

# SWEEP: Get all the Dirt

"Nothing Under the Rug"

NEWSLETTER OF THE VERMONT STATEWIDE ENVIRONMENTAL EDUCATION PROGRAMS • SPRING 2004

## Fish for Dinner: Safe and Sustainable?

Warren King

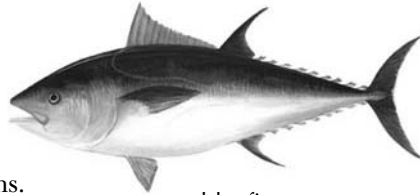
Living in a basically landlocked state, Vermont environmental educators may not have overharvesting of seafood high on their list of environmental problems.

However, it is increasingly a global problem and one our individual shopping and eating habits can influence greatly.

Global fish consumption has risen 400 percent in the last 50 years and will rise another 40 percent in the next decade. The U.S. ranks third in fish consumed. Newly "discovered" fish populations like orange roughy (formerly slimehead: try selling that on your menu!) and Chilean sea bass may be depleted in 10-15 years. Populations of large predator fish – sharks, swordfish and marlin – have been reduced by 90 percent and smaller fish by half. The global catch of usable fish peaked in 1989 and is now flat. The 2003 Pew Oceans Commission report, *AMERICA'S LIVING OCEANS: Charting a Course for Sea Change* has an exhaustive assessment of the problem and possible solutions.

One such solution is for consumers to choose their fish wisely. How do we know which fish are overutilized, which are raised in highly polluting farms, and which are not? You can now cast your net, Internet that is, for timely information on fish you purchase. Two web sites provide lists of fish ranked in terms of their impact based on life history, habitat health, management record, and extent of bycatch. By downloading one, you can be an informed consumer when you go to a restaurant or seafood market.

National Audubon's Living Oceans Program (<http://seafood.audubon.org>) and the Monterey Bay Aquarium (<http://seafood-infocenter.org>) each have downloadable, wal-



bluefin tuna  
courtesy of NOAA

let-sized lists of fish in categories like: Best Choice, Caution and Avoid. The lists agree closely although Monterey's contains twice as many species. Not all species are included, for example, turbot (a flatfish related to sole

and flounder and subject to the same destructive groundfish harvesting techniques), hake and haddock (both cod relatives, and, like cod, depleted). Some farmed seafood like catfish, clams, tilapia and rainbow trout rate high marks while farmed Atlantic salmon produce serious aquatic pollution and gets an "Avoid". (However, its wild caught Pacific relatives rate Best Choice.) Other species to avoid include Chilean sea bass, Atlantic cod, Atlantic flounder and sole, Atlantic halibut, monkfish, orange roughy, shark, swordfish and, worst of all, bluefin tuna.

Individual bluefin tuna weigh hundreds of pounds and sell for \$50 to \$100 per pound in Japan; a sushi serving in a fancy Tokyo restaurant sells for \$75. At these prices it is worthwhile for fishermen to track down the last individual bluefins in the ocean. They have already declined over 90 percent. For more on this intriguing species and its problems, see Carl Safina's excellent 1997 book, *SONG FOR THE BLUE OCEAN* (Henry Holt: New York).

I stood at the local Shaw's fish counter last week for fifteen minutes comparing the iced catch of the day with my Fish Scale card. Discouraged, I passed up swordfish, cod, flounder, monkfish, farmed salmon and scallops in favor of a catfish and a clear conscience, forgetting momentarily the cormorants that were shot around southern catfish ponds to help bring my catch to market. There's no free dinner.

This is the first of periodic articles on environmental and professional topics of general interest to our members. See Note from the Editor on p.2.



## NOTE from the EDITOR

Last year, SWEEP members completed questionnaires about the SWEEP Newsletter. Based on your answers to that survey, a few, relatively minor changes were made for this edition. Members liked the idea of having periodic articles of environmental and/or professional interest. You also thought occasional book reviews would be useful. Both of these suggestions have been included in this newsletter. A third idea, occasional articles about a particular SWEEP member, has not been incorporated this time. Look for that in the future – particularly if you’d like to write one! In order to find space for these additional articles, members suggested cutting way back on the Calendar. Because there are other, more complete and timely calendars available on-line, the newsletter’s calendar will be limited to events of interest to members’ professional development. To find out all the exciting events being hosted by SWEEP organizations, check out their websites! You can link to them from the SWEEP webpage: [www.vermontsweep.org](http://www.vermontsweep.org). (You should check out SWEEP’s website anyhow. It’s great!) The best source of information about environmentally oriented events, including those for families, is Tom Gray’s electronic newsletter: Vermont Environment Update. To subscribe, send a

message to: [vermontenvironmentsubscribe@yahoo.com](mailto:vermontenvironmentsubscribe@yahoo.com). You also can view the list at [www.yahoo.com/group/vermontenvironment](http://www.yahoo.com/group/vermontenvironment). Both the Green Mountain Club and the Hulbert Outdoor Center offer numerous wilderness first aid/ first responder courses. Check their sites for details. Again this winter, the Green Mountain Club is holding its popular James Taylor lecture series on adventure travel at venues throughout the state. If you are interested in going on a long trip yourself, check out VINS’s, Sojourns in Nature and Hulbert’s websites.

