



OPPTS Tribal News

Environmental *VOICES*

Office of Pesticides, Prevention,
and Toxic Substances and
Tribal Environmental
News Exchange

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Featuring Pesticides Programs

Environmental Impacts on Subsistence Foods

Subsistence foods include fish, sea mammals, beavers, bears, deer and moose, plants, and wild rice, and are assumed to make up about 1/3 to 1/2 of a traditional diet. Over the past few years, EPA Region 10 has received reports of tainted subsistence foods, including salmon deformed with tumors, Alaskan fishermen catching infected fish, and seals losing their fur outside of molting season. White sharks, known to be warm water species, have even been seen in Arctic waters.

These reports have caused most to fear that food sources are contaminated with radio nuclides and other toxic chemicals and are, thus, affecting human health, as well as the Native tradition. As a result, EPA has partnered with tribal organizations and members to complete the Traditional Knowledge and Radionuclides Project, featured on page 16 of this issue. This project combines traditional knowledge with western science to measure environmental problems and conduct Arctic research.

The following pages also highlight many other environmental projects that use traditional knowledge and science to focus on environmental topics regarding subsistence foods, including:

- PBTs and other toxic contaminants
- Fish
- Moose and deer
- Wild rice.



Lessons of the Alaskan Wilderness

By Philip Robinson, OPPT Liaison Branch Chief

As I attended a scientific conference in Denali, Alaska, I learned about true beauty and the need to protect its frailty. Alaska is a beautiful vision of sights, particularly in Denali Park, that were unlike anything that I had ever seen before. Alaska, a Mecca for all Americans, demonstrated the fundamental relationship between man, nature, and the environment.

I have worked for many years to protect the environment, but very little of my career has been directed at wilderness protection. Seeing Alaska as a vivid and colorful illustration of wilderness and environmental protection allowed me to better understand the diversity of nature and the fragility and value of the land beneath the urban sprawl. I can now see the importance of having a connection to nature as I better understand the perspective of most Native Americans, as well as the public service announcement which depicted a proud Native American shedding a tear over the litter that had been strewn over his environment. There is a big difference between an intellectual understanding and an emotional or spiritual one. Alaska alone provided me with the latter.

I wish I could look back to other environmental issues on which I worked and say that I connected with nature, as well; I cannot. The good news is that I can now achieve this, and the months ahead will provide great challenges as we, together, attempt to develop approaches based on traditional knowledge and science to better assess the exposures and risks associated with toxic chemicals and pesticides, including subsistence foods. I hope that my new understanding will help all communities better deal with the environmental problems that have been thrust upon Native Americans, the real environmental stewards in America.

From the Editors...

With great pleasure, OPPT and the Office of Pesticides (OPP) present this special Fall/Winter issue of *OPPTS Tribal News*. These two offices, as part of EPA's Office of Prevention, Pesticides, and Toxic Substances, have gathered news and data to provide information on scientific and traditional knowledge of subsistence foods and have featured several environmental programs addressing related issues in this newsletter.

OPPT would also like to announce its new Tribal Web Site, which features tribal news and events, along with all tribal publications, including current and past editions of *OPPTS Tribal News*. Made possible by the work of OPPT summer interns Mavis Smith and Jennifer Courtre, the Web Site also features links to other EPA offices, such as AIEO, Water, and Pesticides, and other EPA Regions.

We offer our thanks to tribal members, scientists, and EPA staff for promoting this exchange of information and for submitting several articles for this issue. We hope this issue emphasizes important items of interest and addresses environmental concerns, and as always, encourage you to relay comments, ideas, and concerns about our programs.


—Mary Lauterbach,
OPPT Tribal Coordinator

—Regina Langton,
OPP Tribal Coordinator

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OPPT's Mission
Promote pollution prevention
Promote the use of less toxic chemicals
Promote the reduction of risks
Promote public understanding of the risks of chemicals

Persistent Bioaccumulative Toxic Chemicals TRI Rulemaking

On November 1, 1999 EPA announced a final rule under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, which lowers the Toxics Release Inventory (TRI) reporting thresholds for persistent bioaccumulative toxic (PBT) chemicals and adds certain other PBT chemicals to the TRI. These PBT chemicals are of particular concern not only because they are toxic but also because they remain in the environment for long periods of time, are not readily destroyed, and accumulate in body tissue. Relatively small releases of PBT chemicals can pose human and environmental health threats and consequently releases of these chemicals warrant recognition by communities. The final rule includes lowered reporting thresholds for PBT chemicals and an additional TRI category for dioxin and dioxin-like compounds, which are subject to a special, lower reporting threshold and an activity qualifier. The rule also introduces modifications to certain reporting exemptions and requirements for the chemicals newly subject to the lower reporting thresholds.

Under current requirements, facilities do not have to report TRI releases if they manufacture or process less than 25,000 pounds of a listed chemical or otherwise use less than 10,000 pounds. These thresholds are inadequate to ensure that the public has access to important information about the quantities of PBT chemicals entering their communities from local industrial facilities. By lowering the existing thresholds to 10 and 100 pounds, EPA believes the public will have access to basic environmental data regarding these chemicals.

Electronic copies of this rule are accessible from the TRI homepage at www.epa.gov/tri and the October Federal Register. For more information regarding this rule, please contact the EPCRA Hotline at 800-535-0202 or Daniel Bushman at 202-260-3882 or bushman.daniel@epa.gov.

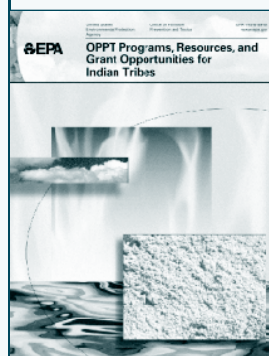
Indian Incentive Program

On October 27, 1999 the Department of Defense (DoD) published the Utilization of Indian Organizations and Indian-Owned Economic Enterprises proposed rule to delete DoD-unique language pertaining to incentive payments made to prime contractors for the utilization of Indian organizations and Indian-owned economic enterprises. For further information regarding the proposed rule, please contact Myrna Mooney at 202-564-4386 and cite FAR case 99-301.

Tribal Resource Guide

This fall, OPPT published its first comprehensive resource book regarding our programs, resources, and grant opportunities for Indian Tribes. This resource book contains over 70 pages of

information on a wide range of programs such as pollution prevention, green chemistry, and lead. The resource notebook was specifically designed as a binder so that



readers can update it with new information. Please watch for the periodic updates in future issues *OPPTS Tribal News* and note that the guidebook can be viewed and downloaded from the new OPPT Tribal Web site at www.epa.gov/opptintr/tribal. Comments, questions, or requests for additional information may be sent to Mary Lauterbach, OPPT Tribal Coordinator, 202 260-9563, lauterbach.mary@epa.gov.

