

Department of Renewable Resources

Spring 2000

Vital learning for us all: how will we cope?

Climate change <u>is</u> a reality

Old news, you might say...

The question is, what are you doing to help your students learn about—and prepare for—climate change?

Hopefully you will accept the challenge to make climate change one of your teaching priorities.

Yes, global change <u>is</u> one more topic to include in your already over-busy schedule. But a vital one that we can't ignore for too much longer.

Fortunately, there is help. Federal, provincial and territorial governments are encouraging us all to learn and take action. Many excellent teaching resources have been and are being developed across the country.

Expect to hear more from the Department of Renewable Resources on this topic over the coming months and years. We are partners in a national effort to make it as easy as possible for teachers to teach about climate change.

In this issue of *WILD Yukon*we offer you some background on climate change. We review some existing resources and list many others you can access. Yukon efforts to deal with climate change are also covered.



This April and May

Celebrate spring! Celebrate life!

It's that time of year again...Spring is in the air...the swans are coming back...and Yukoners are out celebrating the return of the longer days and burgeoning life...

National Wildlife Week, Earth Day, Yukon Biodiversity Awareness Month, Celebration of Swans, Forest Week! So many special events for this special time.

To find our how you and your students can get involved in some of the planned activites, consult the Celebrate Spring website at www.taiga.net/spring or...

...turn to the page 11!

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Some background

A climate change primer

by Craig Olsen, Yukon Climate Change Educator

Climate is the average weather for an area. Climate change is a change in the average weather. The climate of the Yukon and the rest of the world has been changing since the formation of the earth. The earth has undergone large scale glaciations or ice ages and warm periods called interglacials. Chances are very good that we will enter into an ice age again someday.

Greenhouse effect

A major influence on our climate is what is called the greenhouse effect. It was first described in the 1800's where it was calculated that the earth's temperature should be an average temperature of -18° C.



We don't see that at all in reality: we have an average temperature of +15° C. The difference is made up by the greenhouse effect. Essentially greenhouse gases: Carbon Dioxide, Methane, Water Vapour, and Nitrogen Oxides keep us warm. They do this by trapping heat in the atmosphere. Although short wave radiation (sunlight) comes in easily, longwave radiation (heat) has a difficult time leaving. The net effect is to maintain the surface temperature at a higher level than would be expected.

Perfectly natural: what's the problem?

The problem is us! Greenhouse gases make up less than 1% of the atmosphere, but we as humans add to them, particularly since the 1800's and the industrial revolution. The main greenhouse gas in question is CO_2 from the burning of fossil fuels from our cars, heating our homes, burning coal or diesel to produce electricity. When we increase the CO_2 in the atmosphere we increase the heat we trap and get what is referred to as global warming. Scientists have calculated an average earth

temperature increase of $2-3^{\circ}$ C, but in the North we are going to see more, up to 10° C in the Arctic! More of the warming is expected to be in winter than summer.

Isn't warmer better?

First off, 2-3° C warming doesn't seem like much. But to put it into perspective, an ice age is only 5° C cooler than present. An increase in temperature will cause melting of ice caps and a thermal expansion of the oceans resulting in massive flooding in coastal areas. Some whole islands may even disappear!

When the surface temperature of the earth heats up it will also affect weather patterns. Some areas will become drier, while others will get more rain. In the Yukon, we expect more winter precipitation and warmer winters resulting in longer drier summers. We can also expect more severe storms caused by turbulence in the atmosphere.

Warmer winters means a quicker spring so things like the Red River flood in Manitoba in 1997 could become more common. Hotter drier summers could mean more forest fires, and disturbance to permafrost. Changes in weather will generally equate to changes in habitat for wildlife too. Is warmer going to be better?

Greenhouse not a good analogy?

The "greenhouse effect" was described before we really knew how greenhouses worked. Since the atmosphere is almost transparent to incoming solar radiation, but not to outgoing terrestrial radiation, an analogy was drawn long ago between the operation of the atmosphere and that of a greenhouse.