The summer newsletter again will have a theme although the theme hasn’t been determined at this time. Please feel free to contact me with your ideas about themes, your thoughts on the above-mentioned changes and your suggestions for other ways to keep the newsletter relevant for our members. The SWEEP Board is continuing to discuss saving paper and financial resources by printing the newsletter only on-line but for the foreseeable future, we will continue to mail it out. Your thoughts on that topic are also welcome. You can reach me at: [kinglet@together.net](mailto:kinglet@together.net) or 802/388-4082.

Barry King, EDITOR

### Vermont StateWide Environmental Education Programs (SWEEP)

is a coalition of individuals and organizations promoting environmental education in Vermont since 1975. SWEEP’s purpose is to foster environmental appreciation and understanding to enable people to make responsible decisions affecting the environment. For membership and contact information, see p. 8.  
NEWSLETTER EDITING:  
Barry King  
NEWSLETTER PRODUCTION:  
Holly Brough

### “SWEEP:

**Get all the Dirt”** is produced 2 times/year. We welcome your contributions! Contact Editor Barry King at [<kinglet@together.net>](mailto:kinglet@together.net)

### SWEEP’S MISSION

SWEEP’s mission is to improve the quality and increase the effectiveness of environmental education in Vermont, with the following goals:

- To coordinate the efforts of environmental educators.
- To provide an environmental education and resource exchange network among educators, environmental organizations, schools, colleges, universities, state agencies and others who are interested.
- To encourage Vermont educators to become more deeply involved with environmental education and to provide the tools to help them accomplish this task.
- To advocate positive environmental education policies & programs.

### SWEEP BOARD 2003

- |                           |  |
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## Register Now for the 2nd Promise of Place Conference

You're invited to register now for the *Promise of Place Conference: Place-based Education in the Northern Forest*, March 25-27 at the Bethel Inn, Bethel, Maine, presented by the Northern Forest Center and the Center for Place-Based Learning and Innovation. Join others from Maine, New Hampshire, Vermont and New York to deepen your understanding of, and acquire new skills in, place-based education. The conference will build on last year's inaugural event, to include over thirty hands-on, content rich sessions and an extra day of in-depth workshops – relevant for novice and experienced practitioners, program administrators, and community members. A sampling of session topics includes Wabanaki history, student assessment, empowering youth, questing, current

research in PBE, writing about place, sculpture, partnership building, oral history, and using town centers as classroom

Last year's conference was sold-out, so don't wait. For more information and to register visit [www.northernforest.org](http://www.northernforest.org) or contact Heather Cowenhoven, [hcowenhoven@northernforest.org](mailto:hcowenhoven@northernforest.org), 603-229-0679.

We hope to see you there!

### Conference Goals:

- To link place-based educators and community members into a place-based education network for on-going collaboration and support
- To strengthen our shared vision for the promotion of PBE through the presentation of current work and philosophies
- To build knowledge and skills through concrete ideas and experiences
- To develop ideas for collectively realizing the promise of place-based education in the Northern Forest Region and beyond

## Evaluating Place-based Education

*Ned Swanberg*

PEEC, the Place-based Education Evaluation Collaborative, links several programs and numerous organizations in a shared effort at systematic program and cross-program evaluation. The first year's ('02-'03) evaluative reports by Amy Powers, Michael Duffin and Sharon Plumb, are now available at the PEEC website <http://cee.schoolsgogreen.org/PEEC/>. The site also integrates findings across the set identifying common strengths, challenges, and future lines of research.

The Cross-Program Evaluation Report includes two programs focused on professional development and two working at a whole-school level. The four programs share common themes including:

- enhanced community/school connections
- increased understanding of and connection to the local place
- increased understanding of ecological concepts
- enhanced stewardship behavior
- improvement of the local environment
- improvement of school yard habitat and use as teaching space
- increased civic participation.

The PEEC website is an excellent reference point for other work related to program

evaluation, with a number of full text articles and links to additional sources. In Sharon Plumb's evaluation of the Community Mapping Program, she synthesized the literature on "best practices" in service-learning and place-based education. Another useful resource is her bibliography on place-based education.

Recent evaluation entries of note include *CLOSING THE ACHIEVEMENT GAP: Using the Environment as an Integrating Context for Learning* by Gerald Lieberman and Linda Hoody. 1998 ([www.seer.org](http://www.seer.org)) and this fall's contribution from the Coevolution Institute, *MEASURING RESULTS*. In *MEASURING RESULTS*, April 2003, Barbara Schneider and Nicole Cheslock review evaluation models and program findings from fields including museum evaluation, environmental education, health education, and social marketing.

PEEC intends to develop systematic "exportable" tools for place-based program evaluation, contribute to program development, identify common research interests, and contribute to the larger dialogue on program efficacy.

### PEEC includes

- Sustainable Schools
- Forest for Every Classroom
- Project Co-SEED
- Community Mapping Program

### Participating organizations include

- Antioch New England Institute
- Conservation Study Institute
- National Wildlife Foundation
- The Orton Family Foundation
- Shelburne Farms
- the Upper Valley Community Foundation
- and the Vermont Institute of Natural Science among others.



