

Laboratory of Limnology  
Lake Mendota

# LIMNOLOGY NEWS

University of Wisconsin- Madison  
College of Letters and Science



Trout Lake Station  
circa 1935

Number 10

Summer 2001

## From the Director's Desk, July 2001

Dear Friends:



Much has changed since our last newsletter. This edition, like others, contains a summary of our activities, some features of special interest, and announces the awards, degrees and accomplishments that make us proud. It also contains some news of great sadness. During this past year we lost two of our stalwart colleagues. Tom Frost was taken in a tragic accident and Art Hasler's long, productive life ended. Both are eulogized in the pages that follow (pages 2 & 3). Art and Tom are sorely missed and fondly remembered by those of us who continue.

Other changes include moves to new status and are described at greater length inside. John Magnuson retired last summer after 32 years of service to the UW and the Center for Limnology (p. 5). Not surprisingly, we've noticed little reduction in his high tenor of activity, although he keeps promising that he'll take a little time off sometime soon... Dave Egger capped his 30+ years of service and moved his attention to other important pursuits—such as trout, wild

asparagus, and travel (p. 6). Since the last newsletter we've had visits from two Kaeser Visiting Scholars: George Kling, University of Michigan, and Simon Levin of Princeton University. Next year's Kaeser Scholar will be Carl Folke of Stockholm University. Other highlights of the recent past include gifts from the Tug Juday family that provide generous support to undergraduate research at our Trout Lake Station.

One of our special features offers tribute to an alumnus, Oscar Brynildson, as penned by another alumnus, Ray White (p.8). Other special features describe a major new research program sponsored through NSF's Biocomplexity program (p.4) and some important news about special funds established as part of the Center's endowment (p. 9).

Many new faces now appear on the picture board. In addition to the continuing turnover of graduate students and postdocs, there are many new names among those listed as Center staff. We've arranged for our readers to meet a few of them through the picture below. Included is a new member of the office staff (Denise Karns), a new Assistant Director (Sarah Carter), a new "guy in the slip" (Dave Harring) and a new coordinator (Georgia Wagner) for our graduate program in Limnology and Marine Sciences (formerly O & L). Not pictured is Carol Schraufnagel, another new office staff member. Each has joined us since the last newsletter. Also, you may have noticed that the place has a new Director. I was appointed to that position earlier this year. In addition, as detailed inside, Tim Kratz has accepted the position as Associate Director for our Trout Lake Station (p. 7). Our new faculty member, Jake Vander Zanden will have joined us by the time you receive this (p. 7). You'll hear more about him in a future issue.

In May of this year we learned that Steve Carpenter was elected to the National Academy of Sciences. This most prestigious accomplishment followed a remarkable sequence of awards and recognition (p. 4). In all, it's been a time of extremes;—some of joy, pride and celebration, some of great sorrow. We welcome you to this sampler of news from the Center for Limnology.



From left to right: Denise Karns, Sarah Carter,  
Georgia Wagner, and Dave Harring

Sincerely,

James F. Kitchell  
Director, Center for Limnology

# In Memory of Art Hasler (1908-2001)

*Modified from obituary by Brian Mattmiller, UW Communications*



Arthur Hasler

Arthur Hasler died on Friday, March 23, 2001, after a long illness. He was 93. He was professor emeritus after retiring in 1978, having spent 41 years on the faculty here. He is survived by his wife, Hatheway, and his children, Sylvia (Thatcher), A. Frederick, Bruce, Mark, Galen and Karl.

Born in 1908 in Lehi, Utah, he graduated from Brigham Young University with a bachelor's degree in 1932. He earned a Ph.D. in zoology from UW-Madison in 1937. Hasler spoke fluent German, and in 1945, served as a research analyst with the U.S. Air Force Strategic Bombing Survey in post-World War II Germany. He appreciated the opportunity to visit laboratories and meet with natural scientists that had survived the war. Hasler played the key role in the construction of the Laboratory of Limnology on Lake Mendota, and the Trout Lake Station on Trout Lake.

"Many people who work on ecological problems today remain awed by the insightfulness of Hasler's research," says John Magnuson. "He was a big thinker and had grand ideas. He

believed you were not done in research until you dealt with its applications in society."

His most famous research began in the late 1940s, when he demonstrated that "olfactory imprinting," enabled salmon to journey thousands of miles to spawn in the stream of their birth. The idea occurred to Hasler when he visited a mountain stream near his hometown in Utah, and was struck by how the smells of native plants seemed to rekindle childhood memories.

Hasler, pioneered a new way to study ecological problems using experimental manipulations of entire lake ecosystems. He recognized that lakes were too complex to be studied piecemeal in a laboratory setting. His most famous "whole lake experiment" was at Peter and Paul Lake in the 1950s. Subsequently, his students founded research centers with this model in the U.S. and Canada. Whole-ecosystem experiments are used widely in lakes, streams, forests and oceans.