We now understand that a greenhouse maintains its higher internal temperature by reducing convection (wind). This convection includes both heat rising out through the roof, and wind that would blow through the greenhouse to cool it off.

Continued on page 3

2 \$pring 2000

Editorial on a recent Northern conference

More on change in the North

by Craig Olsen, Climate Change Educator

A workshop to address the issue of climate change impacts and adaptation strategies for Canada's northern territories was held in Yellowknife February 27-29, 2000. The workshop was attended by about 120 scientists and other interested individuals. The following is how Craig Olsen views some of the findings reported at the conference.

Climate change predictions for the north can seem rather vague, like regional weather forecasts. The reason for this is the huge expanse of land involved and the complex nature of the Earth's climate systems. Expected implications of climate change in the north include: increased storm activity, precipitation changes, habitat shifts, rising sea levels, and overall warming.

Although difficult to scientifically attribute to climate change, much anecdotal evidence was presented at the workshop.

There are important changes to wildlife populations that have been stable as long as elders can remember. There were references to lack of snow in some places, excess snow in others, dramatic changes in sea ice and permafrost, and even new species of salmon being caught in the Arctic. Snow depths have become too great for caribou to survive in some places, and too thin for seals to raise offspring in others.

Warming has a large impact on polar bears too. We heard about polar bears starving in Churchill because they can't get out onto ice to feed. They are also dying because of ice caves collapsing upon them due to midwinter warming and rains.

Climate changes are not just felt by wildlife. There has been a dramatic decrease in winter road access

due to warmer winters and later falls. Thaw slumps are becoming commonplace. Roads built upon permafrost are feeling the heat and are responding by sinking as the permafrost becomes unstable. There is the same potential for buildings and pipelines grounded in permafrost to do the same. Hydro electric power potential may be decreased because of the lack of precipitation.

Severe windstorms are being observed throughout the North. Storms at sea have a devastating effect upon coastlines without the usual protective winter sea ice cover. For example, Tuktoyuktuk is currently losing 15 m of coastline per year to erosion.

These effects are happening close enough to home to get people concerned and wouldbe naysayers are now strongly believing in climate change. It was encouraging to see representatives from mining companies, highways, communities and engineering firms. There was even a military presence due to concern about

defending northern Canada as the previously frozen Northwest Passage becomes open for shipping. The scientists and environmental types were by far the minority.

The Yellowknife workshop came a long way from identifying all the answers. The overwhelming unanimous feeling, however, is that climate change is a serious problem and we need to do something about it. Though the topic for discussion was adaptation climate change, it was certainly recognized that what we really need to do is reduce the emissions of carbon dioxide worldwide. Emissions are the root of the problem, and any adaptation measures are just a band-aid solution.

Continued from page 2

While the concept of the greenhouse effect remains valid, we would be better off to think of a different analogy. One other proposed analogy is a leaky bucket analogy where water runs into the bucket but leaks out a hole in the bottom. The greenhouse gases in effect partly plug the hole allowing more water to accumulate in the bucket.

So, who's for trying to convince people that the leaky bucket effect is being increased by our activities? Perhaps it's better to stick with the greenhouse effect terminology, but keep in mind that it's not quite accurate.

Access these now

Climate change teaching tools

by Craig Olsen

Here, we offer you summaries of a few resorces on climate change you can access—either via the Internet, or locally through Renewable Resources or Education. We will continue to share summaries of other materials in upcoming newsletters and WILD Updates. Please let us know if you use them, and how they work out for you!

Our Changing Climate: Learning How to Take Charge of Climate Change at School, Home and the Community – Junior Curriculum Unit

Developed by:

Toronto Environmental Alliance free download from the website http://www.torontoenvironment.org/ teachclimate

A group of Education and environmental studies university students called Youth educators for Environmental Action, the youth wing of TEA, developed our Changing Climate as a way to empower young students to take action in their homes and communities to reduce greenhouse gas emissions and stop climate change.