## AmeriCorps Funding Cuts Impact Group Outreach

Julia Grand-Doucet

In May 2003, the Green Mountain Club (GMC) Education Program received some bad news as the nationwide budget cuts to the AmeriCorps program trickled down to Vermont. For the past three years the GMC group outreach coordinator position has been filled by AmeriCorps service members serving eleven-month tenures. Without this position, the ecological health of the Long Trail System is at stake.

Group use of hiking trails in the Northeast is on the rise; more than 380 groups hiked

Vermont's trails in 2002, a 13% increase in a single year! In fact, 98 groups, or about 1,200 hikers, used the Long/Appalachian Trail in the three-week period between August 15 and September 6, 2002. Increased group use of the trail can have substantial negative impacts, like soil erosion and damage to vegetation due to trail widening. Groups can also pose threats to water quality, alpine vegetation, wildlife habitat, and the experiences of other hikers. Continued and effective outreach is urgently needed to educate groups, a process that the Group Outreach program



GMC AmeriCorps staff Heather Thomas teaches Kindergarden students in Eden, Vermont.

has pioneered. GMC's program is widely recognized as a model among trail management organizations for its proactive and innovative responses to increasing group presence. But the good work of recent years will be eroded unless it can be carried forward.

Since its inception in 1998, the Group Outreach Program has developed a number of group management tactics, including direct education to groups and group leader training, which helps track and disperse group use on the Long Trail. These strategies have proven effective: the number of people per group has declined dramatically over four years. In 1998, 75% of overnight groups traveling on the Long/Appalachian Trail consisted of more than ten people. By 2002 only 35% of groups were that large. The average overnight group size fell from sixteen people in 1998 to 9 in 20.

GMC faces drastic funding cuts for the Group Outreach Program. As group use continues to rise, GMC's role becomes ever more important for protecting Vermont's natural resources. The group outreach coordinator position will be scaled back to a five-month seasonal position in the summer of 2004. Grant writing and other fundraising initiatives are underway this winter. If you'd like to help raise funds for group outreach, contact Julia Grand-Doucet, [julia@greenmountainclub.org](mailto:julia@greenmountainclub.org).

## The Vermont Lay Monitoring Program: Afloat for 25 Years!

The Vermont Lay Monitoring Program (LMP) celebrated its 25th anniversary last summer. A statewide, cooperative effort between VT DEC's Water Quality Division and volunteer lake monitors, LMP continues to operate under its original program goals: to involve citizens in lake protection and to establish a database on each lake useful for documenting future changes in water quality.

120 lakes, ponds and Lake Champlain bays have been monitored by Lay Monitors. More than half have been monitored for more than 10 years and the others still have enough to establish a solid base line for future monitoring. Over the past 25 years, Lay Monitors have collected for analysis weekly samples of total phosphorus and chlorophyll-a and have taken weekly Secchi water clarity readings. The picture of lake health that comes from all these efforts differs from lake to lake.

Several examples: Maidstone Lake is a large, deep waterbody. It has been monitored continuously since 1989 and shows consistent good water quality conditions. Fairfield Pond shows improved conditions since 1988 but there are years when the reverse is true. Lake St. Catherine's water clarity has decreased drastically since the 1997 discovery of alewife fish; their feeding habits caused the change.

When the lay monitors themselves are consistent, they can observe conditions other than those they test for. Mary Sondergeld has been a lay monitor on Beebe Pond for 25 consecutive years. Although her data shows fairly consistent phosphorus, chlorophyll-a and clarity readings, she has watched the onslaught and resulting problems of Eurasian watermilfoil, discovered there in 1991, and is now helping to fight it.

## Center for Northern Studies Merges with Sterling College

The Center for Northern Studies, a 30-year-old, Vermont nonprofit institution for research and edu-



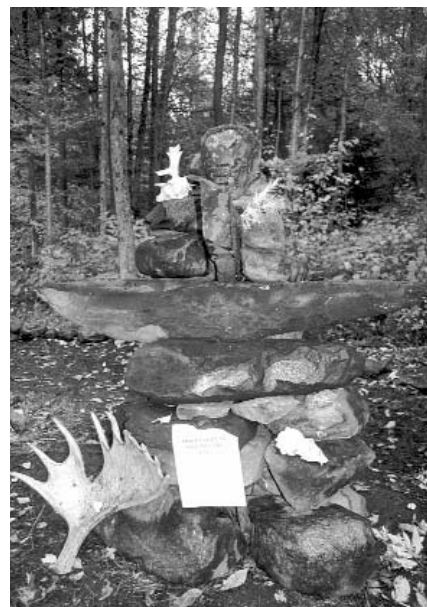
**THE CENTER  
FOR NORTHERN STUDIES**  
AT STERLING COLLEGE

cation on all aspects of the far North, recently merged with Sterling College, a private, four-year, environmental college offering academic programs in Northern Studies, Outdoor Education and Leadership, Sustainable Agriculture, and Wildlands Ecology and Management. The newly established Center for Northern Studies at Sterling College will continue to offer study-away options to students from other colleges, provide additional course options to current Sterling College students, and attract students from international and indigenous communities of the North. In addition, the Center will provide opportunities for educators and other community members to learn more about Northern Studies through a local lecture series, access to a resource library that specializes in the North, and enrollment in courses and field-study programs.