EPA Seeks Applications for State and Tribal Environmental Justice Grants

EPA is soliciting applications from eligible candidates under the State and Tribal Environmental Justice Grants Program. During fiscal year 2000, EPA's Office of Environmental Justice expects to award a total of \$500,000 to states and tribes demonstrating how to effectively address environmental justice issues. A maximum of \$100,000 will be awarded to each recipient, contingent upon the availability of funds.

Only a state or federally-recognized tribal government may apply for funding. However, preference will be given to states or tribes involving community-based grassroots organizations in the development of proposals. Funds may be used to develop a model state or tribal environmental justice executive order or strategic plan and/or to conduct studies, analyses, and training in the development of a state or tribal environmental justice program.

Applications must be postmarked no later than Friday, January 28, 2000, and awards will be announced by August 1, 2000. For more information regarding the application process and requirements, including eligibility criteria, refer to the November 1999 Federal Register or contact Daniel Gogal, Office of Environmental Justice, at 202-564-2576 or 800-962-6215.

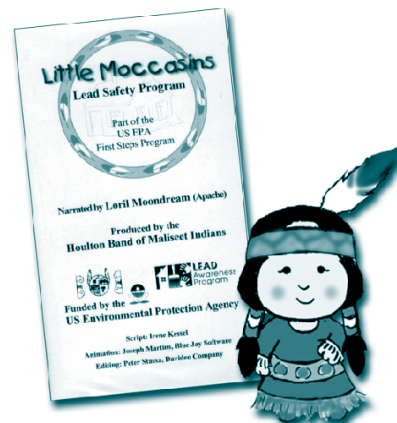
NPCD Plans Grant Program for Indian Tribes

Recently, EPA issued a notice of funds availability (NOFA) for grants that support blood-lead screening and lead educational outreach programs in tribal communities. EPA plans to award 25 to 50 grants ranging from \$15,000 to \$50,000. Proposals for grant funding must include a description of developing and implementing a blood-lead screening program and a description of any existing or new lead educational material to be used in the outreach program. Proposals must also describe ways to target hard-to-reach tribal communities to inform families about childhood lead poisoning and screening. Refer to the Grant NOFA in the December Federal Register for specific selection criteria and additional information regarding the application process. Copies of the Federal Register notice also are available through the National Lead Information Center (NLIC) and the EPA home page at <http://www.epa.gov/lead>. For further information, contact Darlene Watford at 202-260-3989 or watford.darlene@epa.gov.

First Steps Training Video and CD-ROM

The Houlton Band of Maliseet Indians has produced the *First Steps* day care program, which provides teaching tools, such as games, songs, and skits, for parents and daycare providers to instill lead safe habits in children. *First Steps* includes an interactive CD-ROM of helpful manuals and a 20-minute video, and its programs have been developed for Native Americans, as well as English- and Spanish-speaking audiences.

In order to disseminate this information to the day care providers and parents, a second, train-the-trainer course for Little Moccasins will be delivered in February or early-March 2000 at the University of Rhode Island Alton Jones Campus in East Greenwich, RI, and is available for the first 30 individuals. For more information regarding the training program, contact Carla Monroe, Adult Vocation Training, Narragansett Indian Tribe at 401-364-1100 x204. Contact Philip Quint, Houlton Band of Maliseet Indians, for a copy of the video and CD-ROM at 800-545-8524.



News & Events

From the Office of Pesticide Programs

Workshops for Tribal Groundwater and Pesticide Management Plans

EPA is scheduling Plan Development Workshops to help tribal elders, elected officials, environmental staff, and farm management staff address issues concerning the recent Federal Insecticide Fungicide & Rodenticide Act (FIFRA) proposed rule. When final, the rule would require tribes to discontinue use of certain pesticides, namely alachlor, atrazine, cyanazine, metolachlor, and simazine, unless a Ground Water and Pesticide Management Plan (PMP) has been developed and implemented. The final rule is scheduled for publication by the end of May 2000. The following workshops are free for participants, and registration is based on space availability. If interest exceeds the ability to host the scheduled workshops, additional dates will be arranged. Travel and room and board are the responsibility of workshop participants. For additional information or to request registration forms, please contact:

- ▶ Lillian Wilmore, Native Ecology Initiative, 617-232-5742, NAEcology@aol.com,
- ▶ Ron Cooper, Mountaintop Associates, 406-585-3501, ron_cooper@in-tch.com, or
- ▶ Irving Provost, Oglala Lakota Nation, Director of Pesticide Enforcement, 605-867-5624, pepip1@rapidnet.com.

Workshops

Kansas

Prairie Band of Potawatomi Tribe

April 5, Kansas City, KS; April 6 & 7, Mayetta, KS

Nevada

Nevada Indian Environmental Coalition

March 7, 8, and 9, Reno, NV

California

Aqua Caliente Band of Cahuilla Indians, Consortium of Coachella Valley Tribe

May 17, 18, 19, Palm Springs, CA

Fiscal Year 2000 Tribal Pesticide Project Solicitation

The Office of Pesticide Programs is soliciting tribal pesticide groundwater and special project proposals from tribal communities. Financial assistance is for tribal governments to carry out: 1) a discreet pesticide-related project, 2) a project in support of the development or implementation of a pesticide program, or 3) a project in support of the development or implementation of a pesticide program to protect ground water. Funds can be used for new activities or to further an existing eligible project.

OPP will award \$200,000 for special projects and \$245,500 for pesticide-groundwater projects in FY2000. Project proposals are due to regional offices by April 3, 2000. For more information, contact the EPA tribal pesticide staff person in your region or a member of the OPP Tribal Team, Regina Langton at 703-305-7161 or langton.regina@epa.gov and Elizabeth Resek at 703-305-6005 or resek.elizabeth@epa.gov.

Congratulations to the Tribal Pesticide Program Council

It is my pleasure to congratulate the Tribal Pesticide Program Council (TPPC) members on the September 1999 formation of the group. The TPPC was founded based on members' needs, views and goals, to provide a forum for national tribal pesticide policy and issues.

Native Ecology Initiative (NEI), a non-profit organization, was awarded the EPA cooperative agreement to form the TPPC. NEI works to preserve the environment and the rights of indigenous peoples, and we in the Office of Pesticide Programs look forward to developing a closer working relationship with Tribes jointly with this organization.

We value your knowledge and perspective on tribal pesticide issues. Your work as members of the TPPC will make it possible for us to strengthen tribal pesticide programs and assist tribes that do not have pesticide programs. Also, my hope is that this cooperative agreement will make it easier for people at EPA headquarters, Regions and Tribes to work together as we establish a strategic direction for OPP that is responsive to Native American needs and concerns.

Approximately 30 tribes have established pesticide programs under federal law and we expect more tribes to follow. We know that the funding the government devotes to tribal programs helps make them possible. But a successful partnership also demands



The late Conner Byestewa, Jr., Colorado River Indian Tribes, shares news from Indian Country with OPP staff.

that we understand each other's concerns and capacities. We believe that the TPPC will be an effective way for you to share your real world experience with pesticide issues in Indian country with other pesticide program managers and staff, leading to a stronger partnership.

