IPM in Schools Pilot Project Takes Off on Navajo Reservation

By Dr. Marc L. Lame, Entomologist

On May 17, 2001 a Tribal Integrated Pest Management in Schools pilot project, initiated by EPA's Office of Pesticide Programs and the Bureau of Indian Affairs (BIA), began in BIA school facilities on the Navajo Indian Reservation. The program began at the Eastern Navajo Agency (ENA) facility offices with a meeting of several members of the Navajo EPA, BIA facility managers, a contracted pest control operator

(PCO), and Dr. Marc L. Lame, the coordinator and IPM in Schools consultant.

Three BIA schools were chosen for the project initiation, including Crown Point Community School, Lake Valley School, and Mariano Lake School. At the initial meeting, participants discussed the conditions and elements necessary to implement a successful program, such as a committed school administration; obtaining an onsite program manager; conducting audits to document current pest problems, pesticide use, and cost of pest management; and training facility personnel.

The BIA schools and dorms are in good shape to develop as IPM models. The facilities are in







good condition regarding maintenance and sanitation, better than 75% and 85% of schools assessed, respectively. The "better than expected" conditions result from above average facility management and more frequent Indian Health Service(IHS) inspections for sanitation.IHS inspectors are very concerned about disease transmission.Also, the

community is aware of the Hanta virus and the sanitation and rodent exclusion

necessary for prevention.

Upon discussion and a cursory inspection, pest pressures were found to be relatively low. Flying insects, such as bees, wasps, and house flies, and spiders were not a problem in terms of presence or tolerance, and roaches were nonexistent. Harvester Ants and what residents call "Sugar Ants" were present and considered pests. Of real interest to entomologist types are the more than occasional head lice and bedbug infestations. Vertebrate pests, or rodents, did not seem to be a big problem.

All "bugs" are being treated with at least a bi-monthly, scheduled application of a pyrethroid, and the mouse baits are appro-

On-site implementers for the pilot program include Bob Villarreal. ENA Facilities Manager, Chad Bourgoin, ENA Environmental Specialist, and Robert Begay, the PCO. A successful program may be expanded throughout the Reservation with additional help from Debbie McBride (BIA); Herb Holgate, Jeff Biakeddy, and Calvert Curly (Navajo Nation EPA Pesticide Program); and Laverne Gene (EPA Region 9.)

priate. However, there is great potential to demonstrate drastic pesticide reduction under these conditions, particularly with the elimination of scheduled treatments in favor of "as needed and based on monitoring" treatments. OPP will continue to provide updates on this tribal pilot project. For more information on IPM in Schools or this tribal project, contact Marc Lame at 812-855-5249 or mlame@indiana.edu. 15

AEIO Tribal Baseline Assessment Project

EPA and tribal governments need sound information about the current environmental conditions in Indian country in order to make effective use of federal and tribal resources to support environmental planning and management in Indian country. EPA's American Indian Environmental Office (AIEO) began this Baseline Assessment Project in 1997 to gain more insight on environmental conditions in Indian country hoping to improve EPA's effectiveness at protecting human health and the environment and to provide a useful tool for tribal environmental managers.

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Early feedback on the Baseline Project from EPA's Tribal Operations Committee indicated a desire for EPA to summarize the existing federal data before requesting additional data from tribes.Therefore, the first phase of the project was to determine a way to extract tribe-specific information from EPA's national environmental databases since the databases were indexed according to state or county boundaries, not tribal boundaries.This phase resulted in the Tribal Information Management System (TIMS).

TIMS is a web-based information system that allows the user to access federal environmental information for specific tribes.Currently the system is on a developmental server and only accessible via EPA's Intranet with a username and password.Tribal governments will have the opportunity to review their information and provide comments before any information is released to the public.AIEO is preparing to conduct TIMS demonstrations at future tribal meetings. For more information, contact Ed Liu at 202-260-9872 or liu.ed@epa.gov, or Tonya Fish at 202-260-0769 or fish.tonya@epa.gov.

ORD Research on Children's Exposure to Persistent Pollutants

A pilot study of preschool children began this spring in Ohio by EPA's Office of Research and Development to better understand how young children are exposed to persistent pollutants, including pesticides.This is a pilot study, meaning further research on children will be needed to develop conclusions that can be applied to the entire population.