Hasler helped define the importance of land-water interactions as a primary variable in the water quality and ecology of lakes. His work on "cultural eutrophication" helped inform efforts to divert sewage and control fertilizer runoff and soil erosion in lakes, including Lake Mendota.

Hasler served as an advisor to 52 doctoral students and authored more than 200 publications and seven books. He was a past president of the American Society for Limnology and Oceanography, the American Society of Zoologists and the Ecological Society of America. He was a founder and first director of the Institute for Ecology. He was a 1969 inductee to the National Academy of Sciences and a 1972 inductee to the American Academy of Arts and Sciences, and holds many lifetime service and achievement awards, both national and international.

## A Time of Remembrance Scheduled for August 4, 2001

### Arthur Davis Hasler

Students, colleagues, family and friends are invited to join us in remembering the life and career of Arthur Davis Hasler. The gathering will take place at the UW-Madison Pyle Center (formerly Wisconsin Center) Alumni Lounge, 702 Langdon St. on Saturday, August 4, 2001 from 5:30-7:30 pm. You are encouraged to bring a slide or two and a favorite story to share. We also invite your contributions to the Arthur Davis Hasler Memorial Limnology Fund. If you would like to receive more information about the gathering or the memorial fund contact Linda Holthaus, Center for Limnology, 680 N. Park St., Madison, WI 53706, holthaus@facstaff.wisc.edu, 608-262-3304. Please help spread the word about this event!

# Tom Frost (1950-2000)—A Legacy of Friendship and Excellence

By Tim Kratz

Modified from the *ESA Bulletin*, Vol 28, No. 2

While on vacation with his family, Tom Frost drowned on August 25, 2000, in Lake Superior after saving the life of his son.

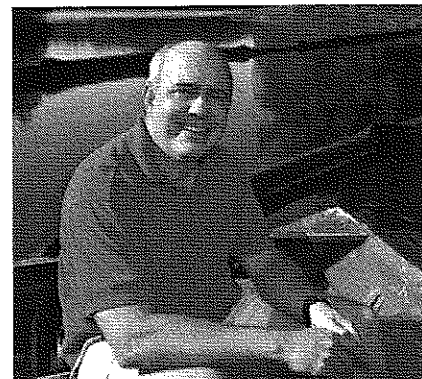
Tom was born in Upper Darby, Pennsylvania, July 2, 1950. He graduated from Drexel University in 1973 with a BS in Biology, and received a Ph.D. in Biology from Dartmouth College in 1978. While on a post-doctoral appointment from the University of Colorado from 1978 to 1980, he studied aquatic ecology in Lake Valencia in Venezuela. The following year he taught Limnology at the University of Colorado at Boulder. He came to the University of Wisconsin in July, 1981, as director of the Center for Limnology Trout Lake Station. Everyone who came to the Trout Lake Station will remember Tom and his personal legacy of friendship and helpfulness. He was genuinely interested in doing what he could to encourage and accomplish the research effort of each and every visitor to the station.

Tom's research interests were many and diverse. He was an internationally known expert on freshwater sponges. His leadership was pivotal in developing collaborative efforts. He led the interdisciplinary Little Rock Lake Project, a long-term

experiment on acid rain in which the lake was divided and one half was acidified for many years, then allowed to recover. He was also one of the leaders of the North Temperate Lakes Long Term Ecological Research program. During Tom's tenure, the station's facilities doubled and the station grew to become a busy nexus of internationally recognized science.

Tom also contributed greatly to the teaching mission of the university both on the Madison campus and at Trout Lake. In Madison he team-taught the annual Fall semester of Limnology starting in 1981 and regularly participated in an advanced field course in marine ecology. He mentored six graduate students to the Doctorate level. He contributed to the flurry of undergraduate research projects underway at the Trout Lake Station. He regularly participated in outreach and service functions of the university with presentations and discussion about lakes directed to audiences that ranged from local lake owners associations to those of the international media.

His skills in science and science management were recognized by the National Science Foundation when he was hired to serve as Program Director for Ecology in the Division of



Tom Frost

Environmental Biology for the period of September 1997 through the summer of 1999.

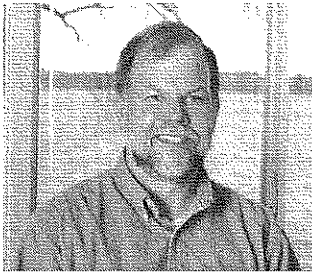
Tom especially loved spending time with his family, playing sports and games, traveling, a good story, a good joke, and the simple pleasures of companionship with friends. He participated in cross-country skiing, bicycling, and canoeing, and enjoyed the natural world. He was also keenly interested in politics.

Tom is survived by his wife, Susan Knight, and their sons, Eliot Frost, 9, and Peter Frost, 6. He will be remembered as a man who brought genuine interest to building and sustaining an ever-growing circle of friendships. His colleagues will remember him as a scientist who brought a gentle, caring humanity to our endeavors.

