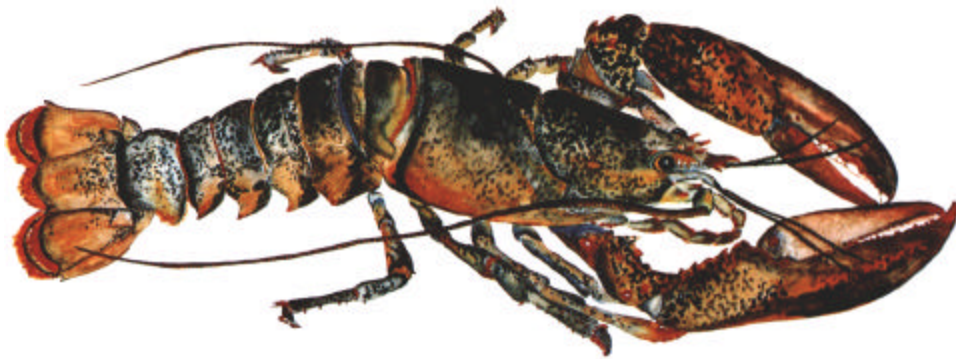


New Brunswick Shellfish Factsheet

- Lobster
- Homard
- *Homarus americanus*



Species description

American lobsters, widely acclaimed for their delicious meat, are truly kings of Canadian shellfish. The lobster is an invertebrate (lack a backbone) and belongs to the decapod or 10-legged family of crustaceans which includes shrimps, prawns, crabs and crayfish.

Lobsters have a jointed external shell, which protects and supports the body parts, while still permitting movement. Their shell-armoured body is divided into two main sections, the combined head and thorax, and the six-jointed abdomen commonly called the “tail”. There are two pairs of antennae, a complicated set of mouth parts, and two black eyes mounted on short movable stalks set on either side of a stout, spiny horn.

The body rests on four pairs of spindly, jointed walking legs, the first two pairs of which have small claws. Two large front legs provide the lobster with formidable tools for capturing food. They are well-armed with strong claws generously equipped with teeth and sharp spines. Usually, one claw is considerably heavier and is known as the

“crusher” in contrast to the other, more slender “pincer”. There is a series of small paddles or swimmerets on the underside of the abdomen, which ends in a wide, flattened tail fan.

The shell is often speckled with dark spots and varies in colour with the area of habitat, ranging from greenish blue to reddish brown. Lobsters are great scavengers and live chiefly on fish (dead or live) and immobile or slow-moving invertebrates such as mussels, sea urchins, crabs and worms which inhabit the sea bottom.

Mating occurs between the months of July and September. Generally, female lobsters extrude eggs one year after mating and carry the eggs, attached under the abdomen, for nearly another year.

Distribution

Lobster are found in coastal waters from southern Labrador to the state of Maryland with the major fisheries in the Gulf of St. Lawrence and the Gulf of Maine. Though lobsters are most common in coastal waters, they are also found in deeper, warm water areas of the Gulf of Maine and along the outer edge of the continental shelf from near Sable Island to the coast of North Carolina.

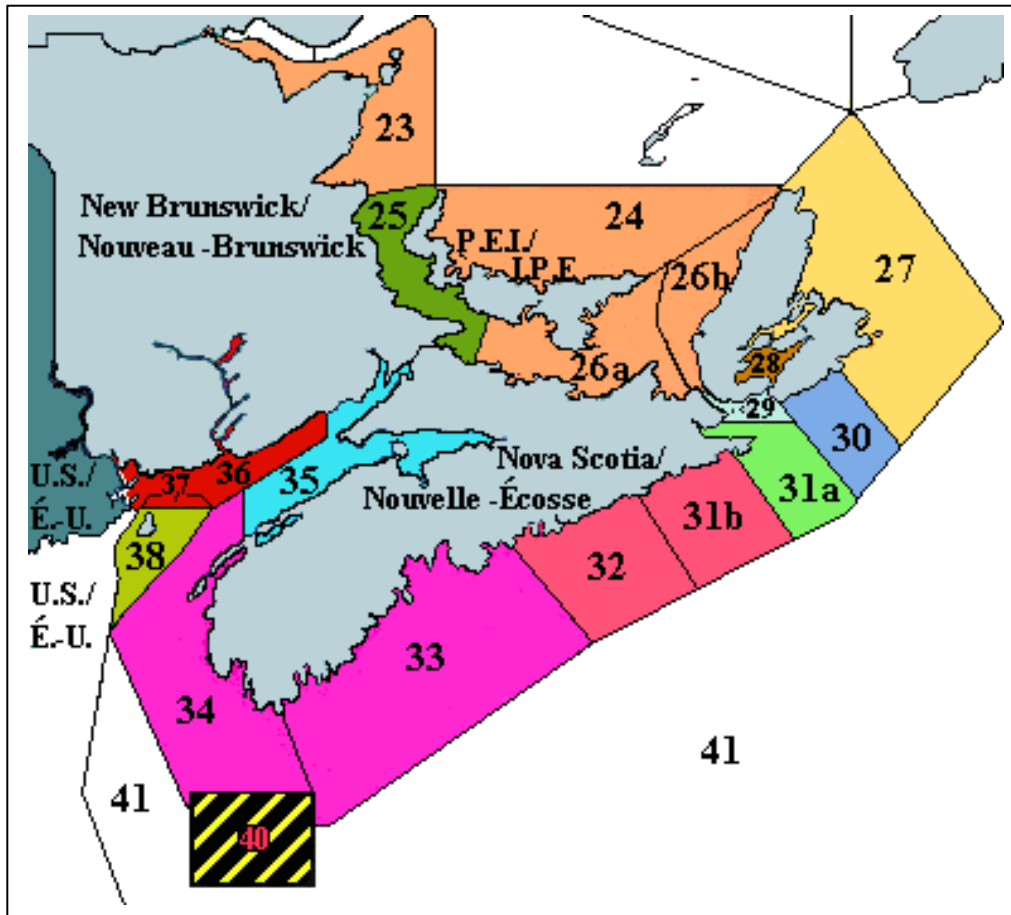
Lobsters prefer all habitat where they can find shelter. Inshore lobster populations are found on rocky bottoms, where a large number of individuals can obtain appropriate shelter. On sand or mud, lobsters may be found hiding under rocks of about their own size. In deep water canyons off the coast of the U.S., lobsters have been observed lodged individually in small burrows dug into the face of clay cliffs.