While designing this unit, Youth Educators consulted and worked with a number of educators around Toronto to find out how they could make this unit useful and worthwhile for teachers trying to meet regular curriculum guidelines. As a result, Our Changing Climate is a cross curricular unit that approaches climate change from a range of subjects including language arts, mathematics, science, geography, history, and computers. The unit contains interactive and hands on activities to encourage active learning.

For the most part this curriculum unit is good, and relevant for us in the North. Some minor changes will need to be made in the lessons.

The unit is divided into six chapters with several well-organized activies each, including quizzes and evaluations:

Unit 1: Students explore the earth as a system and learn about the greenhouse effect, greenhouse gases and the potential impacts of climate change through simple experiments, diagrams, map work and artistic representations.



Unit 2: Students conduct a secret school transportation audit to find out if their school is atmospherically friendly by comparing the amount of carbon dioxide produced by getting to and from school and the amount of carbon dioxide absorbed by trees in the school ground.

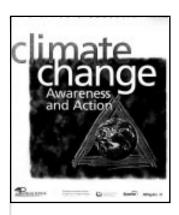
Unit 3: Students read a story that compares energy use in the past to the present. The concept of home energy efficiency is introduced, and students design an energy saving action plan for their home.

Unit 4: Energy sources are discussed according to their advantages and disadvantages. Small research groups study a renewable energy source and design a commercial to promote their energy source to the class. Persuasive techniques in TV are critically analyzed.

Unit 5: The round table method is used to discuss a policy-oriented solution to climate change. Students adopt the roles of different interest groups and negotiate to arrive at a consensus for action.

Unit 6: Climate change issues are explored from a global perspective by reading about different cities' initiatives to combat climate change and plotting them on a map. Students rank the top 12 countries total greenhouse gas emissions and per capita greenhouse gas emissions and discuss the differences. Students design their own transit-oriented community.

As a sample exercise for your class, try the "Spaceship Earth" lesson, available on the 'Net or by calling the Conservation Education Coordinator at 667-3675. It can be used for a socials class to show differences between rich and poor countries, or as an introduction to more climate change information for a science or geography class. It could also be used with math in conjunction with other assignments to have students calculate how much CO₂ they produce.



Climate Change Action and Awareness kit senior level curriculum

Developed by: Pembina Institute for Appropriate Development ISBN: 0-921719-26-4

Format: multimedia kit containing a comprehensive teacher guide, overhead transparencies and a video with accompanying booklet

Price: \$150 + \$15 \$&H + \$11.55 GST = \$176.55

Available for loan from Renewable Resources.

From their website (http://www.pembina.org/pubs/ccaa.htm): "With this comprehensive multimedia kit, the Pembina Institute continues to meet the demand for current, practical resources that can help teachers teach about climate change. The Climate Change Awareness and Action Education Kit is the most comprehensive multimedia education kit on climate change ever devised for Canadian high schools. It was developed in response to the recognized need for quality educational materials to address the climate change issue from a critical thinking perspective, and is designed for use in grades 9 through 12, in Science, Social Studies, Geography and Environmental Studies courses across Canada."

"The kit contains a 300-page teacher guide (with student activities, fact sheets, posters, bibliography and more), eight full-colour, high-resolution transparencies and a video copy of the highly-acclaimed documentary film Turning Down the Heat, which showcases renewable energy technologies and energy conservation. A 16-page booklet has been prepared specifically to accompany the video and to guide teachers in its classroom use."

The Pembina Climate change Kit is less tied to a specific curriculum than the Toronto Environment Alliance kit. It is very well thought out and user friendly with activities that build upon themselves

There are links made to show what skills can be learned by the students to justify curriculum requirements. There are many full color overheads to explain climate change and greenhouse effect and lots of background material.

