

POISIES & PATHOGENS



Department of Botany and Plant Pathology

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<http://www.science.oregonstate.edu/bpp>

Fourteenth Edition

March 2003

FROM THE DEPARTMENTAL CHAIRPERSON

Dear Alumni and Friends,

Please note our website address has changed; update your bookmarks to: <http://www.science.oregonstate.edu/bpp>. We hope that you will visit this site often to see the plans unfold for our BPP Alumni Reunion on July 1st and the symposium honoring the retirement of Dallice Mills on July 2nd (see insets on these events). We also hope that you will join us for one or both of these special days. We are anxious to post the names of those planning to attend so that others might be inspired to come; please send your RSVPs to simpsond@science.oregonstate.edu, by mail to the department address, or telephone to Dianne Simpson (541-737-4147).

I am writing this letter from my temporary "home" in Rockville, MD. It is almost with surprise that I see the end of our stay racing up now at a rapid pace—on May 31st, I will fly back to Oregon and Jim will start the cross-country drive with our youngest daughter Martha. After an extraordinarily long, cold, and snowy winter, the cherry trees are blooming around the Tidal Basin and I find that I am missing my Corvallis garden acutely. My alternate garden for now is the Bishop's Garden at the Washington National Cathedral and I have been visiting it often to gather with my camera the evidence of spring unfolding. New growth in the spring is miraculous to behold and even more appreciated after such a bleak winter. I must confess that we did get some relief in late

BPP ALUMNI REUNION

Tuesday July 1, 2003

Morning Coffee
Department Tours
Early Evening Picnic

Please join us
RSVP by 15 May
simpsond@science.oregonstate.edu

Molecular Genetic Determinants of Plant-Microbe Interactions

A symposium in honor of
Dallice Mills' retirement

Wednesday July 2, 2003
8:30-4:00 p.m.
Oregon State University

Detailed schedule at:
<http://science.oregonstate.edu/bpp>

January when Jim and I were able to escape to the south island of New Zealand where I attended the International Congress of Plant Pathology in Christchurch (as co-author on a keynote paper). It was a great opportunity to be totally immersed in plant pathology for a week and a unique chance to enjoy a beautiful country with very friendly residents and an impressive cuisine. We charted our travel through Portland in order to see our family (our granddaughter is already 9 months!). I look forward to going back to stay so we can see our family and friends much more often; being away has made me especially appreciative that we can return.

It has proven to be a very interesting time to spend in Washington, D.C. I have learned a lot during my project for the USDA Cooperative State Research, Education, and Extension agency and I will be taking home a variety of experiences that should prove beneficial to OSU. I would have preferred a more "normal" period to live here but I suspect that it will be a long time, if ever, before quiet returns so I try to make the most of each day without focusing too much on living in the Nation's capitol during a war that the USA started. So in these last weeks, I will be out and about to see as much of the city as possible before we head west.

As many of you know, Oregon has been especially hard-hit in regards to the economy and budgets continue to shrink including that for the university. Due to the ease of technology, I have been able to stay as connected to events on campus as my time allows but it has been a great relief having **Dan Arp's** capable leadership for the department during this especially challenging time. **Don Armstrong**, associate chairperson, and **Dianne Simpson**, office manager and miracle worker, have been especially important in aiding Dan and the rest of the department in carrying on business in a very unusual time. Unfortunately, we have had several unexpected retirements this year due in a large part to changes in the Public Employees Retirement System (PERS) that has created an environment that discourages faculty from staying on if they are eligible for or near retirement. As of December 31, 2002, **Don Armstrong, F. Joseph Hanus, Mary**

Powelson, and Don Zobel chose to follow **Dalice Mills** into retirement. All are continuing to work on various projects and to complete their teaching and research commitments. We plan to have them "working in retirement" over the next months and years and we will continue to benefit from their contributions for some time to come. Needless to say, there are very large "holes" developing in our department as a result of these retirements and we are turning to the task of making a case for new faculty that we hope to hire down the road. In the immediate future, as of July 1, 2003, the Department of Entomology faculty will disperse to various other units. We will welcome several who believe that our department will be the best fit for them and final plans are being made to complete the transfers. We will introduce our new department members in the next issue.