In a number of areas lobsters tend to be larger in deeper water. There are exceptions. For example, large egg-bearing females are found in shallow waters in the Bay of Fundy where they reproduce and moult during the summer months.

Lobster Fishing Areas & Fishing season

Southern Gulf of St. Lawrence : In the southern Gulf of St. Lawrence, the fishery is divided in five Lobster Fishing Areas (LFA) : 23, 24, 25, 26A et 26B. Lobster fishermen of New-Brunswick have access to LFA 23 from Dalhousie to Escuminac and LFA 25 located between Escuminac and the Nova Scotia border.

The fishing season for the area 23 usually starts at the beginning of May, if the ice is gone, until the end of June. Lobster fishing in area 25 is during fall from approximately August 10th to October 10th.



Source : Fisheries and Oceans Canada

Bay of Fundy : The lobster fishermen in the Bay of Fundy are allowed to fish in LFA 35 (Alma Area), LFA 36 (Saint John County to US/Canada International Border including West Isles & Campobello, LFA 37, and LFA 38 (Grand Manan Island). LFA 37 is exploited by license holders from LFA 36 and 38.

Lobster are trap fished in various parts of the Bay of Fundy from October 15 to July 31 of the next year.

Fishing gear & Fleet

The maximum size allowed for a lobster trap is 125 cm in length, 90 cm in width and 50 cm in height. Traps can vary in size and weigh up to 18 kg (40 lbs) each.

Southern Gulf of St. Lawrence :



Photo : *The lobster fishery – Now-a-days.*
Moncton University – Shippagan Campus, New-Brunswick.



Photo : *Lobster traps, Tynemouth Creek Wharf, Bay of Fundy. September 17, 2001.*
Mark Johnston, Department of Agriculture, Fisheries and Aquaculture of New-Brunswick.

Fishing licenses in New-Brunswick (2000)

Gulf of St. Lawrence : The number of licenses in LFA 23 is 745 and 529 in FLA 25 for a **total of 1,264 licenses** holders.

Bay of Fundy : There is presently 15 license holders in LFA 35, 171 in LFA 36 and 109 in LFA 38 for a **total of 186 licenses**.

Fishery Management

There is no catch limit for any given Lobster Fishing Area (i.e. not a quota fishery). Effort is measured in total traps permitted. Regulatory measures include prohibiting of landing egg-bearing females, minimum carapace size, lath spacing in traps to permit escape of small lobsters, licensing of fishermen (limited entry), restriction of gear type (traps), limitation of the number of traps, division of coastal areas into Lobster Fishing Areas (LFA), and fishing seasons determined by district. Management measures are variable between LFA's.

Southern Gulf of St. Lawrence : The present fisheries management regime is based on five Lobster Fishing Areas (LFA), two major fishing seasons, two minimum carapace sizes at capture and two maximum number of traps allowed per fisherman.

Lobster management regime in the southern Gulf of St. Lawrence in 2001.

LFA	Minimum carapace size	Fishing season	Number of license holders	Maximum # of trap/fisher
23	67.5 mm	May-June	749	300
24	67.5 mm	May-June	637	300
25	67.5 mm	Mid-August to mid-October	867	250
26A	67.5 mm	May-June	767	300
26B	70.0 mm	May-June	256	300

Bay of Fundy : The present management regime is based on limited entry and effort controls that vary between LFAs. There is a common minimum size of 82.5 mm carapace length (CL), and also a prohibition on landing egg-bearing females for all LFAs. Since 1999, there has been a voluntary v-notching program on the tail of egg-bearing lobsters in LFA 36 and, commencing in spring 2001, a prohibition on landing v-notched lobsters in all three LFAs.