You will find 14 lessons in four sections:

Section 1: The Science

- **1: Greenhouse Earth** where students get an introduction to climate change, simulate the greenhouse effect, build a biosphere bottle to show the earth as a system.
- **2. The Carbon Connection** where students study the life of a carbon molecule, understand the carbon cycle and the difference between sources and sinks, realize how we as humans disrupt the natural cycle, and discover the other greenhouse gases.
- **3. Planet Earth's Global Circulation Systems** where students find out about wind and ocean circulation and their role in climate students also do experiments to demonstrate convection. The phenomena of arctic pollution is also explained

Section 2: Evidence and Impacts

- **4. The Balance of Evidence** where students graph changes and causes of global warming, discover climate change science, and discover for themselves that we are having an impact on climate
- 5. The Global Impacts of Climate Change
- 6. Impacts of Climate Change in Canada

Section 3: Politics, Power and Public Opinion

- **7. Polarized Perspectives** students analyze content of Climate change arguments and compare the two perspectives.
- **8. Politics, Power and Public Opinion** where students get put into the hot seat of 'political players and their views' and get to role play.
- **9. The Global Challenge** a model UN style Conference Kyoto demonstration.
- **10.** The Battle for Our Hearts and Mindslearning about the media.

Section 4: Taking Action

11. Cars ,Carbon and Climate Change—find out about the real costs /impact of transportation.

Continued on page 6

A good start

Yukon action on climate change

The Northern Climate ExChange: in the North, for the North

The Northern Research Institute at Yukon College recently established the **Northern Climate ExChange**, a centre devoted to understanding the possible impact of climate change on the Yukon environment and way of life.

Designed to facilitate local involvement in the gathering of scientific and traditional knowledge on climate change, the project will also serve as a catalyst for multidisciplinary climate change research.

The main contributors to the centre include the Government of the Yukon, and the Climate Change Action Fund (CCAF). The CCAF is a component of the National Climate Change Program, a federal government initiative developed to help Canada meet the commitments it made at the International Climate Change meeting in Kyoto, Japan in December 1997.

The Northern Climate ExChange is a partnership of government, First Nations, community, industry, and education. Over the coming year, we will be working on the following:

 Identifying research priorities by conducting a gap analysis of the northern climate change knowledge base;

- Holding roundtable consultation sessions involving northern communities, first nations, educators, industry, and government;
- Developing consensus-based, action-oriented recommendations including targeted research needs and economic opportunities;
- Hosting the Circumpolar Climate Change Summit and Northern Trade Show for Sustainable Technologies; and
- Designing and implementing public education and outreach programs.

The Northern Climate ExChange will advance knowledge on the impacts of climate change on the north, facilitate adaptation to these potential changes, and increase science and research capacity among northerners. The Northern Climate ExChange would like to discuss with you how we can work together to get the message out on climate change.

For more information or assistance, please contact their Director, Aynslie Ogden.

Northern Climate ExChange Northern Research Institute, Yukon College Whitehorse, YT Y1A 5K4 Phone: (867) 668-8735 Fax: (867) 668-8734 email: aogden@yukoncollege.yk.ca

Resources: continued from page 5

Pembina kit

- **12. Energy Efficiency**—students find out about this important and easy step towards solving the problem with simple experiments.
- **13.** Energy That Doesn't Cost the Earth: students learn about renewable energy and can even build solar collectors and biogas generators.
- **14. Changing the World** students take their first steps towards ensuring a preferable future.

We chose students across a broad range, to help us fight Global Climate Change.

Depending on how they chose to their role; they could help rebuild the ozone hole.

By changing their habits about transportation, Smog will vanish from our nation.

By thinking creatively they will find, how to release heat from the greenhouse bind.

So relax everybody, the kids are here,

The end of Climate Change is Drawing near!

Author unknown

Initiatives For Energy Efficiency in the Yukon: House Calls Program

In the fall of 1999, the Yukon Conservation Society formed a partnership with the Yukon Energy Corporation to implement a pilot project on energy efficiency. The goals were to reduce residential energy requirements and enhance climate change knowledge in 125 homes in the Yukon. Of the 125 homes visited during the pilot project, 26 were in Dawson City with the remaining 99 in Whitehorse.