My letter would not be complete without calling to your attention the promotions that occurred this past year. Effective July 1, 2002, **Russell Ingham and Thomas Wolpert** were promoted to Professor; **Deborah Clark** was promoted to Senior Instructor in the Biology Program; and **Steve Cluskey, Robin Ludy, and Wendy Sutton** were promoted to Senior Faculty Research Assistant. Congratulations to them and to the many award winners we had this past year (listed later in this issue).

I would also like to extend a special thank you to all of our alumni and friends who have made donations of time or money to one or more of our programs. Your generosity has been especially encouraging during a time when there are not a lot of "bright spots" on the economic horizon. We are putting your gifts to good use and our students benefit in a variety of ways from your faith in our programs. I hope to see many of you in July. Until then, enjoy each and every day that you are blessed with.

Sincerely,



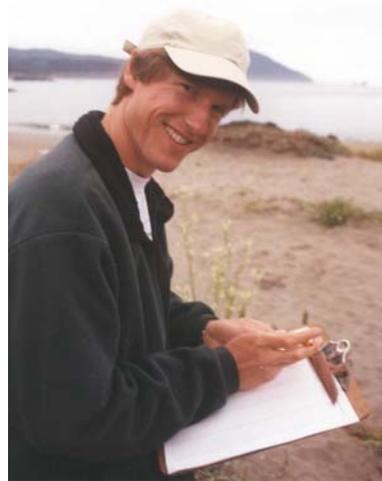
Stella Melugin Coakley
Professor and Chairperson
coakleys@science.oregonstate.edu

OUR COURTESY FACULTY

Dr. Thomas Kaye and the Institute for Applied Ecology

It is both an exciting and daunting task to start a new non-profit organization, but in 1999 Keli Kuykendall (BPP MS 1998) and I founded the Institute for Applied Ecology (IAE) here in Corvallis. We hit the ground running in our first field season (2000), and currently have eight full and part time research staff, as well as seasonal interns and other personnel. I serve as the Institute's Executive Director and conduct research on various ecological topics.

IAE is dedicated to natural resource conservation, research and education. We are actively involved in restoration projects, studies in invasive species control, conservation biology, and habitat management. By working closely with federal agencies that manage public land in the Pacific Northwest and other groups, we have developed partnerships that allow us to transfer our findings



directly to managers and make a positive impact on our environment. Most of our funding comes from federal agencies. One of our major goals is to apply ecological theory and tools to solve real-world problems and improve on-the-ground restoration efforts, while in the process involve students and interns in this work as much as possible. During the spring and summer each year, we include conservation biology interns in our group to expose them to ecological research and give them experience in this field.

Examples of IAE projects include studies to improve reintroduction success of endangered species, such as Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*), the primary

host plant of Fender's blue butterfly, which is also endangered. We have developed



propagation protocols for the lupine that conservationists can now use in efforts to restore both species. We are also working with the Bureau of Land Management to compare different methods (such as burning or mowing) of managing

native prairies and the endangered plants they support. One of our projects involves evaluating the effects of prescribed fire on mid-elevation meadows in the Umpqua National Forest that may be at risk of invasion by non-native plants. Because of the threat to many of our ecosystems by invasive plants, we are now involved in a series of studies to develop successful control measures for one of Oregon's worst weeds, false-brome (*Brachypodium sylvaticum*), an extremely competitive grass first reported in North America by BPP's Ken Chambers. One of our most significant projects is the Native Seed Network, an effort to improve the availability and economy of native plant materials for restoration by working with seed growers and government agencies and facilitating a seed buying/selling website. The list of our ongoing projects goes on!