## Frost Memorial Symposium Planned

Maria Gonzalez (Miami Univ of Ohio) and Daniel Schneider (Univ. Illinois), two of Tom's PhD students, have organized a symposium "Tribute to Thomas M. Frost (1950-2000)" for the June, 2002, meeting of the American Society of Limnology and Oceanography to be held in Victoria, British Columbia. A suite of invited speakers will be joined by contributed papers. Potential contributors should contact Maria (gonzalmj@muohio.edu) or Daniel (ddws@uiuc.edu).

# Steve Carpenter Elected to National Academy of Sciences



Steve Carpenter

Steve Carpenter was one of three UW faculty elected to the National Academy of Sciences May 1, 2001. Election to the academy is among the most coveted and prestigious honors in all of science, outshining all other forms of professional recognition save the Nobel Prize. Now the Halverson Professor of Limnology and a professor of zoology, Steve joined the UW-Madison faculty in 1989. He has studied food webs and several factors which affect production and nutrient cycling, contaminant cycles, freshwater fisheries, eutrophication, non-point pollution, and ecological economics of freshwater. Steve currently serves as the President of the 7,600-member Ecological Society of America. As President of ESA, Carpenter has led in the creation of a new society journal planned for 2003. In addition, he started a new ESA initiative on ecological forecasting which has evoked significant interest from federal funding agencies.

In the past 2 years Carpenter has received three other prestigious awards: the Hutchinson medal from the American Society of Limnology and Oceanography, the Excellence in Ecology award for Limnetic Ecology (presented every three years by the Ecology Institute in Germany), and the MacArthur Award from ESA. Carpenter's MacArthur address "Ecological Futures: Building an Ecology of the Long Now" will be presented at the ESA meeting in Madison during August 2001.

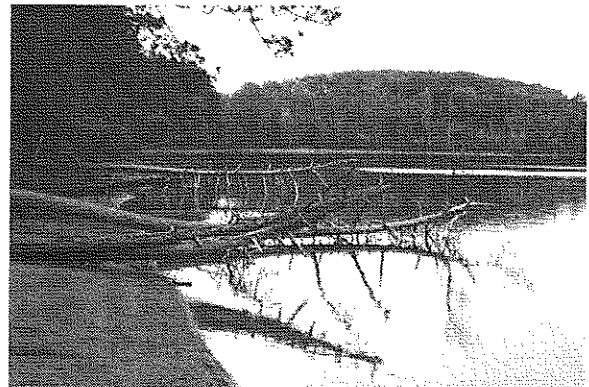
In its citation of Carpenter, the MacArthur Award Committee commented that "Carpenter's work is a model for the study of complex systems, seamlessly integrating theory, example and practice to deal with multiple causation and inherent uncertainty. His research career exhibits exponential growth in both quantity and diversity. He began with a focus on the organismic, population and community scales of ecology, but his more recent work looks at the whole system, landscape and global scales. He championed large-scale experimentation, developed the statistical tools necessary to provide quantitative rigor, and demonstrated how whole-lake manipulation could advance the understanding of ecosystem dynamics. Most recently he has undertaken highly innovative and influential work integrating ecology, economics and management."

## Limnology Leads Biocomplexity

A team of U.W. scientists led by limnologists Steve Carpenter and Tim Kratz received \$3M from the NSF BioComplexity program for research on interactions of riparian land, people, and lakes in the Trout Lake area. Collaborators on the project include Jim Kitchell and John Magnuson, as well as seven other faculty from the departments of Zoology, Botany, Economics and Agronomy.

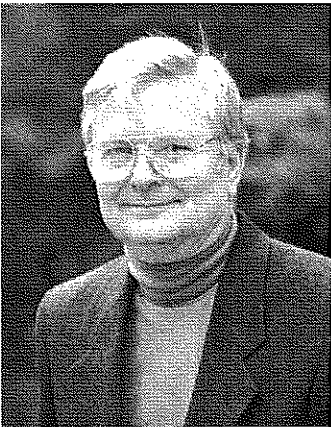
The scientists are investigating surprises – large, unexpected changes from apparently small causes. An example is loss of fish species from lakes as human settlement changes riparian zones.

Researchers will be initiating new whole-lake experiments to study the effects of fallen trees on fish dynamics. In another experiment, they will attempt to extirpate invading rusty crayfish and rainbow smelt by enhancing predator populations while harvesting intensively. The scientists will also conduct an extensive comparative survey of dozens of lakes in Vilas County to examine relationships among economic factors, human activity, shoreline vegetation, fish habitat, and fish populations. The project includes a major ecosystem modeling effort centered on the dynamics of shoreline communities and the implications for fish populations and water quality.



Sparkling Lake

# John Magnuson Retires...or Does He?



John Magnuson

When in high school I worked a summer on an assembly line, spot welding corner supports on deep freezers. My mother recalls me coming home and telling her that I was going to make my avocation my vocation. Between my freshman and sophomore year in college, I counted salmon through weirs and lived in remote cabins on the Egegik and Ugashik Rivers on the Alaskan Peninsula. I was on my way to finding my avocation, however, once the salmon were counted weeks would pass with nothing to do but care for ourselves. The fog and rain set in, as did cabin fever. Sleep was a way of passing time. I was awakened one afternoon by a raging argument between my 2 cabin mates. The cause of the disagreement? Who was doing the most work. I swore I would never complain about having too much to do. These two lessons have stuck with me through the years.

