

REPORTER

Winter/Spring 1994

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Spotlight on Kristen E. France

Kristen is a junior at Oneonta High School. She lives with her family in West Oneonta. She worked at the Station in 1993 as an OCCA F.H.V. Mecklenburg Conservation Fellow. Her internship involved an analysis of zooplankton collected from the surface to the bottom of the Lake at the deepest spot (TR4-C) on a regular basis from January through December 1993. The zooplankton are important in ascertaining the impact of changing water quality and introduced ext-



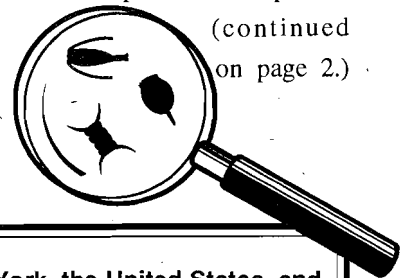
Kristin E. France
Oneonta High School

ics on the biota of Otsego Lake.

Crustacean zooplankters increased from about 100 individuals per liter in center lake in 1935 to over 300 individuals per liter in 1975. In the past several years, concurrent with the introduction of a l e w i v e s

(sawbellies), crustacean zooplankters have been decimated. Less than 10 individuals per liter were present

(continued
on page 2.)



Located in Cooperstown and founded in 1968, the Biological Field Station is a unique facility serving the Upper Susquehanna Watershed, Otsego county and the immediate Cooperstown area. It is primarily a teaching and research center for undergraduate and graduate

students from across New York, the United States, and Canada. Directed by Dr. Willard Harman and staffed with talented, experienced professionals, the Biological Field Station is presently the focal point for information about issues affecting Lake Otsego and the Susquehanna River.

Our Natural Resources: Greenwood

The centerpiece of this research area is the 70 acre pristine Cranberry Bog and its watershed, surrounded by 1000 acres of forest and agricultural land in the town of Burlington.

Owned by The Peterson Family, the land is currently managed under New York State Forest Law (section 480a) and Forest Stewardship programs.

The Petersons have endowed a charitable trust to hold the land, and to provide the monetary resources necessary to assure management goals in perpetuity. An important component of the trust is its declared intent to provide funding for environmental studies at both on-site, and off-site research areas.

More than 700 acres have already been protected in perpetuity under the terms of a Conservation Easement granted to the Otsego Land Trust.

We have posted the property, and are now developing several miles of trails internally. **Greenwoods** is a tremendous addition to our resources, and is an excellent example of what can be accomplished by a cooperative effort between the public and private sectors.



Spotlight on Kristen E. France, cont.

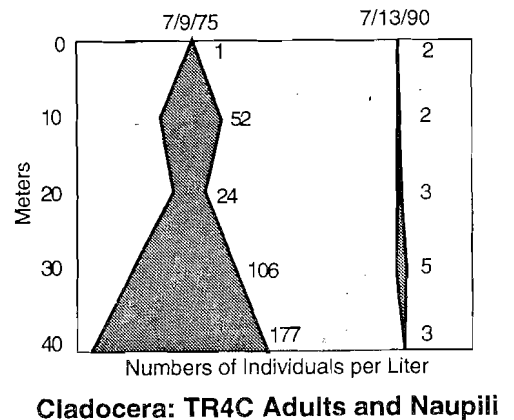
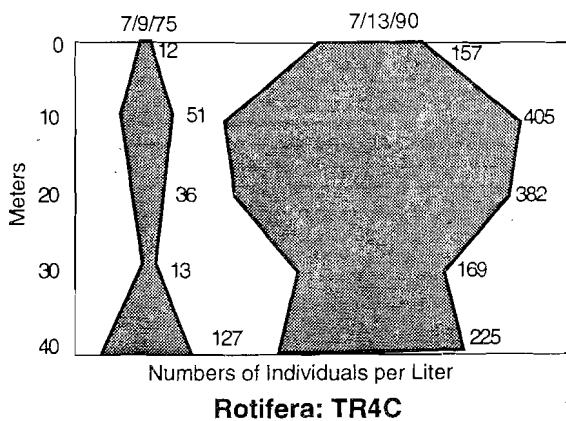
in the water column on 7/13/90. During the same period Rotifer populations, which ranged from 7 to 23 individuals per liter on 7/8/85 varied between 157 and 405 individuals per liter on 7/13/90.

The alewife population exceeded the carrying capacity of Otsego Lake in 1991-2 and then suffered high mortalities. As a result the crustacean population exhibited a moderate increase in late 1992.

Kristen's data for 1993 are expected to show another decrease in crustaceans with an increase in rotifers as the alewife population recovers. However, there is conflicting evidence regarding alewife population performance during the 1993 growing season.

Many thanks to our 1993 volunteers.

Brian Bitteker - Computing Services Adv
Kyla Coburn - Laboratory Assistance
Peter Elkan - Soils Mapping Interpretative
Kathy Ernst - Graphics





A Cause to Support: Youth Education

"Protecting the outdoors is a luxury. While the mountains and rivers are great to look at, we're paying too high a price for that view. It isn't worth it."