I recently completed my doctorate here in Botany and Plant Pathology and in November 2001 was given the opportunity to serve as a Courtesy Assistant Professor. I have enjoyed this role and currently serve on two graduate student committees. I look forward to increasing the involvement of graduate students in my research and hope they will benefit from the variety of exciting projects underway at IAE. I believe strongly in our mission to conduct meaningful ecological research, include students in our programs, and communicate our findings to managers

and the public. In February of 2003 we hosted a conference on the OSU campus on Native Plant Restoration and Management on Public Lands in the Pacific Northwest that was attended by over 300 people, mostly natural resource professionals. The positive energy among the participants was palpable and confirmed my hopes that what we are doing is worthwhile.

I invite anyone interested in IAE and our projects to stop by our office in downtown Corvallis (227 SW 6th) or visit us online at our web sites, www.appliedeco.org and www.nativeseednetwork.org.

FACULTY RESEARCH ASSISTANTS

by Steve Cluskey

Hats off to the following for their continuing contributions and efforts in the unsung world of botany and plant pathology, and for their ongoing initiatives to make life better for farmers, growers, and gardeners.

Promotions.....

The following Faculty Research Assistants were recently promoted to Senior Faculty Research Assistant:

Wendy Sutton, who has worked with Everett Hansen since 1995, on *Phytophthora* and Swiss Needle Cast; she has a BS degree in Biology from Eastern Oregon University, 1993.

Robin Ludy, who graduated with a BS degree in Plant and Soil Science from Southern Illinois University, Carbondale, IL in 1985; she received her MS in Horticulture from Oregon State University in 1990, and has worked with Mary Powelson since 1992 on Late Blight of potatoes and other vegetable diseases.

Valera Peremyslov, who is working with Valerian Dolja on the molecular aspects of Beet Yellow Virus. Valera obtained his MS degree in Russia in 1983. He received the Outstanding Faculty Research Assistant Award in 2002.

Steve Cluskey, who has been working with Jay Pscheidt since 1989 on diseases of hazelnuts. He received his BS degree in Forest Resource Management, from Southern Illinois University, Carbondale, IL, 1974; he received

his MS Horticulture from West Virginia University, Morgantown, West Virginia, 1986.

New Hires....

Tim Knight is currently working with Cindy Ocamb, on diseases of hops and sweet corn. He received his BS from Stanford in 1998 in Earth System Environment Science, and his MS in Soil Science, 2002. He hails from a small town in northern California called Laytonville.

Lisa Smolenska, a new Research Associate, is joining Valerian Dolja's lab; she is from Scotland.

Conrad Schoch, also a new Research Associate will be doing a postdoc in Joey Spatafora's lab. Conrad is from South Africa.

Cynthia Lipp has joined Bill Pfender's group as a new Faculty Research Assistant. She is from Canada.

And Retirees...

Joe Hanus has retired as of Jan 1, 2003 from the Northwest Alliance for Computational Science & Engineering, but his plans are to keep on working and enjoy life. He received his BS in Microbiology from University of Houston in 1962, and his MS in Biophysics and Microbiology, University of Houston in 1966. He began his career with OSU in the Dept of Botany and Plant Pathology in 1976, with Harold Evans in the Nitrogen Fixation Lab. He worked there until 1989, when he began compiling a database of Microbial Germplasm with Larry Moore.

...Others moving on

Kelly Donahue left her position as a Faculty Research Assistant in the Ocamb lab, and took a position with the USDA.

Karen Violette has left the Hansen lab for an out of state position.

Brenda Shaffer, who worked in the Carrington lab, has taken a position in Joyce Loper's lab at the USDA.

Asa Preston has left Dallice Mills' lab. Dallice has recently retired and is finishing up a few projects in order to close his lab. Asa still comes in a few hours a week to help with that process.

Anne Davis who was working for Botany and Plant Pathology in Bob Linderman's lab,

has taken a Federal Research position through USDA-ARS in the same lab.

Christina Cowger who currently works in Chris Mundt's lab will be leaving at the end of the term for a position as a Small Grains Pathologist in the ARS Plant Science Research Unit in Raleigh, North Carolina. She has been with the Mundt lab group since 1994, when she was working on her MS. She finished her PhD a year ago in March and has since been doing a postdoc.