The House Calls project was designed to "help people help themselves". People were shown a variety of energy saving devices and given a high quality demonstration compact fluorescent energy-saving light bulb. Extra insulation

was installed on hot water tanks; in some cases the hot water temperature was decreased. Participants were also given a package with further information on how to alter their behavior for additional savings.

Initially, the only savings we can quantify are from the actual wrap on the hot water tank and the energy saving bulb we replaced. More savings may show up as people have time to alter the way that they use energy.

One large-scale benefit of the House Calls project is to reduce electrical energy consumption specifically where diesel fuel is used to produce electricity. The "WAF" (Whitehorse-Aishihik-Faro) electrical system has considerable hydro (water) capacity. Diesel fuel is only used to meet peak demand, so the savings for Whitehorse houses include only the energy created by diesel generation. Other Yukon communities rely on diesel generators exclusively, so wrapping hot water tanks and using compact fluorescent bulbs results in year-round savings.

Funding for the pilot project was provided as part of the Yukon government investment in energy efficiency in response to the Final Report of the Cabinet Commission on Energy.

Climate Change Presentations in Schools

In the Spring of 1999, Craig Olsen made climate change presentations at all the secondary schools in the Yukon. The presentation included color overhead transparencies detailing:

- 1. The science and process of the greenhouse effect.
- 2. Greenhouse gases and how they act.
- 3. The science that leads us to the conclusion that humans are indeed having a tremendous effect on the natural carbon cycle.
- 4. How we as humans specifically produce CO,
- 5. What we can do as individuals to make a difference.

Students completed simple math equations to show how much Carbon Dioxide was produced by 'everyday normal' activities

Students were left with the Yukon Government fact sheets on climate change

If you would like to borrow or make a copy of the presentation for your class contact...

Why do a climate change curriculum unit?

More than 90% of the human made carbon dioxide currently in the atmosphere comes from Europe and North America. Along with many other countries in the developed world Canada committed to stabilizing carbon dioxide emissions to 1990 levels by 2000 at the Rio Earth Summit. Canada has also committed to reducing carbon dioxide levels to 6% below 1990 levels by 2010 in what is called the Kyoto Protocol.

The City of Whitehorse, among others, signed on to 'the 20% club' where emissions are to be reduced to 20% below 1988 levels.

Let's do our part!

Internet research possibilities

Websites galore on climate change

Canadian Climate Change Bureau www.climatechange.gc.ca

This site offers an abundance of basic information, as well as a comprehensive "links" page.

Northern Climate Change Links
Caribou and Climate Change Slide Show
Caribou Population Models
www.taiga.net/top/climatechange.html

A good place for some more Yukon and Northern information and links. From here you can get to some really cool population models for the Porcupine Caribou Herd, where you enter your own variables and see how climate may affect the herd. There's access to old *Your Yukor*columns as well.

Internet Youth Café on Climate Change http://iisd.ca/youth/internetcafe/ccinfo.htm

The discussion part of thissite is long over, but the basic information is aimed at youth. Some good links, but didn't check to see if active.

C0₂ Calculator <u>www.climcalc.net</u>

This site houses a downloadable software program that allows one to calculate their annual CO_2 emissions. In June of 2000, they are foreseeing a launch of a web-based version of the calculator.

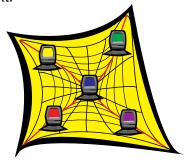
Ecological Footprint Calculator www.mec.ca/coop/communit/meccomm/ecofoot.htm

Not strictly a climate change site, but nevertheless relevant, this page allows visitors to calculate their "ecological footprint": how much land it takes to support your present lifestyle. A simplistic survey, but eye-opening and perhaps a stimulus to change.

Arctic Explorer www.arcticexplorer.com

This site documents a special international project, called Surface Heat Budget of the Arctic Ocean - Joint Ocean Ice Studies SHEBA-JOIS, which

develops the basic knowledge to understand how arctic air, sea and ice interact to affect our global environment.