The Center's educational philosophy is founded upon the belief that individuals who help in deciding the future of Northern regions must bridge traditional disciplines. It integrates field research with educational programs addressing the ecosystems and people of Arctic and subarctic environments and the challenges of sustainable interaction in a global

society. This personal academic experience combines formal academic work in natural science, anthropology, political economy, law, and humanities with comprehensive fieldwork. Field-study programs to Iceland, Labrador, Newfoundland, and the Scottish Isles provide hands-on experience and immersion in northern culture. An excellent faculty with more than three decades of experience in Northern research and education facilitate this opportunity to investigate the environment, peoples, and cultures of the Circumpolar North.

For more information about the Center for Northern Studies at Sterling College contact Erik Hansen, Coordinator of Education Programs, at [north@sterlingcollege.edu](mailto:north@sterlingcollege.edu) or 1-800-648-3591. The lecture series schedule is at [www.sterlingcollege.edu/cns](http://www.sterlingcollege.edu/cns).



*This Arctic sculpture was created by students and Randolph sculptor, Paul Calter, to celebrate the Sterling College and Center for Northern Studies merger. Throughout the Canadian Arctic inuksuit cairns like this one mark territory, aid hunters, or decorate spiritual space.*

## Beyond the Workshop: Following Teachers Back to the Classroom

*Jenna Guarino, Environmental Citizenship Director, VINS*

Many teachers leave professional development (PD) workshops intending to invigorate their curricula with new ideas and tools. But once they return to their classrooms, they often find that the limitations they face prevent them from moving forward. A small amount of money and some ongoing support can help them keep their vision alive.

For three years, the Vermont Institute of Natural Science (VINS) and the National Wildlife Federation (NWF) have teamed up to offer PD workshops, with associated mini-grants, to K-12 teachers. Funded by the A.D. Henderson Foundation, this enhanced teacher workshop program provides two, two-day teacher workshops during each school

year for \$15 per workshop and reimburses the participants' mileage and substitute teachers. The grant also covers guest presentations by top-notch natural science experts and curriculum materials from VINS and NWF.

Workshop participants are encouraged to apply for one of three mini-grants, each of which provide a \$600 cash award and 8 hours of VINS educator time in their school. These visits can be used for program planning, classroom teaching, outdoor fieldwork, or anything else that contributes to the overall program goal. Successful applications promote the value of environmental citizenship by helping students implement local conservation projects that contribute to informed decision-making.

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## ORGANIZATIONAL NEWS

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### Announcing...

The long awaited arrival in Vermont of the **HEALTHY WATER, HEALTHY PEOPLE EDUCATORS GUIDE!** Hot off the press, after many years in the making, this 7-12th grade supplemental curriculum guide covers water quality topics and issues by demonstrating the relationship of water quality to personal, public, and environmental health. The activities include: covering accuracy versus precision;

relative size of measurements (grams, mg/L, ppm, ppb); investigations of water quality data to illustrate the differences between a

one time snapshot sample vs. monitoring samples over time and space; nonpoint source pollution activities; conducting watershed mapping and going underground to uncover ground water contamination. Along with the HWHP Educator's Guide, there is a HWHP Testing Kit Manual that gives in-depth information about eleven water quality parameters. These new water education guides are available for direct purchase or through workshop trainings from the Vermont Water Quality Division's Project WET program. Since teachers love these resources, use them for the perfect "prize" for all of your great water education work with educators and community members. Contact Amy Picotte 802/241-3777, or [www.vtwaterquality.org](http://www.vtwaterquality.org).

### Watershed Alliance Program Fall 2003 Highlights

The Watershed Alliance (WSA) is a partnership of UVM Extension, Sea Grant Lake Champlain, and the Rubenstein School for the Environment and Natural Resources. Since 1999, it has provided free equipment, human resources, and technical support for watershed education and stream monitoring studies in middle and high schools throughout Vermont. Currently, it reaches fourteen schools in nine counties and eight sub-basin watersheds.

WSA welcomes Caitrin Noel, who joined the organization as Education and Outreach Coordinator in August. Lori Cragin, the previous Coordinator, is now pursuing her doctorate at Colorado State University.

This fall, seven UVM undergraduate students served as WSA interns (watershed educators), helping teachers implement the education module in the classroom and on stream monitoring field trips. Watershed educators are the most valuable component of WSA, serving as mentors and role models to younger students. Fortunately, the benefits flow both ways; several watershed educators indicated their internship was one of the most valuable experiences of their college career. Six out of seven interns plan to return to the Watershed Alliance in the spring 2004 semester. Visit WSA's website's Fall 2003 Highlights page for photos and summaries: <http://www.uvm.edu/~watershd/?Page=highlights.html>. Contact Caitrin Noel, 802/656-5428 or [Caitrin.Noel@uvm.edu](mailto:Caitrin.Noel@uvm.edu)

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### *Beyond the Workshop continued from p. 5*

Through this program, VINS and NWF make an extended commitment to a group of teachers to enrich their curricula and help them provide leadership on environmental issues in their community. While the cash award is helpful, most teachers say that the VINS visits are the key ingredient. The ongoing relationship with VINS allows teachers to explore new ideas and helps them problem-solve the inevitable challenges that arise with

a new program. It also brings resource professionals into their classrooms to work directly with their students and model careers in natural science.