The TPPC's first public meeting took place on January 25-26, 2000 in Crystal City, Virginia. I enjoyed meeting TPPC members at this inaugural event and celebrating the establishment of our new working relationship for environmental protection in Indian country.

Anne Lindsay

Anne Lindsay, Director
Field and External
Affairs Division,
Office of Pesticide Programs

For more information about TPPC, contact:

- Irving Provost, TPPC Executive Committee Chairperson
(605) 867-5624
pepip1@rapidnet.com
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- Regina Langton, OPP Tribal Coordinator
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- Elizabeth Resek, OPP Tribal Coordinator
(703) 305-6005
ressek.elizabeth@epa.gov

Work on Subsistence Issues at EPA

• For several years, OPP has been funding work coordinated by EPA Region 9 to characterize the unique exposure scenarios experienced by Native Americans through their use of forest plant materials. Community meetings were held and a study was conducted by the California

Department of Pesticide Regulation to examine residues of herbicides in plants of interest to Native Americans. This work continues.

• OPP began to address subsistence issues as part of the EPA licensing program for the herbicide tri-

clopyr. EPA's extensive review of tri-clopyr included Native American concerns. Also, the pesticide registrant was asked to submit a residue study on plants for triclopyr that could provide information to help EPA address subsistence issues.

Subsistence Foods and Tribal Initiatives

From the Office of Pollution Prevention and Toxics

Indian Township Studies Cadmium Levels in Moose and Deer

By Trevor White, Indian Township Environmental Department

With funds from U.S. EPA Region 1, the Passamaquoddy Indian Township Environmental Department started a successful project this summer with the local Passamaquoddy and Penobscot Indian Tribes to study cadmium levels in moose and deer livers, popular food sources for local members. The study will address reports that moose and deer livers suffered from unsightly lesions and were very friable to the touch and that a current state advisory warned hunters to limit their intake of deer livers and not to consume moose livers at all because of increased cadmium concentrations.

The advisory was based on a 1980 study that recorded high cadmium levels of 25µg/gram of dry weight in moose kidneys and 5µg/gram of dry weight in moose livers. According to the National Academy of Sciences, the acceptable daily intake of cadmium is 300 µg/day, and in comparison, current analytical data suggests that human consumption of moose kidney and possibly moose liver during an average meal may be enough to cause adverse gastro-responses.

Although some believe that moose and deer livers are not popular food sources, a telephone study in an Indian Township revealed that 15 out of 17 tribal families consumed deer liver and that 14 out of 17 fami-



Cadmium is a heavy metal that is profoundly toxic. Signs of cadmium poisoning include diarrhea, nausea, vomiting, abdominal pains, cramps, salivation, and organ destruction. Chronic cadmium exposure results in kidney failure, anemia, and bone disorders.

lies consumed moose liver. All 17 families valued the tradition of eating the subsistence foods, and 12 out of 17 families continue to eat moose or deer liver. In fact, one tribal member declared "we always eat the liver first... I even take a bite of the raw liver when I first take it from the moose. It's always been done that way; its tradition."

With this obvious need to study the cadmium content of moose livers, the Environmental Department designed the study to determine if cadmium levels in moose and deer livers are significantly different than those obtained in 1980 and to study any geographic significance in the cadmium levels of individual animals, specifically in Western Maine compared to Eastern

Maine. Researchers will also use the incisor tooth to determine if cadmium levels directly correspond to the age of the animal.

Moose livers and teeth were collected by tribal hunters, and with a 90% success rate, the department has received 37 moose livers and 8 deer livers from Passamaquoddy Lands and 25 livers from the Penobscot Lands since September. With analysis of cadmium levels in the collected samples, the Passamaquoddy Environmental Department will educate tribal council and members of the risks

Richard Stevens, Governor of the Passamaquoddy Tribe at Indian Township, believes that "...this study is very important to the Tribe, both scientifically and culturally...it will help us understand the way modern society impacts traditional ways of deriving sustenance and helps us protect our greatest resource, our people".

associated with eating moose and deer livers and acceptable consumption levels according to age, sex, size and location.

Subsistence Foods and Tribal Initiatives

From the Office of Pollution Prevention and Toxics

Lake Superior Fish Study with GLIFWC

"Masinaigan," A Chronicle of the Lake Superior Ojibwe

The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) is conducting a study, funded by an Administration for Native Americans Environmental Regulatory Grant, to determine the extent of chemical contamination in fish eaten by consumers living near Lake Superior. The study was prompted by U.S. Food and Drug Administration (FDA) guidelines that require all seafood processors to incorporate Hazard Analysis and Critical Control Point plans, or approaches to address biological, physical, or chemical hazards affecting the commercial food industry. GLIFWC targeted whitefish, lake trout, herring, and siscowet trout during this study since they are common food sources throughout the community. GLIFWC project manager Kory Groetsch, who is featured on page 17 in this issue's interview spotlight, leads this study and proposes that it will help commercial fishermen provide a safe product to locals. The project will also help to establish tribal fish processing guidelines for trimming and smoking fish in order to reduce chemical contaminants.

During the study, GLIFWC staff teamed with the Lake Superior Research Institute at the University of Wisconsin to test fish samples for toxic contaminants, including mercury, chlordane, dichlorodiphenyltrichloroethane, and polychlorinated biphenyls (PCBs). Fish samples from Lake Superior were either collected by GLIFWC staff or bought from local fishermen of the Bay Mills, Keweenaw Bay, Bad River, and Red Cliff tribes. Samples were first skinned, and the skin and fat samples were analyzed to estimate levels of contamination and to determine where most contaminants were contained in the fish. The filleted samples were then ground and liquefied for additional testing. GLIFWC and tribal fishermen collected samples from October 1998 to approximately August 1999.

Once completed in 2000, GLIFWC's study will aid tribal governments and members to establish self-regulating systems that meet new FDA requirements to ensure safe and healthy products from the Lake Superior's tribal commercial fishery.

\$75,000 Awarded to Design a PBT Screening Tool Prototype

EPA's OPPT has awarded \$75,000 to the Alaska Sea Otter and Steller Sea Lion Commission (TASSC), a Native tribal consortium, to design and field-test a screening tool for persistent bioaccumulative toxic (PBT) chemicals present in Alaska tribal subsistence foods. The model program supports EPA's national PBT strategy, which focuses on these Level 1 substances present in fish and other food sources, by screening for prevalent PBT contaminants in harbor seals of the South Central and Southeast regions of Alaska. This integrated multimedia approach also supports the initiatives of the national EPA Environmental Justice Strategy, the OPPT Tribal Strategy, the international Arctic Monitoring and Assessment initiative, the Office of Radiation and Indoor Air, and EPA's Office of International Affairs.