The following are the websites of organizations that have received funding for school-level education from the Climate Change Action Fund (CCAF). French-language resources are indicated by (F). We may review some of these resources in coming issues of <u>WILD Yukon</u>.

B.E.S.T. www.best.bc.ca

FQE (F) <u>www.generation.net/~enviro</u>

Global Change Game www.gcg.mb.ca

Go For Green www.goforgreen.ca

Green Teacher www.web.net/~greentea/

Harmony Foundation www.harmonyfdn.bc.ca

Learning for A Sustainable Future www.schoolnet.ca/vp/learning

Pembina Institute <u>www.piad.ab.ca</u>

SEEDS www.greenschools.ca/SEEDS

SITS <u>www.is.dal.ca/~sits</u>

Tree Canada <u>www.treecanada.ca</u>

Univert Laval (F) <u>www.ulaval.ca</u>

UQCN (F) www.uqcn.qc.ca

Some practical ideas for you and your students

What can we do about it?

From the Canadian Climate Change Bureau web site at www.ec.gc.ca/climate/fact/cli_chan.html

Human activity influences climate change. As individuals, there are some simple things we can do to reduce emissions that take little time and effort and may even save Canadians money.

Taking action on climate change is as simple as turning down the thermostat, or buying an Ecologo certified product. And in addition to helping meet our climate change challenges, benefits may also be felt in improved air quality with less smog, acid rain, and other air pollutants, resulting in better health.

Taking action on climate change could also make our economy more internationally competitive by creating growth and jobs while producing less waste, pollution, and greenhouse gases.

Technological innovations that reduce emissions or produce fewer emissions are highly marketable, at home and around the world.

Many of the greenhouse gas emissions contributing to climate change come from the cars we drive and the burning of fossil fuels, such as gasoline and oil, to produce energy for our homes and office.

Your Home

A little savings goes a long way for the environment, and steps for home energy efficiency are both easy and inexpensive.

A clean, tuned-up furnace runs more efficiently and uses less fuel. Change or clean the filters in your furnace regularly, and have it serviced once a year. More efficient operation means fewer emissions and a lower monthly bill.

Using natural gas to heat your home can lower emissions of carbon dioxide per unit of heat. Lowering your thermostat to 18° for sleeping, and 16° degrees when you're away will reduce heating bills and help lower emissions from energy production. Heating bills can be cut by up to 25 per cent by sealing all leaks around doors, windows, and cracks.

Save on water heating costs and reduce energy use with an insulation blanket on the hot water tank and insulation on hot water pipes.

Check for energy efficiency ratings when buying appliances – it saves money, and it's the right thing for the environment.

Getting Around

Think of the car as just another way to get around, to be used only when other methods aren't feasible. Try to walk, cycle, or take public transit first. Nine tonnes of pollutants are saved each year by just one busload of passengers who leave the car at home.

When driving, slow down. Every 10 km per hour reduction in speed saves 10 per cent on fuel costs and reduces emissions.

Avoid unnecessary idling. Idling engines waste fuel and money and increase emissions. Under-inflated tires increase fuel consumption one per cent for every 2 psi of underinflation – and that costs money, as well as increasing emissions.

Consider fuel economy information when buying a car, and buy a more fuel-efficient vehicle instead of a big gas guzzler.

The Office

Start a carpool, to save on gas costs and emissions.



Save time and travel costs by using a conference call for meetings. Ask about working at home one day a week, using tools like the Internet and e-mail to keep in touch.

When scheduling a meeting, let participants know of others coming from their building or section of town; ride-sharing saves emissions and energy.

Cut down on photocopying – copy on both sides of the page, or attach a circulation slip instead. Less use of the photocopier saves on energy bills and paper.

Au moins une page

Section Franco-faune

Concert de Noël et recyclage

soumis par Lise Ouimet, École Émily Tremblay

Quelle combinaison!

Mais c'est bien ça que les élèves de 4eme et 5eme année d'Émilie-Tremblay ont réussi à faire. Ils sont très stimulé car ils s'occupent du programme de recyclage de toute l'école.