The next PD workshop, Songbirds and Schoolyard Habitats, will be at VINS in Woodstock, January 30-31. For more information, contact Kim Jensen: 802/457-2779 ext. 115 or [kjensen@vinsweb.org](mailto:kjensen@vinsweb.org).

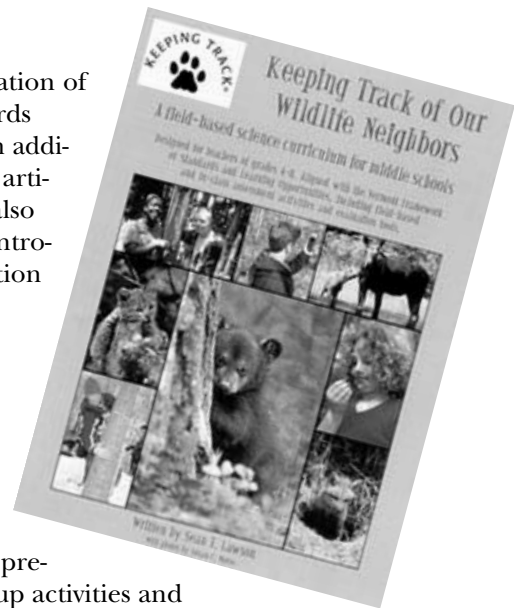
## Keeping Track Publishes School Curriculum

Over the last ten years, Keeping Track has offered its Youth Program, providing school groups with wildlife tracking workshops, habitat monitoring projects, and professional development for teachers. Now, they have produced a curriculum to accompany those programs. **KEEPING TRACK OF OUR WILDLIFE NEIGHBORS** is a science curriculum designed for teachers of grades four to eight. Reviewed by teachers, educational consultants, and wildlife specialists, these materials teach students about wildlife, habitat conservation, and inquiry-based scientific methods. Aligned with Vermont's Framework of Standards and Learning Opportunities, Keeping Track's curriculum provides teachers with the tools needed to evaluate student learning and achievement of the standards.

**KEEPING TRACK OF OUR WILDLIFE NEIGHBORS** is a forty-page curriculum guide that accompanies field-based workshops and in-class presentations. It has seven chapters and a detailed resource section providing

complete documentation of the Vermont Standards addressed, along with additional books, journal articles, and videos. It also includes a detailed introduction and description of Keeping Track's Youth Program; "Driving Questions" that provide an inquiry-based approach; a section devoted to key terminology, definitions, and concepts; preliminary and follow-up activities and evaluations for teachers; and evaluation rubrics with culminating activities for teachers to measure student achievement.

For more information, contact Sean Lawson, Youth Program Coordinator, [sean@keepingtrackinc.org](mailto:sean@keepingtrackinc.org) or 802/434-7000.



## Mad River Glen Opens Interpretive Center

Visitors to Mad River Glen will find a new on-mountain interpretive center thanks to support from the Stark Mountain Foundation. The Foundation was the recipient of a generous grant from the Tauck Foundation that made possible the new Kent Thomas Nature Center. The goal of the center is to help educate the public and to further Mad River Glen's mission of protection and preservation of the land under the Co-op's stewardship. It houses interpretive displays focusing on the ecology, wildlife, geology and other natural wonders found on General Stark Mountain. In the 1960's, the building served as the lift shack for a rope tow; its renovation and conversion to a nature center was completed last summer. The Tauck family, through their foundation, sought to honor their friend Kent Thomas, a long-time Mad River skier who passed away last spring. A beautiful display featuring Kent (and his old season's passes!) memorializes him at the



Kent Thomas, Jr. and family present memorial plaque for his father at Mad River Glen's new nature center.

Center. The building is open year-round and is located partway up the mountain, accessible by ski and snowshoe trails in winter or hiking in the off-season. A map of trails to the site and a full listing of this winter's Naturalist Program calendar can be found at [www.madriverglen.com](http://www.madriverglen.com) or by calling Sean Lawson, Naturalist Director at 802/496-3551 x17.

## Hulbert Weaves Together Schools and Communities Needs

**H**ulbert Outdoor Center (HOC) assists local teachers to discover their communities' needs, its resources (volunteers, trans-

*"This work fosters student stewardship: for their peers, families, and special places, and begins to help them see their connection, power and responsibility to the greater world."*

*Heather Trillium Toulmin*

portation, funding, materials, etc.), and then helps the community to see students and schools as valuable, integral parts of its well-being.

With help from HOC staff member

Heather Trillium Toulmin, Bradford Kindergartners have studied life and its needs through an inquiry-based approach to what plants need to live. They now grow flowers in their classrooms that will be planted at the post office and library with the Bradford Beautification Committee. The sixth graders organized a student forest club for fun and to complete service projects that they identified such as filling an abandoned well and two outhouses. They calculated the volumes of

the holes to be filled and ordered the corresponding amount of sand. The local career/technical center will donate the sand, a truck and some older students to get the work done. This forest club may lead to the creation of a student government and greater student involvement in town boards and committees.

By such endeavors, students gain pride in themselves and their communities. These types of community-building efforts enrich the lives of children, parents and community members. One parent reported, "My child enjoyed the break from the classroom and is associating school with more fun and active experiences with his peers...I would like to see the program expanded..." Evaluations are underway in terms of student achievement, teacher acceptance, and community support. Heather believes, "This work fosters a stewardship ethic: stewardship for their peers, families, special places, and begins to help them see their connection, power and responsibility to the greater world."

