	74.85	107.73	191.78
	SD				
PCB 189	N	1	1	1	1
	MEAN	19.24	14.74	32.31	46.66
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	4.24	13.84	7.41	15.25
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	4.37	4.05	3.3	4.31
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.72	0.78	0.45	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	5.22	2.05	1.39	3
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	7.23	3.61	1.99	5.4
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.37	0.69	0.86	1.17
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.61	6.24	2.8	2.56
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.1	ND	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.52	0.95	0.47	1.37
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.18	0.2	0.26
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.18	0.21	ND	0.44
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.64	4.41	1.07	1.66
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	0.21	ND	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.45	ND	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

HERRING GULL	YEAR			
	1998	1999	2000	2001
124678-	N	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	0.21	ND
FURAN	SD			
123678-	N	1	1	1
HEXACHLORODIBENZO-	MEAN	1.34	0.9	0.54
FURAN	SD			
123789-	N	1	1	1
HEXACHLORODIBENZO-	MEAN	0.53	0.55	0.3
FURAN	SD			
1234678-	N	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.63	0.68	0.22
FURAN	SD			
1234789-	N	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.31	0.15	ND
FURAN	SD			
1234689-	N	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.14	ND
FURAN	SD			
OCTACHLORODIBENZO-	N	1	1	1
FURAN	MEAN	1.97	0.46	ND
	SD			0.79

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	6.84
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	80.06
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	TR
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.026
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.006
	SD	
DDD	N	1
	MEAN	0.003
	SD	
DDE	N	1
	MEAN	1.143
	SD	
DDT	N	1
	MEAN	0.002
	SD	
DIELDRIN	N	1
	MEAN	0.018
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.013
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	0.015
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
NIAGARA RIVER, UNNAMED ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	1.205
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.215
	SD	
PHOTOMIREX	N	1
	MEAN	0.082
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.024
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.049
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.002
	SD	
PCB: 1260	N	1
	MEAN	3.193
	SD	
PCB 1254:1260	N	1
	MEAN	7.932
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	3.97
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, PORT COLBORNE LIGHTHOUSE

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
PERCENT LIPID IN EGG	N	1	1	13	1	1
	MEAN	8.73	10.35	9.5154	10.5	9.03
	SD			0.9529		
PERCENT MOISTURE IN EGG	N	1	1	13	1	1
	MEAN	76.14	75.06	76.3231	76.1	75.30
	SD			0.9020		
CIS/ALPHA- CHLORDANE	N	1	1	13	1	1
	MEAN	TR	0.003	0.0024	0.003	0.001
	SD			0.0016		
TRANS/GAMMA- CHLORDANE	N	1	1	13	1	1
	MEAN	ND	ND	ND	ND	ND
	SD			0		
OXYCHLORDANE	N	1	1	13	1	1
	MEAN	0.021	0.011	0.0142	0.016	0.023
	SD			0.0071		
1234-CHLOROBENZENE	N	1	1	13	1	1
	MEAN	TR	TR	0.0005	TR	ND
	SD			0.0001		
1245-CHLOROBENZENE	N	1	1	13	1	1
	MEAN	TR	TR	0.0005	TR	TR
	SD			0.0001		
PENTACHLOROBENZENE	N	1	1	13	1	1
	MEAN	0.001	0.001	0.0012	0.002	TR
	SD			0.0015		
HEXACHLOROBENZENE	N	1	1	13	1	1
	MEAN	0.01	0.008	0.0088	0.009	0.007
	SD			0.0113		
DDD	N	1	1	13	1	1
	MEAN	TR	0.005	0.0016	0.002	0.002
	SD			0.0008		
DDE	N	1	1	13	1	1
	MEAN	0.598	0.504	0.3816	0.375	0.562
	SD			0.1742		
DDT	N	1	1	13	1	1
	MEAN	0.003	TR	0.0022	0.002	0.003
	SD			0.0008		
DIELDRIN	N	1	1	13	1	1
	MEAN	0.014	0.058	0.0371	0.035	0.034
	SD			0.0159		
HEPTACHLOR EPOXIDE	N	1	1	13	1	1
	MEAN	0.01	0.016	0.0106	0.012	0.015
	SD			0.0041		
ALPHA-	N	1	1	13	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND	ND
	SD			0		
BETA-	N	1	1	13	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND	ND
	SD			0		
GAMMA-	N	1	1	13	1	1
HEXAChLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND	ND
	SD			0		

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, PORT COLBORNE LIGHTHOUSE

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
TOTAL MERCURY	N		1		1	1
	MEAN		0.542		0.4595	0.607
	SD					
TRIS (4-CHLOROPHENYL)	N	1	1	13	1	1
METHANOL	MEAN	ND	ND	ND	ND	0.002
	SD			0		
MIREX	N	1	1	13	1	1
	MEAN	0.038	0.021	0.0147	0.015	0.023
	SD			0.0062		
PHOTOMIREX	N	1	1	13	1	1
	MEAN	0.017	0.009	0.0062	0.006	0.009
	SD			0.0032		
CIS-NONACHLOR	N	1	1	13	1	1
	MEAN	0.008	0.014	0.01	0.01	0.013
	SD			0.0035		
TRANS-NONACHLOR	N	1	1	13	1	1
	MEAN	0.004	0.011	0.0069	0.007	0.007
	SD			0.0019		
OCTACHLOROSTYRENE	N	1	1	13	1	1
	MEAN	0.001	0.002	0.0017	0.002	0.002
	SD			0.001		
PCB: 1260	N	1	1	13	1	1
	MEAN	4.82775	4.106	3.4124	3.266	3.540
	SD			1.9364		
PCB 1254:1260	N	1	1	13	1	1
	MEAN	7.82819	6.548	5.4679	5.014	6.562
	SD			3.0301		
TOTAL PCB	N	1	1	13	1	1
CONGENERS	MEAN	4.286	3.752	3.0977	2.893	3.558
	SD			1.6114		
PCB 37	N	1	1		1	1
	MEAN	1.1	4.1		2.77	2.36
	SD					
PCB 77	N	1	1		1	1
	MEAN	50.09	483.04		269.03	230.98
	SD					
PCB 81	N	1	1		1	1
	MEAN	30.56	73.07		51.46	98.2
	SD					
PCB 126	N	1	1		1	1
	MEAN	765.93	704.37		659.2	836.56
	SD					
PCB 169	N	1	1		1	1
	MEAN	78.87	80.67		67.16	128.36
	SD					
PCB 189	N	1	1		1	1
	MEAN	29.41	40.43		35.66	28.42
	SD					
2378-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	3.33	3.51		2.34	4.05
p-DIOXIN	SD					

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, PORT COLBORNE LIGHTHOUSE

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
1379-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
1378-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
1278-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12479/12468-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12368-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12478-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12379-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12389-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
12378-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	2.64	3.59		2.19	3.24
p-DIOXIN	SD					
123478-	N	1	1		1	1
HEXAChLODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
123678-	N	1	1		1	1
HEXAChLODIBENZO-	MEAN	5.39	3.49		2.81	5.02
p-DIOXIN	SD					
123789-	N	1	1		1	1
HEXAChLODIBENZO-	MEAN	TR	0.66		0.4	1.31
p-DIOXIN	SD					
124679/124689-	N	1	1		1	1
HEXAChLODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
123679/123689-	N	1	1		1	1
HEXAChLODIBENZO-	MEAN	ND	ND		ND	ND
p-DIOXIN	SD					
1234678-	N	1	1		1	1
HEPTACHLORODIBENZO-	MEAN	6.96	1.91		1.96	2.9
p-DIOXIN	SD					
1234679-	N	1	1		1	1
HEPTACHLORODIBENZO-	MEAN	0.13	ND		ND	ND
p-DIOXIN	SD					
OCTACHLORDIBENZO-	N	1	1		1	1
p-DIOXIN	MEAN	8.88	1.77		1.66	8.02
	SD					

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, PORT COLBORNE LIGHTHOUSE

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
2468-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	INT	ND		ND	ND
FURAN	SD					
2368-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	INT	ND		ND	ND
FURAN	SD					
1278-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	INT	ND		ND	ND
FURAN	SD					
2367-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	INT	ND		ND	ND
FURAN	SD					
2378-	N	1	1		1	1
TETRACHLORODIBENZO-	MEAN	INT	0.9		0.64	0.85
FURAN	SD					
12368-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
FURAN	SD					
23468-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
FURAN	SD					
23478-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	1.41	3.34		1.91	2.8
FURAN	SD					
12468-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	INT	0.11		0.15	ND
FURAN	SD					
12478-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	1.64	0.85		0.33	ND
FURAN	SD					
12378-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	ND	0.28		0.15	0.36
FURAN	SD					
23467-	N	1	1		1	1
PENTACHLORODIBENZO-	MEAN	0.5	0.41		0.19	0.39
FURAN	SD					
123468-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	ND	ND		ND	ND
FURAN	SD					
123478-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	0.48	1.07		0.24	1.13
FURAN	SD					
124689-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	ND	0.19		ND	ND
FURAN	SD					
234678-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	TR	ND		ND	0.8
FURAN	SD					
124678-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	ND	0.11		ND	ND
FURAN	SD					

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, PORT COLBORNE LIGHTHOUSE

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
123678-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	0.66	0.89		0.24	0.79
FURAN	SD					
123789-	N	1	1		1	1
HEXACHLORODIBENZO-	MEAN	TR	0.67		0.29	0.95
FURAN	SD					
1234678-	N	1	1		1	1
HEPTACHLORODIBENZO-	MEAN	1.04	0.28		0.3	0.88
FURAN	SD					
1234789-	N	1	1		1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND		ND	0.95
FURAN	SD					
1234689-	N	1	1		1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND		ND	ND
FURAN	SD					
OCTACHLORODIBENZO-	N	1	1		1	1
FURAN	MEAN	ND	ND		ND	2.17
	SD					

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.87	8.41	10.4	9.25
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.74	76.78	76.3	75.63
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.005	0.003	ND	0.003
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.032	0.029	0.036	0.034
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	ND	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.001	0.001	0.002	0.001
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.011	0.011	0.013	0.011
	SD				
DDD	N	1	1	1	1
	MEAN	0.008	0.003	0.005	0.003
	SD				
DDE	N	1	1	1	1
	MEAN	1.057	1.021	1.08	0.913
	SD				
DDT	N	1	1	1	1
	MEAN	0.009	0.002	0.003	0.003
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.049	0.039	0.042	0.049
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.021	0.019	0.02	0.020
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
GAMMA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
TOTAL MERCURY	N		1	1	1
	MEAN		0.419	0.3912	0.766
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.002	0.003	0.003
	SD				
MIREX	N	1	1	1	1
	MEAN	0.012	0.01	0.022	0.008
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.005	0.004	0.01	0.003
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.019	0.023	0.019	0.023
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.013	0.013	0.002	0.011
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.008	0.008	0.008	0.009
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	13.9261	11.6	10.639	13.923
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	23.3514	19.07	18.301	24.863
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	12.578	10.63	9.799	13.087
	SD				
PCB 37	N	1	1	1	1
	MEAN	2.02	0.88	1.3	1.65
	SD				
PCB 77	N	1	1	1	1
	MEAN	310.06	425.87	666.94	523.68
	SD				
PCB 81	N	1	1	1	1
	MEAN	151.55	157.76	205.45	325.44
	SD				
PCB 126	N	1	1	1	1
	MEAN	2098.06	1755.9	2282.67	2831.03
	SD				
PCB 169	N	1	1	1	1
	MEAN	188.79	202.5	223.61	464.82
	SD				
PCB 189	N	1	1	1	1
	MEAN	63.43	82.52	105.98	83.28
	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	6.53	6.37	7.71	9.7
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	6.87	6.99	7.9	9.62
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	8.62	7.82	9.9	12.25
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	1.06	1.18	1.21	1.06
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	3.04	1.66	2.69	2.18
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	8.13	5.22	3.94	3.12
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	1.06	1.2	1.74	1.19
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	3.3	3.63	4.78	6.47
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.3	0.13	0.24	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	2.9	1.55	2.8	1.82
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.36	0.31	0.43	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.9	0.43	0.42	0.65
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.69	0.77	0.73	0.56
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.43	0.22	ND	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.36	TR	ND	ND
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.2	0.11	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.09	1.14	0.96	1.42
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.79	0.71	1.13	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.67	0.3	0.32	ND
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.2	0.08	ND	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.07	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.39	0.18	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	6.04
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	83.42
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.005
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.014
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.003
	SD	
DDD	N	1
	MEAN	0.007
	SD	
DDE	N	1
	MEAN	0.801
	SD	
DDT	N	1
	MEAN	0.002
	SD	
DIELDRIN	N	1
	MEAN	0.03
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.009
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	0.041
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ERIE, MIDDLE ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	1.409
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.051
	SD	
PHOTOMIREX	N	1
	MEAN	0.007
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.017
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.032
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.002
	SD	
PCB: 1260	N	1
	MEAN	1.67
	SD	
PCB 1254:1260	N	1
	MEAN	4.014
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	3.355
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
DETROIT RIVER, FIGHTING ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	7.48	8.81	9.5	9.13
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	77.41	76.45	76.6	76.73
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.002	0.003	0.002	0.003
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.031	0.037	0.025	0.025
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.001	0.002	0.003	0.002
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.008	0.02	0.021	0.015
	SD				
DDD	N	1	1	1	1
	MEAN	0.003	0.003	0.006	0.004
	SD				
DDE	N	1	1	1	1
	MEAN	1.342	1.321	1.254	1.131
	SD				
DDT	N	1	1	1	1
	MEAN	0.013	0.005	0.067	0.005
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.022	0.036	0.032	0.037
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.013	0.02	0.016	0.017
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
GAMMA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
DETROIT RIVER, FIGHTING ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
TOTAL MERCURY	N		1	1	1
	MEAN		0.46	0.6551	0.664
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.002	0.004	0.002
	SD				
MIREX	N	1	1	1	1
	MEAN	0.013	0.01	0.015	0.011
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.006	0.004	0.014	0.004
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.012	0.019	0.015	0.018
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	ND	0.013	0.012	0.012
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.006	0.011	0.02	0.013
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	13.8369	11.86	19.443	14.954
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	20.7481	18.18	25.603	26.329
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	11.086	10.19	15.141	13.769
	SD				
PCB 37	N	1	1	1	1
	MEAN	1.99	1.16	ND	5.01
	SD				
PCB 77	N	1	1	1	1
	MEAN	94.02	245.68	141	405.01
	SD				
PCB 81	N	1	1	1	1
	MEAN	33.79	140.54	82.11	176.52
	SD				
PCB 126	N	1	1	1	1
	MEAN	1189.72	1507.27	1760.06	1653.75
	SD				
PCB 169	N	1	1	1	1
	MEAN	157.58	187.2	182.8	218.26
	SD				
PCB 189	N	1	1	1	1
	MEAN	72.13	86.62	151.75	127.96
	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	4.03	5.86	7.12	8.65
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
DETROIT RIVER, FIGHTING ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	3.53	5.03	4.07	6.31
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	0.23	1.6
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	5.58	7.93	8.62	9.75
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	0.54	1.04	0.82	3.02
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	4.77	2.43	3.44	4.82
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.38	ND	0.14	ND
p-DIOXIN	SD				
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	14.53	5.9	7.5	16.53
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
DETROIT RIVER, FIGHTING ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.51	0.95	0.36	1.55
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.45	3.73	1.53	5.6
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.13	0.09	0.18	0.2
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.84	0.91	1.88	3.99
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.26	0.36	0.17	1.46
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.25	ND	0.46	1.03
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.71	1.35	0.72	3
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.15	ND	0.37	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.38	ND	ND	2.22
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.1	ND	0.14	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
DETROIT RIVER, FIGHTING ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.96	1.42	1.02	3
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.38	0.65	0.4	2.86
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.41	3	0.8	2.7
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.18	ND	ND	2.61
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.15	ND	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.49	0.79	ND	6.15
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

BLACK TERN		YEAR
		1999
PERCENT LIPID IN EGG	N	1
	MEAN	10.71
	SD	
PERCENT MOISTURE IN	N	1
EGG	MEAN	73.5
	SD	
CIS/ALPHA-	N	1
CHLORDANE	MEAN	0.004
	SD	
ANS/GAMMA-	N	1
CHLORDANE	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.004
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	0.001
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.011
	SD	
DDD	N	1
	MEAN	ND
	SD	
DDE	N	1
	MEAN	0.176
	SD	
DDT	N	1
	MEAN	ND
	SD	
DIELDRIN	N	1
	MEAN	0.033
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.004
	SD	
ALPHA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
BETA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
GAMMA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

BLACK TERN	YEAR	
	1999	
TOTAL MERCURY	N	1
	MEAN	0.53
	SD	
IS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.001
	SD	
PHOTOMIREX	N	1
	MEAN	0.001
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.007
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.03
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.005
	SD	
PCB: 1260	N	1
	MEAN	2.5912
	SD	
PCB 1254:1260	N	1
	MEAN	2.7534
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	1.861
	SD	
PCB 37	N	1
	MEAN	27.68
	SD	
PCB 77	N	1
	MEAN	336.6
	SD	
PCB 81	N	1
	MEAN	27.34
	SD	
PCB 126	N	1
	MEAN	347.94
	SD	
PCB 169	N	1
	MEAN	43.36
	SD	
PCB 189	N	1
	MEAN	3.86
	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	1.34
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

BLACK TERN	YEAR	
	1999	
1379-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	2.02
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	0.62
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	3.98
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	0.78
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	5.4
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	
p-DIOXIN	MEAN	4.92
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

BLACK TERN	YEAR	
	1999	
2468-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	0.52
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	0.94
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	0.32
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	0.48
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	0.26
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

BLACK TERN	YEAR	
	1999	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	0.54
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	0.3
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.96
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	0.3
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	1.2
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

FORSTER'S TERN		YEAR
		1999
PERCENT LIPID IN EGG	N	1
	MEAN	9.2
	SD	
PERCENT MOISTURE IN	N	1
EGG	MEAN	77.15
	SD	
CIS/ALPHA-	N	1
CHLORDANE	MEAN	0.002
	SD	
ANS/GAMMA-	N	1
CHLORDANE	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.009
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.007
	SD	
DDD	N	1
	MEAN	TR
	SD	
DDE	N	1
	MEAN	0.621
	SD	
DDT	N	1
	MEAN	TR
	SD	
DIELDRIN	N	1
	MEAN	0.016
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.007
	SD	
ALPHA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
BETA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
GAMMA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

FORSTER'S TERN		YEAR
		1999
TOTAL MERCURY	N	1
	MEAN	2.57
	SD	
IS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	0.005
	SD	
MIREX	N	1
	MEAN	0.014
	SD	
PHOTOMIREX	N	1
	MEAN	0.003
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.018
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.042
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.033
	SD	
PCB: 1260	N	1
	MEAN	3.4307
	SD	
PCB 1254:1260	N	1
	MEAN	7.5205
	SD	
TOTAL PCB	N	1
	MEAN	4.404
	SD	
PCB 37	N	1
	MEAN	2.2
	SD	
PCB 77	N	1
	MEAN	257.19
	SD	
PCB 81	N	1
TEACHLOROBIPHENYL	MEAN	98.81
	SD	
PCB 126	N	1
	MEAN	561.36
	SD	
PCB 169	N	1
	MEAN	44.74
	SD	
PCB 189	N	1
	MEAN	44.06
	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	3.47
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

FORSTER'S TERN	YEAR	
	1999	
1379-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	3.67
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	5.58
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	2
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	1.78
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	3.07
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

FORSTER'S TERN	YEAR	
	1999	
2468-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	0.15
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	0.2
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.06
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	0.42
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	0.03
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	0.16
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.11
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	0.07
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE ST. CLAIR, WALPOLE ISLAND

FORSTER'S TERN		YEAR
		1999
123678-	N	1
HEXACHLORODIBENZO-	MEAN	0.31
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.16
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANTRY ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.7	9.1	9.7	9.82
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.62	75.73	76.7	75.82
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	TR	0.004	0.001	TR
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.035	0.051	0.033	0.034
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	0.002	0.002	0.002
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.015	0.018	0.013	0.009
	SD				
DDD	N	1	1	1	1
	MEAN	TR	TR	0.001	TR
	SD				
DDE	N	1	1	1	1
	MEAN	0.727	1.372	0.877	0.890
	SD				
DDT	N	1	1	1	1
	MEAN	0.004	0.012	0.009	0.006
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	ND	0.08	0.041	0.032
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.016	0.032	0.018	0.019
	SD				
ALPHA-HEXAChlorocyclohexane	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAChlorocyclohexane	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANTRY ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.5	0.4468	0.612
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.003	0.004	0.002
	SD				
MIREX	N	1	1	1	1
	MEAN	0.02	0.074	0.083	0.051
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.012	0.037	0.054	0.021
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.013	0.037	0.019	0.020
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.009	0.027	0.012	0.010
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.001	0.004	0.004	0.002
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	1.8156	2.263	1.715	1.916
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	3.5629	5.932	4.137	4.479
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	1.97	3.201	2.241	2.328
	SD				
PCB 37	N	1	1	1	1
	MEAN	0.99	0.96	1	1.15
	SD				
PCB 77	N	1	1	1	1
	MEAN	19.86	442.22	157.48	125.71
	SD				
PCB 81	N	1	1	1	1
	MEAN	28.73	172.01	75.18	96.14
	SD				
PCB 126	N	1	1	1	1
	MEAN	693.38	1162.23	836.68	926.34
	SD				
PCB 169	N	1	1	1	1
	MEAN	120.57	160.03	101.97	185.54
	SD				
PCB 189	N	1	1	1	1
	MEAN	19.12	28.08	16.77	15.63
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANTRY ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	5.19	14.98	9.51	7.98
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	4.61	4.92	3.25	5.31
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.6	0.55	0.57	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.73	1.42	1.61	2.26
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.1	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANTRY ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	1.72	1.57	1.76	5.3
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.14	0.69	0.46	3.05
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.94	9.63	4.33	3.67
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.05	0.13	0.27	0.12
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.27	1.12	0.59	1.86
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.2	0.35	0.31	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.75	0.33	0.99
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.9	3.17	1.77	1.12
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	0.16	ND	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.46	ND	0.13	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANTRY ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.43	1.65	0.87	1
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.66	1.12	0.73	0.83
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.54	0.53	0.55	0.53
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.15	0.1	ND	0.2
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.08	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.29	ND	ND	0.77
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.73	8.12	9.5	9.12
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	74.74	75.23	75.5	73.74
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.001	0.003	0.004	0.005
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.062	0.045	0.054	0.068
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	0.026	0.065	0.015	0.021
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	0.005	0.019	0.005	0.01
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.011	0.011	0.005	0.005
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.028	0.024	0.025	0.026
	SD				
DDD	N	1	1	1	1
	MEAN	0.023	0.012	0.02	0.024
	SD				
DDE	N	1	1	1	1
	MEAN	3.579	2.579	3.796	4.724
	SD				
DDT	N	1	1	1	1
	MEAN	0.003	0.013	0.068	0.024
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.039	0.038	0.037	0.051
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.021	0.024	0.021	0.023
	SD				
ALPHA-HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	0.002	ND	ND
	SD				
GAMMA-HEXACHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
TOTAL MERCURY	N		1	1	1
	MEAN		0.605	0.8344	0.787
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.012	0.016	0.009
	SD				
MIREX	N	1	1	1	1
	MEAN	0.067	0.022	0.03	0.024
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.033	0.013	0.008	0.013
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.018	0.026	0.027	0.031
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.013	0.019	0.021	0.021
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.019	0.02	0.024	0.033
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	14.7131	13.08	17.089	20.547
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	35.0019	27.07	36.274	48.452
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	21.224	17.07	24.037	30.521
	SD				
PCB 37	N	1	1	1	1
	MEAN	4.54	56.16	8.52	16.06
	SD				
PCB 77	N	1	1	1	1
	MEAN	377.48	871.53	594.71	1204.74
	SD				
PCB 81	N	1	1	1	1
	MEAN	235.63	252.34	328.96	505.22
	SD				
PCB 126	N	1	1	1	1
	MEAN	4446.65	2600.43	5271.35	5967.14
	SD				
PCB 169	N	1	1	1	1
	MEAN	488.55	355.25	585.8	888.6
	SD				
PCB 189	N	1	1	1	1
	MEAN	137.5	113.93	168.68	240.6
	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	25.35	19.81	32.68	36.55
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	10.87	8.78	11.83	14.77
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	0.75	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	16.22	9.95	21.26	20.52
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	1.03	1.19	1.36	4.76
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	5.73	3.12	5.28	5.99
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.65	0.53	0.52	0.59
p-DIOXIN	SD				
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	12.11	8.97	14.32	12.81
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	0.75	0.96	0.61
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.23	0.82	1.13	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	0.09	0.14	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	1.11	2.03	1.96	2.87
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	10.05	10.22	13.29	24.6
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.21	0.94	1.03	0.67
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	3.28	12.17	21.12	16.21
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.75	0.82	1.02	1.32
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.31	4.83	7.16	6.66
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	2.51	3.3	2.65	5.71
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.8	1.83	2.59	2.35
FURAN	SD				
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.42	1.14	ND	ND
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	0.87	1.03	0.87
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	4.49	3.11	4.08	6.37
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.85	3.42	1.83	INT
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	2.8	2.31	3.23	4.26
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.12	0.44	0.7	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.44	0.97	1.74	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.53	0.95	1.31	1.39
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	6.05
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	80.23
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.002
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.011
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.003
	SD	
DDD	N	1
	MEAN	0.012
	SD	
DDE	N	1
	MEAN	1.071
	SD	
DDT	N	1
	MEAN	0.003
	SD	
DIELDRIN	N	1
	MEAN	0.013
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.004
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON, CHANNEL-SHELTER ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.808
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.004
	SD	
PHOTOMIREX	N	1
	MEAN	0.003
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.01
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.016
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.003
	SD	
PCB: 1260	N	1
	MEAN	1.141
	SD	
PCB 1254:1260	N	1
	MEAN	3.027
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	1.902
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, MATCHEDASH BAY

BLACK TERN	YEAR	
	1996	
PERCENT LIPID IN EGG	N	1
	MEAN	10.2
	SD	
PERCENT MOISTURE IN	N	1
EGG	MEAN	74.8
	SD	
CIS/ALPHA-	N	1
CHLORDANE	MEAN	0.0009
	SD	
TRANS/GAMMA-	N	1
CHLORDANE	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.007
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	ND
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.0052
	SD	
DDD	N	1
	MEAN	ND
	SD	
DDE	N	1
	MEAN	0.23
	SD	
DDT	N	1
	MEAN	0.0026
	SD	
DIELDRIN	N	1
	MEAN	0.0206
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.0102
	SD	
ALPHA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
BETA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
GAMMA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, MATCHEDASH BAY

BLACK TERN		YEAR
		1996
TOTAL MERCURY	N	
	MEAN	
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.0056
	SD	
PHOTOMIREX	N	1
	MEAN	0.0032
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.005
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.0134
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.0012
	SD	
PCB: 1260	N	1
	MEAN	0.4132
	SD	
PCB 1254:1260	N	1
	MEAN	1.1163
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	0.518428
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, NOTTAWASAGA ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	6.31
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	79.03
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.001
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.012
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.002
	SD	
DDD	N	1
	MEAN	0.002
	SD	
DDE	N	1
	MEAN	0.24
	SD	
DDT	N	1
	MEAN	0.001
	SD	
DIELDRIN	N	1
	MEAN	0.007
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.003
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, NOTTAWASAGA ISLAND

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	1.38
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.018
	SD	
PHOTOMIREX	N	1
	MEAN	0.006
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.007
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.019
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	ND
	SD	
PCB: 1260	N	1
	MEAN	0.347
	SD	
PCB 1254:1260	N	1
	MEAN	0.795
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	0.48
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, TINY MARSH

BLACK TERN	YEAR	
	1999	
PERCENT LIPID IN EGG	N	1
	MEAN	9.38
	SD	
PERCENT MOISTURE IN	N	1
EGG	MEAN	77.2
	SD	
CIS/ALPHA-	N	1
CHLORDANE	MEAN	ND
	SD	
TRANS/GAMMA-	N	1
CHLORDANE	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	ND
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.001
	SD	
DDD	N	1
	MEAN	TR
	SD	
DDE	N	1
	MEAN	0.082
	SD	
DDT	N	1
	MEAN	ND
	SD	
DIELDRIN	N	1
	MEAN	0.004
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.001
	SD	
ALPHA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
BETA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	
GAMMA-	N	1
HEXACHLOROCYCLOHEXANE	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, TINY MARSH