News from some of our current Faculty Research Assistants/Associates.....

Nadine Wade has been with Russ Ingham's lab since 1992. She guides the work-study students, plus extracting and counting thousands and thousands of nematodes. She also finds time to get involved with Museum Day where she helps Kathy Merrifield set up her moss and lichen exhibit. Nadine volunteers her time for the annual Old Mill Center Appeal Auction. The Old Mill Center is a full service United Way Agency, providing education and treatment to children ages two and up, both on-site and throughout the larger community.

LaRae Wallace, who joined Chris Mundt's lab in 2002, works on rust resistance in wheat. In her spare time she takes care of her famous dog Wren and her two cats.

Kathy Merrifield is currently doing nematode counts and identification for the Plant Clinic, where she has been since 1996. Kathy's favorite past time is working on the bog in her backyard which now includes 80% native Oregonian plants. Kathy is also well known for her nematode songs; she says Volume IV *Cowboy Songs* is still forthcoming, but needs a few finishing touches.

ABOUT OUR UNDERGRADUATE STUDENTS

Botany and Plant Pathology congratulates the following 10 students receiving B.S. degrees in Botany in 2002:

Govardhana Bichel, Jared Birkholz, Kristina Christner, Jerika Duran, Christopher Ellison, Amy Love, Taiowa Montgomery, Melissa Olson, Cheryl Shippentower, and Steven Ziemak

THE UNDERGRADUATE BOTANY CLUB

by John J. Schenk and Bailey Edgley

This year, the OSU Botany Club got off to a fantastic start, thanks to fundraising, activities, and a great group of people! Our membership has doubled since last year. At our meetings, we have been focusing on student research and career opportunities in Botany. We have invited various speakers to come and address different topics related to careers in Botany. Dr. Joey Spatafora and Rachael Andrie, of OSU, discussed graduate school options. We invited Alice Smith from the USDA Forest Service to talk about career options in the Forest Service. At members' request, Dr. Lydia S. Watrud from the EPA discussed phytoremediation. To encourage more undergraduate research, we had three of our own members discuss research projects in which they are involved: Jon Reed, who is working in Dr. Valerian Dolja's lab; Stephen Meyers, who works in Dr. Aaron Liston's lab; and John Schenk, who is also working in Dr. Aaron Liston's lab.

This year's main fundraising event was managing a paid parking lot during the OSU home football games. Although football is not related to Botany, it did supply the club with adequate funding. We have already used some of our savings for three fieldtrips.

The first field trip was to the Portland Chinese Garden in October. We picked a great time to go, since most things were still in bloom or in fruit. We were thankful to bring our own interpreter, Dr. Richard Halse. The garden had a great diversity of families, most of which were a first sight for many of us, since they naturally occur in more tropical habitats. After wandering the garden for a couple hours, we enjoyed some excellent hot tea in the teahouse. Our second trip was a combined snowshoeing and winter twig identification excursion into the Hoodoo Butte area. Fourteen members tested their botanical and physical skills in a four-mile hike. We picked a beautiful day to go since there was plenty of snow and sunshine.

Every year the Botany Club takes a spring break trip. This year we decided to go to the Redwoods National Park. Ten of us packed up and drove down to Prairie Creek State

Park for five days. We hiked to the beach from our campsite, making an extensive plant list along the way. The next day we enjoyed the rain as it soaked all of our gear. A quick stop at the laundromat made everyone a little bit happier. We then headed south to drive through a tree, but the van wouldn't squeeze through, so we had to settle for walking through. The last day we drove to the beach where there was much relaxing and some plant identification. We finished the day by taking a collection trip just outside of the park at Bald Hill. The few more attractive plants that were in bloom were *Ribes roezlii* var. *cruentum*, *Nemophila menziesii*, and *Berberis aquifolium*. After a short, eight-hour van ride, and a stop at the Bandon Cheese Factory, we were back in Corvallis, refreshed and ready for another term.