Alors voici quelques photos et la chanson créée par Liliane Bohémier à partir de leurs idées et de la musique d'Olivier Roy-Jauvin et de son père.





Nous invitons vos soumissions au sujet de l'éducation à propos de l'environnement et conservation de la faune sauvage. Contactez-nous a 667-3675 ou par courriel: remy.rodden@gov.yk.ca



Le Blues du recyclage

Musique: Olivier Roy-Jauvin Paroles: Lilianne Bohémier

Texte inspiré des mots et idées des élèves de la 4e/5e de ÉÉT

L'environnement c'est important, s'en occuper il est grand temps.
Polluez et gaspillez continuez on va

Polluez et gaspillez, continuez, on va étouffer.

C'est pas comme ça qu'on va vivre longtemps, faisons not' part dès maintenant.

Recycler c'est important, ça aide beaucoup 1'environnement.

Les cannettes et les bouteilles, le carton et le papier,

Toutes ces choses à recycler, et tout le monde peut nous aider.

Recycler, ce n'est pas assez, il faut réduire c'que vous consommez

Moins d'papier, moins d'emballage, moins d'achats, moins de dommages.

Boire de l'eau, c'est bien beau, mais jette-la pas dans l'lavabo.

Un autre R pour aider la terre, c'est pas sorcier—réutiliser!

Des boîtes de conserves, des rouleaux d'essuie-tout, des belles guirlandes, ça brille partout!

Comme vous voyez, c'est pas compliqué, les 3R pour sauver la terre.

Celebrate biodiversity in the Yukon!

Get out and celebrate Spring!

There are more opportunities than ever for you and your students to get out and learn about wildlife this Spring. Many groups in the Yukon and pooled their efforts to bring you the biggest and best Spring celebrations ever. Watch the media and our web site <<u>www.taiga.net/spring</u>> for updates to the following events:

April

Saturday April 1st: **Swan Haven is open**! Weekdays 5 to 9 pm, weekends and holidays noon to 7 pm. Visit anytime to see swans and outdoor displays.

Swan Art Contest open to Yukon children (draw for winners on April 22nd). Check your classroom for details of this contest.

Saturday April 9th, Fox Lake: **Family Ice Fishing Day.** Yukon Fish & Game Association. Details 667-4263.

April 9th to 15th: **National Wildlife Week.** Theme: Migration: An Incredible Journey!

Tuesday April 12th, Whitehorse Public Library, 7pm: **Birdhouse Bonanza!** All about bird houses. Call 668-5678.

Thursday April 13th, High Country Inn, 7 pm: **Wolf River Slide Show** with Canadian Parks and Wilderness Society. Details 393-8080.

Saturday April 15th, Swan Haven, 1 pm: **Waterbird Identification Workshop!**

Saturday April 15th, Beringia Centre, Whitehorse, 6:30 pm: **Welcome to 7th Annual Celebration of Swans**. Entertainers and more!

Sunday April 16th, Swan Haven, 1 pm: **Home for a Song bird box building workshop**. Sponsored by Yukon Fish & Game Association. Details 667-8291.

Sunday April 16th, Whitehorse, MacBride Museum, 7 pm: **Talk: Golden Eagles on the Move!** Biologist Carol MacIntyre from the U.S. Parks Service. Call 667-8291.

April 15th to 23rd, weekends and evenings at Swan Haven: **Visit with elders**—hear stories of the past with TTC, CTFN, KDFN elders who will be spending time at the Centre. Join them for informal conversations.

Monday April 17th, Haines Junction Visitor Centre, 7 pm: Talk: Fall Migrations—Trumpeter Swans and Golden Eagles.



Monday April 17th to Friday, April 21st, Swan Haven, 7 pm: **Interpretive walks at Swan Haven**.

Saturday April 22nd: **Earth Day!** Call 668-5678.

Saturday April 22nd, Kluane Lake, 9 am to 4 pm. **Visit** the sheep at Sheep Mountain Visitor Centre.