BLACK TERN	YEAR	
	1999	
TOTAL MERCURY	N	1
	MEAN	0.67
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.002
	SD	
PHOTOMIREX	N	1
	MEAN	0.001
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.002
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.003
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	ND
	SD	
PCB: 1260	N	1
	MEAN	0.1734
	SD	
PCB 1254:1260	N	1
	MEAN	0.3288
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	0.226
	SD	
PCB 37	N	1
	MEAN	2.82
	SD	
PCB 77	N	1
	MEAN	141.68
	SD	
PCB 81	N	1
	MEAN	9.18
	SD	
PCB 126	N	1
	MEAN	79.35
	SD	
PCB 169	N	1
	MEAN	16.59
	SD	
PCB 189	N	1
	MEAN	3.06
	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.35
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, TINY MARSH

BLACK TERN	YEAR	
	1999	
1379-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	0.87
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	0.3
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	1.42
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	0.28
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	2
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	1.34
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, TINY MARSH

BLACK TERN	YEAR	
	1999	
2468-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TETRACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TETRACHLORODIBENZO-	MEAN	0.43
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	0.38
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	0.22
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	0.11
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	0.29
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
GEORGIAN BAY, TINY MARSH

BLACK TERN	YEAR	
	1999	
123678-	N	1
HEXACHLORODIBENZO-	MEAN	0.19
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	0.12
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.18
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	0.04
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.6	9.03	11.3	9.16
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	75.47	75.85	73.9	76.55
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.002	0.002	0.001	0.001
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.051	0.047	0.041	0.040
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.001	0.001	TR	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.013	0.013	0.013	0.011
	SD				
DDD	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
DDE	N	1	1	1	1
	MEAN	1.228	1.237	1.16	1.082
	SD				
DDT	N	1	1	1	1
	MEAN	0.005	0.011	0.006	0.004
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.035	0.057	0.039	0.029
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.024	0.029	0.021	0.019
	SD				
ALPHA-HEXA-CHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXA-CHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
GAMMA-HEXA-CHLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
TOTAL MERCURY	N		1	1	1
	MEAN		0.633	0.6892	0.759
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.003	0.003	0.003
	SD				
MIREX	N	1	1	1	1
	MEAN	0.024	0.035	0.045	0.022
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.015	0.02	0.028	0.013
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.032	0.036	0.032	0.028
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.015	0.026	0.016	0.012
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.002	0.002	0.002	0.002
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	2.3745	2.299	1.825	2.135
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	5.5972	5.74	4.904	5.411
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	2.898	3.044	2.431	2.732
	SD				
PCB 37	N	1	1	1	1
	MEAN	ND	0.37	ND	2.72
	SD				
PCB 77	N	1	1	1	1
	MEAN	81.34	161.19	109.33	192.65
	SD				
PCB 81	N	1	1	1	1
	MEAN	62.65	106.6	72.44	109.01
	SD				
PCB 126	N	1	1	1	1
	MEAN	1268.95	1120.32	1201.61	1112.98
	SD				
PCB 169	N	1	1	1	1
	MEAN	219.02	163.66	196.52	238.51
	SD				
PCB 189	N	1	1	1	1
	MEAN	16.08	15.09	31.73	37.15
	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	8.16	12.26	12.36	9.43
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	9.46	9.45	10.41	8.28
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	0.83	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	7.36	6.24	6.79	6.54
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	1	0.59	1.08	1.02
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXAChLODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	2.22	2.14	1.69	1.58
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	0.15	ND
p-DIOXIN	SD				
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	2.47	4.14	4.74	6.03
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	0.68	0.95	0.96	1.67
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	6.5	7.4	5.9	8.34
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.15	ND	0.12	0.09
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.64	0.75	0.67	1.64
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	0.2	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	0.24	0.48
FURAN	SD				
123468-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.9	1.99	1.36	1.92
FURAN	SD				
124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.16	ND	ND	0.27
FURAN	SD				
234678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.47	ND	ND	ND
FURAN	SD				
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	0.18
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	2.24	1.91	1.46	1.98
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.73	0.93	0.81	1.5
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.64	1.82	1.45	1.34
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	ND	ND	ND	1.07

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT

HERRING GULL		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	10.02
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	74.65
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.003
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.062
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	0.031
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	0.001
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.091
	SD	
DDD	N	1
	MEAN	0.002
	SD	
DDE	N	1
	MEAN	1.64
	SD	
DDT	N	1
	MEAN	0.015
	SD	
DIELDRIN	N	1
	MEAN	0.038
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.025
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT

HERRING GULL		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.892
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.03
	SD	
PHOTOMIREX	N	1
	MEAN	0.035
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.039
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.026
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.003
	SD	
PCB: 1260	N	1
	MEAN	3.111
	SD	
PCB 1254:1260	N	1
	MEAN	8.493
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	4.56
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, GULL ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.64	8.97	10.2	9.54
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	75.52	76.27	76.2	75.01
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.007	0.01	0.005	0.004
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.151	0.222	0.187	0.033
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	0.003	TR	TR	ND
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	TR	TR	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.01	0.017	0.014	0.010
	SD				
DDD	N	1	1	1	1
	MEAN	0.003	0.002	0.004	0.002
	SD				
DDE	N	1	1	1	1
	MEAN	4.945	6.463	6.287	3.741
	SD				
DDT	N	1	1	1	1
	MEAN	0.016	0.02	0.016	0.008
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.098	0.156	0.077	0.076
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.064	0.093	0.059	0.043
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, GULL ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.656	1.863	1.1
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.011	0.012	0.006
	SD				
MIREX	N	1	1	1	1
	MEAN	0.018	0.023	0.051	0.022
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.019	0.022	0.038	0.016
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.05	0.087	0.092	0.060
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.037	0.061	0.06	0.037
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.002	0.001	0.002	0.001
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	8.8214	10.16	12.153	7.199
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	26.0726	29.48	31.178	18.616
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	12.042	14.06	14.62	8.917
	SD				
PCB 37	N	1	1	1	1
	MEAN	3.08	2.26	1.47	3.38
	SD				
PCB 77	N	1	1	1	1
	MEAN	371.14	1380.04	416.61	781.91
	SD				
PCB 81	N	1	1	1	1
	MEAN	182.67	360.52	258.72	190.49
	SD				
PCB 126	N	1	1	1	1
	MEAN	4455.32	5211.41	5840.79	2333.65
	SD				
PCB 169	N	1	1	1	1
	MEAN	578.66	687.06	761	464.78
	SD				
PCB 189	N	1	1	1	1
	MEAN	117.18	46.39	109.58	60.07
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, GULL ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	7.75	6.55	9.52	3.59
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	0.51	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	10.37	10.99	12.27	6.16
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.14	0.75	1.26	0.95
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	3.33	0.59	2.37	1.61
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.43	ND	0.2	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, GULL ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	5.49	1.66	4.78	3.44
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	1.42	2.69	1.25	1.06
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	6.3	14.78	7.76	5.41
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.22	0.28	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.33	1.52	2.48	0.99
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.58	0.83	0.4	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	0.83	0.62
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.62	1.64	1.52	1.1
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN		0.16	0.29	ND
FURAN	SD	ND			
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.36	ND	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, GULL ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	0.17	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	3	1.74	2.12	1.09
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.36	1.24	1.37	0.89
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.86	0.16	0.66	ND
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.2	ND	0.15	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	0.22	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.37	0.12	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, BIG SISTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.4	9.9	8.52	8.75
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.5	75.41	76.62	76.98
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.002	0.006	0.002	0.002
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.146	0.12	0.176	0.079
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	TR	TR	TR
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	TR	0.005	0.001
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.013	0.014	0.013	0.009
	SD				
DDD	N	1	1	1	1
	MEAN	0.009	0.003	0.001	0.001
	SD				
DDE	N	1	1	1	1
	MEAN	5.347	3.626	4.877	3.042
	SD				
DDT	N	1	1	1	1
	MEAN	0.042	0.016	0.016	0.010
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.087	0.121	0.085	0.063
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.067	0.065	0.062	0.035
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, BIG SISTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.6284	0.6968	0.771
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	0.006	0.006	ND	0.005
	SD				
MIREX	N	1	1	1	1
	MEAN	0.036	0.014	0.022	0.013
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.025	0.014	0.02	0.010
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.041	0.058	0.055	0.035
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.016	0.044	0.021	0.019
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.003	0.001	0.001	0.001
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	8.084	6.19525547	6.022	3.942
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	23.151	17.3561644	22.986	13.164
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	12.082	9.294	11.22	6.962
	SD				
PCB 37	N	1	1	1	1
	MEAN	INT	8.91	7.47	11.21
	SD				
PCB 77	N	1	1	1	1
	MEAN	236.21	1291.78	639.34	1270.74
	SD				
PCB 81	N	1	1	1	1
	MEAN	263.19	280.74	341.45	354.39
	SD				
PCB 126	N	1	1	1	1
	MEAN	4406.48	3070.41	4274.87	2278.92
	SD				
PCB 169	N	1	1	1	1
	MEAN	455.82	356.61	553.45	383.75
	SD				
PCB 189	N	1	1	1	1
	MEAN	84.37	65.26	73.05	65.56
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, BIG SISTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	6.6	5.16	7.35	4.72
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	0.45	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	11.16	7.05	9.31	6.05
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.11	1.08	1.02	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	5.3	1.16	3.58	6.24
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.44	1.22	0.94	1.96
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, BIG SISTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	12.25	10.17	11.83	22.53
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	2.8	5.28	4.06	4.62
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.1	0.1	ND	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	1.09	1.06	1.98	2.65
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.17	0.33	0.12	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.37	0.34	0.65	0.3
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.25	0.6	1.03	ND
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.17	0.12	0.28	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.21	ND	0.16	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE MICHIGAN, BIG SISTER ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.15	0.04	0.15	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	2.53	1.22	1.51	1.14
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.32	0.82	0.8	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	1.32	0.22	1.08	0.6
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.11	ND	TR	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.19	ND	TR	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.33	ND	ND	0.41
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, SKIN ISLAND

HERRING GULL		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	10.53
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	74.76
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	ND
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.033
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.007
	SD	
DDD	N	1
	MEAN	TR
	SD	
DDE	N	1
	MEAN	0.938
	SD	
DDT	N	1
	MEAN	0.002
	SD	
DIELDRIN	N	1
	MEAN	0.014
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.014
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, SKIN ISLAND

HERRING GULL		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.472
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.023
	SD	
PHOTOMIREX	N	1
	MEAN	0.02
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.017
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.01
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.001
	SD	
PCB: 1260	N	1
	MEAN	1.77
	SD	
PCB 1254:1260	N	1
	MEAN	4.178
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	1.992
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, CHENE ISLAND

HERRING GULL		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	9.64
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	74.75
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	TR
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.058
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	0.001
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.011
	SD	
DDD	N	1
	MEAN	0.001
	SD	
DDE	N	1
	MEAN	1.541
	SD	
DDT	N	1
	MEAN	0.004
	SD	
DIELDRIN	N	1
	MEAN	0.032
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.024
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, CHENE ISLAND

HERRING GULL		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.4848
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.048
	SD	
PHOTOMIREX	N	1
	MEAN	0.031
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.024
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.011
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.002
	SD	
PCB: 1260	N	1
	MEAN	3.002
	SD	
PCB 1254:1260	N	1
	MEAN	7.301
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	3.459
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, AGAWA ROCK

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	9.65	9.13	10	9.38
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.05	76.24	75.7	75.23
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.002	0.004	0.002	0.002
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.095	0.016	0.099	0.043
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	TR	0.001	TR	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.009	0.014	0.015	0.008
	SD				
DDD	N	1	1	1	1
	MEAN	TR	0.002	TR	TR
	SD				
DDE	N	1	1	1	1
	MEAN	1.728	1.687	2.18	0.883
	SD				
DDT	N	1	1	1	1
	MEAN	0.006	0.016	0.004	0.004
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.05	0.077	0.053	0.040
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.039	0.04	0.041	0.022
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, AGAWA ROCK

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.5654	0.7288	1.05
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.003	0.004	0.001
	SD				
MIREX	N	1	1	1	1
	MEAN	0.021	0.018	0.027	0.016
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.017	0.013	0.02	0.011
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.026	0.043	0.036	0.024
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.012	0.032	0.02	0.015
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	TR	0.002	0.002	0.002
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	3.4615	3.7774	4.599	1.825
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	8.6762	8.7534	11.356	5.082
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	4.096	4.455	5.394	2.447
	SD				
PCB 37	N	1	1	1	1
	MEAN	0.83	0.83	1.38	1.62
	SD				
PCB 77	N	1	1	1	1
	MEAN	49.69	547.18	80.65	220.06
	SD				
PCB 81	N	1	1	1	1
	MEAN	52.11	127.15	74.2	100.08
	SD				
PCB 126	N	1	1	1	1
	MEAN	1335.07	1480.11	2120.89	1027.11
	SD				
PCB 169	N	1	1	1	1
	MEAN	265.85	230.82	380.69	239.88
	SD				
PCB 189	N	1	1	1	1
	MEAN	27.24	15.29	27.44	31.71
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, AGAWA ROCK

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	5.22	5.63	7.33	5.93
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	0.42
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	7.6	6.02	6.19	5.94
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.71	0.92	0.28	0.95
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	3.81	1.93	3.34	3.73
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, AGAWA ROCK

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	5.84	1.84	4.63	5.95
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	3.93	6.56	3.1	4.15
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.16	ND	0.13
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.97	0.89	0.78	0.68
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.38	ND	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	0.27	0.33
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.04	1.8	0.89	1.21
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	0.1	ND	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.25	ND	ND	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, AGAWA ROCK

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	0.06	ND	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.82	1.28	1.32	1.07
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.02	0.89	0.74	0.8
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.87	0.4	0.61	0.59
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.07	ND	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	0.08	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.25	ND	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, GRANITE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
PERCENT LIPID IN EGG	N	1	1	1	1
	MEAN	8.81	8.27	9.7	8.59
	SD				
PERCENT MOISTURE IN EGG	N	1	1	1	1
	MEAN	76.61	75.2	76.5	75.40
	SD				
CIS/ALPHA-CHLORDANE	N	1	1	1	1
	MEAN	0.004	0.004	0.001	TR
	SD				
TRANS/GAMMA-CHLORDANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
OXYCHLORDANE	N	1	1	1	1
	MEAN	0.119	0.1	0.065	0.046
	SD				
1234-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
1245-CHLOROBENZENE	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PENTACHLOROBENZENE	N	1	1	1	1
	MEAN	0.002	0.001	0.002	TR
	SD				
HEXACHLOROBENZENE	N	1	1	1	1
	MEAN	0.015	0.019	0.014	0.010
	SD				
DDD	N	1	1	1	1
	MEAN	TR	0.001	TR	TR
	SD				
DDE	N	1	1	1	1
	MEAN	3.591	2.425	1.537	1.211
	SD				
DDT	N	1	1	1	1
	MEAN	0.013	0.018	0.003	0.003
	SD				
DIELDRIN	N	1	1	1	1
	MEAN	0.082	0.131	0.048	0.042
	SD				
HEPTACHLOR EPOXIDE	N	1	1	1	1
	MEAN	0.058	0.062	0.031	0.025
	SD				
ALPHA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
BETA-HEXAHCLOROCYCLOHEXANE	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, GRANITE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
GAMMA-	N	1	1	1	1
HEXACHLOROCYCLOHEXANE	MEAN	ND	ND	ND	ND
	SD				
TOTAL MERCURY	N		1	1	1
	MEAN		0.4579	0.924	0.694
	SD				
TRIS (4-CHLOROPHENYL)	N	1	1	1	1
METHANOL	MEAN	ND	0.005	0.003	0.002
	SD				
MIREX	N	1	1	1	1
	MEAN	0.066	0.04	0.044	0.043
	SD				
PHOTOMIREX	N	1	1	1	1
	MEAN	0.038	0.025	0.038	0.022
	SD				
CIS-NONACHLOR	N	1	1	1	1
	MEAN	0.05	0.07	0.031	0.031
	SD				
TRANS-NONACHLOR	N	1	1	1	1
	MEAN	0.037	0.057	0.016	0.019
	SD				
OCTACHLOROSTYRENE	N	1	1	1	1
	MEAN	0.002	0.003	0.002	0.003
	SD				
PCB: 1260	N	1	1	1	1
	MEAN	6.7743	3.7682	2.947	2.609
	SD				
PCB 1254:1260	N	1	1	1	1
	MEAN	17.244	10.5616	7.973	7.041
	SD				
TOTAL PCB	N	1	1	1	1
CONGENERS	MEAN	8.163	5.45	4.038	3.485
	SD				
PCB 37	N	1	1	1	1
	MEAN	2.52	0.8	ND	2.97
	SD				
PCB 77	N	1	1	1	1
	MEAN	157.85	579.59	138.31	91.97
	SD				
PCB 81	N	1	1	1	1
	MEAN	125.81	243.68	149.19	148.77
	SD				
PCB 126	N	1	1	1	1
	MEAN	2534.2	2135.15	1659.39	1304.09
	SD				
PCB 169	N	1	1	1	1
	MEAN	348.85	271.15	255.19	260.84
	SD				
PCB 189	N	1	1	1	1
	MEAN	73.76	13.91	44.77	45.22
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, GRANITE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
2378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	8.44	9.96	8.6	8.06
p-DIOXIN	SD				
1379-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1378-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12479/12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12379-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
12389-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123478-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	0.33	ND
p-DIOXIN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	7.99	6.94	6.85	5.58
p-DIOXIN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	0.74	1.33	0.81	ND
p-DIOXIN	SD				
124679/124689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
123679/123689-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	3.14	1.47	3.46	3.81
p-DIOXIN	SD				
1234679-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
p-DIOXIN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, GRANITE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
OCTACHLORDIBENZO-	N	1	1	1	1
p-DIOXIN	MEAN	2.62	1.55	4.16	4.56
	SD				
2468-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2368-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
1278-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
2367-	N	1	1	1	1
TETRACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
12368-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
23478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	4.33	9.02	3.59	4.05
FURAN	SD				
12468-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	ND	0.28	0.1	ND
FURAN	SD				
12478-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.87	0.73	0.53	1.53
FURAN	SD				
12378-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.22	0.24	0.18	ND
FURAN	SD				
23467-	N	1	1	1	1
PENTACHLORODIBENZO-	MEAN	0.22	ND	0.18	0.25
FURAN	SD				
123468-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123478-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	1.25	1.91	1.11	1.09
FURAN	SD				
124689-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	ND	0.13	ND	ND
FURAN	SD				
234678-	N	1	1	1	1
HEXAChLORODIBENZO-	MEAN	0.34	ND	0.19	ND
FURAN	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, GRANITE ISLAND

HERRING GULL		YEAR			
		1998	1999	2000	2001
124678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
123678-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	2.04	1.35	1.37	1.1
FURAN	SD				
123789-	N	1	1	1	1
HEXACHLORODIBENZO-	MEAN	1.07	1.06	0.69	ND
FURAN	SD				
1234678-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.73	0.47	0.68	0.8
FURAN	SD				
1234789-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	0.12	ND	0.18	ND
FURAN	SD				
1234689-	N	1	1	1	1
HEPTACHLORODIBENZO-	MEAN	ND	ND	ND	ND
FURAN	SD				
OCTACHLORODIBENZO-	N	1	1	1	1
FURAN	MEAN	0.3	ND	0.4	0.58
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, MUTTON ISLAND

HERRING GULL		YEAR
		2000
PERCENT LIPID IN EGG	N	1
	MEAN	9.97
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	75.31
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	TR
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.06
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	ND
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	ND
	SD	
DDD	N	1
	MEAN	TR
	SD	
DDE	N	1
	MEAN	1.618
	SD	
DDT	N	1
	MEAN	0.004
	SD	
DIELDRIN	N	1
	MEAN	0.025
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.024
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	0.002
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SUPERIOR, MUTTON ISLAND

HERRING GULL		YEAR
		2000
TOTAL MERCURY	N	1
	MEAN	0.46
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.023
	SD	
PHOTOMIREX	N	1
	MEAN	0.022
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.027
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.014
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.001
	SD	
PCB: 1260	N	1
	MEAN	2.6
	SD	
PCB 1254:1260	N	1
	MEAN	6.973
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	3.208
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
STURGEON LAKE

BLACK TERN	YEAR	
	1996	
PERCENT LIPID IN EGG	N	2
	MEAN	8.95
	SD	0.9192
PERCENT MOISTURE IN	N	2
EGG	MEAN	74.3
	SD	0.2828
CIS/ALPHA-	N	2
CHLORDANE	MEAN	0.0036
	SD	0.0011
TRANS/GAMMA-	N	2
CHLORDANE	MEAN	0.0000375
	SD	1.76777E-05
OXYCHLORDANE	N	2
	MEAN	0.006
	SD	0.0018
1234-CHLOROBENZENE	N	2
	MEAN	0.0002
	SD	.0001
1245-CHLOROBENZENE	N	2
	MEAN	0.0002
	SD	0.0001
PENTACHLOROBENZENE	N	2
	MEAN	0.0044
	SD	0.0017
HEXACHLOROBENZENE	N	2
	MEAN	0.0088
	SD	0.001
DDD	N	2
	MEAN	0.0001
	SD	0.0001
DDE	N	2
	MEAN	0.1291
	SD	0.0146
DDT	N	2
	MEAN	0.0017
	SD	0.0004
DIELDRIN	N	2
	MEAN	0.0275
	SD	0.0006
HEPTACHLOR EPOXIDE	N	2
	MEAN	0.0088
	SD	0.0012
ALPHA-	N	2
HEXACHLOROCYCLOHEXANE	MEAN	0.0001
	SD	0.0001
BETA-	N	2
HEXACHLOROCYCLOHEXANE	MEAN	0.0252
	SD	0.0017
GAMMA-	N	2
HEXACHLOROCYCLOHEXANE	MEAN	0.0023
	SD	0.0005

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
STURGEON LAKE

BLACK TERN	YEAR	
	1996	
TOTAL MERCURY	N	
	MEAN	
	SD	
IS (4-CHLOROPHENYL)	N	2
METHANOL	MEAN	0.0002
	SD	0.0001
MIREX	N	
	MEAN	0.0073
	SD	0
PHOTOMIREX	N	2
	MEAN	0.0028
	SD	0.001
CIS-NONACHLOR	N	2
	MEAN	0.0052
	SD	0.0003
ANS-NONACHLOR	N	2
	MEAN	0.0184
	SD	0.0016
OCTACHLOROSTYRENE	N	2
	MEAN	0.0084
	SD	0.0014
PCB: 1260	N	2
	MEAN	0.5514
	SD	0.0186
PCB 1254:1260	N	2
	MEAN	1.5709
	SD	0.0363
TOTAL PCB	N	2
CONGENERS	MEAN	2.168
	SD	0.0012

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

BLACK TERN		YEAR
		1996
PERCENT LIPID IN EGG	N	1
	MEAN	9.7
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	74.8
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.0051
	SD	
TRANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.0096
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	ND
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.0076
	SD	
DDD	N	1
	MEAN	0.0073
	SD	
DDE	N	1
	MEAN	0.4815
	SD	
DDT	N	1
	MEAN	0.0104
	SD	
DIELDRIN	N	1
	MEAN	0.0389
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.0099
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

BLACK TERN		YEAR
		1996
TOTAL MERCURY	N	
	MEAN	
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	ND
	SD	
MIREX	N	1
	MEAN	0.0053
	SD	
PHOTOMIREX	N	1
	MEAN	0.0029
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.0114
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.0246
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	0.0023
	SD	
PCB: 1260	N	1
	MEAN	0.7353
	SD	
PCB 1254:1260	N	1
	MEAN	1.4045
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	0.7426
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

FORSTER'S TERN		YEAR
		1999
PERCENT LIPID IN EGG	N	1
	MEAN	8.63
	SD	
PERCENT MOISTURE IN EGG	N	1
	MEAN	77.57
	SD	
CIS/ALPHA-CHLORDANE	N	1
	MEAN	0.002
	SD	
ANS/GAMMA-CHLORDANE	N	1
	MEAN	ND
	SD	
OXYCHLORDANE	N	1
	MEAN	0.006
	SD	
1234-CHLOROBENZENE	N	1
	MEAN	ND
	SD	
1245-CHLOROBENZENE	N	1
	MEAN	TR
	SD	
PENTACHLOROBENZENE	N	1
	MEAN	TR
	SD	
HEXACHLOROBENZENE	N	1
	MEAN	0.004
	SD	
DDD	N	1
	MEAN	0.005
	SD	
DDE	N	1
	MEAN	0.818
	SD	
DDT	N	1
	MEAN	TR
	SD	
DIELDRIN	N	1
	MEAN	0.011
	SD	
HEPTACHLOR EPOXIDE	N	1
	MEAN	0.004
	SD	
ALPHA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
BETA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	
GAMMA-HEXACHLOROCYCLOHEXANE	N	1
	MEAN	ND
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

FORSTER'S TERN		YEAR
		1999
TOTAL MERCURY	N	1
	MEAN	2.21
	SD	
TRIS (4-CHLOROPHENYL)	N	1
METHANOL	MEAN	0.002
	SD	
MIREX	N	1
	MEAN	0.006
	SD	
PHOTOMIREX	N	1
	MEAN	0.002
	SD	
CIS-NONACHLOR	N	1
	MEAN	0.01
	SD	
TRANS-NONACHLOR	N	1
	MEAN	0.022
	SD	
OCTACHLOROSTYRENE	N	1
	MEAN	TR
	SD	
PCB: 1260	N	1
	MEAN	2.0164
	SD	
PCB 1254:1260	N	1
	MEAN	3.9589
	SD	
TOTAL PCB	N	1
CONGENERS	MEAN	2.407
	SD	
PCB 37	N	1
	MEAN	3.78
	SD	
PCB 77	N	1
	MEAN	221.32
	SD	
PCB 81	N	1
	MEAN	42.85
	SD	
PCB 126	N	1
	MEAN	340.98
	SD	
PCB 169	N	1
	MEAN	342
	SD	
PCB 189	N	1
	MEAN	26.15
	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	1.91
p-DIOXIN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

FORSTER'S TERN	YEAR	
	1999	
1379-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1378-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12479/12468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12379-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12389-	N	1
PENTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	2.63
p-DIOXIN	SD	
123478-	N	1
HEXAChLODIBENZO-	MEAN	0.39
p-DIOXIN	SD	
123678-	N	1
HEXAChLODIBENZO-	MEAN	3.73
p-DIOXIN	SD	
123789-	N	1
HEXAChLODIBENZO-	MEAN	1.34
p-DIOXIN	SD	
124679/124689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
123679/123689-	N	1
HEXAChLODIBENZO-	MEAN	ND
p-DIOXIN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	1.19
p-DIOXIN	SD	
1234679-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
p-DIOXIN	SD	
OCTACHLORDIBENZO-	N	1
p-DIOXIN	MEAN	2.22
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

FORSTER'S TERN	YEAR	
	1999	
2468-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2368-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1278-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2367-	N	1
TEACHLORODIBENZO-	MEAN	ND
FURAN	SD	
2378-	N	1
TEACHLORODIBENZO-	MEAN	0.3
FURAN	SD	
12368-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23468-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23478-	N	1
PENTACHLORODIBENZO-	MEAN	0.22
FURAN	SD	
12468-	N	1
PENTACHLORODIBENZO-	MEAN	0.06
FURAN	SD	
12478-	N	1
PENTACHLORODIBENZO-	MEAN	0.38
FURAN	SD	
12378-	N	1
PENTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
23467-	N	1
PENTACHLORODIBENZO-	MEAN	0.11
FURAN	SD	
123468-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
123478-	N	1
HEXACHLORODIBENZO-	MEAN	0.16
FURAN	SD	
124689-	N	1
HEXACHLORODIBENZO-	MEAN	0.17
FURAN	SD	
234678-	N	1
HEXACHLORODIBENZO-	MEAN	ND
FURAN	SD	
124678-	N	1
HEXACHLORODIBENZO-	MEAN	0.07
FURAN	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

TABLE 13. CONTAMINANT DATA SUMMARIZED BY LOCATION*
LAKE SIMCOE

FORSTER'S TERN		YEAR
		1999
123678-	N	1
HEXACHLORODIBENZO-	MEAN	0.38
FURAN	SD	
123789-	N	1
HEXACHLORODIBENZO-	MEAN	0.07
FURAN	SD	
1234678-	N	1
HEPTACHLORODIBENZO-	MEAN	0.16
FURAN	SD	
1234789-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
1234689-	N	1
HEPTACHLORODIBENZO-	MEAN	ND
FURAN	SD	
OCTACHLORODIBENZO-	N	1
FURAN	MEAN	ND
	SD	