So, no surprise, I am still "working" at my vocation--my avocation. I desire no alternative at this point. I have been retired since July 1, 2000. I am 67 years old, in excellent health, and my mind still works except for a continuing liability of remembering names of friends, students, and colleagues. The pleasure of a university life is that emeritus status is a viable life style through which one can remain active and contribute. My colleagues have made room for me and continue to interact with me. To date I have continued to teach limnology and ecology of fishes, mentor graduate and undergraduate students, and involve myself in research and writing. My classroom teaching will likely decline this next year.

Norma does not see much difference in my activities. But I am more relaxed, spend more time with family. Sue (Berg) and Jenni (McMahon) are married and live in the area. Sue has two sons and Jenni has one. All nine of us are soon to head off to Door County for a week and will continue such activities.

I still have difficulty saying no, but am becoming more skilled at it...perhaps. I serve on several National Research Council committees, one on Diversitas, another on global change research. I co-chair an activity of the Wisconsin Academy of Science, Arts, and Letters on the sustainability of Wisconsin's water resources and ecosystems; we hope this effort will contribute to stronger water policies for Wisconsin. I sit on the Dane County Lakes & Watershed Commission where I see that global issues such as climate change and dispersal of exotics are relevant at local scales. I am working on a book with Tim Kratz and others on the "Long-Term Regional Ecology of Lakes in the Landscape" that pulls together our first 20 years of research at the North Temperate Lakes LTER site enabled by the National Science Foundation.

I feel good about the Center for Limnology and its present leadership. I wish that every retiring professor or lab director could be so fortunate to see such skillful and creative new leaders take charge. They are absolutely outstanding. Thus, I take comfort in the way the Center is moving and do appreciate not being in charge.

*Jim Kitchell adds:*

*During the summer of 2000, John received the prestigious Award of Excellence from the American Fisheries Society. Most recently, he's been featured on NPR, in the New York Times and other notable media outlets for work that appeared in the journal Science. Those of us at Wisconsin know that the greatest honor accrued last year when John was selected as one of four faculty on the UW campus to receive the Hildale Award--a tribute to his career as a Professor. The following text from the Hildale Award document offers a too-brief summary of John's accomplishments; "John Magnuson's career has been exemplary in every way: in path-breaking research on broadly significant topics; in outstanding and inspirational teaching; and in generous service to international, national, state and campus organizations. Clearly he is a superb leader who has enriched the lives of students, faculty and the broader community which we serve." The Hildale Award is a richly-deserved capstone for a career that has been outstanding in every respect."*

## Invitation to A Tribute to John Magnuson

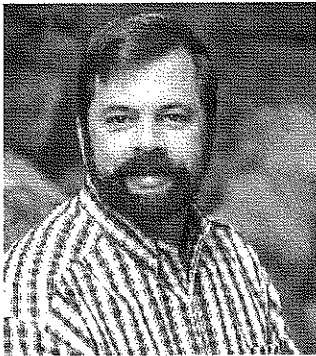
You are invited to share in the celebration of the career and professional accomplishments of John J. Magnuson. The event will be held on the UW-Madison campus in Room 6191 Helen C. White Hall, 600 N. Park Street (adjacent to the Lake Mendota Laboratory) at 7:30 p.m. on Monday August 6, 2001 immediately following the ESA Aquatic Ecology Section Business Meeting & Mixer. If you would like to receive more information or are interested in contributing to a Memory Album or a gift please contact Linda Holthaus at holthaus@facstaff.wisc.edu or call 608-262-3304. Please help spread the word about this event!

# There is Life After Limnology for David Egger

By John Magnuson

If you were at the Laboratory of Limnology anytime from July 1970 until David Egger retired from the University in April 2000, you know him as the chief administrative officer. He had uncanny abilities to solve your problems, get things done, and keep us out of various kinds of hot water. Some of you also know him as a fishing buddy, an open ear, and one concerned for the welfare of the people with which he worked. Here are a few quotes from Linda Holthaus who worked with Dave for 18 of those 30 years: "David functioned at the hub of action in

a very busy place. A typical day in Dave's office was filled with activity, from students seeking advice, to fielding phone calls, to staff seeking advice, to fielding phone calls, to faculty seeking advice, to fielding phone calls. I'm not sure I have ever seen him lose his cool. It is really important to have a boss who doesn't lose his head when the going gets rough."