## Connecticut Riverfest

**C**onnecticut RiverFest will hold its 10th Big Splash River Festival on June 5 at the Wilder Picnic Area, Wilder VT. The event, which promotes stewardship through education and celebration, will feature music; sustainability energy discussions and exhibits; environmental exhibits, activities and demonstrations; canoe and kayak demonstrations and a contra dance. In addition, there will be a kayak raffle and many family activities.

Connecticut RiverFest (CR) also produces River Minutes, produced for radio airing, one-minute snapshots about Connecticut River issues and natural history, available for public use. Another CR initiative, RiverDays, is an educational program for schools and communities. We are seeking schools interested in running a RiverDay or other educational programs, and coordinators to assist their towns.

For information about any of these activities, contact: Bonna Wieler, 802/333-3549, info@ctriverfest.org, www.ctriverfest.org



## Get Swept Away!

Vermont StateWide Environmental Education Programs (Vermont SWEEP) is a coalition of individuals and organizations promoting environmental education in VT.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Town/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Organization: \$35     Individual: \$10

Please make check payable to SWEEP and mail to: SWEEP, 9 Bailey Ave., Montpelier, VT 05602. Thank you!

### MEMBERSHIP BENEFITS INCLUDE:

- Twice-annual membership meetings; periodic development workshops & conferences
- Representation to the six-state New England Environmental Education Alliance (NEEEA)
- Inclusion in SWEEP's Directory, which lists members' environmental education services and is distributed to VT teachers and educators
- SWEEP's newsletter



## VINS Center to Open in June

Phase I of VINS's new Quechee center project will open in June 2004 with impressive raptor exhibits, hiking trails, a gift shop, and educational and support buildings. VINS is currently planning for Phase II, which will include a major educational building with extensive exhibits, a gift shop, café, more wildlife care facilities, and staff offices.

## Sojourns in Nature

Gustav Verderber now has a 2004 Sojourns in Nature calendar as well as a line of greeting cards, all featuring his spectacular nature photography. You can also view some of his work on his on-line gallery. All of these items may be accessed through his website <http://www.sojournsinnature.com>.

## Bio 911 Comes to ECHO!

From January 30 through May 2 a brand new exhibit will come to ECHO at the Leahy Center for Lake Champlain. As environmental educators know all too well, global biodiversity is disappearing at an unprecedented rate and

*"Around the world, biodiversity—defined as the full variety of life from genes to species to ecosystems—is in trouble. There is not one country, not one biome, that remains untouched."*  
E.O. Wilson, biologist

the consequences are dire. This lively, interactive exhibit will take visitors on a fantastic journey across the globe using computer games and quizzes, larger-than-life models, hands-on activities, video and film. After investigating the amazing variety of plant and animal life on Earth, visitors will walk away with ideas of how they can protect it.

## SWEEP NEWS

### Note from the Chair

*The new year begins with a white blanket of snow but my thoughts are on the colors of autumn 2004 as so many of our SWEEP members work hard to organize the Vermont New England Environmental Education Alliance conference to be held at the Bread Loaf Campus of Middlebury College in Ripton, VT October 15-17, 2004. It's not too late to add your voice, muscle, and/or your two cents to help make this conference a success. Please give Marcia Whitney or me a call to offer your services.*

Linda Wellings

building. Two highly talked about aspects of the conference were the serving of local foods at all meals and the tracking of both the event's "ecological footprint", as well as that of individual participants. This activity, led by Jim Merkel, proved to be an eye opening experience for many as it got them to take a close look at the amount of resources required to support their personal lifestyle.

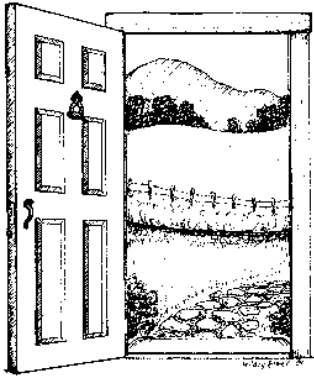


The Vermont contingent at the 2003 NEEEA conference performed a skit to introduce the theme for the 2004 conference in Ripton: "Opening Doors: Collaboration Strengthens Our Voice to Build Sustainable Communities."

## Mr. Rogers Visits 2003 NEEEA Conference!

Last September, environmental educators and administrators from throughout the northeast "followed the tracks" to Woodstock, Connecticut for the 2003 New England Environmental Education Alliance. The weekend included an excellent keynote speaker, workshops, field trips, and evening programs. Workshops fell into one or more of the following strands: environmental education, administration, natural history, and skills

At the end of Saturday night's dinner, diners were suddenly treated to a rousing rendition of the theme song from Mr. Rogers Neighborhood. This set the stage for the arrival of Mr. Rogers himself! Well, not exactly. It was all part of Vermont's presentation to kick off next year's conference, which SWEEP is hosting. The well-received skit included Larry Berrin as Mr. Rogers and some of his "neighbors" who stopped by to pay a visit. The presentation served to introduce our conference's theme, "Opening Doors: Collaboration Strengthens Our Voice To Build Sustainable Communities."