Preschool children are thought to have more frequent contact with pesticides and other pollutants than older children or adults because of their diet, exposure in play areas, and participation in outside activities. There is concern that children may be more sensitive to the toxic effects of some chemicals found in or on lawns, carpets, toys, furniture and many other items. As a result, there is a need to learn more about exposure and risks.

Endorsed by the National Head Start Association, the Ohio Department of Human Services, and several local child service agencies, the three year study will include approximately 260 children between the ages of 18 months and 5 years.Families will be required to supply samples of food and beverages consumed by their children, and scientists will collect samples of indoor and outdoor air, urine and hand wipes, and dust and play area soil.

EPA's National Exposure Research Laboratory in the Research Triangle Park, NC, is also conducting research to fill in the gaps in understanding children's exposure to environmental contaminants, as well as associated effects and assessment of risks to children. For more information, please contact Ann Brown, ORD Media Contact, at 919-541-7818, brown.ann@epa.gov.

New Research at the University of Colorado in Pesticide Removal from Cultural Collections

The research program in the Department of Biology at the University of Colorado at Denver has focused in the past on the use of naturally occurring microorganisms in the removal and detoxification of metals, such as lead and cadmium, and organics from polluted soils.Laboratories supporting the research program have recently studied the usefulness of these same microorganisms in the detoxification and removal of pesticides from contaminated cultural collections.

Microorganisms include bacteria and fungi, generally are not disease-causing, and are responsible for the degradation and recycling of plant and animal materials. Microorganisms also degrade and recycle some of the chemical pollutants being released into the environment. Extensive laboratory studies have shown that these microorganisms can reduce the toxicity of pesticides, often degrading or removing the pesticide entirely.The microorganisms either cause the pesticide to be chemically inactive, and therefore it's less likely to react with a biological system, or destroy the chemical, turning it into nontoxic by-products.

To date, there has only been an examination of microorganisms in mercury-containing solution studies. Experiments are now underway to determine the ability of isolates to volatilize mercury from contaminated materials, such as textiles. Eventually, tribes will participate in testing the procedure on actual artifacts to assess the effect of aged materials on the mercury removal.

With this research, there is hope to find a natural, environmental- and culture- friendly,

approach to remove pesticides from cultural collections.Future plans include evaluating arsenic and organic pollutant removal from objects using the same or similar microorganisms. For more information on this subject, please contact Dr. Timberley Roane, Assistant Professor, Department of Biology, CB #171, P.O. Box 173364, University of Colorado, Denver, CO 80217-3364, 303-556-6592, troane@carbon.cudenver.edu. You may also visit http://carbon.cudenver.edu/ public/biology/.



From July 10 - July 20, 2001 EPA is convening an online public discussion on improving public involvement in EPA decision-making. The Dialogue will be based on the EPA's newly drafted Public Involvement Policy. Join interested citizens, representatives of industry, environmental groups, small businesses, states, local governments, tribes, and other groups to learn more about the draft policy and to share your thoughts and concerns regarding how EPA should implement this policy.

For more information, please contact Patricia Bonner, US EPA, at bonner.patricia@epa.gov or Information Renaissance at 888-638-5323 or epa@network-democracy.org. To participate in the online public discussion, register at http://www.network-democracy.org/epa-pip.



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Floodwater Farming in Southwestern North America

By Gilbert Two/Two, Tohono O'odham Nation

Subsistence farming, or farming with the use of flash-flood waters, has played an important role in the lives of the native population in the arid Sonoran Desert area of Arizona.Arizona's, Tohono O'odham Tribe derived a considerable part of their livelihood from subsistence farming by allowing the waters to irrigate their crops naturally. The O'odham tribe learned to plant where both rain and runoff are concentrated and held by the use of bound weirs, low embankments, dikes, and dirt ditches.This agriculture enables them to grow ancient crops that produce a useable harvest on fewer inches of rainfall compared to other agricultural areas in the world.