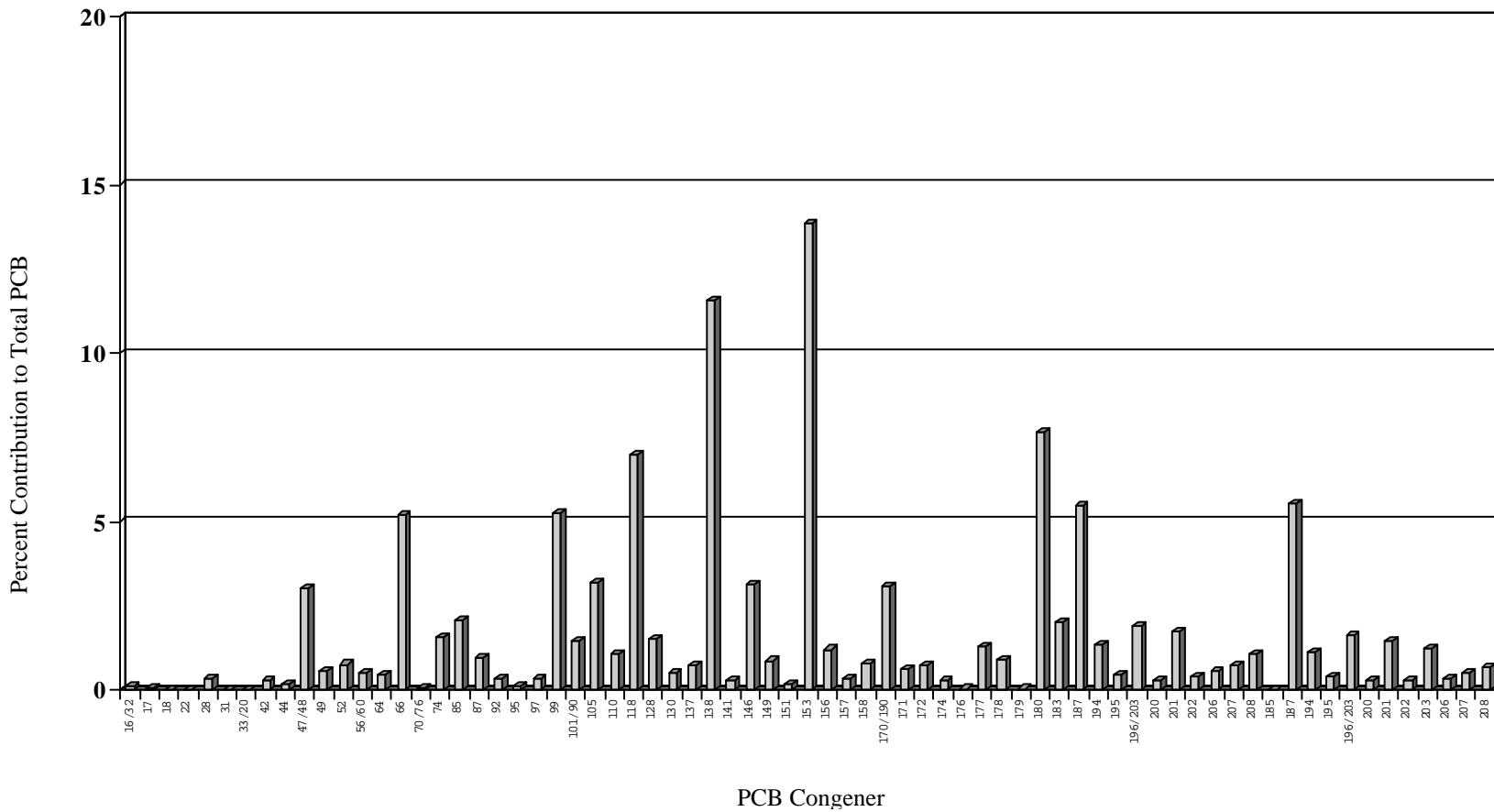
All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

SECTION 3
NON-COPLANAR PCB CONGENERS

Figures 13-27. Percent Contribution of Individual PCB congeners to Total PCBs in Samples from Herring Gull Annual Monitoring Colonies

Table 14. Non-coplanar PCB Congeners

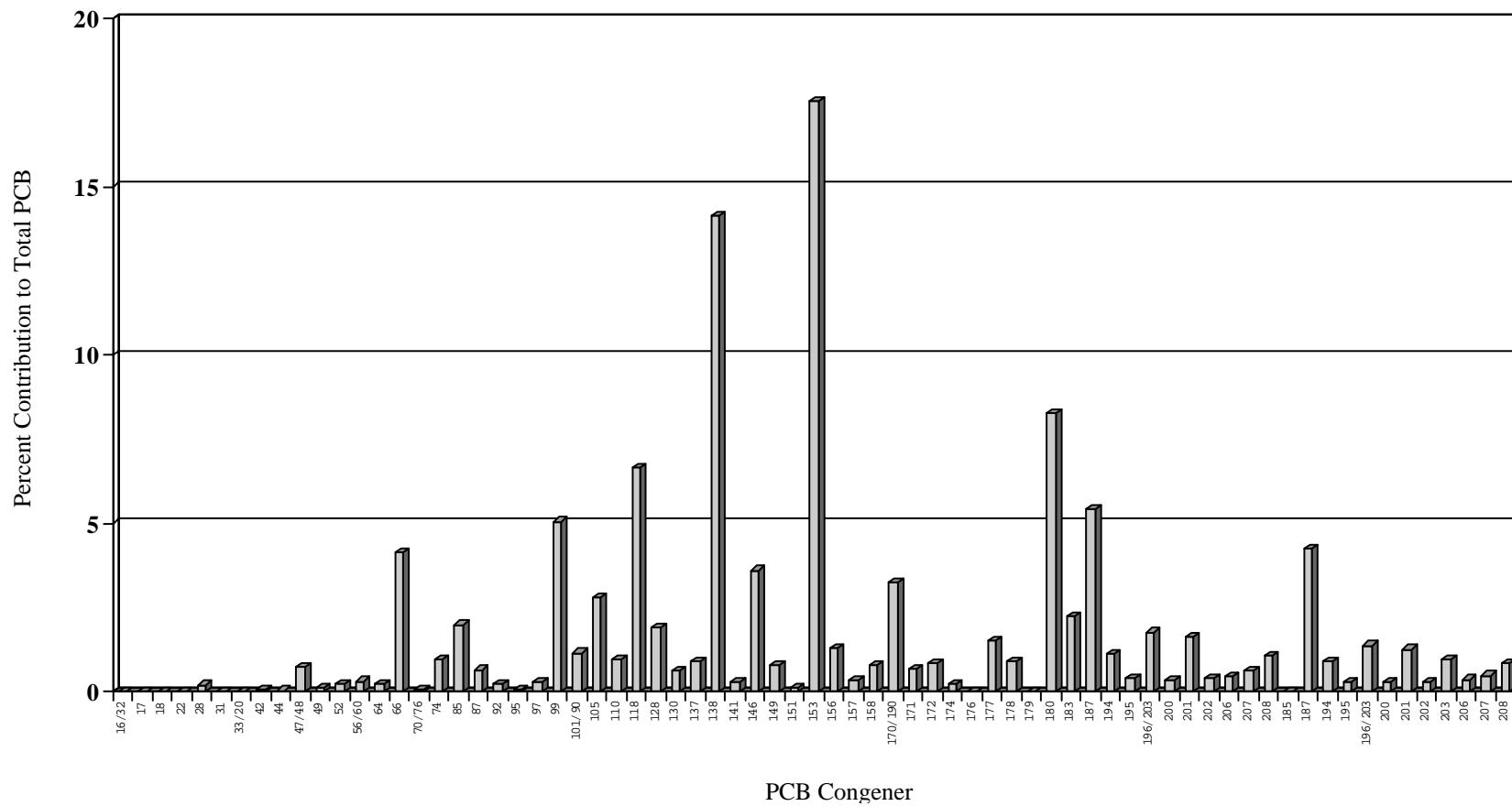
ST. LAWRENCE RIVER



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 13. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Strachan Island, St. Lawrence River (1998-2001)

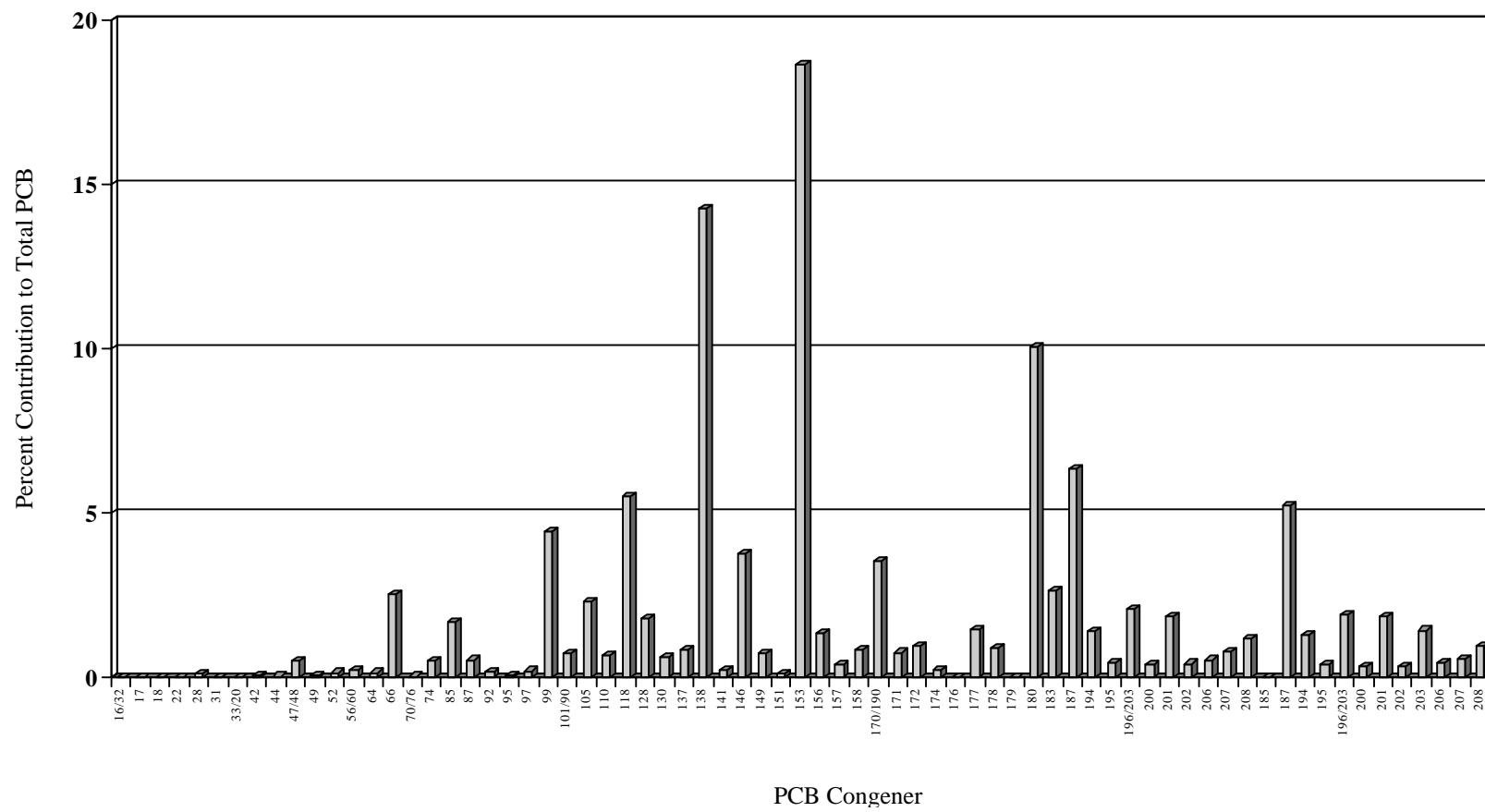
LAKE ONTARIO



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

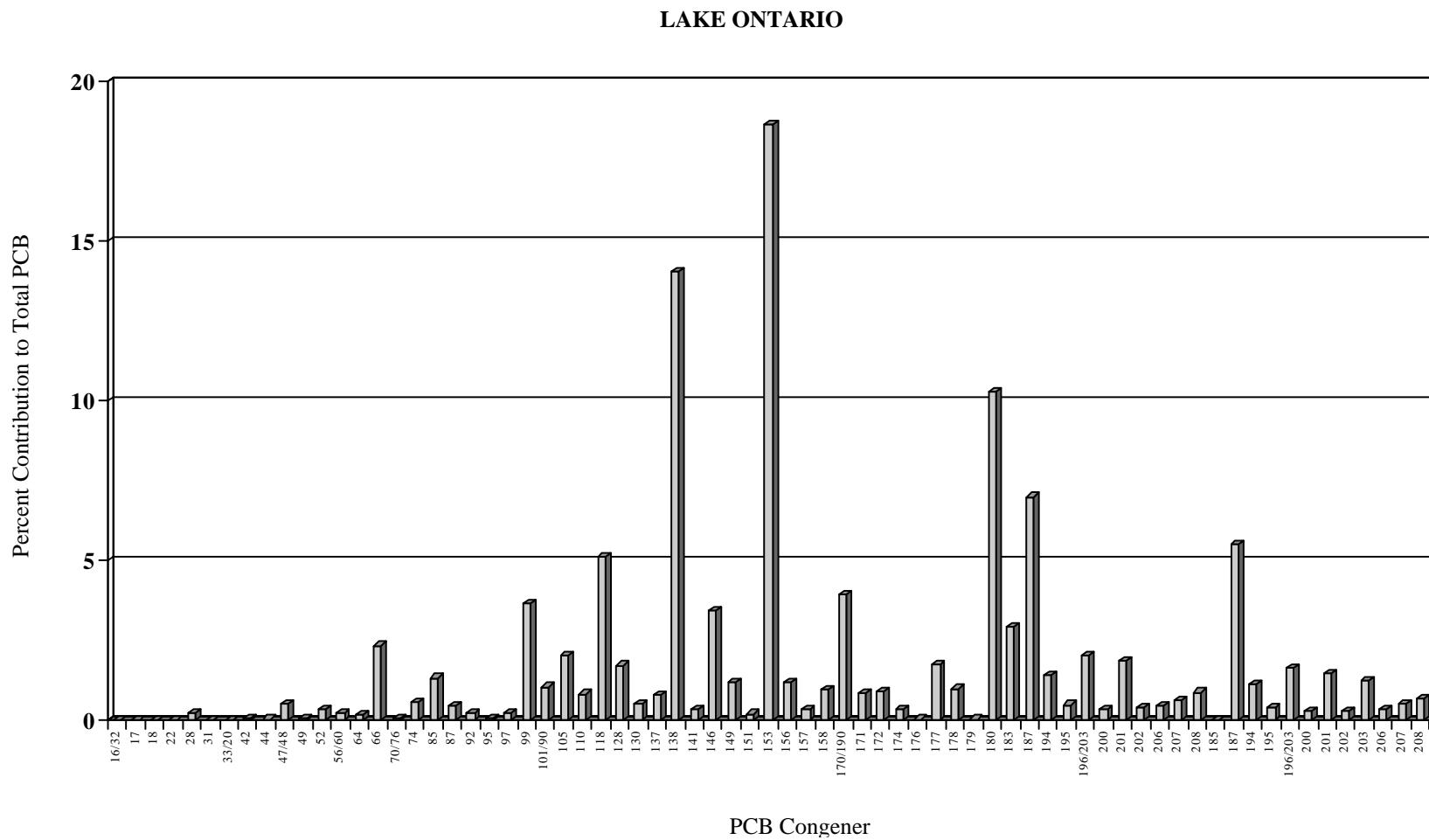
Figure 14. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Snake Island , Lake Ontario (1998-2001)

LAKE ONTARIO



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

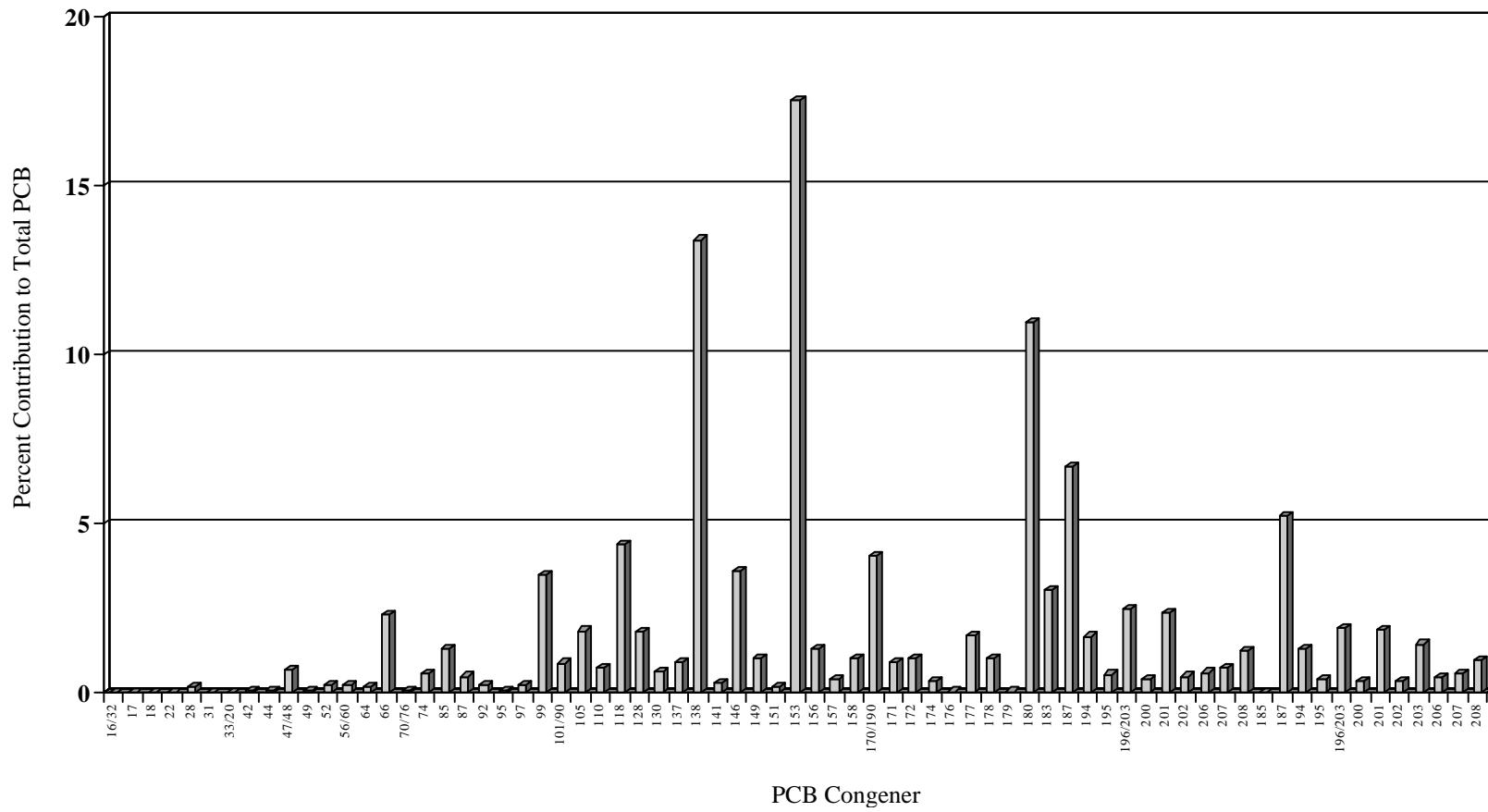
Figure 15. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Toronto Harbour, Lake Ontario (1998-2001)



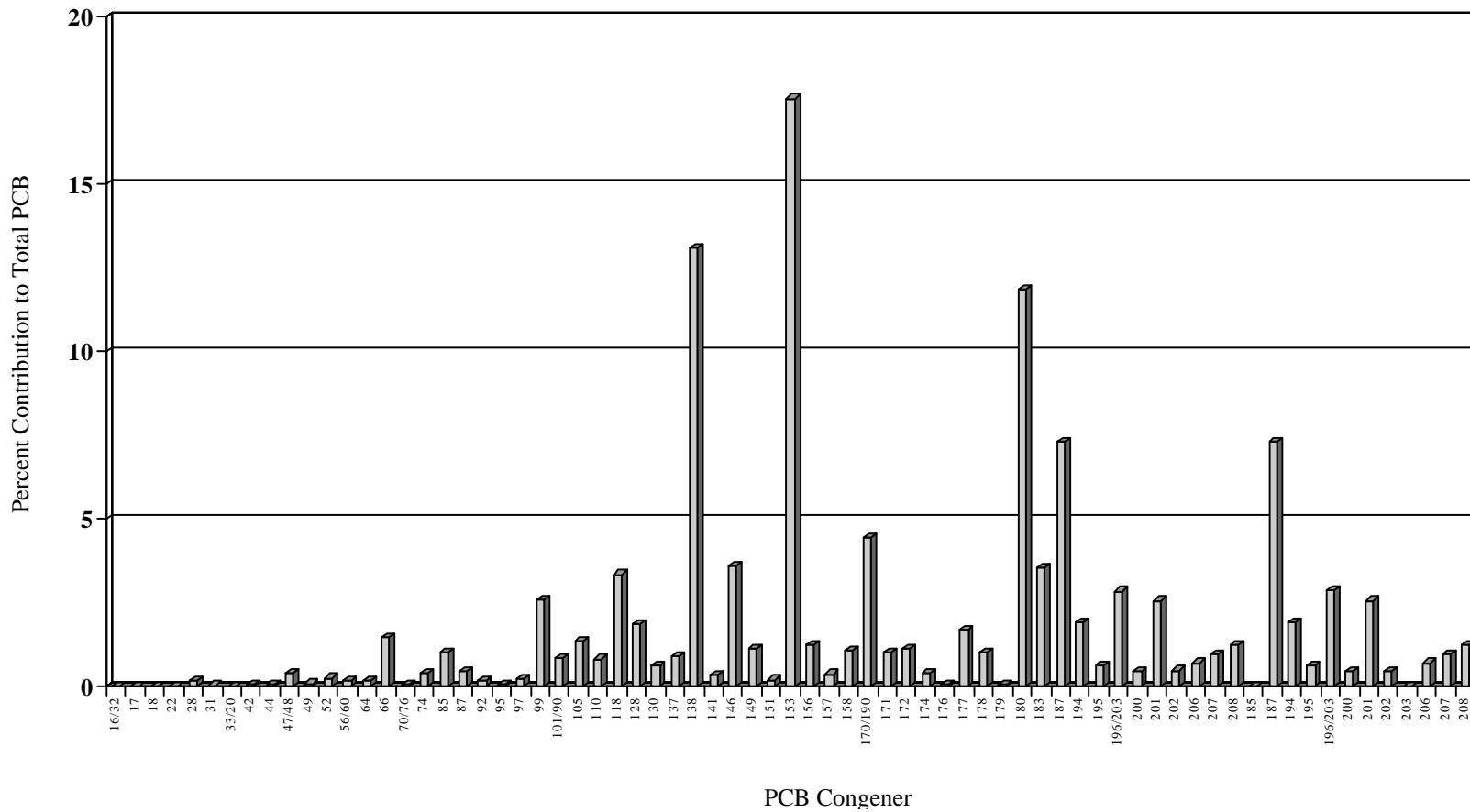
N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 16. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Hamilton Harbour, Lake Ontario (1998-2001)

NIAGARA RIVER



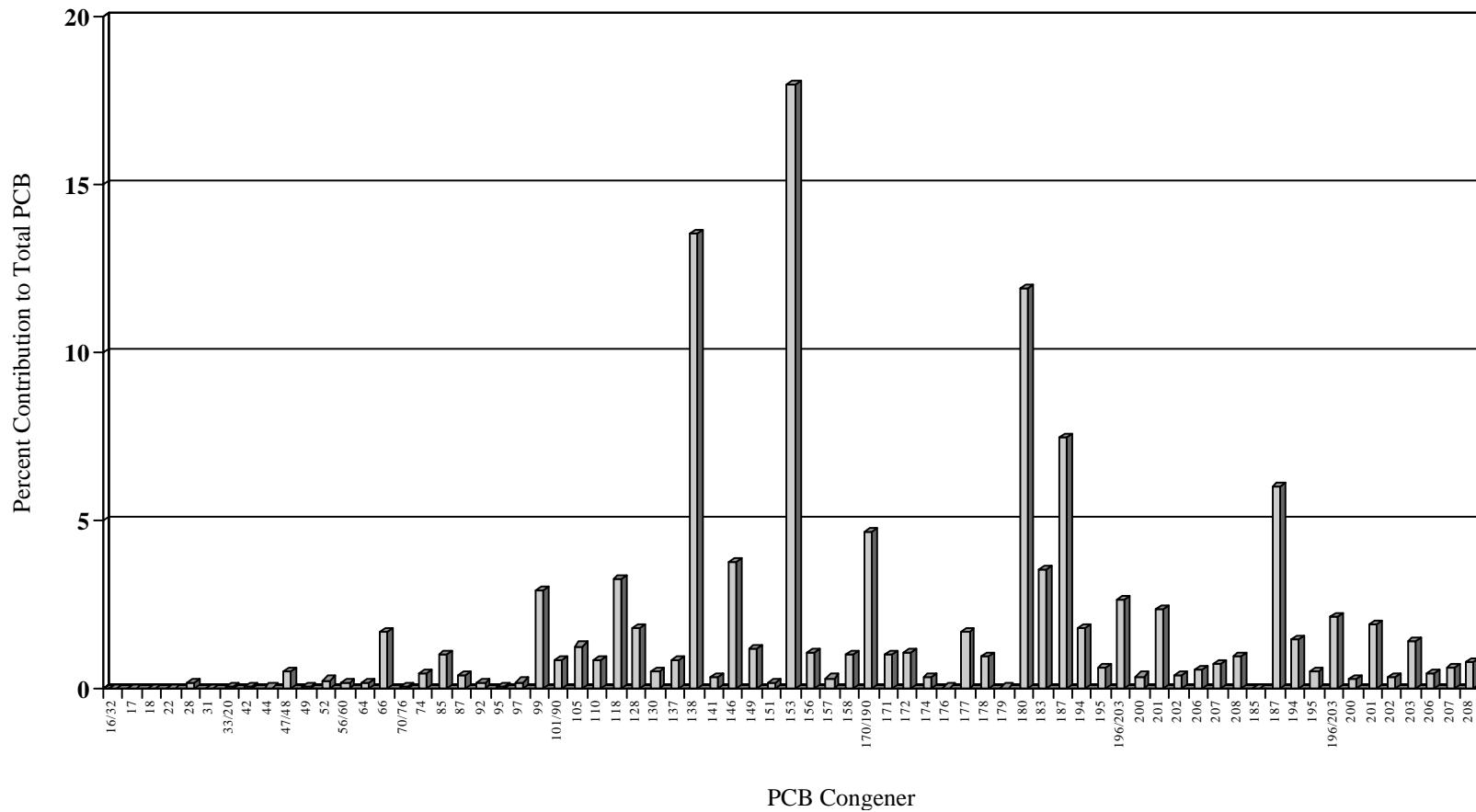
LAKE ERIE



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

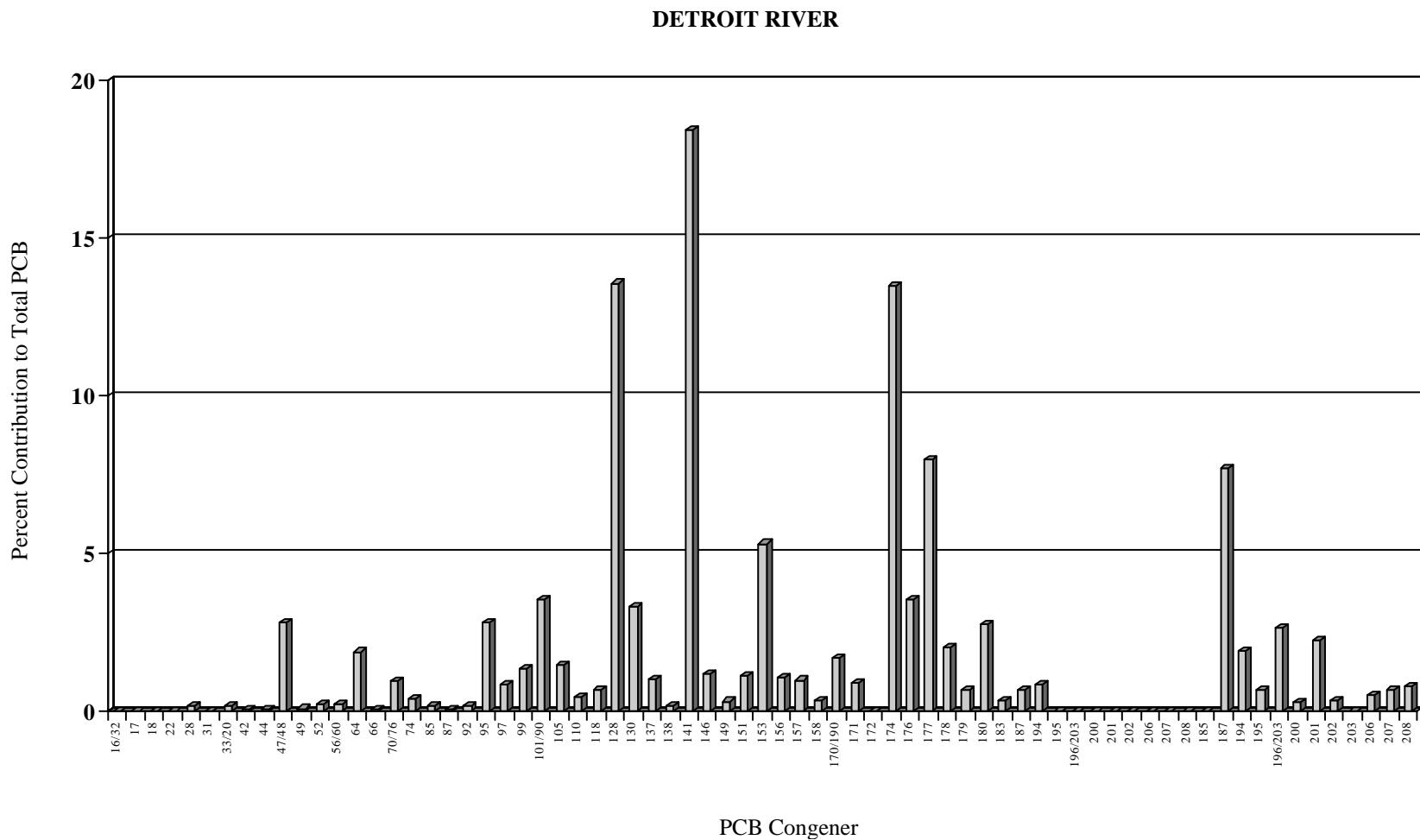
Figure 18. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Port Colborne, Lake Erie (1998-2001)