## NEEEA Conference 2004 Update

The 2004 NEEEA (New England Environmental Education Alliance) Conference will take place at Middlebury College's Bread Loaf campus in Ripton, VT on Oct. 15-17. Co-sponsored by SWEEP and Middlebury College, the keynote speaker will be Burlington Mayor and gubernatorial candidate Peter Clavelle, along with students and teachers doing significant sustainability-related projects. There will be many great workshops based on the theme "Opening Doors: Collaboration Strengthens Our Voice to Build Sustainable Communities" and

lots of fun field trips and entertainment including dancing, an owl prowl, and an acoustic coffeehouse. The Request for Proposals (RFP) for workshops will go out at the end of January/early February, or you can find one at [www.vermontsweep.org](http://www.vermontsweep.org).

The various conference committees continue to prepare for next year's event and invite you to join the fun! If you would like to learn more about how to become involved in the planning process, contact conference co-chairs Marcia Whitney, [mwhitney@vin-web.org](mailto:mwhitney@vin-web.org), 802/457-2779, or Linda Wellings, [llwellings@shelburnefarms.org](mailto:llwellings@shelburnefarms.org), 802/985-8686.

## New England Journal of Environmental Education

Want to show off your artwork, share interesting information from a workshop you attended, or otherwise see your name in print? Please consider submitting an article to the NEW ENGLAND JOURNAL OF ENVIRONMENTAL EDUCATION – it's a great way to highlight your work in an essay, poetry, and/or artwork!

Send a one-page query that discusses the proposed topic, a summary of the content that shows the slant the article will take. Illustrations for the cover and inside pages are also sought. Submissions will be reviewed by the editorial Board and if accepted, the editors will contact the author with comments and suggestions for changes, if any. The editors reserve the right to edit for length, clarity and grammar. Submissions should be well written,

interesting, useful and something that environmental educators in New England will want to read and save. Articles should be concise and fit within our space limits, no more than 3,000 words. Most articles published are 1,500 to 2,000 words. Articles must be submitted via a Word or Text file in an e-mail attachment. Submissions must not have been previously published or simultaneously submitted for publication elsewhere. Authors retain the copyright to their material for future publication. Writers of feature articles will receive four copies of the issue however there will be no other payment. Submissions are accepted on a rolling basis. Please visit our website at [www.neeea.org](http://www.neeea.org) or contact Kim Noyes ([noyesgk@nu.com](mailto:noyesgk@nu.com)) or Drew Dumsch ([drew@fbes.org](mailto:drew@fbes.org)).

## SWEEP PEOPLE

Updates on the comings and goings of environmental educators across VT

**Kim Jensen** has joined VINS as the Woodstock Program Coordinator and Environmental Citizenship Educator. Kim came from the Berkshire Museum in Massachusetts, where she worked in the education department for over three years. After 15 years with VINS **Linda Garrett** (Education Director at North Branch Nature Center and Small Wonders Program Director) has decided to leave at the end of June to become a classroom teacher.

2003 was a big year for SWEEP babies! **Nicole Conte** gave birth to a daughter, Faye Winter Stevens, on July 27. **Jen**

**Baer's** son, Willem Anders Smith, followed Faye on August 1. The next SWEEP progeny was Dylan Cole Severson, born to **Lisa Windhausen** on August 19. **Marcia Whitney** gave birth to a daughter, Emma Jean Whitney, on Sept. 1. On October 26, **Amy Powers** gave birth to Leo Johannes Powers. **Karen Sharpwolf's** daughter Sophia Aurora Sharp was born on November 2. And this just in: Annabelle Pearl was born January 10, 2004 to **Julia Grand-Doucet**. A lucky seven total!

The Watershed Alliance welcomes **Caitrin Noel**, its Educ-

ation and Outreach Coordinator since August. **Lori Cragin**, the previous Coordinator, is now pursuing her doctorate at Colorado State University.

**Ryan Young** has joined the staff of Audubon Vermont as the High Pond Camps Director, managing all aspects of Audubon's summer residential program. Ryan comes to Audubon with a variety of experiences in environmental education, having most recently worked with the Great Smoky Mountains Institute in Tennessee.

## BOOK REVIEW

### Winter World by Bernd Heinrich

HarperCollins, 2003. Hardcover, 347 pps. \$24.95; paperback \$14.95

reviewed by Barry King

To start with, I should say that I am a huge fan of winter and also a fan of most of Bernd Heinrich's books. With that in mind, it won't surprise you to know that I loved this book. If you haven't read any other Heinrich works, this is a great place to begin.

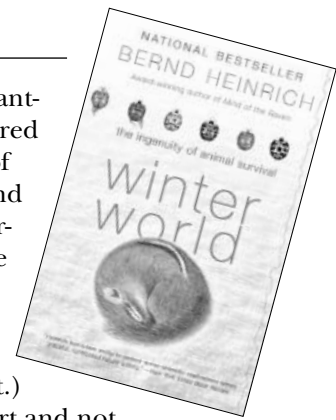
The book's subtitle is "the ingenuity of animal survival" and that describes the book's contents. Whether discussing owl moths (active in winter to escape predation by bats – who knew?), snapping turtles, arctic ground squirrels or any number of other species' adaptations for surviving a northern winter, Heinrich brings a scientist's eye and brain to the problem, yet writes in an easy, engaging style. He continually cites and/or describes scientific studies done on the topic (the references at the end are listed by chapter), but he is rarely pedantic. One drawback to the book is its lack of an index. If you can't remember which chapter a topic was in, you have to do a lot of looking.