The project incorporates tribal cultural perspectives and traditional knowledge in order to protect the vulnerable subpopulation of 227 Aleut, Eskimo, and Indian Tribes whose diet consists of up to one-third wild harvests of marine mammals, large land animals, and fish. TASSC will employ a team of EPA and tribal staff to sample and analyze subsistence food harvests contaminated with PBT chemicals. With sample analyses, TASSC can disseminate the results of the PBT screening tool and better communicate information to the tribal population regarding the location and levels of PBT contamination. TASSC will assess the program's performance by evaluating the screening tool for its applicability throughout Alaska. For more information on this project, contact Fran Stefan, EPA Region 10 at 206-553-6639 or stefan@epa.gov.

Subsistence Foods and Tribal Initiatives

From the Office of Pollution Prevention and Toxics

Drumbeat for Mother Earth

Many scientists and tribal people consider persistent toxic chemicals to be the greatest threat to the long-term survival of Native Americans. These chemicals contaminate the traditional food web, violate treaty rights, travel long distances, and pass from one generation to the next during pregnancy, which leads to cancer, learning disabilities, and other serious health problems. Continued survival within an environment contaminated with these chemicals means making life and death decisions that could alter whole cultures, diets, ceremonies and future generations. "Drumbeat for Mother Earth" is a video and factsheet program, produced by the Indigenous Environmental

Network and Greenpeace U.S. Toxic Campaign, which explores persistent toxic chemicals.

Indigenous Peoples' connection to the Mother Earth places them on a collision course with these chemicals. With the help of tribal groups, scientists, activists, and the chemical industry, the video and factsheet attempts to explain what persistent organic pollutants are and how they impact all populations with particular emphasis to native people. In November 1999 the video received the "Best Public Service

Film Award" at the American Indian Film Festival and the "Best Environmental/Social Justice Film" award at the Earth Vision 99 Santa Cruz Environmental Film and Video Festival. To receive your copy of the video and factsheet, contact the Greenpeace U.S. Toxic Campaign at 800-326-0959 or the Indigenous Environmental Network at 218-751-4967.



Wild Rice: Ecology, Harvest, and Management

The Great Lakes Indian Fish and Wildlife Commission, along with the Wisconsin Department of Natural Resources, and other national and state agencies, recently developed an informative brochure, Wild Rice: Ecology, Harvest, and Management, that documents the importance of wild rice and explains the nature of the subsistence food.

Wild rice, also referred to as manoomin, is the only natural grain native to North America. Within its core range of Minnesota and northern Wisconsin, wild rice provides food for waterfowl, moose, snails, and muskrats, as well as humans, and helps to maintain water quality by binding loose soils, confining nutrients, and slowing winds across shallow wetlands.

Because of its significance and natural sensitivity to water flow, water levels, and turbidity, wild rice has been the focus of many tribal and environmental initiatives promoting abundance monitoring, restoration and enhancement, harvest monitoring, and research. For more information regarding harvest regulations and management initiatives, please contact the Wisconsin Department of Natural Resources at 608-266-2621, the Minnesota Department of Natural Resources at 800-776-6000, or the Great Lakes Indian Fish and Wildlife Commission, at 715-682-6619. You can also obtain copies of brochure from the Great Lakes Indian Fish and Wildlife Commission.

Subsistence Foods and Tribal Initiatives

From the Office of Pollution Prevention and Toxics

Wild Rice Restoration Featured in Circle of Flight

The Bureau of Indian Affairs, inter-tribal organizations, and Midwest Region reservations, have produced their fiscal year 1999 wetland and waterfowl enhancement initiative and accomplishment report, *Circle of Flight*. The *Circle of Flight* publication features 24 tribal and inter-tribal success stories of wild rice restoration and wetland and waterfowl enhancement projects, including the projects briefly described below.

Bay Mills Wetlands & Wild Rice Enhancement

The Bay Mills Indian Community, managing approximately 770 acres of wetlands in the Eastern Upper Peninsula of Michigan, has been seeding in lakes and waters since 1993 and has since improved rice beds areas and identified future seeding activities.

Lac Vieux Desert Wild Rice Restoration Project

The Lac Vieux Desert Band of Lake Superior Chippewa Indians has been restoring the 5,000-acre Lake Lac Vieux Desert since 1991 by planting several hundred pounds of rice throughout its bays and fringe areas in addition to nearby rivers and lakes. With the support of the Great Lakes Indian Fish and Wildlife Commission and the Ottawa National Forest, the community also has researched ways to better enhance the area and reduce water level fluctuation.



Bois Forte Nett Lake Wild Rice Restoration and Development

In 1997, the Bois Forte Department of Natural Resources purchased 2,000 pounds of Nett Lake rice from band member harvesters and reseeded the grain in weak and non-productive rice beds to enhance wild rice development. The department also has monitored water level management, restricted access to weakly-producing rice beds, and redistributed wild rice seed to improve rice bed coverage throughout the area.

Fond du Lac Wild Rice and Wetland Restoration Project

The Fond du Lac Band of Lake Superior Ojibwe is working to place four water control structures and a large berm on Rice Portage Lake to restore wild rice and wetland areas. With help from the Minnesota Department of Natural Resources, the U.S. Fish and

Wildlife Service, and many other sponsors and environmental organizations, dams will help to replenish drained areas of the lake and improve hydrology to Deadfish Lake.

Grand Portage Mount Maud Lake Wild Rice Restoration

In 1998 the Grand Portage Reservation restored Mount Maud Lake to historical water levels, reclaiming 79 acres of wild rice beds for migratory waterfowl and subsistence use.

1854 Authority Wild Rice Research and Management

In 1998 the 1854 Authority developed a wild rice action plan that identified 10 rice lakes in the 1854 Ceded Territory for long-term monitoring, including measurement of water level, quality, and temperature; rice coverage, density, height, and tiller counts; and several other factors relating to the quality of rice beds. The authority will later purchase equipment needed to continue data monitoring and improve analysis with GIS.

Lac Du Flambeau Waterfowl and Wild Rice Enhancement

The Natural Resource Program has worked to obtain survey data at the proposed Sugar Bush Creek Impoundment during 1999 by estimating flooding potential through modeling, determining embankment requirements, preparing specifications for the dam and spillway, and estimating construction

Subsistence Foods and Tribal Initiatives

From the Office of Pollution Prevention and Toxics

costs. The program will also perform general maintenance of levees and water control structures, seed wildlife openings, relocate Canadian geese, and reseed wild rice lakes.

Lac Courte Oreilles Billy Boy Flowage Enhancement

In 1998 the Lac Courte Oreilles Conservation Department seeded 703 pounds of local wild rice in 11-12 acres on the Billy Boy Flowage. The Lac Courte Oreilles Conservation Department also worked to restrict boating in this area and to protect the wild rice plants during the floating leaf stage in order to restore waterfowl habitat and wild rice beds.

Menominee Waterfowl Management and Wild Rice Projects

In 1998, water control structures were built and over 2,200 pounds of wild rice seeds were planted in the Minnow Creek and the South East Pine Lake Waterfowl Management areas to provide valuable breeding and migration habitat for waterfowl, beavers and otters, and white-tailed deer. In addition, a concrete weir was installed to raise and lower water levels at different times of the year, and the introduction of wild rice seed provided a food source for waterfowl migrating to the Camp 19/Old Railroad Grade Waterfowl Management area.