Traditional floodwater farming methods are used less frequently today. As a high risk system, floodwater farming is no longer competitive with conventional irrigation agriculture. O'odham families also believe that the elderly masters of flood farming water control are dying, and a smaller percentage of the young are learning the basic skills. Food production however remains viable in arid lands with modern agricultural methods. But as ground water pumping cost increase, and therefore, continue to affect crop production economics in arid lands, floodwater farming has been utilized more often across the O'odham Nation by merging the traditional techniques with the conventional irrigation methods. For example, in periods when storm events are more probable, in July through August and December through January, floodwater-charged ecosystems are used to produce crops with higher protein contents and more physiological drought and heat tolerance than crops grown under conventionally irrigated fields.

With assistance from USDA, communities continue to carry out activities that increase conservation of natural resources, support economic development, and enhance the environment and standard of living. For more information, please contact Gilbert TwoTwo, District Conservationist, Tohono O'odham Nation, at SWCD P.O. Box 577, Sells, Arizona 85634-0577, 520-383-2851, 520-383-3445 (fax), gilbert.twotwo@az.usda.gov.

STAR Research Capsules

EPA's Science to Achieve Results (STAR) extramural research program addresses all major research priorities of EPA and focuses on important scientific issues facing our nation. "Capsules," listed in the box below, were developed at the request of EPA program and regional offices, and present some of the topics that relate to areas where STAR researchers are working. Within each topic area, all grants or other National Center for Environmental Research (NCER) research pertaining to that specific scientific issue, such as "Mercury," are described in summary form. Descriptive information and links to the NCER web site are provided for more information, including abstracts, progress reports, final reports, and publications when available. In addition, web links to other agencies and/or EPA offices are provided for a more complete picture of research in a specific topic area.For more information, visit, http://es.epa.gov/ncerqa/publications/topical/. (Source: EPA's National Center for Environmental Research-STAR research capsules)

Algal Blooms Research Children's Health **Dioxin Research** Drinking Water Ecological Assessment and Indicators **Fisheries Research** Great Lakes Research Mercury Research Mining Impacts Research NOx Research PCB Research Pesticide Bio- and Phytoremediation Pesticide Removal and Agricultural Impacts Research Remediation Research Pesticides and Human Health Research Sediments Research Urban Sprawl Research



Tribal Medicine Project Visits Inland Pacific Northwest

By David F. Goldsmith, MSPH, PhD, George Washington University

EPA's Office of Pesticide Programs is supporting a Tribal Medicine Project with George Washington University focusing on pesticide and health issues affecting tribal communities. The program focuses on health care provider outreach in the area of pesticide-related medical conditions and pesticide sampling on tribal lands. The Tribal Medicine Project seeks to bring EPA's preventive medicine focus to pesticide-related training of health care providers in tribal communities. The environmental sampling is an attempt to characterize pesticides used on tribal lands and the possible routes of exposure to better inform the health care providers.No human health effect studies are being conducted.

On April 23, 2001, a Tribal Medicine Project planning meeting was held in Spokane, Washington to discuss possible collaboration for both sampling and a health training workshop. Thanks to EPA Region 10 **Circuit Rider Pesticides** Enforcement Coordinator, Eric Gjevre, invitations went to the Colville Tribe, Kootenai Tribe, Nez Perce Tribe, Coeur d'Alene Tribe, Spokane Tribe, Kalispel Tribe, Indian Health Service in Portland, and the Bureau of Indian Affairs.Common concerns among the tribes include pesticide applications, including aerial applications, and anecdo-

Attending Tribes and Meeting Contacts

- Coeur d'Alene Tribe, Eric Gjevre, Director of Natural Resources, P.O. Box 408, Plummer, ID 83851-0408, 208-686-5507
- Kootenai Tribe of Idaho, Adrienne Bourgeois, Environmental Director, P.O. Box 1269, Bonners Ferry, ID 83805, 208-267-3519
- Colville Confederated Tribes, Deb Louie, Member Tribal Council, Maurice Socula, Environmental Protection Office, Matt Boyd Jr., Environmental Health Specialist; Gary Desautil, P.O. Box 150, Nespelem, WA 99155, 509-634-2312.
- Nez Perce Tribe, Jennifer Williams, Environmental Specialist, ERWM Program; Julie Simpson, Air Quality Program;P.O. Box 365, Lapwai, ID 83540, 208-843-7375, ext. 2444; Becky Wilson-Simpson, PHN, Community Health Supervisor-Nimiipuu Health, P.O. Drawer 367, Lapwai, ID 83540, 208-843-7303, ext. 2492.

tal reports of asthma and other respiratory complaints.Other issues of concern include pesticides in irrigation water and impacts on fisheries, especially salmon, and long standing differences about tribal sovereignty regarding regulations.