David Egger

A bit of history: Dave received his B.Sc. in Fishery Biology and his M.Sc. in Interdisciplinary Biological

Sciences at Michigan State University. An administrative officer who could relate to the science is a great asset to a University research group. I often sought his counsel and his touch is apparent in the present research programs, facilities, staff structure, and in the educational opportunities for the many students influenced by our program. In the 1970s Dave went on research cruises with us in the Atlantic, organized the seminars, and studied phalarope foraging on zooplankton with Stan Dodson in Alaska. He was key in helping establish the Center for Limnology in 1983 from the previous Lake Biology Program. Of his many projects, one of the most recent was to see that the old "Birge & Juday"-era cabins at Trout Lake were modernized; only one is yet to be finished. I owe David a great personal debt, as do all of us fortunate enough to work with him at limnology.

Dave and Julie's daughter Meleia is finishing her first year of college. Dave and Julie remain in Madison but spend deserved chunks of time at the cabin that they built in northern Michigan. David is our administrator emeritus and comes in to check on us—to go fishing with buddies, help with the lake shore clean up day, and recently to help with our photo archives. He is one of the few souls who can recognize each member of the parade of people that has come through the Lake Lab over the last 30 years.

## Flooded, again!

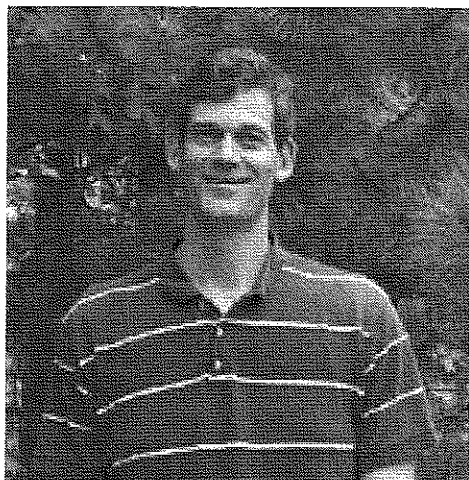
Some may remember the flood of '93 when much of the upper midwest was underwater in a 100-year event. Included in all that was a flood of the Madison lakes that caused us to sandbag the basement doors and slip as water levels rose to 25 cm above the floor level. That was a memorable event!

Well, we started the new century with another of those! Two weeks of daily rain in June of '00 was followed by a pair of 5 cm downpours on saturated soils, and there we were again—up to our knees in sandbags and pumps. We have a new record for us of 29 cm above floor level. Five pumps running continuously, bebies of overnight shifts by student and staff volunteers, and a month of having to climb UP into the boats before water levels dropped to the point that we could put the pier out again. Those climate change models forecast increased variability in weather. Well, we've had our flood for this century. One's enough.



## Tim Kratz Selected to Lead Trout Lake Station

The Center for Limnology is pleased to announce that Tim Kratz has been selected as the Center's Associate Director in charge of Trout Lake Station. Tim was born and raised in Milwaukee, Wisconsin. As a sophomore in high school he went with a youth group on a two week canoe trip to the Boundary Waters Canoe Area. He came back from this trip filled with an appreciation of wild places. Tim attended UW-Madison intending to be a math major, but ended up graduating with a major in botany and a strong interest in ecology. His Master's Thesis was on the reproductive ecology of black spruce in the Red Lake Peatland Area in northern Minnesota, and he was awarded a M.S. in Ecology and Behavioral Biology at the University of Minnesota in 1977. He returned to Wisconsin to the UW-Madison Botany Department for a Ph.D working with



Tim Kratz

Tim Allen and Cal DeWitt on the long-term development of kettle-hole peatlands. After completing his Ph.D in 1981 he joined the Center for Limnology staff as Site Manager for the then new Long-Term Ecological Research Project. Tim's research interests are in the long-term landscape ecology of lakes, especially how the position of lakes within the landscapes influences their long term dynamics. He has served on the Ecosystem Science review panel at the National Science Foundation, the National Research Council committees reviewing the EPA's Environmental Monitoring and Assessment Project and the Grand Canyon Monitoring and Research

Center. Tim is looking forward to the challenges of his new role at the Trout Lake Station, and we are most delighted that he has accepted the position.

## Jake Vander Zanden Joins Center for Limnology

The Center for Limnology is pleased to announce that Jake Vander Zanden will be joining our faculty this summer as Assistant Professor of Zoology. Although he was born in Alabama, Jake was raised in nearby Neenah, Wisconsin, where much of his childhood was spent fishing in Lake Winnebago, foreshadowing later interest in limnology and fish ecology. He headed to Canada for a Bachelor's degree in Geography and stayed for a Ph.D. in Biology at McGill University in Montreal. Jake's postdoctoral work was at the University of California – Davis, where he was a Nature Conservancy David H. Smith postdoctoral fellow. His teaching responsibilities at UW-Madison will include Zoology 510: Ecology of Fishes and Zoology 315: Limnology, Conservation of Aquatic Resources. Current research interests include studies of aquatic invasive species, food webs, and applications of stable isotopes and other ecological tracer techniques to studies of aquatic ecosystems.

Visit us on the web!

<http://limnology.wisc.edu>

### **Limnology News**

The University of Wisconsin-Madison Center for Limnology publishes Limnology News for its alumni and friends. Comments on the newsletter, articles and article ideas are welcome. Contact Limnology News, Center for Limnology, 680 North Park Street, Madison WI 53706.