A professor of biology at UVM, Heinrich is a true scientist; his curiosity and pertinacity are obvious. He routinely counts things that would never occur to me to count, like how many and what kinds of seeds were stored in birds' nests appropriated by deer mice.

Unable to identify one type, he planted them in the spring and discovered they were ragweed. An example of his persistence was his desire to find out what type of caterpillars winter-foraging kinglets were eating. (He knew about the caterpillars by shooting a kinglet and opening up its stomach – he's a scientist, remember. Audubon did it for art.)

After sending some off to an expert and not getting a definitive answer, Heinrich decided to grow the larvae to adulthood to see what type of moth they became. He and some students spent a day shaking trees (the number and species are given, of course) and picking up caterpillars that dropped to the snow. He then carefully kept them in hopes of raising them. For various reasons, he was unsuccessful, so he went through the same process the next year. And the next. And the next. Four years in all but in the end, Heinrich was able to document not only what winter food source is most important for golden-crowned kinglets (snow fleas had been the previous assumption) but also where the larvae of this particular species of Geometrid moth overwinter.

Stories like that fill the book. The reader is rewarded not only with excellent information about how animals survive winter but also about how scientists, particularly one scientist, go about finding answers to questions that most of us never even think to ask.



## RESOURCES/OPPORTUNITIES

### On-Line Winter Field Studies Course

JANUARY 20 - APRIL 30, 2004  
Montana State University; 3 graduate credits; 9-12 hrs/week  
Designed for educators to learn and practice basic ecological field study techniques and integrate them into their own instructions, the course includes: Campfire Preparation in Snow, Growth Dynamics of Trees, Geobotanical Forest Mapping, Green Grass Ecology Beneath Snow Cover, Chickadee Flock Behavior, Winter Mammals Survey and Behavior Studies Based on Snow Tracks, Physics and

Chemical Characteristics of Streams and Rivers, Snow Cover Strata. *For more information and to visit the course, <http://btc.montana.edu/eft/>*

### A Field Guide to Environmental Literacy: making strategic investments in environmental education

by James L. Elder  
Do you want to make a case for the importance and timeliness of strategic philanthropic investment in environmental and sustainability education, and the national benefits that would accrue from reducing the environmental literacy gap?

NAAEE says this new book will help. It includes information on environmental literacy's status and scope, teachers and materials and available funding among other things. It also offers a framework for how/why funders might think about investing in environmental literacy and calls for initiatives to build national capacity, develop political momentum and generate new funding. It sounds like a valuable tool. Available through NAAEE, [www.naaee.org](http://www.naaee.org), it costs \$28 for members and \$34 for non-members. *(If anyone wants to review it in the next newsletter, that would be great!)*

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**CALENDAR**


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JULY 14-18

**Sustainable Communities 2004 Conference** Burlington, VT

Join regional, national and international dialogues on Education for Sustainability. The conference will feature an Education for Sustainability working group for networking, sharing best practices, and planning how we can strengthen our efforts in anticipation of the United Nations Decade of Education for Sustainable Development, beginning in 2005. This working group will serve as an umbrella for the various education-related events throughout the conference. Contact Erica Zimmerman at ezimmerman@shelburnefarms.org or 802/985-8686 if you're interested in being part of the working group. Visit [www.global-community.biz/conference/](http://www.global-community.biz/conference/) to learn more about the conference. And read about initial steps of the Decade at [www.unesco.org](http://www.unesco.org) - see the *Education page* - or at [www.ncseonline.org/EFS/](http://www.ncseonline.org/EFS/).

MARCH 25-27

**Promise of Place Conference: Place-based Education in the Northern Forest**

Bethel Inn, Bethel, Maine  
[www.northernforest.org](http://www.northernforest.org) or  
 contact Heather Cowenhoven,  
 hcowenhoven@northernforest.org, 603-229-0679.

APRIL 29 **SWEEP Meeting**

11:00-3:00 pm. Location TBA.

OCTOBER 15-17 2004

**NEEEA (New England Environmental Education Alliance) Conference**

Ripton, VT  
 Marcia Whitney, 802-457-2779,  
 mwhitney@vinsweb.org, or  
 Linda Wellings, 802-985-8686,  
 llwellings@shelburnefarms.org.

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**JOBS OPP'S**


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VINS expects to have several openings this spring and summer. Please contact the person listed for details and/or to receive a job announcement when one is available.

- **Two Raptor Educators**  
*Larry Berrin; 802-457-1053, ext. 112, or lberrin@vinsweb.org*
- **Summer Camp Director & Assistant Director**  
*Larry Berrin*
- **Preschool Program Director**  
*(probably combined with other educational responsibilities);  
 Marcia Whitney; 802-457-1053, x113 or mwhitney@vinsweb.org*
- **Education Intern** *(summer or fall 2004 for one year); Marcia Whitney*

**Vermont SWEEP**

Statewide Environmental Education Programs

9 Bailey Avenue

Montpelier, VT 05602

Save  
the Date!

**SWEEP Membership Meeting**

Apr. 29, 2004 • 11 AM - 3 PM. LOCATION TBA.