The Tribal Pesticide Program Council was briefed on the status of this project at its most recent meeting in March 2001 in Crystal City, Virginia. For more information on the Tribal Medicine Project, contact David F. Goldsmith, MSPH, PhD, Department of Environmental & Occupational Health, George Washington University, 2300 K Street, Suite 201, Washington DC20037, 202-994-1734, 202-994-0011 (fax), eohdfg@gwumc.edu.



Winds of Change Magazine

There are many interesting sources of information available today that feature a wide variety of Indian issues and focus specifically on environmental and public health problems that tribal nations have encountered over the last decade.Many different mass media formats, such as television, radio, the Internet, newspapers, and magazines, are used to discuss these important issues and events, and many printed resources are being created by tribal organizations and indigenous peoples, environmental organizations and tribal

and non-tribal governmental entities.

One available resource is the *Winds of Change* magazine, devoted to American Indian Education & Opportunity. It is the only nationally distributed, full color magazine published by and for Americans Indians.Many of the articles in this magazine feature ongoing environmental projects and offer a native perspective on environmental issues and concerns.The magazine is beautifully illustrated through original native artwork, and the graphics make each issue a keepsake.*Winds of Change* is being published quarterly by AISES Publishing, Inc., which is associated with the

American Indian Science and Engineering Society. For further information, visit www.winds.uthscsa.edu or contact the editors of *Winds of Change* at 4730 Walnut, Suite 212, Boulder, Colorado 80301, 303-444-9099.





In the Light of Reverence, Indian Films on PBS

On Tuesday, August 14th, 2001 at 10:00 PM, tune in to PBS for a special screening of the award winning new documentary, *In The Light of Reverence*. This film is part of the "Point of View" showcase,

"...This beautifully-crafted film is a wake-up call for everyone who cares about the environment and human rights..." —Robert Redford

an acclaimed series of independent films airing on PBS.

In The Light of Reverence documents the Native American struggles to protect landscapes of spiritual significance. The film tells the stories of three communities and the places they hold sacred, such as the Lakota at Devils Tower in Wyoming, the Wintu at Mt. Shasta in California, and the Hopi in the Four Corners area of the Southwest. *In the Light of Reverence* also shows the obstacles to religious freedom for land-based practitioners and the impact on sacred landscapes that range from mining to ski resorts. The film is narrated by Peter Coyote and Tantoo Cardinal.

In the Light of Reverence has been honored with the Best Feature Documentary award at the American Indian Film Festival in San Francisco, and is expected to receive The Eagle Award at the Taos Talking Pictures Festival.For more information, please contact Christopher (Toby) McLeod, Sacred Land Film Project, Earth Image Films, P.O. Box C-151, La Honda, CA 94020, 650-747-0685, 650-747-0750 (fax), eif@igc.org or visit www.sacredland.org.

In the Light of Reverence Screening Schedule

- First Peoples' Festival 2001, Montreal, Canada, June 14, 2001, 9pm
- Native American Journalists Association Annual Meeting, Adam's Mark Hotel, Buffalo, NY, June 15 –17, 2001, Time TBA
- Berkeley Community Theater, Schwimly Little Theater, Berkeley, CA, June 30, 2001, 3:30pm
- Smithsonian's National Museum of the American Indian, New York, NY, August 2, 6pm, and August 4, 2pm

Pollution Prevention Incentives for States

The Pollution Prevention Incentives for States (PPIS) Grant Program provides matching funds to states and tribes to support pollution prevention activities and the development of state and tribal environmental programs.

Quick Facts

What type of program is it? Matching grant program. What's the purpose? Promote pollution prevention through technical assistance and training, outreach and education, regulatory integration, demonstration (or pilot) projects, and awards recognition.

Who's eligible? Federallyrecognized Indian tribes, state government agencies, state universities, the District of Columbia, and U.S. territories. How much funding is available? Funding may vary and is subject to availability each fiscal year; approximately \$5 million in grant and cooperative agreement funds is available for FY 2001-2002.