Sokaogon Chippewa Wild rice Ecology and Management Project

To enhance wild rice production, the environmental staff of the Sokaogon Chippewa com-

munity reseeded the 400-acre Rice Lake and will continue monitoring the effects of changing water levels, soil types, and water chemistry.

Red Cliff Circle of Flight Accomplishments, 1991 – 1998

Wild Rice has been seeded at four sites, totaling over 25 acres, to restore wild rice beds and waterfowl habitat. Red Cliff also completed construction of waterfowl nest structures and seeded corn and millet food plots.

Great Lakes Indian Fish and Wildlife Commission Ceded Territory Wild Rice Enhancement and Research

Along with assisting the construction of water control structures and impoundments, the Great Lakes Indian Fish and Wildlife Commission coordinated the seeding of approximately 8500 pounds of wild rice in various locations to restore wild rice abundance and placed boat landing signs on selected waters advising boaters to use precaution near wild rice beds.

In addition to rice restoration, *Circle of Flight* highlights the following wetland and waterfowl enhancement projects:

Bay Mills Indian Community Waterfowl Enhancement Projects
Grand Traverse Band Waterfowl/Wetland Enhancement
Keweenaw Bay Haataja and Dynamite Hill Wetland Acquisition
Keweenaw Bay Trumpeter Swan

Introduction and Monitoring
Little River Band
Peters Bayou Manistee State Game Area
Fond du Lac Ceded Territory
Stony River Riparian Willow Project
Leech Lake Goshawk Nest Protection
Leech Lake Maintenance of Circle of Flight Projects
Leech Lake Native Seed Source Development for Upland Planting
Mille Lacs Niish Minis
Waabashkiki Restoration Project
Red Lake Farm/Kiwosay Wildlife Habitat Restoration Project
Upper/Lower Sioux Hank's Lake Wetlands
Shakopee Mdewakanton Dakota Community Mystic and Arctic Lake Wetlands Project
White Earth Pembina Wetland Restoration
White Earth Sugar Bush Upland Enhancement
White Earth Twin Lake Creek Wetland Restoration/Upland Enhancement
Bad River Wetland Monitoring
Oneida Wetland Enhancement
Red Cliff Waterfowl Enhancement Project
Great Lakes Indian Fish and Wildlife Commission Ceded Territory Wetland Management Projects

Subsistence Foods and Tribal Initiatives

From the Office of Pesticide Programs

Wild Rice Ecosystems Management in Minnesota

Submitted by Subijoy Dutta, US EPA, and
Larry Schwarzkopf, Fond du Lac Resources Program

With the construction of water dams and the evaluation of wild rice conditions and trends, the Fond du Lac Natural Resources Program has implemented the Fond du Lac Rice Portage Wild Rice Restoration Project. The project will help the Natural Resources Program to protect, maintain, and enhance wild rice lakes within the Fond du Lac Reservation in Minnesota.

Wild rice has been of great cultural and spiritual importance to the Fond du Lac Band of Lake Superior Ojibwa for hundreds of years, and members have worked hard to protect the valuable resource. In the early 1900s, a judicial ditch was constructed throughout the area to remedy early drainage and water control problems. However, the ditch system lowered lake levels significantly on the wild rice lakes, and hundreds of acres of wild rice stands were eliminated because the lower water depth allowed competing wetland vegetation to grow in its place. Rice Portage Lake, one of five area lakes, was especially affected by the drainage as its original area of 634 acres was diminished to only 114 acres of open water for wild rice production. The ditch system also altered the natural hydrological characteristics of the upper Stoney Brook watershed, and lower lake levels resulted in a reduced discharge



capacity for the ditch system, which was often a problem after summer rainstorms. To correct these existing problems, the Program has constructed four water control structures and a flood retention impoundment to control ongoing vegetation and restore wild rice stands. The reservation's vegetation control equipment and a new aquatic weed harvester has also been used to convert several acres of floating cattail mat on Rice Portage Lake and to remove other plants and weed from area lakes.

Also, the Fond du Lac Natural Resources Program and Environmental Program have combined scientific and resource management information with cultural knowledge of wild rice to collect water quality data and research plant communities. The water quality parameters

assessed in local wild rice lakes included pH, phosphorus, nitrogen, dissolved oxygen, color, turbidity, iron, alkalinity, and sulfate. Results show that wild rice can grow in a pH range of 6.4 to 10.1. Phosphorus enhances plant production and was found in concentrations of 30 to 100 mg/L, while orthophosphorus varied widely from 0 to 80 mg/L. Excess phosphorus, however, can promote perennial aquatic competitors to the detriment of the wild rice. Nitrogen, which is used and recycled in the rice lake environment, ranged from 0.1 to 4.0 mg/L, and dissolved oxygen concentrations ranged from 8 to 12 mg/L, typically during the Spring. Iron concentrations in wild rice plant tissue ranged from 0.1 to 3.0 mg/L. In the bays of Leech Lake, however, iron concentrations were gener-

Subsistence Foods and Tribal Initiatives

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ally less than 0.1 mg/L. In addition, wild rice tolerates a wide range of alkalinity, 5 to 250 parts per million, but is not found in waters high in sulfate salts. Throughout the Fond du Lac region, sulfate concentrations ranged from 0.05 to 12 parts per million.

Also, wild rice generally grows in water depths of 0.5 to 6.0 feet, while water levels are at their highest during the months of April, May, and June. Water turbidity ranges from 0.5 to 500 NTU, and water color ranges from 50 to 300 Pt-Co.

Wild rice competes with a variety of plants in the ecosystem, including emergents, submergents, and floating plants. Emergents include the cattail, burreed, bulrush, pickerelweed, and arrowhead. Submergents include the coontail, pondweed, milfoil, and wild celery. Finally, floating plants include the yellow and white lily and the duckweed.

The Fond du Lac Environmental Program also initiated a recent project to study the effects of mercury, lead, cadmium, copper, and aluminum on the germination and early growth-state of wild rice throughout area lakes. The study was initiated to address the concerns of contaminant levels in potential mine runoff from a proposed copper mine in central Wisconsin and confirmed that certain metals have an adverse

effect on wild rice. Concerns leading up to this study also were based on the Program's unsuccessful efforts to restore hundreds of acres of wild rice stands in the lower St. Louis River estuary five years ago. At that time, the project was conducted to study the decline of the wild rice stands, and seeds were planted in the area to restore wild rice beds. Several potential stressors, including mercury contamination, prevented successful germination, and most of the remnant wild rice plants were stunted and in poor condition.

The Ojibway people have protected and managed wild rice lakes for centuries, and will continue to be at the forefront of efforts to protect, study, and manage this invaluable resource throughout the region. With scientific research, careful management of the water control structures, protection of the watershed, and vegetation conversion and removal, the Fond du Lac Natural Resources Program, along with the Environmental Program, will restore these lakes to their historical abundance of wild rice.