Lobster management regime in Bay of Fundy in 2001.

LFA	Fishing seasons (fall and spring)	License details	Class A (fulltime)	Partnership (Fulltime)	Class B (Part-time)
35	Oct. 15 – Dec. 31	number	96	-	-
	April 1 – July 31	trap limit	300	-	90
36	2 nd Tuesday in Nov. – Jan. 14	number	161	7	2
	March 31 – June 30	trap limit	300	450	90
38	2 nd Tuesday in Nov. – open through winter	number	82	26	1
	open through winter – June 30	trap limit	375	563	113

Landings

Southern Gulf of St. Lawrence : For LFA 23 and 25, a total of 5811 t was landed by New Brunswick fishermen in 1998 for a total value 51 M\$. In 1999 and 2000, they landed 7,698 t and 7,281 t respectively.

Historical landings

Commercial lobster landings in the southern Gulf of St. Lawrence have shown a sharp increase since 1974 from 5,594 t landed to a record high of 22,063 t in 1990. This represents a four fold increase during a 16 year period. The increase in catches has been observed in all LFAs but there is some variation in the year of peak landing. The factors responsible for the extraordinary catch increase is not well understood. It is believed that the overall fishing power substantially increased when economic and technological developments took an accelerated pace after the Second World War. However, this alone cannot explain the magnitude of the increase that was seen all over the geographical range of the American lobster, from North Carolina to Labrador. Favorable environmental factors are believed to have favored the survival of lobster recruitment over its entire distribution range.

Since 1990, landings in the southern Gulf have shown a steady declining trend. In 1997, about 16,600 t of lobster were landed, which represents a 25 % reduction from the peak landing in 1990. The declining trend was not observed with the same amplitude in all LFAs.

Bay of Fundy : New Brunswick fishermen landed 1,402 t of lobster in 1998 for a total value of 16.7 M\$.

Historical landings

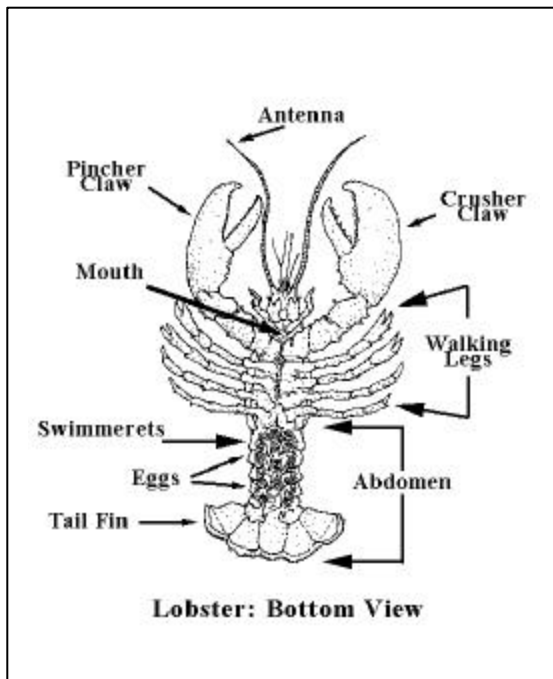
Lobster landings in the Bay of Fundy were first reported on an annual basis in 1892. Landings peaked in 1895 at 1,415 t, then subsequently declined, over a 40-year period, to a low of 179 t in 1938. From 1939 onwards, landings increased to a second peak of 897 t in 1953.

Total landings were relatively stable (between 491-897 t) from 1946/47 to 1974/74. A low of 296 t was reported in 1975/76 then landings rebounded to 545 t the following year and subsequently increased through the 1980's.

From 1986-87 to 1993-94, landings appeared to have stabilized at approximately 1,000 t (range 942-1,046 t). Landings subsequently increased by approximately 300 t each fishing season to reach 2,566 t in 1998-99. Current landings exceed the initial peak in 1892 by approximately 1,000t.

Did you know that...

- The record for the largest documented lobster goes to a lobster taken off Nova Scotia in 1977. It weighed 44 lbs., 6 oz. (20 kg) and was between three and four feet long. It may have been 100 years old. (Ref. <http://octopus.gma.org/lobsters/allaboutlobsters/parts.html>)
- How can you tell a male from a female? The first pair of swimmerets closest to the body are hard and bony on a male, and soft and feathery like the rest of the swimmerets, on a female. A female also has a wider tail than a comparably-sized male. She needs the breadth for carrying all her eggs.



A live lobster is greenish-black on top and orange below, with accents of blue on the joints of its claws. That is because a lobster's shell is composed of three pigments: red, blue, and yellow.

References

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