What do I need to submit? Interested applicants must submit a proposal and other application materials; detailed information can be obtained from listed contacts.

Background

The concept of pollution prevention has been a primary focus of environmentalists and EPA for over twenty years. Because they have specific information on pertinent environmental issues needing to be addressed within their own communities, EPA encourages states and tribal communities and their leaders to play a primary role in working with industry, local governments, and the public in obtaining pollution prevention goals. As a result, in 1989 EPA established the Pollution Prevention Incentives for States Grant Program with goals of:

- Building pollution prevention capabilities within state, local, and tribal governments
- Testing innovative pollution prevention approaches and methodologies
- Fostering coordination and exchange of information between federal agencies, tribes, state and local governments, and the private sector
- Targeting high-risk environmental problems in sectors that are traditionally addressed by EPA, such as agriculture, energy, and transportation
- Leveraging EPA resources through seed money and well-targeted grants.

Application Requirements and Information

Eligibility

Federally-recognized Indian tribes, state agencies, state universities, the District of Columbia, and U.S. territories are eligible to apply. Local governments, private universities, private non-profit organizations, and individuals may not receive grant funds. By teaming or partnering with other eligible state or tribal programs, local governments and private groups can receive funding.

Application

Applications and proposals should include proposed objectives or plans addressing state or tribal pollution prevention capabilities; cross-media transfer of pollutants; state or tribal community pollution prevention goals and/or needs; integration with other state, tribal, or federal programs; measures of success; and long-term funding mechanisms.

Application Submission

Because application procedures and schedules are determined by each EPA Region, Regional PPIS Coordinators listed below should be contacted for questions or requests regarding applications, deadlines, and other program information. Also, consult the regional PPIS coordinator about forms and certificates that need to be included in the application packet.

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OPPT Regional Grant Program Contacts

US EPA Region 1 JFK Federal Building One Congress Street, Suite 1100 Boston, Massachusetts 02114 Kira Jacobs, 617-918-1817 Abby Swaine, 617-918-1841

US EPA Region 2 290 Broadway, 25th Floor New York, New York 10007 Marcia Seidner, 212-637-3584 Deborah Feeman, 212-637-3730

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US EPA Region 3 1650 Arch Street Philadelphia, Pennsylvania 19103 Jeff Burke, 215-814-2761 Lorna Rosenberg, 215-814-5389 US EPA Region 4 Atlanta Federal Center 61 Forsyth Street, S.W. Atlanta, Georgia 30303 Dan Ahern, 404-562-9028

US EPA Region 5 77 West Jackson Boulevard Chicago, Illinois 60604 Phil Kaplan, 312-353-4669

US EPA Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202 Eli Martinez, 214-665-2119 Joy Campell, 214-665-7446

US EPA Region 7 901 North 5th Street Kansas City, Kansas 66101 Chilton McLaughlin, 913-551-7666 US EPA Region 8 999 18th Street, Suite 500 Denver, Colorado 80202 Linda Walters, 303-312-6385

US EPA Region 9 5 75 Hawthorne Street San Francisco, California 94105 Eileen Sheehan, 415-744-2190 John Katz, 415-744-2150 Leif Magnuson, 415-744-2153

Region 10 1200 Sixth Avenue Seattle, Washington 98101 Carolyn Gangmark, 206-553-4072

Indian Lands

Pages 21 and 22 are designed for insertion into the OPPT Programs, Resources, and Grant Opportunities for Indian Tribes document. (Tribal Guidance update number 2)

Environmental Justice Through Pollution Prevention

The Environmental Justice Pollution Prevention (EJP2) Grant Program provides financial assistance to state and local governments, federally-recognized Indian tribes, non-profit environmental organizations, and academic institutions for projects that address environmental justice and use pollution prevention as the solution to environmental issues, rather than traditional pollution control techniques.

Quick Facts

What type of program is it?Grant program.What's the purpose? Fund projects addressing environmental justice using pollution prevention.

Who's eligible? Federallyrecognized Indian tribes, state and local governments, nonprofit environmental organizations, and academic institutions.
How much funding is available? Up to \$750,000 in grant funds will be available to eligible organizations
What do I need to submit?
Proposal, budget information, certification forms, resumes, and standard forms for federal grant assistance.