A Native American Subsistence Scenario

Stuart Harris, Confederated Tribes of the Umatilla Indian Reservation, has developed a multipathway exposure scenario based on traditional subsistence activities for use at the U.S. Department of Energy, Hanford, WA. Hanford is located in southeastern Washington on land where residents with a traditional lifestyle are 2 to 100 times more exposed to radioactive and chemical contamination compared to a suburban resident living in the same location. If water is contaminated and used in a sweat lodge, this becomes a major route of exposure as well. Stuart has also developed metrics for cultural risk assessment that reflects traditional perspectives based on traditional environmental knowledge, ecosystem assessments, and Comparative Risk. To gain more knowledge regarding the exposure scenario, contact Stuart Harris at 541-278-5211, stuartharris@ctuir.com, or Barbara Harper (Yakama Nation) at 509-946-0101, bharper@nwinfo.net

Subsistence Foods and Tribal Initiatives

From the Office of Pesticide Programs

Native Subsistence in a Toxic Environment: A Tribal Viewpoint

By Chuck Striplen, *Mutzun Ohlone Tribe*

In coastal northern California, the Yurok Tribe, along with the Hupa, Karuk, and Tsnungwe Tribes, occupy lands near the Klamath River, and combined, these tribes represent the densest population of aboriginal peoples in the entire state of California. When persistent chemicals are introduced into their environment, they contaminate forests and rivers and eventually cause health problems or diseases in subsistence hunters and gatherers.

Tribal members consume deer, elk, salmon, sturgeon, steelhead, lamprey eels, mushrooms and acorns, in addition to wild and medicinal plants, directly from local forests and rivers as at least 50 percent of their diet. Many members also burn beargrass for the best basket materials, or collect acorns to make soup or bread. Among the 250-300 basketmakers in the state, many gather their own materials from the forests and along roadsides. They must also clip, transplant, and seed materials during the year, and therefore, are exposed to human carcinogens every time they practice this culture.

Many toxic chemicals enter the local environment when pesticides and herbicides are used to manage timberlands and county roadways. An approximate total

of 2400 gallons of pesticides was applied to privately held timberlands in Humboldt County in 1998. In addition, 132,000 gallons of liquid-form herbicide and 91,000 pounds of dry weed killers are applied by the California Department of Transportation and county road agencies to their roadsides in a typical year. An average of about five gallons of liquid-form and more than two pounds of dry herbicide is applied per mile along the 15,000 miles of highways in the local area. Also, 51 of the state's 58 county governments utilize at least one pound of dry-form and one gallon of liquid-form herbicide per mile to kill weeds along the 64,000 miles of roads under county management in the state of California.

Are pesticides and herbicides "killing" Native Americans in California? Frankly, there's not enough evidence to say if this is true. While these toxic chemicals may have passed rigorous tests to estimate their effects on the human body, none of these "special" exposure scenarios take into account the fact that someone may actually eat two to three hundred pounds of salmon, sturgeon, deer, or elk in a given year. Tribal members are concerned about their exposure to these pesticides, which is not the



same as that of the average American.

If we're going to accept that these chemicals, many known to be carcinogens or endocrine disrupters at certain doses, are going to be sprayed by the metric ton in areas which may put local residents at risk of exposure, we need to know their effects. For example, a disproportionate number of Native American residents in Humboldt County have been diagnosed with cancer, and studies are needed to determine if the reported cases are caused by pesticides, leaking mines or UST's, diet, or smoking, or if it's caused by a combination of them all. It is important for federal, state, local, and tribal governments alike to remember that subsistence hunting and gathering is still a reality for many people. Far more than just a "lifestyle", subsistence should be viewed as one of the strongest mechanisms for cultural survival and as a model for land stewardship.

Subsistence Foods and Tribal Initiatives

From the Office of Pesticide Programs

Focus on Tribes: The Miami Tribe of Oklahoma

By Carl Etsitty, Office of Pesticide Programs

The struggle for existence is a constant historic reminder for members of the Miami Tribe of Oklahoma, currently located in the northwest of Ottawa County, Oklahoma. Since signing the Greenville Treaty with the United States in 1795, the tribe has been working to improve enrollment and to revitalize sovereignty. The Miami Tribe of Oklahoma has initiated various tribal programs to resolve and prevent continued ecological destruction and to help preserve resources for future generations, including Housing and Home Improvement, Tribal Library/Archives, Daycare, Title VI, Language Restoration, and the Environmental Department. Specifically, subdivisions of the Environmental Department, namely Water Quality, Wetlands Management, and Environmental Education, are addressing the effects of lead and zinc mining in the north-central county. Elevated levels of lead and zinc were reported in children and surface/ground waters of the local area, which has been classified as an EPA Superfund Site. The tribe also is actively seeking and engaging in clean up efforts to avoid and prevent further human and ecological damage.

Over 90 percent of the tribal land is utilized for agricultural production of primary food

sources and row crops, such as nuts, berries, corn, squash, wheat, grain sorghum, soybeans, and corn. Beef cattle are the primary livestock, and the native pecan is the primary horticultural crop. Therefore, in addition to clean-up efforts, the Environmental Department is researching and identifying agricultural practices that may adversely affect the local environment. The tribe is progressively researching the level of soil degradation from continuous land farming and heavy metal contamination and is also implementing integrated pest management techniques to help reduce and transform damaged areas into viable productive agricultural land.

By establishing an armorship of resources and visioning a continuous existence with Mother Earth, the Miami Tribe of Oklahoma is taking advantage of instilled principles for a better tomorrow.

For more information about the Miami Tribe of Oklahoma and the tribe's integrated pest management approaches, contact Carl Etsitty, OPP, at 703-605-0749 or etsitty.carl@epa.gov and Marilyn Rogers, Miami Tribe of Oklahoma Environmental Department, at 918-542-1445 or epagap@2dogs.net.

EPA Helping to Reduce Drifting Pesticide Sprays

By Jay Ellenberger, Office of Pesticide Programs

The drift of pesticide sprays during application can expose people, wildlife and the environment to pesticide residues, causing health and environmental effects and property damage. For these reasons, OPP staff have been working with others, including the late Conner Byestewa Jr. of Colorado River Indian Tribes, on a number of activities to help reduce the occurrence of such problems.

Each year there are thousands of reported complaints of off-target spray drift and pesticide releases that affect farm workers and harvesters, children playing outside, and wildlife. The proximity of individuals and sensitive sites to the pesticide application, the amounts of pesticide drift, and toxicity of the pesticide can also determine the potential impacts from drift.