LAKE ERIE

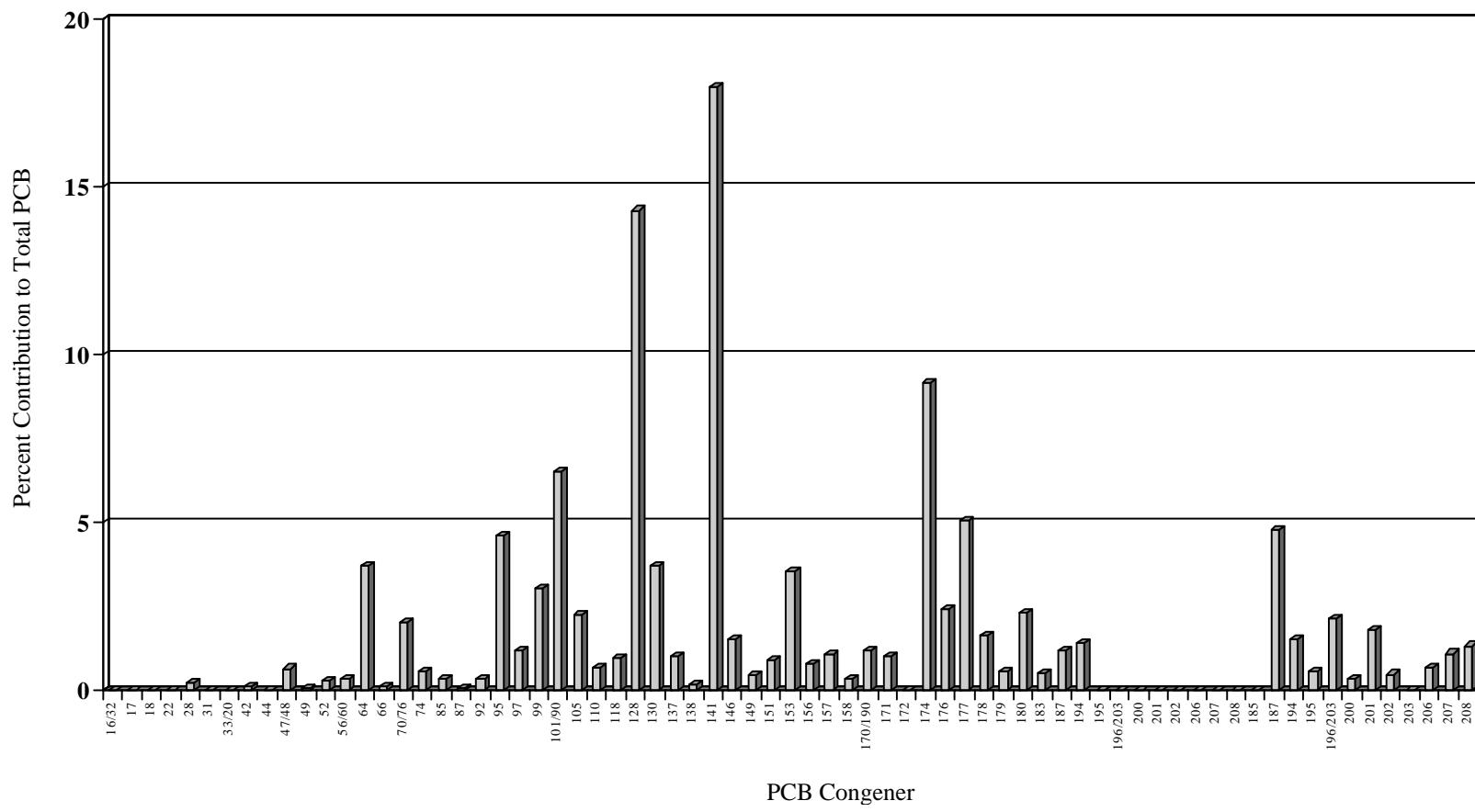


N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 19. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Middle Island, Lake Erie (1998-2001)



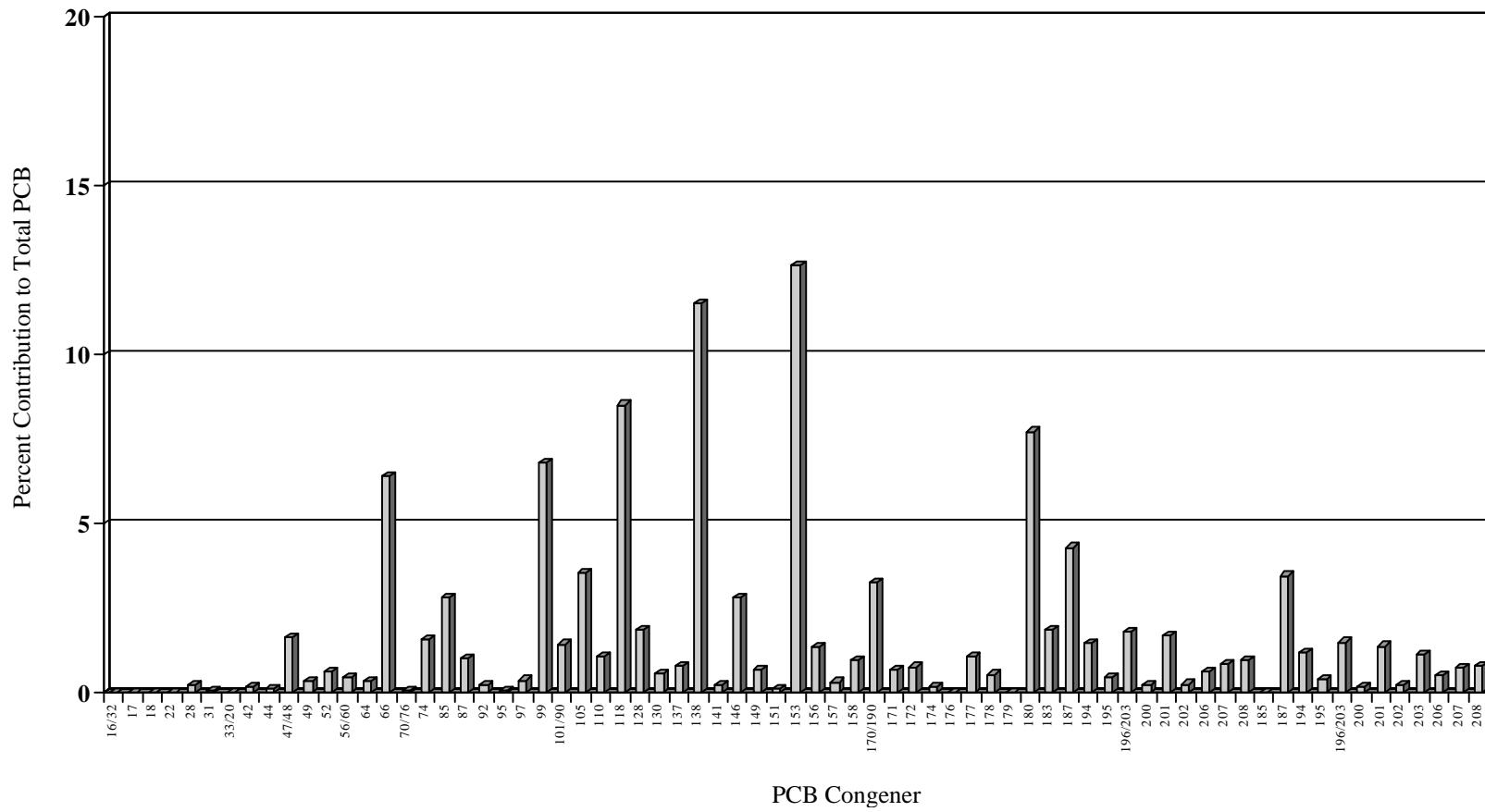
LAKE HURON



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 21. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Chantry Island, Lake Huron (1998-2001)

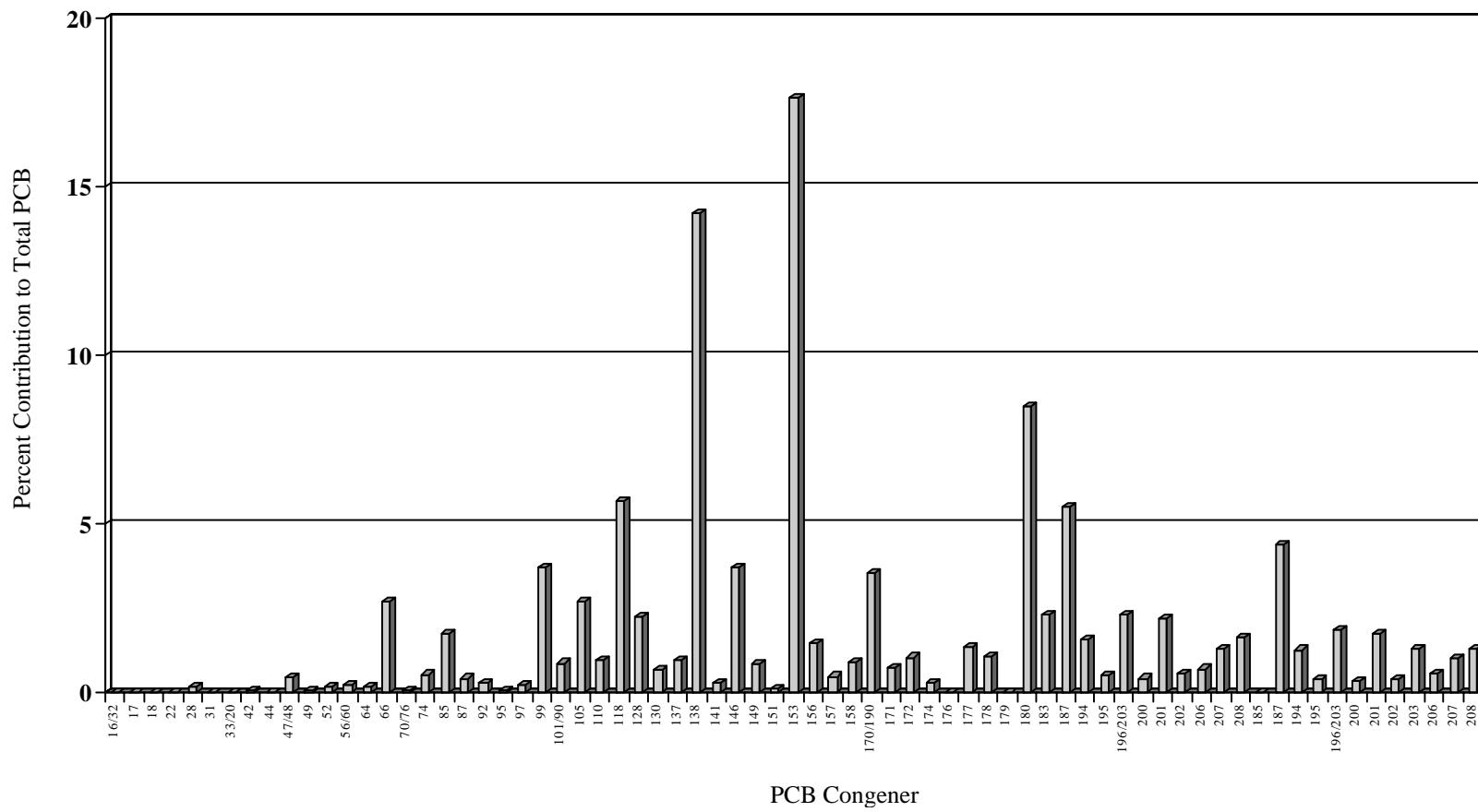
LAKE HURON



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

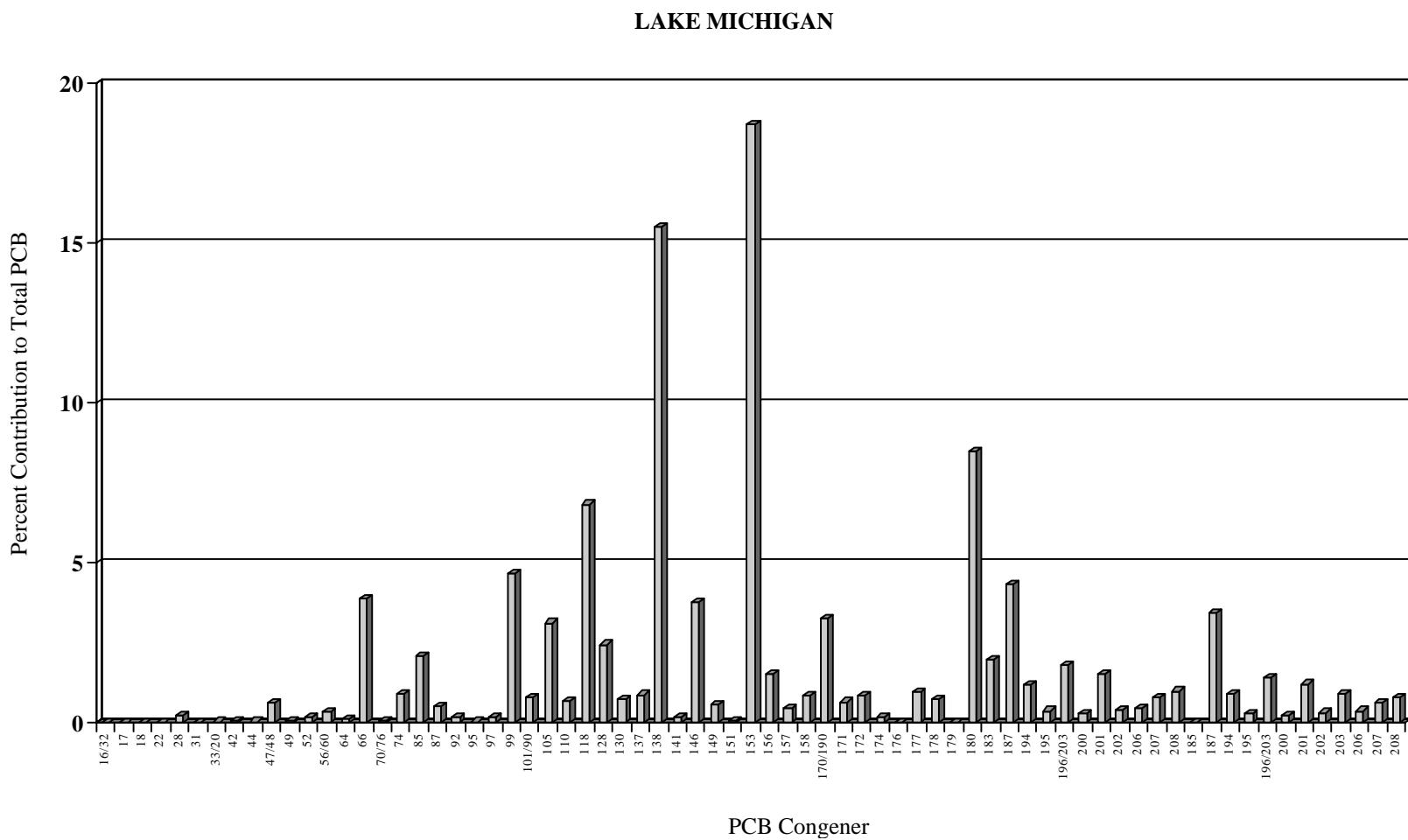
Figure 22. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Channel Shelter Island, Lake Huron (1998-2001)

LAKE HURON (NORTH CHANNEL)



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

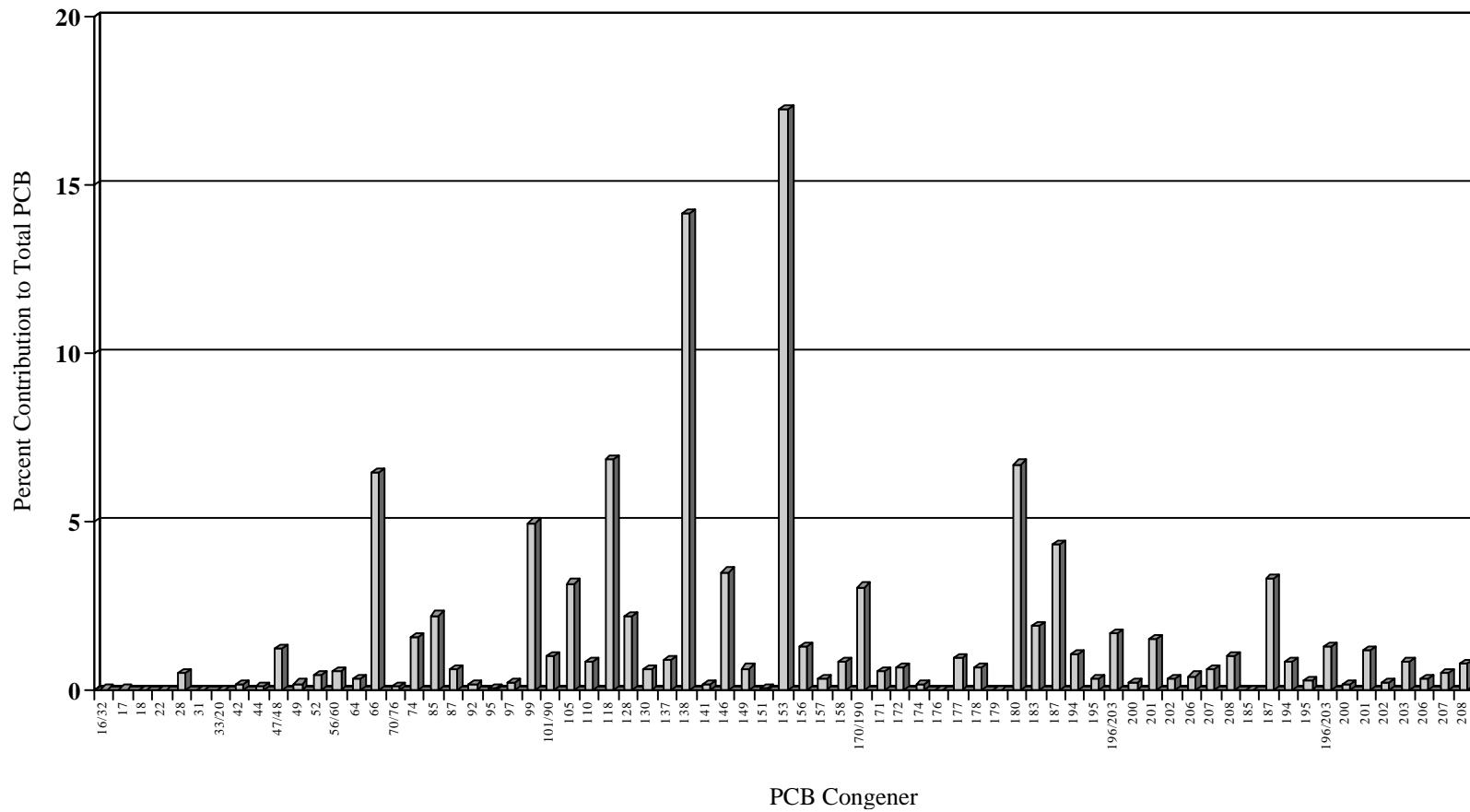
Figure 23. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Double Island, Lake Huron (1998-2001)



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 24. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Gull Island, Lake Michigan (1998-2001)

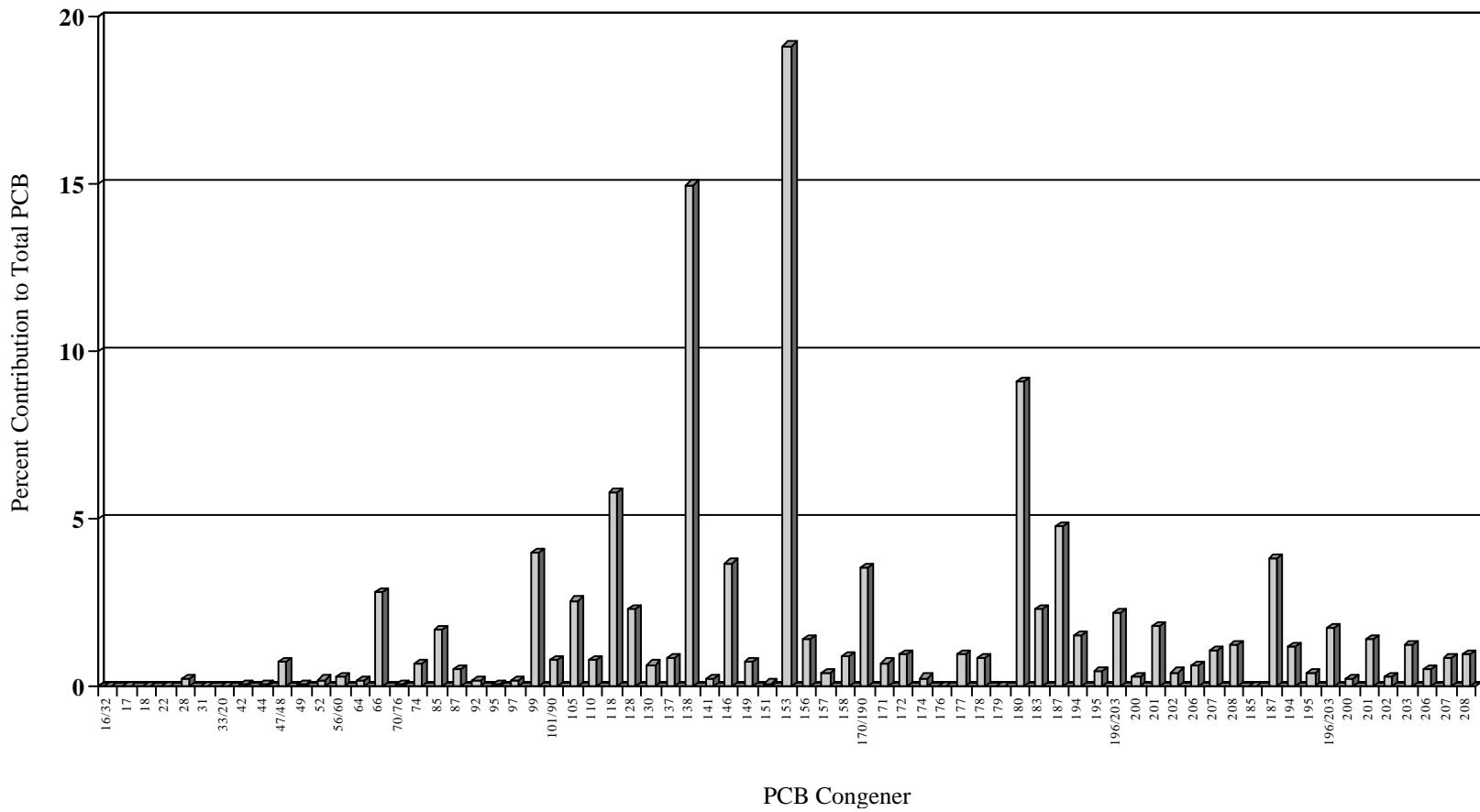
LAKE MICHIGAN



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 25. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Big Sister Island, Lake Michigan (1998-2001)

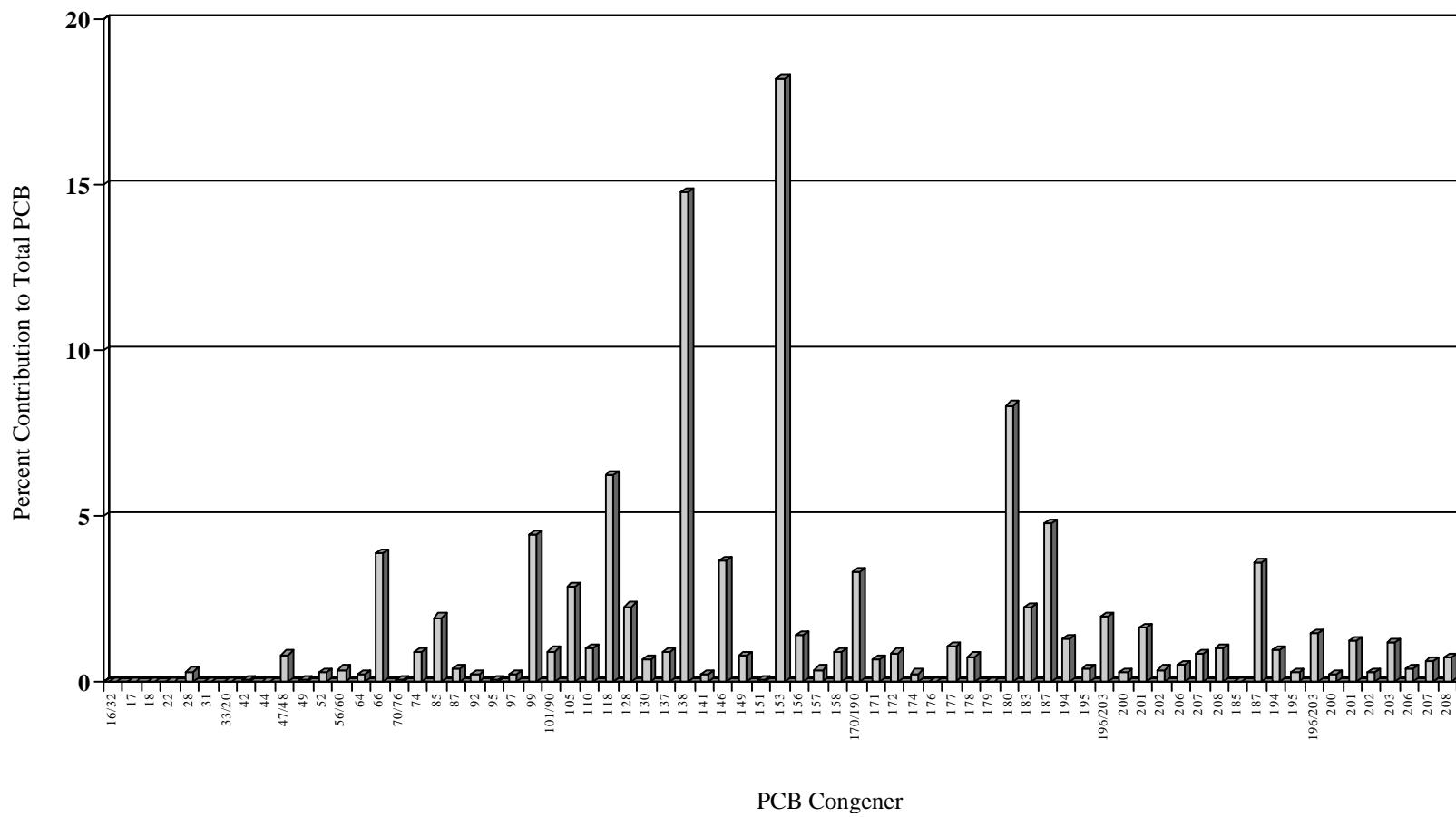
LAKE SUPERIOR



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 26. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Agawa Rock, Lake Superior (1998-2001)

LAKE SUPERIOR



N = 4 (1 pooled sample or average of 13 eggs/year, 1998-2001)

Figure 27. Percent contribution of individual PCB congeners to total PCB concentration in Herring Gull eggs from Granite Island, Lake Superior (1998-2001)