Background

The Environmental Justice Pollution Prevention (EJP2) grant program has been in existence since 1995. This grant program was designed to fund projects which have a direct impact on affected communities and encourage innovative use of pollution prevention to address environmental justice issues. Projects funded by this grant program have included public education, training, seminars, research and investigations, surveys, public-private partnerships, and approaches to develop, evaluate, and demonstrate non-regulatory strategies and technologies. Through the program, EPA strongly encourages cooperative efforts among communities, businesses, industry, and government agencies to address common pollution prevention goals.

Application Requirements and Information

Eligibility

The EJP2 grant program accepts applications from any affected, non-profit community organization, or state and federallyrecognized tribal organizations. While state and local governments and academic institutions are eligible to receive grants, preference will be given to nonprofit, community-based/grassroots organizations and state and federally-recognized tribes. Also, non-profit community organizations must be incorporated in order to receive awards. Private businesses, federal agencies, and

individuals cannot receive grants under this program.

Application

Application packets must include a one page summary sheet, narrative of proposal, key contacts, a detailed, itemized budget, certification of nonconstruction, SF 424B, letters of commitment, memorandum of understanding, or other documents that highlight significant involvement of other partners in your grant application, resumes or biographical information regarding the lead and other key personnel, Standard Form 424 for applications of federal grants, federal Standard Form 424A providing budget and match information, and certification regarding debarment, suspension, and other responsive matters. Applications may also include any additional information providing the history of the organization(s) and success stories.

Application Submission

Requests for proposals and applications are typically published in the Federal Register. Details of proposal requirements and applica-

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tion packets can be found in the EJP2 grant program guidance. The program guidance may be obtained by calling (703) 841-0483 or sending an email message to ejp2@erg.com. The program guidance and a mock application form are also provided on the EJP2 home page at http://www.epa.gov/opptintr/ejp2. Applicants may request up to \$75,000 for projects, and those that are governmental entities, such as state and local governments, are subject to a 25% matching or cost-sharing

requirement. The application period typically closes during the Spring or Summer. Finally, applications should be mailed to Environmental Justice Pollution Prevention Programs, c/o Eastern Research Group (ERG), 2200 Wilson Boulevard, Suite 400, Arlington, VA 22201.

Contact Information

To obtain copies of the EJP2 grant program guidance and application package or to obtain more information regarding the EJP2 grant program, call (703) 841-0483 or email ejp2@erg.com. Grant guidance package materials, as well as a list of regional contact names and addresses, are also provided at the EJP2 Home Page www.epa.gov/opptintr/ejp2.

Regional Grant Program Contacts

US EPA Region 1 One Congress Street, Suite 100 Boston, MA 02114-2023 Ronnie Harrington, 617-918-1703 Pat O'Leary, 617-565-3834

US EPA Region 2 290 Broadway, 25th Floor New York, NY10007 Marcia Seidner, 212-637–3584 Deborah Freeman, 212-637–3730

US EPA Region 3 1650 Arch Street Philadelphia, PA 19103 Jeff Burke, 215-814-2761 US EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303–8960 Connie Raines, 404-562–9671

US EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604–3590 Phil Kaplan, 312-353–4669

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US EPA Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX75202–2733 Eli Martinez, 214-665–2119

US EPA Region 7 901 North Fifth Street Kansas City, KS 66101 Althea Moses, 913-551–7649 US EPA Region 8 999 18th Street, Suite 500 Denver, CO 80202–2466 Linda Walters, 303-312–6385 Jean Belille, 303-312-6556

5 US EPA Region 9 75 Hawthorne Street San Francisco, CA 94105 Eileen Sheehan, 415-744–2190 John Katz, 415-744–2150

US EPA Region 10 1200 Sixth Avenue Seattle, WA 98101 Lucita Valiere, 206-553–2964

Indian Lands

Pages 21 and 22 are designed for insertion into the OPPT Programs, Resources, and Grant Opportunities for Indian Tribes document. (Tribal Guidance update number 2)



Interview with Georjean M. Moomaw, new FOSTTA Tribal Affairs Co-Chairperson



Georjean M. Moomaw is the new FOSTTA Tribal Affairs project co-chair-

person, as well as the Project Manager for the Toxic Lead Program within the Colville Confederated Tribe in Nespelem, Washington.Georjean also serves as the Brownsfields Project Manager.