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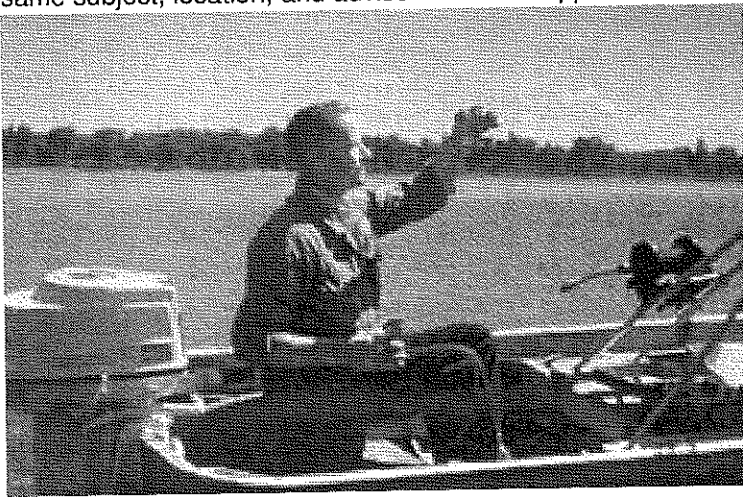
# Memories of Oscar M. Brynildson (1916-2000)

By Ray J. White  
Ph.D., Hasler, 1972

Early-1950s denizens of the little, red-brick Lake Lab that used to squat on Lake Mendota's shore at the foot of Park Street will recall grad student Oscar Brynildson's distinctive, resonant voice and slight Skandinavian intonation and phrasing. In professional life, that voice and his hand would guide coldwater fishery research of the Wisconsin Conservation Department (later Department of Natural Resources) for years. He gave considerate, good-natured direction to junior biologists and worked beside them on streams and lakes. His "OMB" marks many a field note and memo in department files.

Oscar was born March 5, 1916, on a farm near Taylor in Jackson County, Wisconsin, grandson of Norwegian immigrants, eighth among his parents' 12 children. As a youth, he knew the delights and drudgeries of farmstead life. Bleak loneliness might have plagued him in the days when his brothers were too old or young to play with. Same-aged boys lived too distant. His near-aged sisters played games that boys disdain. However, Oscar turned slack hours into fun, observing the behavior of barnyard chickens. He gave each a name and discovered on his own the peck-order system that was years later presented to him in college as a new ethological breakthrough. Nature also offered much in surrounding fields and streams. Thus, a trout angler, hunter, and budding biologist.

Two years into undergrad work at the University of Wisconsin, he entered WWII service for four years. The army trained him in German at the University of Cincinnati, and he became an interrogator of war prisoners. Continuing studies post-war at the Universities of Michigan and Wisconsin, he earned a bachelors degree in Zoology at the latter and went on for an MA (Jan. 1950) with A. D. Hasler on lake liming in Chippewa County. This expanded into doctoral research; same subject, location, and advisor. At the Chippewa Lakes, fellow grad students were Bill Helm and Bill Schmitz; later



Oscar Brynildson, circa 1951 Photo provided by Mrs. Diane Brynildson

he often spoke of working with them. Before finishing, Oscar took employment with the Wisconsin Conservation Department (WCD) in August 1952. That prolonged the data-analysis and thesis-writing immensely, as many another has found. He completed his Ph.D. in 1958, the thesis entitled "Lime-treatment of Brown-stained Lakes and Their Adaptability for Trout and Largemouth Bass." A major aspect was size-selective predation of fish on zooplankton.

He began with WCD's Fish Management Division as a field biologist, working out of Madison, mainly in southern counties. Soon he took on a statewide project to evaluate trout stream habitat management. By 1957 he headed all the state's trout and salmon research, initially supervising biologists who studied angling regulations at Lawrence Creek (Adams and Marquette Counties) and who evaluated habitat work on various streams. The state's coldwater research grew under

Oscar's direction to include many analyses of stream habitat restoration, spring-pond alterations, and lake-salmonid problems. Included were studies at the Five Lakes site in Vilas County. He authored many reports and publications.

A confirmed bachelor most of his life, Oscar made his home in Madison until 1967, when the Cold Water Research Group relocated to Waupaca and he lived at Amherst. He retired in 1977, moved to the Black River Falls area near his natal home, and married Margaret "Margo" Wonn. They often ventured out to fish trout, hunt ruffed grouse, and enjoy other offerings of the countryside. Surviving brother, Clifford Brynildson of Madison, a fellow UW Zoology grad student (MS 1950) and WCD-DNR fishery biologist, often hunted and fished with him. Oscar's wife Margo died in 1986, he on December 5, 2000 at age 84 in Black River Falls. They buried him in tidy new field khakis, the sort of "DNR garb" he wore to the end of his days. No tie, but, as he would have thought proper, top shirt-button buttoned.