Sunday April 23rd, Burwash Landing, Kluane Museum of Natural History, 1 pm: **Swan Viewing at Kluane River.**

Tuesday April 25th, meet at the Porter Creek Super A, 6 pm: **Shrike Migration! field trip**. Call 667-4630.

Sunday April 30th, Kluane Lake, 9 am to 4 pm. Visit the sheep at Sheep Mountain Visitor Centre.

May

May 1st to 6th: National Forest Week.

Tuesday May 2nd, Whitehorse Public Library, 7 pm: Pam Sinclair will highlight the **Birds of the Yukon Project** and how your sightings can contribute to 150 years of Yukon birding history! Call 667-4630.

Thursday May 4th, Kluane Park Visitor Reception Centre, 7 pm: **Haines Junction Shorebird Identification Workshop!** Call 634-2329.

Thursday May 4th, S.S. Klondike, 6 pm: **Beginner's Waterfowl Night!** Join Linda Cameron for tips on waterfowl identification at Schwatka Lake.

Sunday May 7th, meet at the SS Klondike, 9 am: **Tagish Birding Tour!** Helmut Grünberg guides this exciting day trip south. Bring your lunch!

For everyone

Celebrate Spring & biodiversity: events

May (continued from page 11, see for April events)

Saturday May 6th, Whitehorse, 7 pm: **Wetlands Walk** with Yukon Conservation Society. Call 668-5678.

Sunday May 7th: Swan Haven closes.

Thursday May 11th, meet at the SS. Klondike, 6 pm: **Beginner's Waterfowl Night II**. Learn waterbird identification at Schwatka Lake with René Carlson.

Saturday May 13th, **International Migratory Bird Day** — Spring Migration Count! To participate in this "spring round-up" call Cameron Eckert at 667-4630.

Sunday May 14th, meet at Porter Creek Super A, 8:30 am: **Birding Jackfish Bay!** Join Pam Sinclair on this morning trip during the peak of migration.

Saturday May 13th, Whitehorse TBA, 2 pm: **The Stories of the Yukon River.** Field trip with members of Yukon Conservation Society. Call 668-5678.

Tuesday May 16th, meet at Rodger's Video, 6 pm: **Migration at Quartz Road Wetland!** Join Helmut Grünberg at this rich wetland in downtown Whitehorse. Call 667-4630.

Thursday May 18th, meet at the SS Klondike, 6 pm: **Shorebirding at Lewes Marsh!** Shorebird enthusiast Cameron Eckert guides this trip to Lewes Marsh to study a diversity of shorebirds. Call 667-4630.



Saturday May 20th, Whitehorse. **The Wildlife Corridor in Our Backyard**. Walk with interpreters from Yukon Conservation Society. Call 667-5678.

Wednesday May 24th, meet at the SS Klondike, 5:30 pm: Jim Hawking's **Judas Creek Bird Migration Finalé! Field Trip.** Call 667-4630.

Friday May 26th, 5 pm to Saturday, May 27th, 5 pm: **YUKON BIRDATHON 2000.** A conservation education fundraiser and an annual highlight of spring birding! For info call Sheila at 633-6674.

Saturday May 27th, TBA: **McIntyre Creek Clean-up**. Join the Yukon Fish & Game Association for this active outing benefiting our local environment. Call 667-4263.

Saturday May 27th, Whitehorse, TBA: **Hikes for Tykes!** Take a walk with the Yukon Conservation Society for this Aquatic Explorations journey. Call 667-5678.

Tuesday May 30th, meet in the parking lot of Takhini Elementary School, 7 pm: **Birding Beginner's Night** to Takhini/McIntyre pond! Field trip with Jeanette McCrie. Call 667-4630.



WILD Yukon's for Yukon teachers and others interested in environment and conservation education.

We welcome your letters, suggestions, children's work, reviews of new print and audio/visual resources. Mail. fax or e-mail submissions to:

Conservation Education Coordinator Renewable Resources (R-7) Government of Yukon Box 2703 Whitehorse, Yukon Y1A 2C6

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