While working with representatives from federal and state government agencies, pesticide applicators and manufacturers, and tribes in the National Coalition on Drift Minimization, EPA hopes to improve awareness and education on drift reduction and to identify needed research and regulatory actions to reduce exposures. EPA also is sponsoring a number of programs that restrict pesticides use, provide certification and training programs, and enforce pesticide laws. For more information on pesticides spray exposure, contact NPTN at 1-800-858-7378 or Jay Ellenberger at (703) 305-7099 or ellenberger.jay@epa.gov.

Subsistence Foods and Tribal Initiatives

The Traditional Knowledge and Radio Nuclides Project

By Fran Stefan, EPA Region 10

Alaska is home to 227 Aleut, Eskimo, and Indian Tribes, and up to 1/3 of Alaska's traditional diet comes from sea mammals, large land animals, fish, and birds. Yet, Alaskan tribal communities worry that their subsistence foods are no longer safe to eat and are contaminated with toxic pollutants, such as radio nuclides. Therefore, EPA's Office of Waste and Chemicals Management and Office of Radiation and Indoor Air co-sponsored a three-year grant for the Alaska Native Science Commission (ANSC) and the University of Alaska Institute of Social and Economic Research (ISER) to address issues of contaminants in the subsistence food chain. The ultimate goal of this three-year Traditional Knowledge and Radio nuclides project is to build capacity among Alaskan, federally-recognized tribes and to clearly identify and address their concerns about radio nuclides, other contaminants, and adverse changes in their environment.

During the project's first year in 1999, ANSC and ISER hosted a series of Regional Talking Circles throughout the region to discuss the following concerns of tribal leaders, hunters, and environmental experts:

- ▶ Warming trends and climate changes
- ▶ Changes in migratory patterns
- ▶ Observations of abnormalities in wildlife, such as lesions in salmon, herring, and whitefish
- ▶ Declining populations of herring, shellfish, and halibut
- ▶ Caribou with swollen joints and massive abscesses
- ▶ Fewer seals, hairless seals, and ineffective seal blubbers
- ▶ Off-tasting Labrador tea leaves used to treat everything from arthritis to an upset stomach
- ▶ Diminished health of tribal members diagnosed with cancer and asthma.

During fiscal year 2000, ANSC will host six, additional Regional Talking Circles so that tribal participants can review and evaluate a new synthesis document which describes key findings on contaminant research from the Arctic research community. Simultaneously, ISER will present the Arctic research

"Decisions that will affect people in a community should be made by community members and based on Traditional Knowledge as well as science. Failing to do so can have disastrous impacts. In the 1970s, residents of two Northern Ontario reserves were advised to limit consumption of mercury-tainted fish. The advice ignored the benefits of traditional food and resulted in severe social, economic and health problems."

Mary Teya, Dene Elder, Fort Good Hope
Elders/Scientist Retreat 1998

community with tribal findings derived from the Talking Circles. Based on these two streams of knowledge, tribal and Arctic scientists will gather in September 2000 to frame an Arctic Research agenda and to discuss ways to combine Native and western knowledge and areas where it is important to respect the differences. The September 2000 Arctic Research agenda will also serve to stimulate an influx of funding to federally-recognized tribal governments to support research and monitoring in their communities. To initiate funding, the Traditional Knowledge and Radio nuclides project will award \$6000 - \$10,000 each as small grants for 15-30 research projects and activities.

Finally, the Traditional Knowledge project will invite everyone who has participated in this effort to a statewide meeting in fiscal year 2001 to critique and review the effectiveness of the project and to recommend additional activities to protect human health and the subsistence environment in Alaska.

As part of this project, EPA's Fran Stefan, ANSC, and ISER have also compiled the Traditional Knowledge and Native Foods Database, available at <http://shiva.iser.uss.alaska.edu/knowledge/db>. This interactive database, which is continuously updated with new information, can be used to review tribal perspectives and western scientific findings on contaminant issues and harvest and nutritional information and contains links to other databases. For more information about the Traditional Knowledge and Radio nuclides project, please contact Fran Stefan at (206) 553-6639 or call the Traditional Knowledge hotline at 1-877-478- 2672.

Interview with Kory Groetsch

Kory Groetsch is an environmental biologist with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC). Currently, Groetsch is leading two research projects that will provide contaminant level data to local fishermen and fish processors to protect the sale and distribution of local fish in the Great Lakes and tribal members who consume them.

Q: Kory, please describe your projects.

A: With help from local fisherman and biologists, GLIFWC is analyzing filet tissues for toxic contaminants. Samples will be collected by local tribal fishermen and GLIFWC staff from four, popular species of commercially, processed fish in Lake Superior, specifically whitefish, lake trout, herring, and siscowet trout. The data will be disseminated to tribal fishermen and the public to improve the commercial processing and sale of healthy fish and to help establish processing guidelines for trimming and smoking fish, which may reduce the amount of chemical contaminants. To help tribal governments establish self-regulatory authority over the new seafood safety regulations administered by the U.S. Food and Drug Administration (FDA), test results will be available to tribal governments as they develop model safety codes that meet FDA regulations.

In the second study,

GLIFWC is also creating GIS maps that color code lakes based on concentrations of mercury found in filet tissue of walleyes from inland lakes. The GIS mercury maps are distributed to tribal fishermen so that they can utilize lakes with less contaminated fish and, therefore, distribute healthier food sources to women of childbearing age, expectant mothers, and young children. We are also expanding our distribution to other locations such as health care institutions, schools, and government assistant programs. GLIFWC will also exchange data with Minnesota, Michigan, and Wisconsin and include their state information when creating the GIS maps.

Q: What prompted the need for the research projects?

A: The issue of environmental contaminants in edible fish tissue became a national concern back in the 1960s, and the bioaccumulation of mercury in fish tissue has been a recognized problem since the late 1970s. Little research has addressed how commercial processing affects contaminant levels in filets from Lake Superior. As a result, GLIFWC decided to conduct research projects that use tribal-commercial processing methods, have a statistical experimental design so that data can be compared to FDA values, focus on popular fishing locations in Lake Superior, and use

current, scientific methods with an emphasis on quality control and quality assurance.

Q: What resources and contacts have you used to manage your projects?

A: Our projects have progressed with little or no problems thanks to the support of local tribal fishermen, biologist, and chemists within and outside of GLIFWC. We also received assistance from Michigan State University, the Michigan Department of Natural Resources, the Red Cliff Fisheries Department, the Keweenaw Bay Indian Community Biological Services Division, and tribal fisherman Ralph Wilcox and Joe Duffy.

Q: What difficulties do you foresee in communicating to the public the results of your projects?

A: It is hard to inform any group of people about chemical contaminants without causing alarm. Therefore, when presenting our findings, we must emphasize that 1) there are several species and sizes of fish from Lake Superior that have very low contaminant concentrations, 2) fish are a very healthy source of protein, and 3) the benefits of fish may outweigh the risk of contaminant exposure.

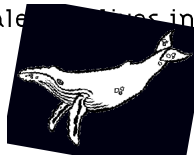
Alaska Natives and Subsistence Foods

Many Alaska Natives live a subsistence lifestyle. They do not buy their food in a grocery store. They hunt, fish, and gather plants and berries to provide their food.