You may not see eye-to-eye on the opinion expressed above, but it is a fairly common one. Face it, a lot of people are divorced from the natural world. Swamps are smelly; and the woods are full of bugs and rain and a good bit of danger, if only from the elements. Malls have replaced days out in the woods for most kids, and those kids, who may see nature on television or out their car windows, are never going to express a strong opinion in favor of giving things up to keep the view out the window a natural one.

Our resources are going to be in the hands of that generation sooner than later. It will be a generation raised on a diet of television images, video games, and mall crowds, with a lot of problems that will make saving "the view out the window" a pretty low priority. That may be the legacy we leave. But it doesn't have to be that way.

Since 1968, we've been reaching out to thousands of children and teachers across New York. Our goal is simple —

we want to teach a generation to care — care for the land and for the rivers and lakes and air. Guess what? It's working. Teaching kids about the environment and conservation has come to be recognized as the single most significant thing anyone can do to help take care of the land around us.

And we're doing it! We're doing it on-site at the Biological Field Station, on the waters of Lake Otsego, and up and down the Susquehanna River. We're doing it in the classrooms with videos and teacher training.

We are not doing this alone. It costs money, and even with the progress we've made, we have more to do. If Otsego Lake Country has given anything at all to you, now is the time to give a small portion of that back. Now is the time to reach out your hand to hold a smaller one and help a child start on that same trip that has helped you love this area. It will be a great gift to the children and an even greater one to Mother Nature.

their dedication and talents are irreplaceable!

Cindy Magee - Administrative Assistance
Dan Rosen - Communications
Mariam Sharick - Ornithological Research
Tom Smullens - Technical Assistance

Mission: Education

Education at the Station provides students with "hands-on" training in all phases of research, valuable problem-solving skills and a greater appreciation for environmental problems. The relaxed atmosphere and informal interactions between students and scientists enhance the learning process. Our students participate in actual research activities that are carried on by our staff and visiting researchers. This approach is designed to integrate our research and instructional functions into a single coordinated effort addressing environmental problems of re-

gional concern. We offer advanced training for science teachers and programs for school children, as well as seminars, workshops and information for the general public.

Formal offerings in Bio 108, Ecology and Field Biology, and Bio 184, Aquatic Ecology, are regularly provided to advanced high school students. Support is usually provided for tuition and fees. Many elementary and high school students are introduced to Otsego Lake and its problems at the BFS during day trips each year.

Updates

- **New books**

Marble: *A guide to wetland functional design*

Hammer: *Constructed Wetlands for Wastewater Treatment*

Cooke et al: *Restoration and Management of Lakes and Reservoirs, 2nd edition*

Gobas and McCorguodale: *Chemical Dynamics in Fresh-water Ecosystems*

Wetzel and Likens: *Limnological Analyses, 2nd edition*

- Field Station personnel continue to monitor for **Zebra Mussels** from Otsego Lake down the Susquehanna to Sayre, Pa. To date none have been found. We have ongoing studies on these pests in Seneca and Oneida Lakes.

- This spring semester Joe Homburger will start to teach a 3-hr. course on campus: **Introduction to Environmental Regulations.**

- The **OCCA has committed funds** to make the extensive repairs necessary to the walkways in Goodyear Swamp Sanctuary. We extend our appreciation!

- Tom Gergel (SUCO Geography Department) conducted three **fly-overs of Otsego Lake** taking aerial photographs to evaluate the distribution and abundance of rooted vascular plants this last summer.

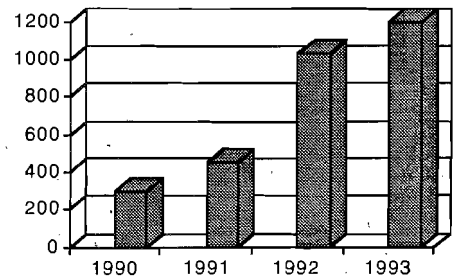
- We conducted nine Saturday morning **Learning Adventures** trips in 1993 presenting subjects as diverse as "Emergency Shelter Building" and "Prehistoric Flint Tool Manufacture" to the "Birds of Otsego Lake County" and "The Ice Age Origin of Otsego Lake".

- More than 10 miles of **trails and walkways** are now being maintained on BFS lands.

- 1993 was the 25th year we used BFS boats and people to help the Otsego County Conservation Association (OCCA) with the **Annual Otsego Lake Clean Up Day**

- In 1993 we had more than 1000 visitors. Most were pre-college students, involved in field experiences.

Visitors to the Biological Field Station



Since 1968 there have been thousands of high school and college students, visiting researchers, and others that have studied at the BFS. We would like to hear from you! Your information may appear in the next section of the *BFS Reporter*.

Fiscal challenges in recent years have constrained the work of the Biological Field Station. Private gift support from individuals, foundations, and corporations is essential and an investment in the Biological Field Stations' continued success and services to the community. For more information, call or write:

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Professor and Director
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The College at Oneonta Foundation receives and manages gifts for the Biological Field Station. All gifts are used expressly for the purposes for which they are given and they are tax-deductible. Information is available through:

FIELD STATION MISSIONS
The BFS is a facility of the SUNY College at Oneonta. The next few issues will cite various of the missions as specified by the College.

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