How did you gain the opportunity to work with the Colville Confederated Tribe?

I am a member of the Confederated Tribes of the Colville Reservation and have interests in environmental issues. When the project manager position was advertised, I jumped at the opportunity to work for my tribe in this capacity.Essentially, no one else wanted the job; so I got it. It was my lucky day.My educational background also helped. I have a double major in Human Services with a minor in Native American Studies, and I am a certified teacher with endorsements in social science, special education, and chemistry. I began my masters degree in education administration and plan to finish my studies in the future.

What's most interesting about your work?

My work involves all aspects

of working with public in various methods, such as raising awareness, establishing policies, and promoting sustainability land use plans. The most interesting aspect of my work involves collaborating and networking with various local tribal communities and tribal, state, and federal governments while promoting regulatory measures to protect human health.

Is there a connection between your background and Native Americans?

My mother is Okanogan of the Colville Tribe, and my father is Kutenai of the Confederated Salish and Kootenai Tribes of the Flathead Reservation. My children, grandchildren, and I are all members of the Colville Tribe.

Tell us about your Tribe's history and current structure.

The Tribe was declared a federally recognized Tribe by President Grant in 1872. There are 12 unique tribal bands joined together to form the Colville Tribe. Historically, the Tribe's main economy has been the timber industries and agriculture; however, more recently human services is increasing. The reservation is comprised of nearly 1.4 million acres and includes approximately about 8600 members of the Tribe. What do you want people to know about your work with FOSTTA, your tribe, etc.?

FOSTTA is providing me the opportunity to learn first hand about EPA. I am especially interested in understanding how and in what ways EPA can coordinate effectively with tribal community efforts to protect and sustain their communities. It also allows me to network with other tribes, states and government officials regarding EPA federal laws, policies, and goals. As FOSTTA Co-Chairperson, I want to increase my knowledge of EPA's various media programs and support OPPT's tribal strategy and the FOSTTA Tribal Project. I want to help Native Americans realize that educating themselves about environmental hazards that may be located in their communities is top priority. Many tribal people take for granted that clean air and water will always be there, but we need to take the extra steps to guarantee clean air and water for future generations.

Interview with Fred E. Corey, new FOSTTA Tribal Affairs Co-Chairperson



Fred E. Corey is the other new FOSTTA Tribal Affairs project co-chairperson, as well as the

Environmental Director for the Aroostook Band of Micmacs in Presque Isle, Maine.

How did you gain the opportunity to work with the Aroostook Band of Micmacs?

My employment with the Tribe began in 1996.Prior to that time I was employed as an environmental chemist at a commercial environmental laboratory for several years and later as a project manager responsible for managing several large petroleum-contaminated remediation sites for an environmental consulting firm.During my tenure as a remedial project manager, I was contacted by the Tribe to discuss environmental consulting services that could be provided to the Tribe. Subsequent to my initial meeting with the Tribe, I was invited to submit a job application for an environmental position. Finally, I have a Bachelor of Science Degree from the University of Maine in Environmental Studies.

What's most interesting about your work?

In my position as Environmental Director, I am responsible for development and management of all tribal environmental programs.My work is interesting because of the challenge of developing and implementing an environmental protection program for the Aroostook Band of Micmacs that protects tribal health, natural resources, and culture.Whereas most environmental protection programs are only focused on protecting human health and the environment, a tribal environmental protection program also seeks to protect tribal cultural traditions that are the basis for the unique identity of the Tribe. Tell us about your Tribe's history and current structure.

The Aroostook Band of Micmacs was federally recognized in 1991 and has just begun to re-establish a land base.Currently most of the Tribe's 1,200 members do not live on tribal land but live in geographically widely separated communities in Aroostook County.Aroostook is Maine's northern most and largest county and is larger than the states of Connecticut and Rhode Island combined.In addition to the Aroostook Band of Micmacs in Maine, there are 27 other Micmac communities in the maritime provinces of eastern Canada, with a total population of over 50,000.

What do you want people to know about your work with FOSTTA, your tribe, etc.?