Oscar Brynildson contributed much to Wisconsin's heyday of conservation spirit and progress. Throughout the state, abused streams have healed. There, wild trout populations thrive far better than before Oscar and his team began building the knowledge to restore them. Political elements have lately undermined much that he and fellow post-war biologists developed: effective organization; sound, science-based resource protection and management; and high department morale. We could well follow his era's example in a rededication to serving natural resources and the public.



# Endowment News

The Center for Limnology gratefully acknowledges the generous gifts that provide additional funding to support our ongoing mission of research, education, and service. If you would like to make a gift to the Center, please contact us at the Center's address or by phone (608-262-3014). Options are available through the UW Foundation for contributing to any of the currently established funds, or a separate fund may be established which allows the donor to specify how the funds may be used. The UW Foundation may be contacted at 1848 University Ave., P.O. Box 8860, Madison, WI 53708-8860, phone 608-263-4545. Additional information may also be found on their web site, <http://uwfound.wisc.edu>

Our current funds include the following:

**Center for Limnology General Endowment Fund:**

Multiple donors support this fund which provides undesignated monies to be used for the Center's programs.

**Arthur D. Hasler Memorial Limnology Fund:** Aids the Center in its teaching, research, and public service role.

**Anna Grant Birge Memorial Scholarship Fund:**

Provides summer support for graduate students in the field of limnology, preference to be given to students engaged in investigations on the lakes of Wisconsin.

**Chase Noland Scholarship in Limnology:** Provides summer support for undergraduate research projects.

**William V. Kaeser Visiting Scholar Fund:** Provides funding to support visiting scholars in limnology or related fields.

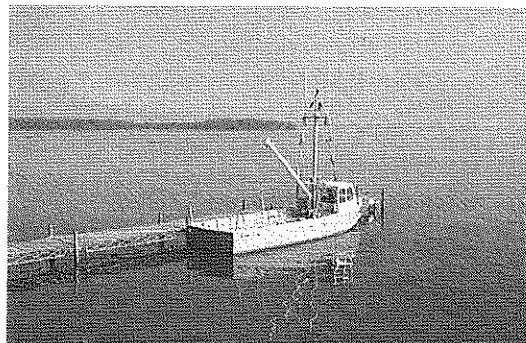
**Dorothy Powers Grant and Eugene Lodewick Grant Memorial Scholarship Fund:** Used to support limnology graduate students.

**Chancey Juday Limnological Data Fund:** Is used to establish a data management and archival system to preserve the valuable records accumulated for Wisconsin lakes.

**Donald Halverson Limnology Fund:** Provides funds for faculty salaries; currently used in partial support of Steve Carpenter.

**John J. Magnuson Limnology Library Fund:** Supports the Limnology Library's mission to provide quality resources for students, faculty, and researchers around the world.

**Kenneth W. Malueg Limnology Scholarship Fund:** A newly established fund for supporting graduate students in the Center for Limnology.



**College for Kids  
2001**



## Student Awards

The Anna Grant Birge Award Recipients for 2001 include **Paula Allen** (Zoology, Dodson), **Issac Kaplan** (Limnology, Kitchell), **Brian Roth** (Limnology, Kitchell), **Carlos Santos** (Limnology, Dodson), **Gregory Sass**, (Zoology, Kitchell), **Jeff Schell** (Zoology, Dodson) and **Karen Wilson** (Zoology, Magnuson).

**Tanya Havlicek** (Limnology, Carpenter) has been awarded a STAR fellowship from the Environmental Protection Agency. Her research is associated with the Biocomplexity project which investigates interactions between residential development, angling pressure, and fish population stability.

**Carolyn Antonie** (undergrad in Zoology) has been awarded the Chase Noland Award for 2001 in support of her work with Emily Stanley to study impoundment soils and their difference from upstream reaches of the same river.

The 2001 Center for Limnology recipients of National Science Foundation Research Experience awards are **Catherine Hein** (LTER, Magnuson), **Katherine Sipiowski** (LTER, Finlay), **Mark Nordheim** (LTER, Lillesand), and **Caitlin Gille** (Cascade, Kitchell).

## Recent Graduates

**Ross Freeman** (M.S. 2000, Stanley) studied land use change in the Wisconsin River floodplain. He found that forest, wetland, and urban lands have increased in the floodplain at the expense of agriculture and native grassland over the past 60 years, and that the extent of landscape fragmentation has decreased in many floodplain reaches. Ross explored effects of different land conversion strategies on overall landscape structure, and found that greatest improvement in overall floodplain connectivity was achieved by focusing on small gaps in forest cover along the edge of the river channel.

**Ben Greenfield** (M.S. 2000, Carpenter) studied landscape patterns of mercury accumulation by yellow perch. Small lakes with extensive areas of wetlands in their watersheds had the highest mercury concentrations in yellow perch. Other significant correlates of mercury concentration were pH and perch body size. Ben is a researcher with the San Francisco Estuary Institute in Richmond, California.