Arctic people hunt caribou and moose for the good meat and warm hide. Caribou and moose are members of the deer family. Did you know that the moose is the largest member of the deer family?

Beluga is a kind of whale that lives in the waters of the Arctic. A



Beluga is not a fish but rather a mammal that breathes air, gives birth to its young, and is warm blooded. Native Alaskans who hunt for whales use every part of this large animal from the tusks to the blubber to the skin.



Alaska is home to the ferocious polar bear and the gregarious walrus. Polar bears live only at the very most northern tip of Alaska where they can remain next to the ice flows of the Arctic. Polar bears are great swimmers and will swim from ice flow to ice flow at a cruising speed of about 6 miles per hour. Some have even been seen 50 miles away from any ice or land. How do they keep warm in this frigid arctic environment?



The polar bear has a thick layer of blubber for insulation.

The arctic people in Alaska also use the walrus as a food source and will tan and oil the hide or skin to make durable covers for their umiak (walrus hide) boats. The ivory tusks are carved to create beautiful pictures and different



objects, like necklaces. Also, the bones are used to make spear heads. In the past native mothers would use the walrus blubber as a float for her baby by placing a stick through it sideways. The oil is also used for food and in oil lamps to help light and heat arctic homes.



Netting for fish provides the Native Alaskans with another source of food. Can you believe that there are over 20,000 different species of fish?



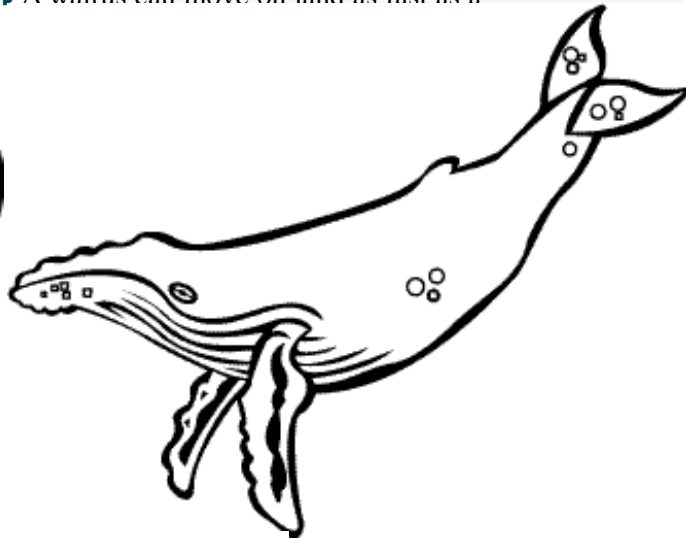
Berries and wild rice are gathered and used for food, and plants are used for medical purposes and for basket weaving. Wild rice is also used as a food source, and is harvested by tribal members. Wild rice is the only grain native to North America.

So as you can see, protecting the environment in Alaska is essential to maintaining subsistence foods and the way of life for the Natives.

Kids' Page



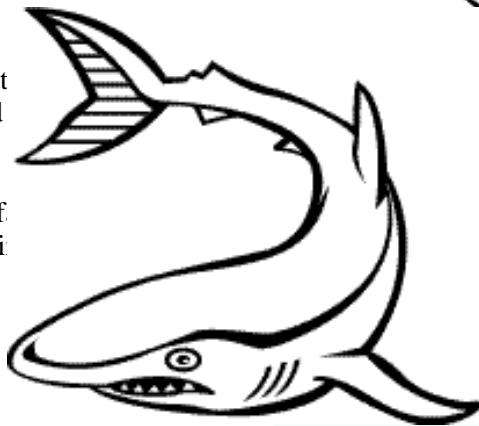
- ▶ The walrus has air sacs under their throats that they can fill like floatation bubbles and bob vertically in the water and sleep!
- ▶ A walrus can move on land as fast as a



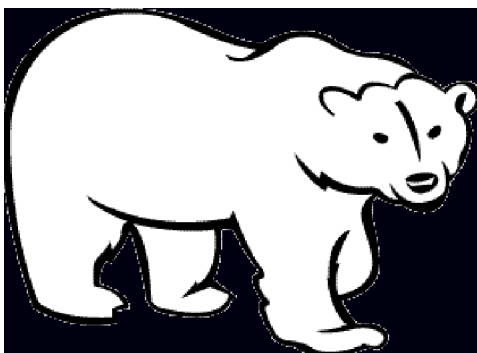
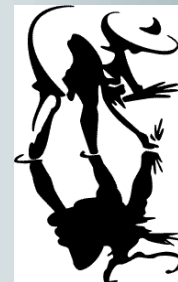
male whales are cows, male whales are called bulls, female whales are called

at the Blue Whale is the largest animal that has ever lived. Not even the largest dinosaur was as big as a blue whale.

- ▶ Did you know that tunas and some sharks swim as fast as 40 miles per hour in bursts?



- ▶ Wild rice was a staple food of the Souix and Chippewa
- ▶ Wild rice can be stored indefinitely in tightly sealed containers



- ▶ Polar bears travel through ice flows of the Arctic at a cruising speed of about 6 miles per hour.



- ▶ The moose is the Official State Animal of Maine. Do you know the official animal of your state?

Mark Your Calendars!

February 2000

8-11
**Office of Water
 BASINS Training Course**
 Utah State University
 Logan, UT
 Bryan Goodwin
 202-260-1308

March 2000

5-7
FOSTTA Conference/Meeting
Key Bridge Marriott
 Arlington, VA
 Darlene Harrod
 202-260-6904

14-16
**International Institute for
 Indigenous Resource
 Management**
Risk Assessment Workshop
 Denver, CO
 Barbara Harper, Stuart Harris,
 Merv Tano
 509-946-0101, 541-278-5211,
 303-733-0481

17-20
**Nevada Indian Environmental
 Coalition**
**Tribal Groundwater and
 Pesticide Management Plan
 Development Workshop**
 Reno, NV
 Lillian Wilmore, Ron Cooper,
 Irving Provost
 617-232-5742,
 406-585-3501,
 605-867-5264 or 5969

April 2000

8-11
**American Indian Higher
 Education Consortium,
 Spring 2000, 19th Annual
 Conference on Education**
 Albuquerque, NM
www.iaiancad.org/aihec/aihec2000.html
 703-838-0400

EPA Web Sites and Hot Lines

EPA	www.epa.gov
OPP	www.epa.gov/pesticides/
OPPT	www.epa.gov/opptintr
Pollution Prevention	www.epa.gov/opptintr/p2home
American Indian Environmental Office	www.epa.gov/indian
Asbestos Ombudsman Hotline	1-800-368-5888
EPCRA Hotline	1-800-535-0202
Lead Hotline	1-800-532-3394
National Pesticide Telecommunication (NPTN) Hotline	www.ace.orst.edu/info/nptn 1-800-858-7378
TSCA Hotline	202-554-1404