Since there are many toxics and pollution prevention issues affecting Tribes, but limited resources to address all issues at the same time. I would like to assist FOSTTA by identifying issues with the greatest significance to tribes, and therefore, allocating resources to address the most significant toxics and pollution prevention issues affecting tribes.I would also like to assist FOSTTA in coordinating its efforts with other Tribal environmental organizations to ensure that FOSTTA is utilizing its resources as efficiently as possible. Finally, I would like to assist in outreach. With over 550 federally recognized Tribes, it is important that the cultural diversity of North American tribes is recognized and considered as new toxics and pollution prevention initiatives are developed by EPA.

Kids' Page

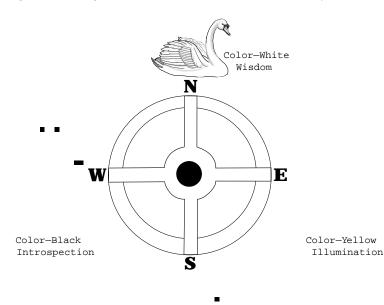
Looking into the Indian Medicine Wheel, the *Circle of Life* Gardens

By Martin Ogle, Northern Virginia Regional Park Authority

The "Circle of Life" describes the transition of an organism's life from the beginning to the end, and includes all the "paths of life" it encounters. The "Circle of Life" concept is familiar to many people, especially those involved in environmental education and teachers, as well as students of ecology, life sciences, geology, and biology. Its spiritual meaning is also appreciated by people of all ages and formed the foundation for indigenous cultures of the world. The "Circle of Life Garden" at Potomac Overlook Regional Park is an existing, symbolic learning center of life's cyclical path. The entire garden area at the regional park, located in Arlington, Virginia, is designed with five

areas of flowers, plants, and fruits, along with an Indian Circle Garden. The Indian Circle Garden is inspired by the Native American "medicine wheel," based on the mythology of the Arapahoe, Crow, Cheyenne, and Sioux tribes of the West.The animals, colors, and significance of each direction, as seen in the illustration below, represent the seasons, peoples' lives, and life in general.

The Potomac Overlook Indian Circle Garden is approximately 12 yards in diameter with two paths, representing the North-South and East-West trails.The paths divide the circle in four equal quarters of "seasonal gardens" that include plants of seasonal interests, such as zinnias, butterfly-weed, and



Color-Green Innocence other plants attractive to butterflies within the summer garden.Planted at the center of the Indian Circle Garden is an apple tree, while wooden posts inscribed with "N," "S," "E," and "W" are fixed outside the circle where each path begins. The other five areas of the garden include the sundial circle: an orchard of dwarf and semi-dwarf apple, pear, plum, and cherry trees; a berry patch with varieties of blackberries and raspberries; and native plant plots with seeds from local meadows, seed distributors, and other sources.

The Potomac Overlook "Circle of Life Garden" project was featured at the 11th Annual Potomac Overlook Open House and Heritage Festival on May 5, 2001 and is an excellent teaching tool and source of celebration that can be adopted at schools, parks, and personal properties. If you have questions or comments about Potomac Overlook "Circle of Life Garden," please contact Martin Ogle, Potomac Overlook Nature Center, 2845 Marcey Road, Arlington, VA 22207, 703-528-5406, potomac@nvrpa.org.

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Mark Your Calendars!

July 2001

10-12 Developing a Tribal Implementation Plan Workshop Institute of Tribal Environmental Professionals Fond du Lac, Minnesota Christy Nations, 202-523-7792

30- August 1

National Assessment of the Worker Protection Program EPA Certification and Worker Protection Branch Lake Buena, Florida Sara Ager, 703-308-3003

August 2001

In the Light of Reverence Public airing of film screening within "Point of View" showcase on PBS Christopher McLeod, 650-747-0685

September 2001

Pesticide Spray Drift Conference Sacramento, California Carol Ramsay, 509-335-9222

17-20

Affiliated Tribes of Northwest Indians (ATNI) 48th ATNI Annual Conference Lincoln City, OR ATNI, 503-249-5773

20-21

20-21 Third National Tribal Pesticide Program Council (TPPC) Meeting Arizona Lillian Wilmore, 617-232-5742

EPA Websites and Hot Lines

EPA	www.epa.gov
ОРР	www.epa.gov/pesticides/
ОРРТ	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

Address Service Requested

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United States Environmental Protection Agency (7408) Washington, DC 20460