**Chris Harvey** (Ph.D. 2001, Kitchell) is the first PhD granted in Limnology and Marine Sciences, which was formerly the Oceanography and Limnology graduate program. His thesis "A stable Isotope Analysis Of Food Web Structure In Lake Superior" was completed in June 2001. Chris will spend July-Sept. at Univ. Stockholm working with Sture Hansson, then move to Seattle where he begins an National Research Council postdoc with Peter Kareiva and the National Marine Fisheries Service group working on salmon recovery in the Columbia.

**Jefferson Hinke** (M.S. Zoology 2001, Kitchell) was awarded an MS based on research conducted as part of the cascade project at UNDERC. His thesis was entitled "Trophic Interactions of Juvenile Yellow Perch (*Perca*

*flavescens*) and Young-of-Year Largemouth Bass (*Micropterus salmoides*): The Influence of Density, Size, and Growth."

**Jeff Houser** (Ph.D. 2001, Carpenter) studied the effects of colored dissolved organic carbon on lake physics and metabolism. Darker lakes have thinner, colder epilimnions and higher-amplitude diel temperature cycles than clearer lakes. Whole-lake respiration, measured as carbon dioxide and methane accumulation in the hypolimnion, is greater in darker lakes. Jeff moved to a postdoctoral position at Oak Ridge National Laboratory in July 2001.

**Dick Lathrop** (Ph.D. 1998, Carpenter) analyzed the long-term plankton record of the Madison lakes. He showed how chlorophyll concentrations of Lake Mendota are controlled by the interaction of phosphorus, grazing, and physical mixing. A model was developed to forecast the response of Lake Mendota to nonpoint phosphorus inputs, and used to design mitigation targets for an ongoing management program. Dick continues to work for Wisconsin DNR and is based at the Laboratory of Limnology on Lake Mendota. His responsibilities include coordination of the LTER program on the Madison area lakes.

**David Lewis** (Ph.D. 2000, Magnuson) conducted his research on "Interactions between aquatic snails and exotic crayfish" to understand the complexity of species interactions in the lakes near our Trout lake Station. At the same time he sought broader frameworks to explain the world he sees in the context of long-term regional ecology. David is now a postdoctoral associate at the urban Long-Term Ecological Research program in Phoenix, Arizona, where he continues to broaden his perspective studying global biogeochemical cycling.

## **Recent Graduates, continued...**

**Brian Roth** completed his MS in Limnology and Marine Sciences (2001, Kitchell) through a thesis entitled "The Role of Competition, Predation and their Interaction in Invasion Dynamics: Predator Accelerated Replacement." Brian will continue in the PhD program of LMS as part of the Biocomplexity program on Sparkling Lake where predator enhancement and intensive trapping are being tested as means for reducing rusty crayfish populations.

**Gregory Sass** completed his MS in Zoology (2001, Kitchell) with a thesis entitled "An Analysis of Walleye, Stizostedion vitreum, Growth in the Ceded Territory of Wisconsin, 1977-2000." Greg started his PhD work this summer as part of the Biocomplexity program and is working on predator-prey interactions in lakes where coarse woody debris manipulations are to be done.

## **Migrations**

**Graeme Cumming** (Ph.D. Oxford, 1999, postdoc Carpenter) has accepted a position as Assistant Professor with the Department of Wildlife Ecology and Conservation at the University of Florida – Gainesville.

**Tim Essington** (Ph.D. 1999, Kitchell) after a two-year stint as a postdoc in Hawaii on the Apex Predators project, Tim will be an Assistant Professor in the Marine Sciences Research Center, State University of New York – Stony Brook.

**Jacque Finlay** (Ph.D. University of California – Berkeley, postdoc Stanley) has accepted a National Research Council postdoctoral appointment with Rob Striegl at the Denver US Geological Survey Lab. He will shuttle between there and field work in the Yukon River Basin.

**Hojeong Kang** (Ph.D., University of Wales, 1999) was a post-doctoral research associate involved in our study of the Wisconsin River floodplain and was investigating landscape-scale patterns of microbial activity related to organic matter decomposition. Hojeong was able to return to Korea and is now a faculty member in the Department of Environmental Science and Engineering at Ewha University.

**Kathy Webster** (PhD 1998, Magnuson) will be joining the faculty in the Department of Biological Sciences at the University of Maine in Orono. Kathy previously worked as an aquatic ecologist for the Wisconsin Department of Natural Resources for over 20 years.

Keep us posted! Be sure to let us know about noteworthy events. Send changes of address, phone, email, notice of awards or grants, etc. to: Attn: Denise Karns, Center for Limnology 680 North Park Street, Madison WI 53706-1492, phone 608-262-3014, [limnology@mhub.limnology.wisc.edu](mailto:limnology@mhub.limnology.wisc.edu)

### **CFL Hosts ESA Aquatic Ecology Section Mixer**

The Center for Limnology will be hosting the Ecological Society of America Aquatic Ecology Section Business Meeting and Mixer from 5:30 – 7:30 on Monday, August 6, 2001. The event will be held at the Center for Limnology Lake Mendota Laboratory and Water Sciences and Engineering Laboratory. We hope to see you there!