INDEX TO NO-PCB CONTAMINANT DATA, SUMMARIZED BY LOCATION

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**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, STRACHAN ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	0.024	0.007	0.006	0.012
	SD				
PCB 17	N	1	1	1	1
	MEAN	0.006	0.002	0.002	0.004
	SD				
PCB 18	N	1	1	1	1
	MEAN	0.002	TR	TR	0.001
	SD				
PCB 22	N	1	1	1	1
	MEAN	0.001	TR	TR	TR
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.048	0.019	0.028	0.028
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.044	0.017	0.013	0.033
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.022	0.009	0.007	0.020
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.366	0.247	0.341	0.232
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.092	0.036	0.03	0.067
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.122	0.046	0.046	0.083
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.057	0.047	0.054	0.046
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.062	0.032	0.029	0.047
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.564	0.48	0.52	0.479
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.007	0.004	0.005	0.006
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.176	0.144	0.154	0.146
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, STRACHAN ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.221	0.232	0.176	0.179
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.102	0.086	0.084	0.091
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.04	0.035	0.024	0.040
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.016	0.007	0.005	0.013
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.037	0.031	0.022	0.040
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.595	0.582	0.51	0.385
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.148	0.134	0.129	0.164
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.341	0.336	0.297	0.271
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.122	0.101	0.078	0.123
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.747	0.713	0.667	0.616
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.165	0.166	0.132	0.126
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.059	0.054	0.043	0.046
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.088	0.078	0.061	0.057
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.25	1.229	1.074	1.002
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.027	0.026	0.023	0.029
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.339	0.348	0.282	0.259
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.083	0.091	0.066	0.098
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, STRACHAN ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.021	0.017	0.011	0.024
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.502	1.449	1.25	1.250
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.132	0.135	0.108	0.096
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.035	0.031	0.029	0.027
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.087	0.078	0.074	0.070
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.339	0.335	0.294	0.236
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.067	0.067	0.06	0.049
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.085	0.084	0.065	0.054
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.026	0.027	0.02	0.027
	SD				
PCB 176	N	1	1	1	1
	MEAN	0.002	0.002	ND	0.003
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.135	0.141	0.123	0.113
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.093	0.09	0.078	0.089
	SD				
PCB 179	N	1	1	1	1
	MEAN	0.003	0.003	0.001	0.004
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.914	0.83	0.729	0.535
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.23	0.216	0.17	0.166
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.625	0.588	0.467	0.469
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.153	0.141	0.125	0.112
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, STRACHAN ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.047	0.045	0.042	0.036
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.218	0.201	0.171	0.155
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.032	0.032	0.023	0.025
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.194	0.186	0.157	0.141
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.038	0.039	0.032	0.036
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.062	0.061	0.046	0.048
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.079	0.077	0.062	0.058
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.115	0.114	0.093	0.093
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, MCNAIR ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.003
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/48	N	1
	MEAN	0.003
	SD	
PCB 49	N	1
	MEAN	TR
	SD	
PCB 52	N	1
	MEAN	ND
	SD	
PCB 56/60	N	1
	MEAN	0.002
	SD	
PCB 64	N	1
	MEAN	TR
	SD	
PCB 66	N	1
	MEAN	0.021
	SD	
PCB 70/76	N	1
	MEAN	TR
	SD	
PCB 74	N	1
	MEAN	0.012
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, MCNAIR ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 85	N	1
	MEAN	0.002
	SD	
PCB 87	N	1
	MEAN	0.008
	SD	
PCB 92	N	1
	MEAN	0.004
	SD	
PCB 95	N	1
	MEAN	TR
	SD	
PCB 97	N	1
	MEAN	ND
	SD	
PCB 99	N	1
	MEAN	0.063
	SD	
PCB 101/90	N	1
	MEAN	0.004
	SD	
PCB 105	N	1
	MEAN	0.027
	SD	
PCB 110	N	1
	MEAN	TR
	SD	
PCB 118	N	1
	MEAN	0.128
	SD	
PCB 128	N	1
	MEAN	0.013
	SD	
PCB 130	N	1
	MEAN	0.008
	SD	
PCB 137	N	1
	MEAN	0.004
	SD	
PCB 138	N	1
	MEAN	0.259
	SD	
PCB 141	N	1
	MEAN	TR
	SD	
PCB 146	N	1
	MEAN	0.084
	SD	
PCB 149	N	1
	MEAN	0.004
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, MCNAIR ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 151	N	1
	MEAN	0.002
	SD	
PCB 153	N	1
	MEAN	0.497
	SD	
PCB 156	N	1
	MEAN	0.039
	SD	
PCB 157	N	1
	MEAN	0.01
	SD	
PCB 158	N	1
	MEAN	0.019
	SD	
PCB 170/190	N	1
	MEAN	0.099
	SD	
PCB 171	N	1
	MEAN	0.016
	SD	
PCB 172	N	1
	MEAN	0.018
	SD	
PCB 174	N	1
	MEAN	ND
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.016
	SD	
PCB 178	N	1
	MEAN	0.027
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.245
	SD	
PCB 183	N	1
	MEAN	0.069
	SD	
PCB 187	N	1
	MEAN	0.11
	SD	
PCB 194	N	1
	MEAN	0.05
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
ST. LAWRENCE RIVER, MCNAIR ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 195	N	1
	MEAN	0.002
	SD	
PCB 196/203	N	1
	MEAN	0.073
	SD	
PCB 200	N	1
	MEAN	0.005
	SD	
PCB 201	N	1
	MEAN	0.066
	SD	
PCB 202	N	1
	MEAN	0.022
	SD	
PCB 206	N	1
	MEAN	0.041
	SD	
PCB 207	N	1
	MEAN	0.038
	SD	
PCB 208	N	1
	MEAN	0.075
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, SNAKE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	ND	TR	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	ND	TR	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.014	0.012	0.016	0.009
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.004	0.002	0.005	0.002
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.002	TR	0.002	0.001
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.053	0.05	0.046	0.043
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.006	0.004	0.009	0.004
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.017	0.014	0.019	0.010
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.023	0.022	0.018	0.018
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.016	0.015	0.017	0.009
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.324	0.307	0.253	0.231
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.002	0.002	0.003	0.001
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.072	0.067	0.056	0.055
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, SNAKE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.149	0.157	0.102	0.125
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.047	0.045	0.04	0.039
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.015	0.021	0.017	0.012
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.003	0.002	0.003	0.002
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.019	0.022	0.02	0.014
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.409	0.395	0.293	0.263
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.078	0.095	0.079	0.055
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.204	0.213	0.162	0.172
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.066	0.073	0.065	0.047
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.503	0.485	0.38	0.420
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.146	0.135	0.11	0.117
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.05	0.042	0.033	0.038
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.076	0.063	0.051	0.050
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.104	1.004	0.833	0.862
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.019	0.023	0.019	0.013
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.284	0.268	0.205	0.212
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.055	0.061	0.051	0.046
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, SNAKE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.008	0.007	0.007	0.006
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.386	1.199	1.024	1.104
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.102	0.098	0.073	0.075
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.028	0.024	0.021	0.022
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.064	0.052	0.049	0.048
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.26	0.232	0.198	0.186
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.053	0.049	0.042	0.038
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.069	0.059	0.047	0.047
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.016	0.018	0.015	0.014
	SD				
PCB 176	N	1	1	1	1
	MEAN	0.001	TR	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.115	0.111	0.086	0.090
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.068	0.065	0.059	0.049
	SD				
PCB 179	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.68	0.571	0.504	0.472
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.186	0.155	0.126	0.130
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.451	0.383	0.296	0.332
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.086	0.078	0.071	0.065
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, SNAKE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.029	0.026	0.023	0.023
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.142	0.121	0.105	0.104
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.025	0.023	0.019	0.023
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.128	0.11	0.099	0.095
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.029	0.03	0.026	0.024
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.035	0.032	0.028	0.029
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.055	0.052	0.049	0.007
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.08	0.074	0.067	0.066
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

HERRING GULL		YEAR
		2001
PCB 16/32	N	6
	MEAN	0.001
	SD	0.002
PCB 17	N	6
	MEAN	0.0005
	SD	0.0008
PCB 18	N	6
	MEAN	0.0002
	SD	0.0002
PCB 22	N	6
	MEAN	0.0001
	SD	0.0002
PCB 28	N	6
	MEAN	0.0178
	SD	0.016
PCB 31	N	6
	MEAN	ND
	SD	0
PCB 33/20	N	6
	MEAN	0.0001
	SD	0.0002
PCB 42	N	6
	MEAN	0.0093
	SD	0.0138
PCB 44	N	6
	MEAN	0.0068
	SD	0.0107
PCB 47/48	N	6
	MEAN	0.0782
	SD	0.0569
PCB 49	N	6
	MEAN	0.0172
	SD	0.0286
PCB 52	N	6
	MEAN	0.0347
	SD	0.0479
PCB 56/60	N	6
	MEAN	0.0332
	SD	0.0243
PCB 64	N	6
	MEAN	0.0208
	SD	0.0217
PCB 66	N	6
	MEAN	0.3822
	SD	0.2693
PCB 70/76	N	6
	MEAN	0.0032
	SD	0.0029
PCB 74	N	6
	MEAN	0.095
	SD	0.0747

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

HERRING GULL		YEAR
		2001
PCB 85	N	6
	MEAN	0.2072
	SD	0.1236
PCB 87	N	6
	MEAN	0.068
	SD	0.0735
PCB 92	N	6
	MEAN	0.0245
	SD	0.022
PCB 95	N	6
	MEAN	0.0083
	SD	0.0134
PCB 97	N	6
	MEAN	0.0332
	SD	0.0376
PCB 99	N	6
	MEAN	0.5737
	SD	0.3052
PCB 101/90	N	6
	MEAN	0.1538
	SD	0.1314
PCB 105	N	6
	MEAN	0.3065
	SD	0.1844
PCB 110	N	6
	MEAN	0.1022
	SD	0.0931
PCB 118	N	6
	MEAN	0.7198
	SD	0.4015
PCB 128	N	6
	MEAN	0.1743
	SD	0.0764
PCB 130	N	6
	MEAN	0.0753
	SD	0.0355
PCB 137	N	6
	MEAN	0.0917
	SD	0.0424
PCB 138	N	6
	MEAN	1.5177
	SD	0.6897
PCB 141	N	6
	MEAN	0.0327
	SD	0.0212
PCB 146	N	6
	MEAN	0.3887
	SD	0.1681
PCB 149	N	6
	MEAN	0.0898
	SD	0.0588

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

HERRING GULL		YEAR
		2001
PCB 151	N	6
	MEAN	0.0123
	SD	0.0136
PCB 153	N	6
	MEAN	1.9262
	SD	0.8133
PCB 156	N	6
	MEAN	0.1143
	SD	0.0522
PCB 157	N	6
	MEAN	0.0302
	SD	0.0128
PCB 158	N	6
	MEAN	0.0932
	SD	0.0441
PCB 170/190	N	6
	MEAN	0.328
	SD	0.1339
PCB 171	N	6
	MEAN	0.0587
	SD	0.0226
PCB 172	N	6
	MEAN	0.0753
	SD	0.0299
PCB 174	N	6
	MEAN	0.0235
	SD	0.0118
PCB 176	N	6
	MEAN	0.0009
	SD	0.002
PCB 177	N	6
	MEAN	0.1193
	SD	0.0484
PCB 178	N	6
	MEAN	0.0855
	SD	0.0526
PCB 179	N	6
	MEAN	0.001
	SD	0.0016
PCB 180	N	6
	MEAN	0.8103
	SD	0.3349
PCB 183	N	6
	MEAN	0.2428
	SD	0.1028
PCB 187	N	6
	MEAN	0.5878
	SD	0.2408
PCB 194	N	6
	MEAN	0.1208
	SD	0.0431

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

HERRING GULL		YEAR
		2001
PCB 195	N	6
	MEAN	0.0393
	SD	0.0144
PCB 196/203	N	6
	MEAN	0.1857
	SD	0.0686
PCB 200	N	6
	MEAN	0.0302
	SD	0.0117
PCB 201	N	6
	MEAN	0.1672
	SD	0.0626
PCB 202	N	6
	MEAN	0.0292
	SD	0.0164
PCB 206	N	6
	MEAN	0.0513
	SD	0.0156
PCB 207	N	6
	MEAN	0.0867
	SD	0.0284
PCB 208	N	6
	MEAN	0.094
	SD	0.0289

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 16/32	N	6
	MEAN	0.0006
	SD	0.0002
PCB 17	N	6
	MEAN	0.0002
	SD	0.0002
PCB 18	N	6
	MEAN	0.0003
	SD	0.0002
PCB 22	N	6
	MEAN	0.0003
	SD	0.0002
PCB 28	N	6
	MEAN	0.0297
	SD	0.0118
PCB 31	N	6
	MEAN	ND
	SD	0
PCB 33/20	N	6
	MEAN	0.0003
	SD	0.0002
PCB 42	N	6
	MEAN	0.011
	SD	0.0036
PCB 44	N	6
	MEAN	0.007
	SD	0.0018
PCB 47	N	6
	MEAN	0.1948
	SD	0.0382
PCB 49	N	6
	MEAN	0.006
	SD	0.0013
PCB 52	N	6
	MEAN	0.0353
	SD	0.0133
PCB 56/60	N	6
	MEAN	0.0663
	SD	0.0141
PCB 64	N	6
	MEAN	0.025
	SD	0.0081
PCB 66	N	6
	MEAN	0.7077
	SD	0.1863
PCB 70/76	N	6
	MEAN	0.0042
	SD	0.001
PCB 74	N	6
	MEAN	0.2217
	SD	0.054

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 85	N	6
	MEAN	0.4935
	SD	0.1326
PCB 87	N	6
	MEAN	0.0577
	SD	0.0192
PCB 92	N	6
	MEAN	0.0275
	SD	0.0048
PCB 95	N	6
	MEAN	0.0105
	SD	0.0029
PCB 97	N	6
	MEAN	0.0297
	SD	0.0076
PCB 99	N	6
	MEAN	1.4077
	SD	0.3735
PCB 101/90	N	6
	MEAN	0.1378
	SD	0.0142
PCB 105	N	6
	MEAN	0.7447
	SD	0.2003
PCB 110	N	6
	MEAN	0.1032
	SD	0.0242
PCB 118	N	6
	MEAN	1.7772
	SD	0.4675
PCB 128	N	6
	MEAN	0.4682
	SD	0.1517
PCB 130	N	6
	MEAN	0.1545
	SD	0.0471
PCB 137	N	6
	MEAN	0.1687
	SD	0.0431
PCB 138	N	6
	MEAN	3.7923
	SD	1.193
PCB 141	N	6
	MEAN	0.0188
	SD	0.0043
PCB 146	N	6
	MEAN	1.0138
	SD	0.3501
PCB 149	N	6
	MEAN	0.1177
	SD	0.0213

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 151	N	6
	MEAN	0.0212
	SD	0.0041
PCB 153	N	6
	MEAN	5.1968
	SD	1.7437
PCB 156	N	6
	MEAN	0.2958
	SD	0.0774
PCB 157	N	6
	MEAN	0.0855
	SD	0.0222
PCB 158	N	6
	MEAN	0.2455
	SD	0.0727
PCB 170/190	N	6
	MEAN	0.9312
	SD	0.3390
PCB 171	N	6
	MEAN	0.1328
	SD	0.0383
PCB 172	N	6
	MEAN	0.1868
	SD	0.0588
PCB 174	N	6
	MEAN	0.0263
	SD	0.0041
PCB 176	N	6
	MEAN	0.002
	SD	0.0006
PCB 177	N	6
	MEAN	0.2628
	SD	0.0689
PCB 178	N	6
	MEAN	0.2615
	SD	0.0873
PCB 179	N	6
	MEAN	0.0033
	SD	0.0012
PCB 180	N	6
	MEAN	2.3988
	SD	0.8841
PCB 183	N	6
	MEAN	0.6667
	SD	0.264
PCB 187	N	6
	MEAN	1.529
	SD	0.5646
PCB 194	N	6
	MEAN	0.3558
	SD	0.1356

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LITTLE GALLOO ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 195	N	6
	MEAN	0.1057
	SD	0.0325
PCB 196/203	N	6
	MEAN	0.5457
	SD	0.1933
PCB 200	N	6
	MEAN	0.0652
	SD	0.0138
PCB 201	N	6
	MEAN	0.477
	SD	0.1627
PCB 202	N	6
	MEAN	0.0823
	SD	0.019
PCB 206	N	6
	MEAN	0.1908
	SD	0.0472
PCB 207	N	6
	MEAN	0.2355
	SD	0.0625
PCB 208	N	6
	MEAN	0.327
	SD	0.0845

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

HERRING GULL		YEAR
		2001
PCB 16/32	N	6
	MEAN	0.0001
	SD	0.0004
PCB 17	N	6
	MEAN	0.0001
	SD	0.0002
PCB 18	N	6
	MEAN	0.0001
	SD	0.0002
PCB 22	N	6
	MEAN	0.0001
	SD	0.0002
PCB 28	N	6
	MEAN	0.0064
	SD	0.008
PCB 31	N	6
	MEAN	ND
	SD	0
PCB 33/20	N	6
	MEAN	0.0002
	SD	0.0002
PCB 42	N	6
	MEAN	0.0014
	SD	0.0033
PCB 44	N	6
	MEAN	0.001
	SD	0.0009
PCB 47/48	N	6
	MEAN	0.031
	SD	0.0226
PCB 49	N	6
	MEAN	0.0019
	SD	0.0111
PCB 52	N	6
	MEAN	0.0069
	SD	0.016
PCB 56/60	N	6
	MEAN	0.0136
	SD	0.007
PCB 64	N	6
	MEAN	0.0068
	SD	0.0081
PCB 66	N	6
	MEAN	0.162
	SD	0.1047
PCB 70/76	N	6
	MEAN	0.0018
	SD	0.0014
PCB 74	N	6
	MEAN	0.034
	SD	0.0279

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

HERRING GULL		YEAR
		2001
PCB 85	N	6
	MEAN	0.0984
	SD	0.0417
PCB 87	N	6
	MEAN	0.026
	SD	0.0174
PCB 92	N	6
	MEAN	0.0112
	SD	0.0119
PCB 95	N	6
	MEAN	0.0011
	SD	0.0026
PCB 97	N	6
	MEAN	0.0098
	SD	0.0084
PCB 99	N	6
	MEAN	0.2718
	SD	0.2478
PCB 101/90	N	6
	MEAN	0.0452
	SD	0.0604
PCB 105	N	6
	MEAN	0.1452
	SD	0.1204
PCB 110	N	6
	MEAN	0.037
	SD	0.0340
PCB 118	N	6
	MEAN	0.3338
	SD	0.3216
PCB 128	N	6
	MEAN	0.1058
	SD	0.0715
PCB 130	N	6
	MEAN	0.037
	SD	0.0232
PCB 137	N	6
	MEAN	0.049
	SD	0.0252
PCB 138	N	6
	MEAN	0.7592
	SD	0.7407
PCB 141	N	6
	MEAN	0.0108
	SD	0.0212
PCB 146	N	6
	MEAN	0.206
	SD	0.2103
PCB 149	N	6
	MEAN	0.04
	SD	0.0387

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

HERRING GULL		YEAR
		2001
PCB 151	N	6
	MEAN	0.0039
	SD	0.0073
PCB 153	N	6
	MEAN	0.9952
	SD	1.1945
PCB 156	N	6
	MEAN	0.0586
	SD	0.0608
PCB 157	N	6
	MEAN	0.0168
	SD	0.0147
PCB 158	N	6
	MEAN	0.0466
	SD	0.038
PCB 170/190	N	6
	MEAN	0.159
	SD	0.2034
PCB 171	N	6
	MEAN	0.032
	SD	0.0294
PCB 172	N	6
	MEAN	0.037
	SD	0.0352
PCB 174	N	6
	MEAN	0.0116
	SD	0.017
PCB 176	N	6
	MEAN	0.0001
	SD	0.0016
PCB 177	N	6
	MEAN	0.0718
	SD	0.0602
PCB 178	N	6
	MEAN	0.0546
	SD	0.0736
PCB 179	N	6
	MEAN	0.0002
	SD	0.0004
PCB 180	N	6
	MEAN	0.3802
	SD	0.4035
PCB 183	N	6
	MEAN	0.1296
	SD	0.1196
PCB 187	N	6
	MEAN	0.3182
	SD	0.2986
PCB 194	N	6
	MEAN	0.0696
	SD	0.0718

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

HERRING GULL		YEAR
		2001
PCB 195	N	6
	MEAN	0.0222
	SD	0.0228
PCB 196/203	N	6
	MEAN	0.1008
	SD	0.0968
PCB 200	N	6
	MEAN	0.0182
	SD	0.0157
PCB 201	N	6
	MEAN	0.0906
	SD	0.1016
PCB 202	N	6
	MEAN	0.0202
	SD	0.0179
PCB 206	N	6
	MEAN	0.0316
	SD	0.0398
PCB 207	N	6
	MEAN	0.059
	SD	0.0454
PCB 208	N	6
	MEAN	0.0644
	SD	0.0661

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 16/32	N	6
	MEAN	0.0007
	SD	0.0007
PCB 17	N	6
	MEAN	0.0001
	SD	0.0002
PCB 18	N	6
	MEAN	TR
	SD	0
PCB 22	N	6
	MEAN	0.0004
	SD	0.0002
PCB 28	N	6
	MEAN	0.0322
	SD	0.0411
PCB 31	N	6
	MEAN	ND
	SD	0
PCB 33/20	N	6
	MEAN	TR
	SD	0
PCB 42	N	6
	MEAN	0.0075
	SD	0.0035
PCB 44	N	6
	MEAN	0.0053
	SD	0.0032
PCB 47	N	6
	MEAN	0.1205
	SD	0.0554
PCB 49	N	6
	MEAN	0.0062
	SD	0.0039
PCB 52	N	6
	MEAN	0.024
	SD	0.0087
PCB 56/60	N	6
	MEAN	0.0437
	SD	0.0085
PCB 64	N	6
	MEAN	0.0187
	SD	0.0084
PCB 66	N	6
	MEAN	0.5125
	SD	0.1253
PCB 70/76	N	6
	MEAN	0.0047
	SD	0.0021
PCB 74	N	6
	MEAN	0.156
	SD	0.0445

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 85	N	6
	MEAN	0.3363
	SD	0.0524
PCB 87	N	6
	MEAN	0.0367
	SD	0.0205
PCB 92	N	6
	MEAN	0.0218
	SD	0.0058
PCB 95	N	6
	MEAN	0.0083
	SD	0.0039
PCB 97	N	6
	MEAN	0.0238
	SD	0.0106
PCB 99	N	6
	MEAN	1.07
	SD	0.1712
PCB 101/90	N	6
	MEAN	0.1187
	SD	0.0311
PCB 105	N	6
	MEAN	0.5512
	SD	0.0986
PCB 110	N	6
	MEAN	0.0818
	SD	0.024
PCB 118	N	6
	MEAN	1.3745
	SD	0.2411
PCB 128	N	6
	MEAN	0.4165
	SD	0.0779
PCB 130	N	6
	MEAN	0.1255
	SD	0.0205
PCB 137	N	6
	MEAN	0.1548
	SD	0.0185
PCB 138	N	6
	MEAN	3.2383
	SD	0.5735
PCB 141	N	6
	MEAN	0.0202
	SD	0.0069
PCB 146	N	6
	MEAN	0.9195
	SD	0.1935
PCB 149	N	6
	MEAN	0.0985
	SD	0.0189

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 151	N	6
	MEAN	0.0182
	SD	0.0071
PCB 153	N	6
	MEAN	4.6573
	SD	1.1126
PCB 156	N	6
	MEAN	0.2355
	SD	0.0473
PCB 157	N	6
	MEAN	0.0662
	SD	0.0124
PCB 158	N	6
	MEAN	0.1955
	SD	0.0306
PCB 170/190	N	6
	MEAN	0.8218
	SD	0.2079
PCB 171	N	6
	MEAN	0.1183
	SD	0.0248
PCB 172	N	6
	MEAN	0.1497
	SD	0.0426
PCB 174	N	6
	MEAN	0.0233
	SD	0.0062
PCB 176	N	6
	MEAN	0.002
	SD	0.0011
PCB 177	N	6
	MEAN	0.2288
	SD	0.0578
PCB 178	N	6
	MEAN	0.2337
	SD	0.0741
PCB 179	N	6
	MEAN	0.0032
	SD	0.0021
PCB 180	N	6
	MEAN	1.9747
	SD	0.5828
PCB 183	N	6
	MEAN	0.6205
	SD	0.1703
PCB 187	N	6
	MEAN	1.4548
	SD	0.3854
PCB 194	N	6
	MEAN	0.3578
	SD	0.1074

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, PIGEON ISLAND**

GREAT BLACK-BACKED GULL		YEAR
		2001
PCB 195	N	6
	MEAN	0.1053
	SD	0.0265
PCB 196/203	N	6
	MEAN	0.5205
	SD	0.1522
PCB 200	N	6
	MEAN	0.0553
	SD	0.0142
PCB 201	N	6
	MEAN	0.4522
	SD	0.1421
PCB 202	N	6
	MEAN	0.077
	SD	0.0211
PCB 206	N	6
	MEAN	0.2123
	SD	0.0585
PCB 207	N	6
	MEAN	0.2547
	SD	0.0629
PCB 208	N	6
	MEAN	0.3475
	SD	0.1032

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
BATH**

BLACK TERN		YEAR
		1996
PCB 28	N	1
	MEAN	0.0008
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 49	N	1
	MEAN	ND
	SD	
PCB 52	N	1
	MEAN	ND
	SD	
PCB 60	N	1
	MEAN	0.009
	SD	
PCB 64	N	1
	MEAN	ND
	SD	
PCB 66	N	1
	MEAN	0.0077
	SD	
PCB 70	N	1
	MEAN	ND
	SD	
PCB 74	N	1
	MEAN	0.0034
	SD	
PCB 87	N	1
	MEAN	ND
	SD	
PCB 97	N	1
	MEAN	0.0015
	SD	
PCB 99	N	1
	MEAN	0.0188
	SD	
PCB 101	N	1
	MEAN	0.0071
	SD	
PCB 105	N	1
	MEAN	0.0099
	SD	
PCB 110	N	1
	MEAN	0.0099
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
BATH**

BLACK TERN		YEAR
		1996
PCB 118	N	1
	MEAN	0.0393
	SD	
PCB 128	N	1
	MEAN	ND
	SD	
PCB 129	N	1
	MEAN	0.0021
	SD	
PCB 137	N	1
	MEAN	0.0021
	SD	
PCB 138	N	1
	MEAN	0.0691
	SD	
PCB 141	N	1
	MEAN	ND
	SD	
PCB 146	N	1
	MEAN	0.0142
	SD	
PCB 149	N	1
	MEAN	0.0149
	SD	
PCB 151	N	1
	MEAN	ND
	SD	
PCB 153	N	1
	MEAN	0.0812
	SD	
PCB 158	N	1
	MEAN	0.0018
	SD	
PCB 170	N	1
	MEAN	0.0208
	SD	
PCB 171	N	1
	MEAN	0.0053
	SD	
PCB 172	N	1
	MEAN	0.0031
	SD	
PCB 174	N	1
	MEAN	0.0036
	SD	
PCB 180	N	1
	MEAN	0.0478
	SD	
PCB 182	N	1
	MEAN	0.0368
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
BATH**

BLACK TERN		YEAR
		1996
PCB 183	N	1
	MEAN	0.0122
	SD	
PCB 185	N	1
	MEAN	ND
	SD	
PCB 194	N	1
	MEAN	0.0082
	SD	
PCB 195	N	1
	MEAN	0.0032
	SD	
PCB 200	N	1
	MEAN	0.0022
	SD	
PCB 201	N	1
	MEAN	0.0138
	SD	
PCB 203	N	1
	MEAN	0.0083
	SD	
PCB 206	N	1
	MEAN	0.0036
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	ND	ND	TR
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.004	0.008	0.006	0.005
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.001	0.002	0.002	0.002
	SD				
PCB 44	N	1	1	1	1
	MEAN	TR	TR	0.001	0.001
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.024	0.031	0.029	0.023
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.002	0.002	0.003	0.002
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.006	0.006	0.008	0.008
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.009	0.014	0.01	0.009
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.005	0.01	0.007	0.006
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.109	0.173	0.12	0.113
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	TR	0.001	0.002	0.001
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.02	0.035	0.023	0.023
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.087	0.106	0.075	0.079
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.025	0.029	0.028	0.026
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.007	0.012	0.009	0.008
	SD				
PCB 95	N	1	1	1	1
	MEAN	TR	0.001	0.002	0.002
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.007	0.014	0.01	0.008
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.236	0.254	0.205	0.213
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.031	0.04	0.039	0.043
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.114	0.138	0.109	0.109
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.024	0.049	0.032	0.034
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.29	0.308	0.256	0.282
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.101	0.098	0.08	0.089
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.037	0.031	0.027	0.029
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.053	0.046	0.037	0.041
	SD				
PCB 138	N	1	1	1	1
	MEAN	0.836	0.735	0.638	0.728
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.01	0.011	0.01	0.013
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.221	0.203	0.165	0.180
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.029	0.04	0.037	0.041
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.003	0.005	0.006	0.006
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.116	0.924	0.823	0.971
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.078	0.073	0.063	0.062
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.022	0.019	0.019	0.017
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.05	0.043	0.042	0.041
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.213	0.183	0.168	0.165
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.044	0.04	0.038	0.034
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.057	0.052	0.043	0.041
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.008	0.013	0.011	0.013
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.089	0.085	0.074	0.056
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.049	0.045	0.047	0.046
	SD				
PCB 179	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.609	0.514	0.482	0.462
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.164	0.137	0.111	0.130
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.4	0.32	0.26	0.326
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.083	0.072	0.07	0.065
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, LESLIE STREET SPIT (TORONTO HARBOUR)**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.027	0.022	0.022	0.019
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.126	0.108	0.098	0.097
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.022	0.022	0.018	0.017
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.111	0.094	0.088	0.089
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.022	0.022	0.024	0.018
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.029	0.031	0.025	0.023
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.043	0.043	0.046	0.033
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.06	0.065	0.065	0.054
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.006	0.028	0.021	0.013
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	0.012	TR	ND
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.002	0.006	0.005	0.004
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.001	0.0005	0.003	0.002
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.032	0.046	0.049	0.036
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.002	0.008	0.008	0.005
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.01	0.033	0.039	0.018
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.012	0.021	0.018	0.014
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.005	0.019	0.015	0.011
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.14	0.24	0.211	0.158
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.001	0.006	0.005	0.002
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.031	0.061	0.05	0.040
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.097	0.129	0.101	0.096
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.03	0.044	0.04	0.033
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.009	0.025	0.021	0.016
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.003	0.007	0.007	0.005
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.009	0.025	0.02	0.015
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.295	0.352	0.311	0.221
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.038	0.106	0.117	0.073
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.155	0.189	0.171	0.135
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.03	0.087	0.083	0.062
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.4	0.463	0.429	0.349
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.145	0.152	0.137	0.117
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.045	0.045	0.038	0.038
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.071	0.068	0.058	0.051
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.204	1.187	1.13	0.996
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.013	0.032	0.034	0.024
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.299	0.309	0.27	0.231
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.052	0.115	0.117	0.093
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.007	0.021	0.018	0.016
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.654	1.502	1.516	1.330
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.11	0.115	0.088	0.072
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.028	0.025	0.027	0.021
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.081	0.078	0.079	0.067
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.369	0.337	0.316	0.238
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.078	0.074	0.064	0.051
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.09	0.084	0.058	0.052
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.015	0.032	0.032	0.027
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	0.001	0.002	0.002
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.146	0.15	0.141	0.115
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.083	0.085	0.084	0.064
	SD				
PCB 179	N	1	1	1	1
	MEAN	0.001	0.002	0.002	0.002
	SD				
PCB 180	N	1	1	1	1
	MEAN	1.035	0.894	0.786	0.593
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.277	0.244	0.222	0.192
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.675	0.593	0.519	0.464
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.138	0.115	0.124	0.080
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.046	0.039	0.039	0.029
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.203	0.175	0.153	0.126
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.03	0.03	0.023	0.021
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.185	0.158	0.145	0.112
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.034	0.037	0.031	0.026
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.042	0.037	0.032	0.026
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.056	0.056	0.052	0.040
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.075	0.077	0.074	0.052
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 16/32	N	1
	MEAN	TR
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.036
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	0.003
	SD	
PCB 47/48	N	1
	MEAN	0.028
	SD	
PCB 49	N	1
	MEAN	0.005
	SD	
PCB 52	N	1
	MEAN	0.007
	SD	
PCB 56/60	N	1
	MEAN	0.025
	SD	
PCB 64	N	1
	MEAN	0.004
	SD	
PCB 66	N	1
	MEAN	0.244
	SD	
PCB 70/76	N	1
	MEAN	0.007
	SD	
PCB 74	N	1
	MEAN	0.1
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 85	N	1
	MEAN	0.024
	SD	
PCB 87	N	1
	MEAN	0.042
	SD	
PCB 92	N	1
	MEAN	0.049
	SD	
PCB 95	N	1
	MEAN	0.005
	SD	
PCB 97	N	1
	MEAN	0.003
	SD	
PCB 99	N	1
	MEAN	0.293
	SD	
PCB 101/90	N	1
	MEAN	0.033
	SD	
PCB 105	N	1
	MEAN	0.187
	SD	
PCB 110	N	1
	MEAN	0.017
	SD	
PCB 118	N	1
	MEAN	0.534
	SD	
PCB 128	N	1
	MEAN	0.127
	SD	
PCB 130	N	1
	MEAN	0.032
	SD	
PCB 137	N	1
	MEAN	0.038
	SD	
PCB 138	N	1
	MEAN	1.134
	SD	
PCB 141	N	1
	MEAN	0.036
	SD	
PCB 146	N	1
	MEAN	0.217
	SD	
PCB 149	N	1
	MEAN	0.047
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 151	N	1
	MEAN	0.024
	SD	
PCB 153	N	1
	MEAN	1.549
	SD	
PCB 156	N	1
	MEAN	0.088
	SD	
PCB 157	N	1
	MEAN	0.023
	SD	
PCB 158	N	1
	MEAN	0.085
	SD	
PCB 170/190	N	1
	MEAN	0.393
	SD	
PCB 171	N	1
	MEAN	0.053
	SD	
PCB 172	N	1
	MEAN	0.046
	SD	
PCB 174	N	1
	MEAN	0.026
	SD	
PCB 176	N	1
	MEAN	0.002
	SD	
PCB 177	N	1
	MEAN	0.108
	SD	
PCB 178	N	1
	MEAN	0.088
	SD	
PCB 179	N	1
	MEAN	0.004
	SD	
PCB 180	N	1
	MEAN	0.687
	SD	
PCB 183	N	1
	MEAN	0.206
	SD	
PCB 187	N	1
	MEAN	0.39
	SD	
PCB 194	N	1
	MEAN	0.108
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ONTARIO, HAMILTON HARBOUR**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 195	N	1
	MEAN	0.041
	SD	
PCB 196/203	N	1
	MEAN	0.179
	SD	
PCB 200	N	1
	MEAN	0.013
	SD	
PCB 201	N	1
	MEAN	0.153
	SD	
PCB 202	N	1
	MEAN	0.025
	SD	
PCB 206	N	1
	MEAN	0.042
	SD	
PCB 207	N	1
	MEAN	0.043
	SD	
PCB 208	N	1
	MEAN	0.082
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.007	0.011	0.007	0.007
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.002	0.003	0.002	0.002
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.001	0.002	TR	0.002
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.029	0.027	0.035	0.028
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.003	0.004	0.002	0.003
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.007	0.014	0.007	0.008
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.011	0.011	0.01	0.008
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.005	0.01	0.005	0.006
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.099	0.112	0.1	0.087
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	TR	0.005	0.003	0.001
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.024	0.028	0.024	0.022
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.065	0.063	0.049	0.047
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.023	0.025	0.021	0.014
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.007	0.015	0.007	0.006
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.002	0.004	0.003	0.002
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.007	0.017	0.008	0.006
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.184	0.158	0.14	0.128
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.031	0.056	0.034	0.031
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.099	0.08	0.074	0.066
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.023	0.052	0.027	0.024
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.233	0.186	0.183	0.162
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.109	0.075	0.066	0.063
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.038	0.024	0.022	0.020
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.059	0.036	0.03	0.030
	SD				
PCB 138	N	1	1	1	1
	MEAN	0.791	0.547	0.523	0.478
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.012	0.018	0.01	0.009
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.214	0.155	0.132	0.123
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.042	0.056	0.04	0.036
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.006	0.01	0.007	0.005
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.071	0.692	0.673	0.624
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.077	0.052	0.052	0.044
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.022	0.018	0.016	0.012
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.057	0.038	0.043	0.036
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.244	0.154	0.172	0.134
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.054	0.037	0.038	0.030
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.064	0.043	0.04	0.033
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.014	0.018	0.011	0.011
	SD				
PCB 176	N	1	1	1	1
	MEAN	TR	0.001	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.102	0.073	0.071	0.048
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.055	0.045	0.037	0.038
	SD				
PCB 179	N	1	1	1	1
	MEAN	TR	0.001	0.001	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.683	0.408	0.472	0.346
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.187	0.122	0.111	0.108
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.419	0.268	0.237	0.247
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.101	0.059	0.07	0.059
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.031	0.02	0.023	0.018
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.155	0.094	0.098	0.081
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.025	0.017	0.015	0.014
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.139	0.089	0.102	0.080
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.026	0.02	0.018	0.018
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.038	0.022	0.024	0.019
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.032	0.036	0.036	0.025
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.073	0.049	0.049	0.040
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.009
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	0.001
	SD	
PCB 47/48	N	1
	MEAN	0.012
	SD	
PCB 49	N	1
	MEAN	0.002
	SD	
PCB 52	N	1
	MEAN	0.002
	SD	
PCB 56/60	N	1
	MEAN	0.009
	SD	
PCB 64	N	1
	MEAN	0.002
	SD	
PCB 66	N	1
	MEAN	0.098
	SD	
PCB 70/76	N	1
	MEAN	0.003
	SD	
PCB 74	N	1
	MEAN	0.042
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 85	N	1
	MEAN	0.01
	SD	
PCB 87	N	1
	MEAN	0.023
	SD	
PCB 92	N	1
	MEAN	0.021
	SD	
PCB 95	N	1
	MEAN	0.002
	SD	
PCB 97	N	1
	MEAN	ND
	SD	
PCB 99	N	1
	MEAN	0.162
	SD	
PCB 101/90	N	1
	MEAN	0.011
	SD	
PCB 105	N	1
	MEAN	0.101
	SD	
PCB 110	N	1
	MEAN	0.006
	SD	
PCB 118	N	1
	MEAN	0.305
	SD	
PCB 128	N	1
	MEAN	0.07
	SD	
PCB 130	N	1
	MEAN	0.02
	SD	
PCB 137	N	1
	MEAN	0.019
	SD	
PCB 138	N	1
	MEAN	0.579
	SD	
PCB 141	N	1
	MEAN	0.01
	SD	
PCB 146	N	1
	MEAN	0.129
	SD	
PCB 149	N	1
	MEAN	0.016
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 151	N	1
	MEAN	0.006
	SD	
PCB 153	N	1
	MEAN	0.827
	SD	
PCB 156	N	1
	MEAN	0.053
	SD	
PCB 157	N	1
	MEAN	0.014
	SD	
PCB 158	N	1
	MEAN	0.039
	SD	
PCB 170/190	N	1
	MEAN	0.195
	SD	
PCB 171	N	1
	MEAN	0.024
	SD	
PCB 172	N	1
	MEAN	0.027
	SD	
PCB 174	N	1
	MEAN	0.008
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.051
	SD	
PCB 178	N	1
	MEAN	0.05
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.35
	SD	
PCB 183	N	1
	MEAN	0.098
	SD	
PCB 187	N	1
	MEAN	0.198
	SD	
PCB 194	N	1
	MEAN	0.058
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
NIAGARA RIVER**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 195	N	1
	MEAN	0.021
	SD	
PCB 196/203	N	1
	MEAN	0.088
	SD	
PCB 200	N	1
	MEAN	0.008
	SD	
PCB 201	N	1
	MEAN	0.078
	SD	
PCB 202	N	1
	MEAN	0.019
	SD	
PCB 206	N	1
	MEAN	0.02
	SD	
PCB 207	N	1
	MEAN	0.022
	SD	
PCB 208	N	1
	MEAN	0.052
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
PORT COLBORNE LIGHTHOUSE**

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
PCB 16/32	N	1	1	13	1	1
	MEAN	ND	TR	ND	ND	TR
	STD			0		
PCB 17	N	1	1	13	1	1
	MEAN	ND	ND	ND	ND	ND
	STD			0		
PCB 18	N	1	1	13	1	1
	MEAN	ND	TR	ND	TR	ND
	STD			0		
PCB 22	N	1	1	13	1	1
	MEAN	ND	TR	ND	ND	ND
	STD			0		
PCB 28	N	1	1	13	1	1
	MEAN	0.004	0.006	0.0045	0.006	0.008
	STD			0.0022		
PCB 31	N	1	1	13	1	1
	MEAN	ND	ND	0.0011	ND	ND
	STD			0.0009		
PCB 33/20	N	1	1	13	1	1
	MEAN	ND	ND	ND	ND	ND
	STD			0		
PCB 42	N	1	1	13	1	1
	MEAN	TR	0.002	0.0024	0.003	0.003
	STD			0.0009		
PCB 44	N	1	1	13	1	1
	MEAN	TR	0.001	0.0013	0.001	0.001
	STD			0.001		
PCB 47/48	N	1	1	13	1	1
	MEAN	0.014	0.01	0.0122	0.013	0.017
	STD			0.0053		
PCB 49	N	1	1	13	1	1
	MEAN	0.001	0.003	0.0027	0.003	0.005
	STD			0.0010		
PCB 52	N	1	1	13	1	1
	MEAN	0.005	0.01	0.0091	0.009	0.012
	STD			0.0040		
PCB 56/60	N	1	1	13	1	1
	MEAN	0.006	0.005	0.0057	0.005	0.008
	STD			0.0021		
PCB 64	N	1	1	13	1	1
	MEAN	0.003	0.005	0.0043	0.005	0.009
	STD			0.0017		
PCB 66	N	1	1	13	1	1
	MEAN	0.052	0.04	0.0457	0.045	0.074
	STD			0.0212		
PCB 70/76	N	1	1	13	1	1
	MEAN	TR	0.003	0.0025	0.003	0.002
	STD			0.0005		
PCB 74	N	1	1	13	1	1
	MEAN	0.013	0.014	0.0127	0.012	0.020
	STD			0.0060		

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
PORT COLBORNE LIGHTHOUSE**

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
PCB 85	N	1	1	13	1	1
	MEAN	0.041	0.037	0.0301	0.026	0.037
	STD			0.0132		
PCB 87	N	1	1	13	1	1
	MEAN	0.015	0.016	0.0149	0.014	0.017
	STD			0.0054		
PCB 92	N	1	1	13	1	1
	MEAN	0.004	0.009	0.0076	0.007	0.006
	STD			0.0029		
PCB 95	N	1	1	13	1	1
	MEAN	0.001	0.004	0.0036	0.003	0.002
	STD			0.0013		
PCB 97	N	1	1	13	1	1
	MEAN	0.004	0.01	0.0087	0.008	0.008
	STD			0.0026		
PCB 99	N	1	1	13	1	1
	MEAN	0.11	0.082	0.0809	0.075	0.104
	STD			0.0386		
PCB 101/90	N	1	1	13	1	1
	MEAN	0.019	0.036	0.0317	0.029	0.034
	STD			0.0124		
PCB 105	N	1	1	13	1	1
	MEAN	0.055	0.05	0.0412	0.039	0.051
	STD			0.0184		
PCB 110	N	1	1	13	1	1
	MEAN	0.017	0.039	0.0287	0.026	0.034
	STD			0.0092		
PCB 118	N	1	1	13	1	1
	MEAN	0.139	0.124	0.0989	0.094	0.129
	STD			0.0479		
PCB 128	N	1	1	13	1	1
	MEAN	0.083	0.071	0.0550	0.055	0.066
	STD			0.0285		
PCB 130	N	1	1	13	1	1
	MEAN	0.028	0.022	0.0168	0.017	0.021
	STD			0.0084		
PCB 137	N	1	1	13	1	1
	MEAN	0.042	0.032	0.0245	0.023	0.031
	STD			0.0125		
PCB 138	N	1	1	13	1	1
	MEAN	0.571	0.478	0.3992	0.366	0.479
	STD			0.2212		
PCB 141	N	1	1	13	1	1
	MEAN	0.008	0.014	0.0117	0.011	0.012
	STD			0.0045		
PCB 146	N	1	1	13	1	1
	MEAN	0.16	0.135	0.1112	0.097	0.122
	STD			0.0606		
PCB 149	N	1	1	13	1	1
	MEAN	0.03	0.051	0.0432	0.039	0.044
	STD			0.0174		

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
PORT COLBORNE LIGHTHOUSE**

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
PCB 151	N	1	1	13	1	1
	MEAN	0.004	0.01	0.0088	0.008	0.006
	STD			0.0031		
PCB 153	N	1	1	13	1	1
	MEAN	0.776	0.636	0.5370	0.49	0.636
	STD			0.2998		
PCB 156	N	1	1	13	1	1
	MEAN	0.056	0.049	0.0387	0.037	0.040
	STD			0.0189		
PCB 157	N	1	1	13	1	1
	MEAN	0.012	0.015	0.0127	0.012	0.013
	STD			0.0058		
PCB 158	N	1	1	13	1	1
	MEAN	0.047	0.037	0.0346	0.031	0.035
	STD			0.0176		
PCB 170/190	N	1	1	13	1	1
	MEAN	0.2	0.17	0.1375	0.131	0.145
	STD			0.0767		
PCB 171	N	1	1	13	1	1
	MEAN	0.044	0.039	0.0312	0.033	0.033
	STD			0.0161		
PCB 172	N	1	1	13	1	1
	MEAN	0.052	0.042	0.0345	0.034	0.037
	STD			0.0178		
PCB 174	N	1	1	13	1	1
	MEAN	0.01	0.017	0.0128	0.012	0.015
	STD			0.0039		
PCB 176	N	1	1	13	1	1
	MEAN	ND	0.002	ND	ND	TR
	STD			0		
PCB 177	N	1	1	13	1	1
	MEAN	0.077	0.068	0.0545	0.05	0.048
	STD			0.0311		
PCB 178	N	1	1	13	1	1
	MEAN	0.04	0.038	0.0362	0.032	0.033
	STD			0.0193		
PCB 179	N	1	1	13	1	1
	MEAN	ND	0.002	0.0005	ND	TR
	STD			0.0009		
PCB 180	N	1	1	13	1	1
	MEAN	0.529	0.45	0.3740	0.358	0.388
	STD			0.2122		
PCB 183	N	1	1	13	1	1
	MEAN	0.158	0.136	0.1073	0.093	0.123
	STD			0.0594		
PCB 187	N	1	1	13	1	1
	MEAN	0.331	0.271	0.2175	0.186	0.257
	STD			0.1229		
PCB 194	N	1	1	13	1	1
	MEAN	0.084	0.074	0.0592	0.058	0.064
	STD			0.0300		

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
PORT COLBORNE LIGHTHOUSE**

HERRING GULL		YEAR				
		1998	1999	2000	2000	2001
PCB 195	N	1	1	13	1	1
	MEAN	0.029	0.024	0.0179	0.019	0.021
	STD			0.0101		
PCB 196/203	N	1	1	13	1	1
	MEAN	0.13	0.111	0.0822	0.081	0.094
	STD			0.0446		
PCB 200	N	1	1	13	1	1
	MEAN	0.02	0.018	0.0141	0.012	0.016
	STD			0.0076		
PCB 201	N	1	1	13	1	1
	MEAN	0.112	0.099	0.0767	0.073	0.088
	STD			0.0452		
PCB 202	N	1	1	13	1	1
	MEAN	0.019	0.019	0.0173	0.017	0.014
	STD			0.0094		
PCB 206	N	1	1	13	1	1
	MEAN	0.032	0.027	0.0218	0.02	0.022
	STD			0.0104		
PCB 207	N	1	1	13	1	1
	MEAN	0.045	0.04	0.0286	0.031	0.029
	STD			0.0134		
PCB 208	N	1	1	13	1	1
	MEAN	0.054	0.049	0.0303	0.041	0.045
	STD			0.0138		

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.017	0.017	0.019	0.018
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	0.005	TR	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.007	0.005	0.007	0.006
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.004	0.002	0.003	0.003
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.063	0.051	0.058	0.062
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.01	0.007	0.01	0.007
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.03	0.026	0.027	0.032
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.018	0.017	0.017	0.018
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.018	0.017	0.016	0.015
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.203	0.184	0.198	0.199
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.003	0.004	0.007	0.004
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.053	0.051	0.048	0.052
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.122	0.114	0.1	0.119
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.049	0.041	0.046	0.047
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.022	0.018	0.018	0.022
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.007	0.006	0.007	0.008
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.025	0.02	0.024	0.019
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.363	0.313	0.299	0.365
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.094	0.092	0.107	0.096
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.144	0.146	0.134	0.155
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.099	0.089	0.101	0.096
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.391	0.356	0.341	0.405
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.226	0.195	0.177	0.231
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.068	0.057	0.05	0.054
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.118	0.086	0.077	0.095
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.705	1.392	1.336	1.815
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.039	0.038	0.042	0.034
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.498	0.412	0.354	0.474
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.135	0.129	0.131	0.151
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.021	0.017	0.018	0.024
	SD				
PCB 153	N	1	1	1	1
	MEAN	2.288	1.803	1.729	2.472
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.133	0.125	0.103	0.129
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.038	0.032	0.034	0.037
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.132	0.104	0.102	0.135
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.58	0.511	0.449	0.600
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.129	0.113	0.101	0.125
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.139	0.121	0.095	0.126
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.044	0.04	0.042	0.038
	SD				
PCB 176	N	1	1	1	1
	MEAN	0.002	0.003	0.003	0.002
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.228	0.195	0.168	0.175
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.115	0.102	0.087	0.138
	SD				
PCB 179	N	1	1	1	1
	MEAN	0.002	0.002	0.002	0.003
	SD				
PCB 180	N	1	1	1	1
	MEAN	1.526	1.271	1.166	1.526
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.463	0.376	0.306	0.478
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.977	0.767	0.642	1.056
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.207	0.188	0.181	0.258
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.071	0.065	0.059	0.084
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.324	0.292	0.242	0.351
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.044	0.043	0.033	0.048
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.291	0.26	0.222	0.324
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.046	0.046	0.036	0.053
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.062	0.067	0.052	0.080
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.082	0.086	0.076	0.096
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.103	0.111	0.097	0.127
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	TR
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.221
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	TR
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	0.002
	SD	
PCB 47	N	1
	MEAN	0.241
	SD	
PCB 49	N	1
	MEAN	0.022
	SD	
PCB 52	N	1
	MEAN	0.006
	SD	
PCB 56/60	N	1
	MEAN	0.035
	SD	
PCB 64	N	1
	MEAN	0.006
	SD	
PCB 66	N	1
	MEAN	0.316
	SD	
PCB 70/76	N	1
	MEAN	0.002
	SD	
PCB 74	N	1
	MEAN	0.154
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 85	N	1
	MEAN	0.025
	SD	
PCB 87	N	1
	MEAN	0.04
	SD	
PCB 92	N	1
	MEAN	0.039
	SD	
PCB 95	N	1
	MEAN	0.005
	SD	
PCB 97	N	1
	MEAN	0.001
	SD	
PCB 99	N	1
	MEAN	0.151
	SD	
PCB 101/90	N	1
	MEAN	0.029
	SD	
PCB 105	N	1
	MEAN	0.075
	SD	
PCB 110	N	1
	MEAN	0.012
	SD	
PCB 118	N	1
	MEAN	0.198
	SD	
PCB 128	N	1
	MEAN	0.041
	SD	
PCB 130	N	1
	MEAN	0.012
	SD	
PCB 137	N	1
	MEAN	0.012
	SD	
PCB 138	N	1
	MEAN	0.293
	SD	
PCB 141	N	1
	MEAN	0.015
	SD	
PCB 146	N	1
	MEAN	0.068
	SD	
PCB 149	N	1
	MEAN	0.027
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 151	N	1
	MEAN	0.015
	SD	
PCB 153	N	1
	MEAN	0.412
	SD	
PCB 156	N	1
	MEAN	0.029
	SD	
PCB 157	N	1
	MEAN	0.01
	SD	
PCB 158	N	1
	MEAN	0.026
	SD	
PCB 170/190	N	1
	MEAN	0.113
	SD	
PCB 171	N	1
	MEAN	0.016
	SD	
PCB 172	N	1
	MEAN	0.016
	SD	
PCB 174	N	1
	MEAN	0.016
	SD	
PCB 176	N	1
	MEAN	0.002
	SD	
PCB 177	N	1
	MEAN	0.003
	SD	
PCB 178	N	1
	MEAN	0.029
	SD	
PCB 179	N	1
	MEAN	0.004
	SD	
PCB 180	N	1
	MEAN	0.183
	SD	
PCB 183	N	1
	MEAN	0.06
	SD	
PCB 187	N	1
	MEAN	0.115
	SD	
PCB 194	N	1
	MEAN	0.045
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ERIE, MIDDLE ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 195	N	1
	MEAN	0.016
	SD	
PCB 196/203	N	1
	MEAN	0.06
	SD	
PCB 200	N	1
	MEAN	0.006
	SD	
PCB 201	N	1
	MEAN	0.051
	SD	
PCB 202	N	1
	MEAN	0.011
	SD	
PCB 206	N	1
	MEAN	0.018
	SD	
PCB 207	N	1
	MEAN	0.018
	SD	
PCB 208	N	1
	MEAN	0.033
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
DETROIT RIVER, FIGHTING ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	TR	TR	ND	0.001
	SD				
PCB 17	N	1	1	1	1
	MEAN	TR	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	ND	TR
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	ND	TR
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.008	0.026	0.022	0.031
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	TR	ND	0.018
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.003	0.005	0.019	0.007
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.002	0.003	0.007	0.003
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.062	0.076	1.126	0.105
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.005	0.007	0.016	0.011
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.013	0.029	0.038	0.039
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.017	0.022	0.033	0.025
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.008	0.016	0.036	0.021
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.158	0.207	0.301	0.253
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.002	0.003	0.006	0.004
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.041	0.064	0.086	0.073
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
DETROIT RIVER, FIGHTING ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.096	0.11	0.137	0.131
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.035	0.04	0.06	0.051
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.009	0.017	0.022	0.021
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.003	0.006	0.007	0.007
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.008	0.017	0.024	0.024
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.297	0.311	0.42	0.339
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.053	0.083	0.145	0.125
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.145	0.142	0.196	0.173
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.035	0.068	0.107	0.103
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.373	0.358	0.525	0.463
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.179	0.164	0.171	0.203
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.055	0.048	0.061	0.063
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.08	0.065	0.088	0.084
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.515	1.327	1.869	1.922
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.019	0.025	0.053	0.041
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.375	0.342	0.466	0.442
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.068	0.104	0.161	0.165
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
DETROIT RIVER, FIGHTING ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.011	0.018	0.025	0.023
	SD				
PCB 153	N	1	1	1	1
	MEAN	2.076	1.722	2.593	2.617
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.138	0.125	0.183	0.139
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.031	0.034	0.051	0.035
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.123	0.105	0.158	0.154
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.583	0.51	0.832	0.671
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.115	0.106	0.17	0.126
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.116	0.106	0.149	0.109
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.022	0.034	0.052	0.047
	SD				
PCB 176	N	1	1	1	1
	MEAN	0.001	0.002	0.004	0.003
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.168	0.166	0.254	0.242
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.088	0.092	0.123	0.127
	SD				
PCB 179	N	1	1	1	1
	MEAN	0.002	0.002	0.002	0.003
	SD				
PCB 180	N	1	1	1	1
	MEAN	1.517	1.3	2.131	1.639
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.405	0.351	0.491	0.472
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.901	0.763	1.081	1.158
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.2	0.202	0.332	0.243
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
DETROIT RIVER, FIGHTING ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.071	0.064	0.111	0.084
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.31	0.277	0.415	0.336
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.034	0.034	0.043	0.041
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.257	0.232	0.353	0.284
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.035	0.039	0.053	0.045
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.059	0.057	0.087	0.061
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.074	0.072	0.112	0.072
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.085	0.09	0.134	0.090

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

BLACK TERN		YEAR
		1999
PCB 16/32	N	1
	MEAN	TR
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	TR
	SD	
PCB 22	N	1
	MEAN	TR
	SD	
PCB 28	N	1
	MEAN	0.003
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	TR
	SD	
PCB 42	N	1
	MEAN	0.001
	SD	
PCB 44	N	1
	MEAN	TR
	SD	
PCB 47/48	N	1
	MEAN	0.004
	SD	
PCB 49	N	1
	MEAN	TR
	SD	
PCB 52	N	1
	MEAN	0.003
	SD	
PCB 56/60	N	1
	MEAN	0.002
	SD	
PCB 64	N	1
	MEAN	0.003
	SD	
PCB 66	N	1
	MEAN	0.012
	SD	
PCB 70/76	N	1
	MEAN	TR
	SD	
PCB 74	N	1
	MEAN	0.006
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

BLACK TERN		YEAR
		1999
PCB 85	N	1
	MEAN	0.011
	SD	
PCB 87	N	1
	MEAN	0.001
	SD	
PCB 92	N	1
	MEAN	0.002
	SD	
PCB 95	N	1
	MEAN	TR
	SD	
PCB 97	N	1
	MEAN	0.003
	SD	
PCB 99	N	1
	MEAN	0.03
	SD	
PCB 101/90	N	1
	MEAN	0.006
	SD	
PCB 105	N	1
	MEAN	0.016
	SD	
PCB 110	N	1
	MEAN	0.011
	SD	
PCB 118	N	1
	MEAN	0.046
	SD	
PCB 128	N	1
	MEAN	0.032
	SD	
PCB 130	N	1
	MEAN	0.01
	SD	
PCB 137	N	1
	MEAN	0.015
	SD	
PCB 138	N	1
	MEAN	0.201
	SD	
PCB 141	N	1
	MEAN	0.002
	SD	
PCB 146	N	1
	MEAN	0.065
	SD	
PCB 149	N	1
	MEAN	0.014
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

BLACK TERN		YEAR
		1999
PCB 151	N	1
	MEAN	0.002
	SD	
PCB 153	N	1
	MEAN	0.316
	SD	
PCB 156	N	1
	MEAN	0.025
	SD	
PCB 157	N	1
	MEAN	0.009
	SD	
PCB 158	N	1
	MEAN	0.018
	SD	
PCB 170/190	N	1
	MEAN	0.119
	SD	
PCB 171	N	1
	MEAN	0.026
	SD	
PCB 172	N	1
	MEAN	0.027
	SD	
PCB 174	N	1
	MEAN	0.006
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.046
	SD	
PCB 178	N	1
	MEAN	0.006
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.284
	SD	
PCB 183	N	1
	MEAN	0.076
	SD	
PCB 187	N	1
	MEAN	0.146
	SD	
PCB 194	N	1
	MEAN	0.048
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

BLACK TERN		YEAR
		1999
PCB 195	N	1
	MEAN	0.016
	SD	
PCB 196/203	N	1
	MEAN	0.067
	SD	
PCB 200	N	1
	MEAN	0.01
	SD	
PCB 201	N	1
	MEAN	0.055
	SD	
PCB 202	N	1
	MEAN	0.002
	SD	
PCB 206	N	1
	MEAN	0.014
	SD	
PCB 207	N	1
	MEAN	0.023
	SD	
PCB 208	N	1
	MEAN	0.021
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

FORSTER'S TERN		YEAR
		1999
PCB 16/32	N	1
	MEAN	TR
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	TR
	SD	
PCB 28	N	1
	MEAN	0.013
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	TR
	SD	
PCB 42	N	1
	MEAN	0.007
	SD	
PCB 44	N	1
	MEAN	0.005
	SD	
PCB 47/48	N	1
	MEAN	0.035
	SD	
PCB 49	N	1
	MEAN	0.005
	SD	
PCB 52	N	1
	MEAN	0.023
	SD	
PCB 56/60	N	1
	MEAN	0.011
	SD	
PCB 64	N	1
	MEAN	0.017
	SD	
PCB 66	N	1
	MEAN	0.087
	SD	
PCB 70/76	N	1
	MEAN	0.006
	SD	
PCB 74	N	1
	MEAN	0.032
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

FORSTER'S TERN		YEAR
		1999
PCB 85	N	1
	MEAN	0.048
	SD	
PCB 87	N	1
	MEAN	0.021
	SD	
PCB 92	N	1
	MEAN	0.019
	SD	
PCB 95	N	1
	MEAN	0.007
	SD	
PCB 97	N	1
	MEAN	0.016
	SD	
PCB 99	N	1
	MEAN	0.153
	SD	
PCB 101/90	N	1
	MEAN	0.072
	SD	
PCB 105	N	1
	MEAN	0.069
	SD	
PCB 110	N	1
	MEAN	0.084
	SD	
PCB 118	N	1
	MEAN	0.181
	SD	
PCB 128	N	1
	MEAN	0.082
	SD	
PCB 130	N	1
	MEAN	0.021
	SD	
PCB 137	N	1
	MEAN	0.036
	SD	
PCB 138	N	1
	MEAN	0.549
	SD	
PCB 141	N	1
	MEAN	0.017
	SD	
PCB 146	N	1
	MEAN	0.096
	SD	
PCB 149	N	1
	MEAN	0.096
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

FORSTER'S TERN		YEAR
		1999
PCB 151	N	1
	MEAN	0.02
	SD	
PCB 153	N	1
	MEAN	0.784
	SD	
PCB 156	N	1
	MEAN	0.059
	SD	
PCB 157	N	1
	MEAN	0.03
	SD	
PCB 158	N	1
	MEAN	0.042
	SD	
PCB 170/190	N	1
	MEAN	0.169
	SD	
PCB 171	N	1
	MEAN	0.039
	SD	
PCB 172	N	1
	MEAN	0.036
	SD	
PCB 174	N	1
	MEAN	0.032
	SD	
PCB 176	N	1
	MEAN	0.002
	SD	
PCB 177	N	1
	MEAN	0.053
	SD	
PCB 178	N	1
	MEAN	0.042
	SD	
PCB 179	N	1
	MEAN	0.003
	SD	
PCB 180	N	1
	MEAN	0.376
	SD	
PCB 183	N	1
	MEAN	0.113
	SD	
PCB 187	N	1
	MEAN	0.267
	SD	
PCB 194	N	1
	MEAN	0.061
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE ST. CLAIR, WALPOLE ISLAND**

FORSTER'S TERN		YEAR
		1999
PCB 195	N	1
	MEAN	0.021
	SD	
PCB 196/203	N	1
	MEAN	0.102
	SD	
PCB 200	N	1
	MEAN	0.02
	SD	
PCB 201	N	1
	MEAN	0.092
	SD	
PCB 202	N	1
	MEAN	0.026
	SD	
PCB 206	N	1
	MEAN	0.053
	SD	
PCB 207	N	1
	MEAN	0.053
	SD	
PCB 208	N	1
	MEAN	0.101
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANTRY ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.003	0.008	0.006	0.005
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 42	N	1	1	1	1
	MEAN	ND	0.002	0.002	ND
	SD				
PCB 44	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.01	0.02	0.017	0.012
	SD				
PCB 49	N	1	1	1	1
	MEAN	TR	0.002	0.002	0.001
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.002	0.011	0.007	0.004
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.006	0.011	0.007	0.006
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.002	0.009	0.006	0.004
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.055	0.132	0.085	0.071
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	TR	0.003	0.002	TR
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.011	0.027	0.017	0.014
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANTRY ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.035	0.071	0.04	0.041
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.003	0.021	0.016	0.012
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.003	0.013	0.008	0.005
	SD				
PCB 95	N	1	1	1	1
	MEAN	TR	0.002	0.002	0.001
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.002	0.014	0.01	0.006
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.076	0.155	0.101	0.093
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.01	0.042	0.033	0.023
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.054	0.102	0.062	0.060
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.01	0.046	0.032	0.022
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.116	0.217	0.136	0.134
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.044	0.07	0.046	0.049
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.014	0.021	0.013	0.016
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.019	0.029	0.02	0.020
	SD				
PCB 138	N	1	1	1	1
	MEAN	0.26	0.433	0.302	0.327
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.003	0.011	0.011	0.007
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.069	0.118	0.075	0.081
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.01	0.034	0.026	0.023
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANTRY ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.001	0.005	0.005	0.003
	SD				
PCB 153	N	1	1	1	1
	MEAN	0.344	0.525	0.375	0.420
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.032	0.046	0.028	0.033
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.01	0.012	0.009	0.009
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.018	0.026	0.021	0.019
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.078	0.1	0.071	0.080
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.016	0.023	0.016	0.017
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.025	0.031	0.022	0.022
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.004	0.011	0.009	0.008
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.021	0.038	0.028	0.021
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.018	0.03	0.022	0.022
	SD				
PCB 179	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.199	0.248	0.188	0.210
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.05	0.067	0.047	0.057
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.093	0.148	0.106	0.119
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.039	0.039	0.033	0.039
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANTRY ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.012	0.014	0.014	0.013
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.054	0.059	0.043	0.055
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.007	0.011	0.007	0.008
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.042	0.051	0.038	0.047
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.01	0.015	0.01	0.011
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.019	0.017	0.013	0.016
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.029	0.025	0.024	0.029
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.032	0.036	0.028	0.033
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	0.001	0.001	ND	0.006
	SD				
PCB 17	N	1	1	1	1
	MEAN	TR	TR	ND	0.002
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	ND	0.002
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	ND	0.002
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.034	0.05	0.057	0.081
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	0.012
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	TR	ND	0.002
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.031	0.027	0.046	0.059
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.017	0.013	0.024	0.033
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.322	0.23	0.442	0.511
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.065	0.052	0.078	0.124
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.104	0.113	0.122	0.215
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.092	0.07	0.125	0.136
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.064	0.056	0.077	0.094
	SD				
PCB 66	N	1	1	1	1
	MEAN	1.36	0.96	1.773	1.868
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.006	0.009	0.011	0.019
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.306	0.243	0.424	0.477
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.615	0.452	0.675	0.854
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.208	0.153	0.252	0.313
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.038	0.041	0.05	0.066
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.015	0.012	0.015	0.026
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.07	0.067	0.085	0.111
	SD				
PCB 99	N	1	1	1	1
	MEAN	1.537	1.052	1.657	2.048
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.252	0.238	0.354	0.482
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.743	0.584	0.905	1.041
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.218	0.198	0.24	0.346
	SD				
PCB 118	N	1	1	1	1
	MEAN	1.822	1.324	2.215	2.547
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.393	0.329	0.446	0.56
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.126	0.097	0.127	0.167
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.186	0.132	0.168	0.238
	SD				
PCB 138	N	1	1	1	1
	MEAN	2.555	1.976	2.648	3.537
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.033	0.034	0.047	0.075
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.631	0.516	0.636	0.821
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.105	0.118	0.154	0.234
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.016	0.019	0.024	0.036
	SD				
PCB 153	N	1	1	1	1
	MEAN	2.788	2.159	2.941	3.855
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.281	0.253	0.324	0.378
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.074	0.048	0.074	0.087
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.203	0.153	0.211	0.297
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.667	0.609	0.768	0.994
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.129	0.117	0.155	0.201
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.166	0.151	0.17	0.214
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.033	0.036	0.041	0.063
	SD				
PCB 176	N	1	1	1	1
	MEAN	0.002	0.002	0.003	0.005
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.214	0.175	0.254	0.337
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.092	0.095	0.131	0.175
	SD				
PCB 179	N	1	1	1	1
	MEAN	0.002	0.001	0.003	0.004
	SD				
PCB 180	N	1	1	1	1
	MEAN	1.613	1.434	1.873	2.252
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.408	0.339	0.393	0.578
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.953	0.76	0.9	1.381
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.29	0.282	0.333	0.442
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.086	0.082	0.11	0.14
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.374	0.351	0.401	0.549
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.04	0.038	0.044	0.067
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.346	0.319	0.373	0.524
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.041	0.046	0.063	0.078
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.115	0.111	0.139	0.187
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.162	0.16	0.215	0.245
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.18	0.187	0.241	0.296
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.018
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	0.003
	SD	
PCB 47/48	N	1
	MEAN	0.016
	SD	
PCB 49	N	1
	MEAN	0.011
	SD	
PCB 52	N	1
	MEAN	0.008
	SD	
PCB 56/60	N	1
	MEAN	0.007
	SD	
PCB 64	N	1
	MEAN	ND
	SD	
PCB 66	N	1
	MEAN	0.084
	SD	
PCB 70/76	N	1
	MEAN	0.005
	SD	
PCB 74	N	1
	MEAN	0.046
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 85	N	1
	MEAN	0.009
	SD	
PCB 87	N	1
	MEAN	0.019
	SD	
PCB 92	N	1
	MEAN	0.012
	SD	
PCB 95	N	1
	MEAN	0.003
	SD	
PCB 97	N	1
	MEAN	0.002
	SD	
PCB 99	N	1
	MEAN	0.096
	SD	
PCB 101/90	N	1
	MEAN	0.015
	SD	
PCB 105	N	1
	MEAN	0.061
	SD	
PCB 110	N	1
	MEAN	0.012
	SD	
PCB 118	N	1
	MEAN	0.195
	SD	
PCB 128	N	1
	MEAN	0.021
	SD	
PCB 130	N	1
	MEAN	0.008
	SD	
PCB 137	N	1
	MEAN	0.007
	SD	
PCB 138	N	1
	MEAN	0.221
	SD	
PCB 141	N	1
	MEAN	0.005
	SD	
PCB 146	N	1
	MEAN	0.051
	SD	
PCB 149	N	1
	MEAN	0.013
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 151	N	1
	MEAN	0.006
	SD	
PCB 153	N	1
	MEAN	0.32
	SD	
PCB 156	N	1
	MEAN	0.027
	SD	
PCB 157	N	1
	MEAN	0.006
	SD	
PCB 158	N	1
	MEAN	0.018
	SD	
PCB 170/190	N	1
	MEAN	0.088
	SD	
PCB 171	N	1
	MEAN	0.009
	SD	
PCB 172	N	1
	MEAN	0.01
	SD	
PCB 174	N	1
	MEAN	0.005
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.017
	SD	
PCB 178	N	1
	MEAN	0.018
	SD	
PCB 179	N	1
	MEAN	0.001
	SD	
PCB 180	N	1
	MEAN	0.125
	SD	
PCB 183	N	1
	MEAN	0.036
	SD	
PCB 187	N	1
	MEAN	0.07
	SD	
PCB 194	N	1
	MEAN	0.035
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, CHANNEL SHELTER ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 195	N	1
	MEAN	0.012
	SD	
PCB 196/203	N	1
	MEAN	0.043
	SD	
PCB 200	N	1
	MEAN	0.003
	SD	
PCB 201	N	1
	MEAN	0.038
	SD	
PCB 202	N	1
	MEAN	0.007
	SD	
PCB 206	N	1
	MEAN	0.015
	SD	
PCB 207	N	1
	MEAN	0.016
	SD	
PCB 208	N	1
	MEAN	0.029
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, MATCHEDASH BAY**

BLACK TERN		YEAR
		1996
PCB 28	N	1
	MEAN	0.0013
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 49	N	1
	MEAN	ND
	SD	
PCB 52	N	1
	MEAN	ND
	SD	
PCB 60	N	1
	MEAN	0.0118
	SD	
PCB 64	N	1
	MEAN	0.0005
	SD	
PCB 66	N	1
	MEAN	0.0105
	SD	
PCB 70	N	1
	MEAN	ND
	SD	
PCB 74	N	1
	MEAN	0.0052
	SD	
PCB 87	N	1
	MEAN	ND
	SD	
PCB 97	N	1
	MEAN	ND
	SD	
PCB 99	N	1
	MEAN	0.0247
	SD	
PCB 101	N	1
	MEAN	0.0057
	SD	
PCB 105	N	1
	MEAN	0.0134
	SD	
PCB 110	N	1
	MEAN	0.011
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, MATCHEDASH BAY**

BLACK TERN		YEAR
		1996
PCB 118	N	1
	MEAN	0.0477
	SD	
PCB 128	N	1
	MEAN	ND
	SD	
PCB 129	N	1
	MEAN	0.0025
	SD	
PCB 137	N	1
	MEAN	0.0022
	SD	
PCB 138	N	1
	MEAN	0.0817
	SD	
PCB 141	N	1
	MEAN	ND
	SD	
PCB 146	N	1
	MEAN	0.015
	SD	
PCB 149	N	1
	MEAN	0.0155
	SD	
PCB 151	N	1
	MEAN	ND
	SD	
PCB 153	N	1
	MEAN	0.091
	SD	
PCB 158	N	1
	MEAN	0.0021
	SD	
PCB 170	N	1
	MEAN	0.0206
	SD	
PCB 171	N	1
	MEAN	0.0052
	SD	
PCB 172	N	1
	MEAN	0.0026
	SD	
PCB 174	N	1
	MEAN	0.0034
	SD	
PCB 180	N	1
	MEAN	0.0481
	SD	
PCB 182	N	1
	MEAN	0.0379
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, MATCHEDASH BAY**

BLACK TERN		YEAR
		1996
PCB 183	N	1
	MEAN	0.0125
	SD	
PCB 185	N	1
	MEAN	ND
	SD	
PCB 194	N	1
	MEAN	0.0084
	SD	
PCB 195	N	1
	MEAN	0.0022
	SD	
PCB 200	N	1
	MEAN	0.0029
	SD	
PCB 201	N	1
	MEAN	0.0159
	SD	
PCB 203	N	1
	MEAN	0.0098
	SD	
PCB 206	N	1
	MEAN	0.0073
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, NOTTAWASAGA ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.003
	SD	
PCB 31	N	1
	MEAN	TR
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/48	N	1
	MEAN	0.002
	SD	
PCB 49	N	1
	MEAN	0.001
	SD	
PCB 52	N	1
	MEAN	0.001
	SD	
PCB 56/60	N	1
	MEAN	0.001
	SD	
PCB 64	N	1
	MEAN	TR
	SD	
PCB 66	N	1
	MEAN	0.01
	SD	
PCB 70/76	N	1
	MEAN	0.002
	SD	
PCB 74	N	1
	MEAN	0.006
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, NOTTAWASAGA ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 85	N	1
	MEAN	0.003
	SD	
PCB 87	N	1
	MEAN	0.004
	SD	
PCB 92	N	1
	MEAN	0.003
	SD	
PCB 95	N	1
	MEAN	0.001
	SD	
PCB 97	N	1
	MEAN	ND
	SD	
PCB 99	N	1
	MEAN	0.018
	SD	
PCB 101/90	N	1
	MEAN	0.004
	SD	
PCB 105	N	1
	MEAN	0.012
	SD	
PCB 110	N	1
	MEAN	0.003
	SD	
PCB 118	N	1
	MEAN	0.037
	SD	
PCB 128	N	1
	MEAN	0.009
	SD	
PCB 130	N	1
	MEAN	0.002
	SD	
PCB 137	N	1
	MEAN	0.002
	SD	
PCB 138	N	1
	MEAN	0.058
	SD	
PCB 141	N	1
	MEAN	0.002
	SD	
PCB 146	N	1
	MEAN	0.015
	SD	
PCB 149	N	1
	MEAN	0.004
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, NOTTAWASAGA ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 151	N	1
	MEAN	0.002
	SD	
PCB 153	N	1
	MEAN	0.093
	SD	
PCB 156	N	1
	MEAN	0.01
	SD	
PCB 157	N	1
	MEAN	0.005
	SD	
PCB 158	N	1
	MEAN	ND
	SD	
PCB 170/190	N	1
	MEAN	0.018
	SD	
PCB 171	N	1
	MEAN	0.003
	SD	
PCB 172	N	1
	MEAN	0.004
	SD	
PCB 174	N	1
	MEAN	0.002
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.005
	SD	
PCB 178	N	1
	MEAN	0.006
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.038
	SD	
PCB 183	N	1
	MEAN	0.012
	SD	
PCB 187	N	1
	MEAN	0.02
	SD	
PCB 194	N	1
	MEAN	0.008
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON, NOTTAWASAGA ISLAND**

BLACK-CROWNED NIGHT-HERON		YEAR
2000		
PCB 195	N	1
	MEAN	0.003
	SD	
PCB 196/203	N	1
	MEAN	0.011
	SD	
PCB 200	N	1
	MEAN	0.001
	SD	
PCB 201	N	1
	MEAN	0.009
	SD	
PCB 202	N	1
	MEAN	0.004
	SD	
PCB 206	N	1
	MEAN	0.006
	SD	
PCB 207	N	1
	MEAN	0.007
	SD	
PCB 208	N	1
	MEAN	0.01
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, TINY MARSH**

BLACK TERN		YEAR
		1999
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.002
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/48	N	1
	MEAN	0.002
	SD	
PCB 49	N	1
	MEAN	ND
	SD	
PCB 52	N	1
	MEAN	TR
	SD	
PCB 56/60	N	1
	MEAN	0.001
	SD	
PCB 64	N	1
	MEAN	0.001
	SD	
PCB 66	N	1
	MEAN	0.006
	SD	
PCB 70/76	N	1
	MEAN	TR
	SD	
PCB 74	N	1
	MEAN	0.003
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, TINY MARSH**

BLACK TERN		YEAR
		1999
PCB 85	N	1
	MEAN	0.003
	SD	
PCB 87	N	1
	MEAN	TR
	SD	
PCB 92	N	1
	MEAN	TR
	SD	
PCB 95	N	1
	MEAN	TR
	SD	
PCB 97	N	1
	MEAN	TR
	SD	
PCB 99	N	1
	MEAN	0.006
	SD	
PCB 101/90	N	1
	MEAN	0.001
	SD	
PCB 105	N	1
	MEAN	0.004
	SD	
PCB 110	N	1
	MEAN	0.002
	SD	
PCB 118	N	1
	MEAN	0.009
	SD	
PCB 128	N	1
	MEAN	0.003
	SD	
PCB 130	N	1
	MEAN	0.001
	SD	
PCB 137	N	1
	MEAN	0.002
	SD	
PCB 138	N	1
	MEAN	0.024
	SD	
PCB 141	N	1
	MEAN	ND
	SD	
PCB 146	N	1
	MEAN	0.008
	SD	
PCB 149	N	1
	MEAN	0.002
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, TINY MARSH**

BLACK TERN		YEAR
		1999
PCB 151	N	1
	MEAN	ND
	SD	
PCB 153	N	1
	MEAN	0.033
	SD	
PCB 156	N	1
	MEAN	0.004
	SD	
PCB 157	N	1
	MEAN	0.003
	SD	
PCB 158	N	1
	MEAN	0.002
	SD	
PCB 170/190	N	1
	MEAN	0.01
	SD	
PCB 171	N	1
	MEAN	0.003
	SD	
PCB 172	N	1
	MEAN	0.003
	SD	
PCB 174	N	1
	MEAN	0.001
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.005
	SD	
PCB 178	N	1
	MEAN	ND
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.019
	SD	
PCB 183	N	1
	MEAN	0.006
	SD	
PCB 187	N	1
	MEAN	0.016
	SD	
PCB 194	N	1
	MEAN	0.001
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
GEORGIAN BAY, TINY MARSH**

BLACK TERN		YEAR
		1999
PCB 195	N	1
	MEAN	0.001
	SD	
PCB 196/203	N	1
	MEAN	0.009
	SD	
PCB 200	N	1
	MEAN	0.002
	SD	
PCB 201	N	1
	MEAN	0.008
	SD	
PCB 202	N	1
	MEAN	0.001
	SD	
PCB 206	N	1
	MEAN	0.006
	SD	
PCB 207	N	1
	MEAN	0.004
	SD	
PCB 208	N	1
	MEAN	0.009
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.004	0.005	0.004	0.005
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	ND	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	ND	0.002	ND	ND
	SD				
PCB 44	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.012	0.014	0.011	0.012
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.001	0.002	TR	0.002
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.004	0.007	0.004	0.005
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.007	0.008	0.006	0.006
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.003	0.007	0.003	0.004
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.074	0.085	0.07	0.070
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	TR	0.002	0.001	0.001
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.014	0.018	0.013	0.014
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.052	0.057	0.04	0.043
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.005	0.018	0.009	0.014
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.006	0.01	ND	0.006
	SD				
PCB 95	N	1	1	1	1
	MEAN	TR	0.001	ND	0.001
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.006	0.01	0.005	0.006
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.107	0.119	0.092	0.096
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.019	0.03	0.019	0.028
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.083	0.083	0.069	0.067
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.021	0.035	0.02	0.028
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.166	0.173	0.146	0.145
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.068	0.068	0.054	0.058
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.021	0.02	0.015	0.017
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.032	0.029	0.022	0.023
	SD				
PCB 138	N	1	1	1	1
	MEAN	0.409	0.419	0.358	0.395
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.006	0.009	0.006	0.010
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.107	0.116	0.091	0.098
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.018	0.03	0.018	0.026
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.003	0.004	0.002	0.004
	SD				
PCB 153	N	1	1	1	1
	MEAN	0.517	0.506	0.436	0.504
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.046	0.046	0.034	0.037
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.013	0.017	0.011	0.012
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.028	0.026	0.022	0.023
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.107	0.102	0.087	0.096
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.022	0.022	0.016	0.019
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.034	0.034	0.021	0.026
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.007	0.01	0.006	0.009
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.041	0.044	0.036	0.028
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.029	0.033	0.026	0.028
	SD				
PCB 179	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.26	0.252	0.2	0.234
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.068	0.069	0.051	0.066
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.159	0.166	0.132	0.157
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.046	0.043	0.04	0.048
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), DOUBLE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.015	0.013	0.012	0.014
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.07	0.069	0.054	0.065
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.012	0.014	0.008	0.012
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.063	0.063	0.054	0.062
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.016	0.018	0.013	0.013
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.02	0.021	0.017	0.020
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.036	0.041	0.033	0.032
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.041	0.054	0.044	0.043
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT**

HERRING GULL		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.02
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	0.015
	SD	
PCB 44	N	1
	MEAN	0.008
	SD	
PCB 47/48	N	1
	MEAN	0.051
	SD	
PCB 49	N	1
	MEAN	0.024
	SD	
PCB 52	N	1
	MEAN	0.044
	SD	
PCB 56/60	N	1
	MEAN	0.028
	SD	
PCB 64	N	1
	MEAN	0.026
	SD	
PCB 66	N	1
	MEAN	0.27
	SD	
PCB 70/76	N	1
	MEAN	0.003
	SD	
PCB 74	N	1
	MEAN	0.078
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT**

HERRING GULL		YEAR
		2000
PCB 85	N	1
	MEAN	0.08
	SD	
PCB 87	N	1
	MEAN	0.042
	SD	
PCB 92	N	1
	MEAN	0.018
	SD	
PCB 95	N	1
	MEAN	0.006
	SD	
PCB 97	N	1
	MEAN	0.026
	SD	
PCB 99	N	1
	MEAN	0.194
	SD	
PCB 101/90	N	1
	MEAN	0.087
	SD	
PCB 105	N	1
	MEAN	0.129
	SD	
PCB 110	N	1
	MEAN	0.07
	SD	
PCB 118	N	1
	MEAN	0.286
	SD	
PCB 128	N	1
	MEAN	0.085
	SD	
PCB 130	N	1
	MEAN	0.024
	SD	
PCB 137	N	1
	MEAN	0.032
	SD	
PCB 138	N	1
	MEAN	0.62
	SD	
PCB 141	N	1
	MEAN	0.018
	SD	
PCB 146	N	1
	MEAN	0.135
	SD	
PCB 149	N	1
	MEAN	0.051
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT**

HERRING GULL		YEAR
		2000
PCB 151	N	1
	MEAN	0.009
	SD	
PCB 153	N	1
	MEAN	0.702
	SD	
PCB 156	N	1
	MEAN	0.054
	SD	
PCB 157	N	1
	MEAN	0.007
	SD	
PCB 158	N	1
	MEAN	0.037
	SD	
PCB 170/190	N	1
	MEAN	0.14
	SD	
PCB 171	N	1
	MEAN	0.028
	SD	
PCB 172	N	1
	MEAN	0.034
	SD	
PCB 174	N	1
	MEAN	0.015
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.045
	SD	
PCB 178	N	1
	MEAN	0.036
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.341
	SD	
PCB 183	N	1
	MEAN	0.083
	SD	
PCB 187	N	1
	MEAN	0.172
	SD	
PCB 194	N	1
	MEAN	0.063
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE HURON (NORTH CHANNEL), PUMPKIN POINT**

HERRING GULL		YEAR
		2000
PCB 195	N	1
	MEAN	0.018
	SD	
PCB 196/203	N	1
	MEAN	0.084
	SD	
PCB 200	N	1
	MEAN	0.014
	SD	
PCB 201	N	1
	MEAN	0.074
	SD	
PCB 202	N	1
	MEAN	0.02
	SD	
PCB 206	N	1
	MEAN	0.028
	SD	
PCB 207	N	1
	MEAN	0.037
	SD	
PCB 208	N	1
	MEAN	0.049
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, GULL ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	TR	ND	TR	TR
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	TR	TR	TR
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.03	0.025	0.019	0.026
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	TR	TR	0.003
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.004	0.004	0.005	0.008
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.001	0.002	0.003	0.004
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.079	0.098	0.081	0.051
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.006	0.005	0.009	0.010
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.017	0.021	0.017	0.025
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.037	0.057	0.044	0.028
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.015	0.018	0.017	0.015
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.459	0.622	0.531	0.304
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.004	0.013	0.007	0.010
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.097	0.156	0.112	0.072
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, GULL ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.246	0.326	0.282	0.180
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.061	0.059	0.079	0.044
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.017	0.023	0.025	0.017
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.002	0.004	0.004	0.004
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.014	0.024	0.024	0.018
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.6	0.717	0.665	0.335
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.074	0.115	0.131	0.074
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.372	0.465	0.451	0.259
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.066	0.09	0.105	0.061
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.831	0.973	1.002	0.584
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.297	0.359	0.351	0.204
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.093	0.1	0.096	0.068
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.126	0.126	0.116	0.064
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.903	2.152	2.276	1.359
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.016	0.021	0.029	0.016
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.477	0.559	0.529	0.303
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.052	0.075	0.087	0.053
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, GULL ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.006	0.008	0.01	0.008
	SD				
PCB 153	N	1	1	1	1
	MEAN	2.251	2.526	2.727	1.782
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.181	0.22	0.22	0.134
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.05	0.065	0.06	0.036
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.106	0.119	0.125	0.074
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.39	0.447	0.492	0.295
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.075	0.088	0.099	0.056
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.106	0.122	0.123	0.076
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.017	0.021	0.024	0.015
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.123	0.124	0.144	0.080
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.083	0.097	0.116	0.074
	SD				
PCB 179	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.967	1.114	1.332	0.789
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.245	0.272	0.277	0.180
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.569	0.592	0.623	0.370
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.128	0.159	0.173	0.116
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, GULL ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.041	0.049	0.055	0.035
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.213	0.242	0.263	0.173
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.03	0.035	0.035	0.026
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.186	0.206	0.227	0.138
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.039	0.051	0.064	0.040
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.052	0.064	0.066	0.044
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.078	0.103	0.12	0.081
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.11	0.131	0.148	0.096
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, BIG SISTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	TR	TR	0.003	0.001
	SD				
PCB 17	N	1	1	1	1
	MEAN	TR	ND	0.002	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	TR	0.001	TR
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	0.001	0.001
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.043	0.035	0.059	0.054
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.009	0.015	0.014	0.020
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.006	0.009	0.009	0.010
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.157	0.105	0.125	0.092
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.016	0.018	0.021	0.021
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.034	0.04	0.035	0.058
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.07	0.055	0.058	0.034
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.033	0.031	0.033	0.038
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.867	0.574	0.711	0.398
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.006	0.015	0.008	0.011
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.193	0.174	0.164	0.097
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, BIG SISTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.295	0.212	0.233	0.137
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.074	0.061	0.068	0.045
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.015	0.021	0.016	0.019
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.003	0.006	0.004	0.007
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.02	0.026	0.019	0.023
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.616	0.407	0.606	0.338
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.115	0.106	0.1	0.075
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.4	0.306	0.358	0.191
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.086	0.089	0.08	0.080
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.836	0.648	0.789	0.432
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.27	0.212	0.246	0.146
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.076	0.064	0.07	0.041
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.11	0.085	0.1	0.056
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.69	1.267	1.678	0.961
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.02	0.018	0.019	0.013
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.45	0.331	0.371	0.238
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.063	0.06	0.066	0.064
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, BIG SISTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.004	0.007	0.005	0.009
	SD				
PCB 153	N	1	1	1	1
	MEAN	2.012	1.554	2.029	1.225
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.165	0.141	0.129	0.077
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.035	0.04	0.037	0.025
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.093	0.072	0.092	0.067
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.351	0.285	0.375	0.201
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.076	0.057	0.055	0.039
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.093	0.072	0.061	0.039
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.018	0.017	0.017	0.015
	SD				
PCB 176	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.127	0.088	0.104	0.065
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.075	0.063	0.073	0.052
	SD				
PCB 179	N	1	1	1	1
	MEAN	TR	TR	TR	TR
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.886	0.679	0.66	0.432
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.232	0.176	0.197	0.152
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.544	0.389	0.45	0.324
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.12	0.096	0.122	0.087
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE MICHIGAN, BIG SISTER ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.037	0.033	0.043	0.026
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.189	0.159	0.201	0.119
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.029	0.022	0.024	0.015
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.18	0.14	0.176	0.107
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.036	0.031	0.032	0.024
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.039	0.04	0.05	0.037
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.055	0.063	0.077	0.057
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.113	0.08	0.144	0.067
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, SKIN ISLAND**

HERRING GULL		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.006
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/47	N	1
	MEAN	0.01
	SD	
PCB 49	N	1
	MEAN	ND
	SD	
PCB 52	N	1
	MEAN	0.004
	SD	
PCB 56/60	N	1
	MEAN	0.006
	SD	
PCB 64	N	1
	MEAN	0.003
	SD	
PCB 66	N	1
	MEAN	0.054
	SD	
PCB 70/76	N	1
	MEAN	ND
	SD	
PCB 74	N	1
	MEAN	0.013
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, SKIN ISLAND**

HERRING GULL		YEAR
		2000
PCB 85	N	1
	MEAN	0.031
	SD	
PCB 87	N	1
	MEAN	0.007
	SD	
PCB 92	N	1
	MEAN	0.004
	SD	
PCB 95	N	1
	MEAN	ND
	SD	
PCB 97	N	1
	MEAN	0.003
	SD	
PCB 99	N	1
	MEAN	0.075
	SD	
PCB 101/90	N	1
	MEAN	0.016
	SD	
PCB 105	N	1
	MEAN	0.053
	SD	
PCB 110	N	1
	MEAN	0.014
	SD	
PCB 118	N	1
	MEAN	0.11
	SD	
PCB 128	N	1
	MEAN	0.044
	SD	
PCB 130	N	1
	MEAN	0.012
	SD	
PCB 137	N	1
	MEAN	0.017
	SD	
PCB 138	N	1
	MEAN	0.305
	SD	
PCB 141	N	1
	MEAN	0.005
	SD	
PCB 146	N	1
	MEAN	0.071
	SD	
PCB 149	N	1
	MEAN	0.014
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, SKIN ISLAND**

HERRING GULL		YEAR
		2000
PCB 151	N	1
	MEAN	ND
	SD	
PCB 153	N	1
	MEAN	0.36
	SD	
PCB 156	N	1
	MEAN	0.028
	SD	
PCB 157	N	1
	MEAN	0.007
	SD	
PCB 158	N	1
	MEAN	0.019
	SD	
PCB 170/190	N	1
	MEAN	0.074
	SD	
PCB 171	N	1
	MEAN	0.015
	SD	
PCB 172	N	1
	MEAN	0.02
	SD	
PCB 174	N	1
	MEAN	0.004
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.021
	SD	
PCB 178	N	1
	MEAN	0.018
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.194
	SD	
PCB 183	N	1
	MEAN	0.048
	SD	
PCB 187	N	1
	MEAN	0.088
	SD	
PCB 194	N	1
	MEAN	0.043
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, SKIN ISLAND**

HERRING GULL		YEAR
		2000
PCB 195	N	1
	MEAN	0.011
	SD	
PCB 196/203	N	1
	MEAN	0.048
	SD	
PCB 200	N	1
	MEAN	0.008
	SD	
PCB 201	N	1
	MEAN	0.042
	SD	
PCB 202	N	1
	MEAN	0.009
	SD	
PCB 206	N	1
	MEAN	0.013
	SD	
PCB 207	N	1
	MEAN	0.023
	SD	
PCB 208	N	1
	MEAN	0.022
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, CHENE ISLAND**

HERRING GULL		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.007
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	0.001
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/48	N	1
	MEAN	0.017
	SD	
PCB 49	N	1
	MEAN	0.001
	SD	
PCB 52	N	1
	MEAN	0.008
	SD	
PCB 56/60	N	1
	MEAN	0.009
	SD	
PCB 64	N	1
	MEAN	0.005
	SD	
PCB 66	N	1
	MEAN	0.091
	SD	
PCB 70/76	N	1
	MEAN	TR
	SD	
PCB 74	N	1
	MEAN	0.019
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, CHENE ISLAND**

HERRING GULL		YEAR
		2000
PCB 85	N	1
	MEAN	0.056
	SD	
PCB 87	N	1
	MEAN	0.014
	SD	
PCB 92	N	1
	MEAN	0.006
	SD	
PCB 95	N	1
	MEAN	TR
	SD	
PCB 97	N	1
	MEAN	0.006
	SD	
PCB 99	N	1
	MEAN	0.131
	SD	
PCB 101/90	N	1
	MEAN	0.028
	SD	
PCB 105	N	1
	MEAN	0.089
	SD	
PCB 110	N	1
	MEAN	0.031
	SD	
PCB 118	N	1
	MEAN	0.192
	SD	
PCB 128	N	1
	MEAN	0.072
	SD	
PCB 130	N	1
	MEAN	0.02
	SD	
PCB 137	N	1
	MEAN	0.028
	SD	
PCB 138	N	1
	MEAN	0.533
	SD	
PCB 141	N	1
	MEAN	0.009
	SD	
PCB 146	N	1
	MEAN	0.123
	SD	
PCB 149	N	1
	MEAN	0.029
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, CHENE ISLAND**

HERRING GULL		YEAR
		2000
PCB 151	N	1
	MEAN	0.003
	SD	
PCB 153	N	1
	MEAN	0.623
	SD	
PCB 156	N	1
	MEAN	0.045
	SD	
PCB 157	N	1
	MEAN	0.012
	SD	
PCB 158	N	1
	MEAN	0.031
	SD	
PCB 170/190	N	1
	MEAN	0.126
	SD	
PCB 171	N	1
	MEAN	0.025
	SD	
PCB 172	N	1
	MEAN	0.035
	SD	
PCB 174	N	1
	MEAN	0.009
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.039
	SD	
PCB 178	N	1
	MEAN	0.027
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.329
	SD	
PCB 183	N	1
	MEAN	0.08
	SD	
PCB 187	N	1
	MEAN	0.169
	SD	
PCB 194	N	1
	MEAN	0.058
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, CHENE ISLAND**

HERRING GULL		YEAR
		2000
PCB 195	N	1
	MEAN	0.016
	SD	
PCB 196/203	N	1
	MEAN	0.082
	SD	
PCB 200	N	1
	MEAN	0.014
	SD	
PCB 201	N	1
	MEAN	0.07
	SD	
PCB 202	N	1
	MEAN	0.016
	SD	
PCB 206	N	1
	MEAN	0.03
	SD	
PCB 207	N	1
	MEAN	0.041
	SD	
PCB 208	N	1
	MEAN	0.054
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, AGAWA ROCK**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.006	0.01	0.01	0.008
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	ND	TR	TR	ND
	SD				
PCB 42	N	1	1	1	1
	MEAN	ND	0.003	ND	0.002
	SD				
PCB 44	N	1	1	1	1
	MEAN	ND	0.002	TR	TR
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.018	0.021	0.054	0.016
	SD				
PCB 49	N	1	1	1	1
	MEAN	TR	0.004	0.001	0.002
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.004	0.014	0.004	0.007
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.01	0.013	0.014	0.007
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.003	0.01	0.005	0.006
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.099	0.124	0.155	0.071
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	TR	0.006	0.001	0.002
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.021	0.03	0.035	0.017
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, AGAWA ROCK**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.068	0.078	0.089	0.040
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.017	0.023	0.026	0.013
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.004	0.012	0.005	0.005
	SD				
PCB 95	N	1	1	1	1
	MEAN	TR	0.003	TR	0.001
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.003	0.013	0.005	0.006
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.156	0.167	0.233	0.092
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.017	0.049	0.026	0.022
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.111	0.113	0.141	0.059
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.015	0.047	0.023	0.027
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.245	0.245	0.328	0.136
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.101	0.103	0.123	0.054
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.029	0.029	0.034	0.015
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.042	0.038	0.044	0.021
	SD				
PCB 138	N	1	1	1	1
	MEAN	0.633	0.639	0.829	0.371
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.005	0.013	0.008	0.006
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.151	0.166	0.198	0.088
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.015	0.04	0.028	0.026
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, AGAWA ROCK**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	TR	0.005	0.002	0.003
	SD				
PCB 153	N	1	1	1	1
	MEAN	0.819	0.807	1.061	0.480
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.064	0.067	0.074	0.032
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.024	0.017	0.023	0.009
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.038	0.038	0.048	0.021
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.146	0.161	0.193	0.081
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.029	0.034	0.036	0.016
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.043	0.047	0.047	0.021
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.006	0.013	0.009	0.009
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.037	0.048	0.051	0.020
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.032	0.039	0.042	0.021
	SD				
PCB 179	N	1	1	1	1
	MEAN	ND	TR	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.379	0.414	0.504	0.200
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.098	0.106	0.119	0.057
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.206	0.212	0.248	0.128
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.061	0.068	0.081	0.037
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, AGAWA ROCK**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.019	0.021	0.025	0.011
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.096	0.102	0.115	0.053
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.012	0.014	0.015	0.007
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.075	0.082	0.094	0.044
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.016	0.021	0.021	0.009
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.028	0.027	0.035	0.015
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.045	0.048	0.059	0.024
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.05	0.049	0.073	0.029
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, GRANITE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 16/32	N	1	1	1	1
	MEAN	TR	ND	ND	ND
	SD				
PCB 17	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 18	N	1	1	1	1
	MEAN	TR	ND	ND	ND
	SD				
PCB 22	N	1	1	1	1
	MEAN	TR	TR	ND	ND
	SD				
PCB 28	N	1	1	1	1
	MEAN	0.016	0.02	0.015	0.014
	SD				
PCB 31	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 33/20	N	1	1	1	1
	MEAN	TR	TR	TR	ND
	SD				
PCB 42	N	1	1	1	1
	MEAN	0.002	0.003	0.002	0.001
	SD				
PCB 44	N	1	1	1	1
	MEAN	0.001	TR	ND	TR
	SD				
PCB 47/48	N	1	1	1	1
	MEAN	0.058	0.047	0.036	0.030
	SD				
PCB 49	N	1	1	1	1
	MEAN	0.003	0.006	0.003	0.002
	SD				
PCB 52	N	1	1	1	1
	MEAN	0.013	0.027	0.01	0.011
	SD				
PCB 56/60	N	1	1	1	1
	MEAN	0.024	0.024	0.016	0.012
	SD				
PCB 64	N	1	1	1	1
	MEAN	0.01	0.021	0.01	0.009
	SD				
PCB 66	N	1	1	1	1
	MEAN	0.275	0.238	0.184	0.124
	SD				
PCB 70/76	N	1	1	1	1
	MEAN	0.002	0.005	0.001	TR
	SD				
PCB 74	N	1	1	1	1
	MEAN	0.059	0.059	0.042	0.030
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, GRANITE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 85	N	1	1	1	1
	MEAN	0.156	0.121	0.07	0.063
	SD				
PCB 87	N	1	1	1	1
	MEAN	0.011	0.034	0.023	0.013
	SD				
PCB 92	N	1	1	1	1
	MEAN	0.012	0.02	0.007	0.008
	SD				
PCB 95	N	1	1	1	1
	MEAN	0.001	0.003	TR	TR
	SD				
PCB 97	N	1	1	1	1
	MEAN	0.01	0.023	0.009	0.008
	SD				
PCB 99	N	1	1	1	1
	MEAN	0.383	0.259	0.174	0.124
	SD				
PCB 101/90	N	1	1	1	1
	MEAN	0.047	0.075	0.042	0.031
	SD				
PCB 105	N	1	1	1	1
	MEAN	0.241	0.165	0.11	0.086
	SD				
PCB 110	N	1	1	1	1
	MEAN	0.048	0.087	0.038	0.037
	SD				
PCB 118	N	1	1	1	1
	MEAN	0.53	0.354	0.244	0.195
	SD				
PCB 128	N	1	1	1	1
	MEAN	0.195	0.125	0.086	0.075
	SD				
PCB 130	N	1	1	1	1
	MEAN	0.061	0.036	0.025	0.023
	SD				
PCB 137	N	1	1	1	1
	MEAN	0.08	0.048	0.032	0.029
	SD				
PCB 138	N	1	1	1	1
	MEAN	1.259	0.771	0.582	0.514
	SD				
PCB 141	N	1	1	1	1
	MEAN	0.012	0.017	0.01	0.010
	SD				
PCB 146	N	1	1	1	1
	MEAN	0.309	0.198	0.141	0.125
	SD				
PCB 149	N	1	1	1	1
	MEAN	0.037	0.058	0.032	0.036
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, GRANITE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 151	N	1	1	1	1
	MEAN	0.003	0.007	0.003	0.003
	SD				
PCB 153	N	1	1	1	1
	MEAN	1.534	0.922	0.734	0.662
	SD				
PCB 156	N	1	1	1	1
	MEAN	0.124	0.078	0.052	0.045
	SD				
PCB 157	N	1	1	1	1
	MEAN	0.027	0.021	0.016	0.013
	SD				
PCB 158	N	1	1	1	1
	MEAN	0.076	0.045	0.034	0.033
	SD				
PCB 170/190	N	1	1	1	1
	MEAN	0.281	0.17	0.135	0.119
	SD				
PCB 171	N	1	1	1	1
	MEAN	0.056	0.037	0.027	0.026
	SD				
PCB 172	N	1	1	1	1
	MEAN	0.074	0.046	0.034	0.030
	SD				
PCB 174	N	1	1	1	1
	MEAN	0.012	0.018	0.011	0.011
	SD				
PCB 176	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 177	N	1	1	1	1
	MEAN	0.076	0.055	0.043	0.046
	SD				
PCB 178	N	1	1	1	1
	MEAN	0.055	0.042	0.03	0.032
	SD				
PCB 179	N	1	1	1	1
	MEAN	ND	ND	ND	ND
	SD				
PCB 180	N	1	1	1	1
	MEAN	0.742	0.413	0.323	0.286
	SD				
PCB 183	N	1	1	1	1
	MEAN	0.189	0.111	0.085	0.086
	SD				
PCB 187	N	1	1	1	1
	MEAN	0.404	0.238	0.177	0.190
	SD				
PCB 194	N	1	1	1	1
	MEAN	0.104	0.06	0.06	0.046
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, GRANITE ISLAND**

HERRING GULL		YEAR			
		1998	1999	2000	2001
PCB 195	N	1	1	1	1
	MEAN	0.033	0.02	0.018	0.008
	SD				
PCB 196/203	N	1	1	1	1
	MEAN	0.163	0.097	0.087	0.069
	SD				
PCB 200	N	1	1	1	1
	MEAN	0.022	0.016	0.011	0.011
	SD				
PCB 201	N	1	1	1	1
	MEAN	0.128	0.079	0.075	0.060
	SD				
PCB 202	N	1	1	1	1
	MEAN	0.026	0.02	0.015	0.015
	SD				
PCB 206	N	1	1	1	1
	MEAN	0.041	0.025	0.026	0.019
	SD				
PCB 207	N	1	1	1	1
	MEAN	0.062	0.041	0.046	0.028
	SD				
PCB 208	N	1	1	1	1
	MEAN	0.076	0.045	0.052	0.037
	SD				

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, MUTTON ISLAND**

HERRING GULL		YEAR
		2000
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	ND
	SD	
PCB 22	N	1
	MEAN	ND
	SD	
PCB 28	N	1
	MEAN	0.013
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 47/48	N	1
	MEAN	0.023
	SD	
PCB 49	N	1
	MEAN	0.001
	SD	
PCB 52	N	1
	MEAN	0.009
	SD	
PCB 56/60	N	1
	MEAN	0.014
	SD	
PCB 64	N	1
	MEAN	0.007
	SD	
PCB 66	N	1
	MEAN	0.12
	SD	
PCB 70/76	N	1
	MEAN	TR
	SD	
PCB 74	N	1
	MEAN	0.029
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, MUTTON ISLAND**

HERRING GULL		YEAR
		2000
PCB 85	N	1
	MEAN	0.055
	SD	
PCB 87	N	1
	MEAN	0.019
	SD	
PCB 92	N	1
	MEAN	0.007
	SD	
PCB 95	N	1
	MEAN	ND
	SD	
PCB 97	N	1
	MEAN	0.006
	SD	
PCB 99	N	1
	MEAN	0.133
	SD	
PCB 101/90	N	1
	MEAN	0.03
	SD	
PCB 105	N	1
	MEAN	0.095
	SD	
PCB 110	N	1
	MEAN	0.026
	SD	
PCB 118	N	1
	MEAN	0.201
	SD	
PCB 128	N	1
	MEAN	0.071
	SD	
PCB 130	N	1
	MEAN	0.021
	SD	
PCB 137	N	1
	MEAN	0.026
	SD	
PCB 138	N	1
	MEAN	0.509
	SD	
PCB 141	N	1
	MEAN	0.009
	SD	
PCB 146	N	1
	MEAN	0.113
	SD	
PCB 149	N	1
	MEAN	0.021
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, MUTTON ISLAND**

HERRING GULL		YEAR
		2000
PCB 151	N	1
	MEAN	0.003
	SD	
PCB 153	N	1
	MEAN	0.58
	SD	
PCB 156	N	1
	MEAN	0.044
	SD	
PCB 157	N	1
	MEAN	0.011
	SD	
PCB 158	N	1
	MEAN	0.03
	SD	
PCB 170/190	N	1
	MEAN	0.112
	SD	
PCB 171	N	1
	MEAN	0.022
	SD	
PCB 172	N	1
	MEAN	0.028
	SD	
PCB 174	N	1
	MEAN	0.006
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.027
	SD	
PCB 178	N	1
	MEAN	0.024
	SD	
PCB 179	N	1
	MEAN	ND
	SD	
PCB 180	N	1
	MEAN	0.285
	SD	
PCB 183	N	1
	MEAN	0.065
	SD	
PCB 187	N	1
	MEAN	0.125
	SD	
PCB 194	N	1
	MEAN	0.052
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SUPERIOR, MUTTON ISLAND**

HERRING GULL		YEAR
		2000
PCB 195	N	1
	MEAN	0.013
	SD	
PCB 196/203	N	1
	MEAN	0.066
	SD	
PCB 200	N	1
	MEAN	0.01
	SD	
PCB 201	N	1
	MEAN	0.052
	SD	
PCB 202	N	1
	MEAN	0.013
	SD	
PCB 206	N	1
	MEAN	0.02
	SD	
PCB 207	N	1
	MEAN	0.028
	SD	
PCB 208	N	1
	MEAN	0.034
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

BLACK TERN		YEAR
		1996
PCB 28	N	1
	MEAN	0.0013
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 42	N	1
	MEAN	ND
	SD	
PCB 44	N	1
	MEAN	ND
	SD	
PCB 49	N	1
	MEAN	ND
	SD	
PCB 52	N	1
	MEAN	0.0045
	SD	
PCB 60	N	1
	MEAN	0.0263
	SD	
PCB 64	N	1
	MEAN	0.0007
	SD	
PCB 66	N	1
	MEAN	0.011
	SD	
PCB 70	N	1
	MEAN	ND
	SD	
PCB 74	N	1
	MEAN	0.0045
	SD	
PCB 87	N	1
	MEAN	0.0032
	SD	
PCB 97	N	1
	MEAN	0.0026
	SD	
PCB 99	N	1
	MEAN	0.0258
	SD	
PCB 101	N	1
	MEAN	0.011
	SD	
PCB 105	N	1
	MEAN	0.0152
	SD	
PCB 110	N	1
	MEAN	0.0182
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

BLACK TERN		YEAR
		1996
PCB 118	N	1
	MEAN	0.0437
	SD	
PCB 128	N	1
	MEAN	ND
	SD	
PCB 129	N	1
	MEAN	0.003
	SD	
PCB 137	N	1
	MEAN	0.0027
	SD	
PCB 138	N	1
	MEAN	0.1028
	SD	
PCB 141	N	1
	MEAN	0.002
	SD	
PCB 146	N	1
	MEAN	0.0194
	SD	
PCB 149	N	1
	MEAN	0.027
	SD	
PCB 151	N	1
	MEAN	0.0009
	SD	
PCB 153	N	1
	MEAN	0.119
	SD	
PCB 158	N	1
	MEAN	0.0037
	SD	
PCB 170	N	1
	MEAN	0.0358
	SD	
PCB 170/190	N	
	MEAN	
	SD	
PCB 171	N	1
	MEAN	0.0173
	SD	
PCB 172	N	1
	MEAN	0.0055
	SD	
PCB 174	N	1
	MEAN	0.006
	SD	
PCB 180	N	1
	MEAN	0.0855
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

BLACK TERN		YEAR
		1996
PCB 182	N	1
	MEAN	0.0553
	SD	
PCB 183	N	1
	MEAN	0.023
	SD	
PCB 185	N	1
	MEAN	ND
	SD	
PCB 194	N	1
	MEAN	0.0124
	SD	
PCB 195	N	1
	MEAN	0.0056
	SD	
PCB 200	N	1
	MEAN	0.004
	SD	
PCB 201	N	1
	MEAN	0.0227
	SD	
PCB 203	N	1
	MEAN	0.015
	SD	
PCB 206	N	1
	MEAN	0.0059
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

FORSTER'S TERN		YEAR
		1999
PCB 16/32	N	1
	MEAN	ND
	SD	
PCB 17	N	1
	MEAN	ND
	SD	
PCB 18	N	1
	MEAN	TR
	SD	
PCB 22	N	1
	MEAN	TR
	SD	
PCB 28	N	1
	MEAN	0.005
	SD	
PCB 31	N	1
	MEAN	ND
	SD	
PCB 33/20	N	1
	MEAN	TR
	SD	
PCB 42	N	1
	MEAN	0.002
	SD	
PCB 44	N	1
	MEAN	0.001
	SD	
PCB 47/48	N	1
	MEAN	0.014
	SD	
PCB 49	N	1
	MEAN	0.001
	SD	
PCB 52	N	1
	MEAN	0.007
	SD	
PCB 56/60	N	1
	MEAN	0.004
	SD	
PCB 64	N	1
	MEAN	0.004
	SD	
PCB 66	N	1
	MEAN	0.03
	SD	
PCB 70/76	N	1
	MEAN	0.003
	SD	
PCB 74	N	1
	MEAN	0.011
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

FORSTER'S TERN		YEAR
		1999
PCB 85	N	1
	MEAN	0.022
	SD	
PCB 87	N	1
	MEAN	0.009
	SD	
PCB 92	N	1
	MEAN	0.007
	SD	
PCB 95	N	1
	MEAN	0.003
	SD	
PCB 97	N	1
	MEAN	0.005
	SD	
PCB 99	N	1
	MEAN	0.075
	SD	
PCB 101/90	N	1
	MEAN	0.026
	SD	
PCB 105	N	1
	MEAN	0.033
	SD	
PCB 110	N	1
	MEAN	0.027
	SD	
PCB 118	N	1
	MEAN	0.082
	SD	
PCB 128	N	1
	MEAN	0.044
	SD	
PCB 130	N	1
	MEAN	0.011
	SD	
PCB 137	N	1
	MEAN	0.02
	SD	
PCB 138	N	1
	MEAN	0.289
	SD	
PCB 141	N	1
	MEAN	0.006
	SD	
PCB 146	N	1
	MEAN	0.091
	SD	
PCB 149	N	1
	MEAN	0.039
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

FORSTER'S TERN		YEAR
		1999
PCB 151	N	1
	MEAN	0.007
	SD	
PCB 153	N	1
	MEAN	0.455
	SD	
PCB 156	N	1
	MEAN	0.029
	SD	
PCB 157	N	1
	MEAN	0.021
	SD	
PCB 158	N	1
	MEAN	0.024
	SD	
PCB 170/190	N	1
	MEAN	0.1
	SD	
PCB 171	N	1
	MEAN	0.023
	SD	
PCB 172	N	1
	MEAN	0.022
	SD	
PCB 174	N	1
	MEAN	0.013
	SD	
PCB 176	N	1
	MEAN	ND
	SD	
PCB 177	N	1
	MEAN	0.031
	SD	
PCB 178	N	1
	MEAN	0.029
	SD	
PCB 179	N	1
	MEAN	TR
	SD	
PCB 180	N	1
	MEAN	0.221
	SD	
PCB 183	N	1
	MEAN	0.066
	SD	
PCB 187	N	1
	MEAN	0.151
	SD	
PCB 194	N	1
	MEAN	0.041
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

**TABLE 14. NON-COPLANAR PCB CONGENERS
LAKE SIMCOE**

FORSTER'S TERN		YEAR
		1999
PCB 195	N	1
	MEAN	0.015
	SD	
PCB 196/203	N	1
	MEAN	0.067
	SD	
PCB 200	N	1
	MEAN	0.013
	SD	
PCB 201	N	1
	MEAN	0.06
	SD	
PCB 202	N	1
	MEAN	0.019
	SD	
PCB 206	N	1
	MEAN	0.037
	SD	
PCB 207	N	1
	MEAN	0.03
	SD	
PCB 208	N	1
	MEAN	0.062
	SD	

All units measured on a wet weight basis. Dioxins, furans and non-ortho PCBs measured in pg/g; all others in µg/g. Percent lipid and percent moisture given in percent. For all compounds: ND indicates not detected; TR indicates a trace amount detected; INT indicates interference with the sample. See page nine for methodology and detection limits.

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