We have also been busy with community outreach projects this year. The Botany Club participated in the fall session of Museum Day, and is excited to participate in the program again this spring. We are also continuing with Science Connections, a science outreach program where we teach Botany to third and fourth graders. The curriculum was first developed two years ago by Jon Reed of the OSU Botany Club. This has been a great opportunity for us to go to Portland and interact with kids and get them excited about our favorite subject.

We have a full plate this spring term. The spring garden festival is coming up in May where we plan on selling plants (mostly natives) that we have been growing. Like last year, we will also have plant related activities, such as identifying plants for a prize, or guessing whether or not a plant is native to Oregon. We are also planning a field trip to Eastern Oregon to the John Day area to look at plant fossils and flora of Eastern Oregon.

This year has gone by fast because we have been having so much fun. We look forward to a busy spring term, followed by elections in June. We hope that the club will continue to attract many new members in the next year.

ABOUT OUR GRADUATE STUDENTS

by Djibo Zanzot

This year has kept the Graduate Students getting high praises for their efforts and out of most kinds of trouble. Here are some highlights:

The Mycological Society of America held their annual meeting on our esteemed campus this year. **Kentaro Hosaka** and **Gi-Ho Sung**, (both working with Spatafora), kept everything on track for the big event. **Eun-Sung Oh** (Hansen) won the Best Graduate Student Poster for her "Mechanisms of resistance to *Phytophthora lateralis*."

Ioannis Tzanetakis (Martin) and **Rachael Andrie** (Ciuffetti) represented the grads at last year's American Phytopathological Society meeting in Milwaukee (Wisconsin, not Oregon, of course).

Susan Crow (Lajtha), earned an Honorable Mention for Best Student Presentation at Biogeomon, the 4th International Symposium on Ecosystem Behaviour, held last August in the UK.

The grads kicked off the Fall term with a welcome weekend out in Waldport at a beautiful house with an ocean view, and a hike around Cape Perpetua. Dry year notwithstanding, **Todd Temple** (Johnson) came through with a harvest of chanterelles for soup on the Saturday night. Thanks again to Stella, *in absentia*.

Kristin Skinner (Ciuffetti) won an award for her poster at the CGRB retreat held last October.

This year's t-shirt design is a bigleaf maple (*Acer macrophyllum*) with tarspot fungus (*Rhytisma punctatum*) thereon. The design was chosen because the maple is a common forest hardwood and street tree (at least here in the great Pacific Northwest), and the tarspot fungus is commonly seen in autumn when tarspotted leaves fall. The fungus produces cytokinins that cause the leaf to continue photosynthesizing in the area around the fruiting stromata, which are clustered in small spots on the leaf. Thus the t-shirt design epitomizes several of our research foci in the department: botany, plant pathology, mycology. The design was drawn for us by Rena Schlacter, an undergrad

biology/fine arts double major, who is also drawing several images for the Oregon Flora Project. In a similar vein, we are hoping to raise some funds through the sale of pint glasses, which will feature drawings of *Humulus lupulus* (hops) and some of the diseases that affect them. Be on the lookout for these! Support the GSA!

Several students attended a conference held February 11th –13th at LaSells Stewart Center under the banner “Native Plant Restoration and Management on Public Lands in the Pacific Northwest: Rare Plants, Invasive Species, and Ecosystem Management”. The conference was sponsored by the Bureau of Land Management and the Institute for Applied Ecology, founded by BPP alums Tom Kaye and Keli Kuykendall. The three day conference brought together many land managers, restorationists, and other public lands workers from Washington and Oregon. Among the BPP graduate presenters were: **Rebecca Currin** (Meinke), **Kristen Harrison** (Pyke), **Briana Lindh** (Muir), **Brie-Anne McKernan** (Meinke), **Carolyn Menke** (Muir), **Kate Worster** (Mundt), and **Djibo Zanzot** (Parke). Many other BPP profs and alums made presentations.

February also marked a return of BPP to the Biology Graduate Student Symposium, held at the Hatfield Marine Research Center in Newport. **John Bienapfl** (Ocamb), **Rex Cole** (Fowler), and **Djibo Zanzot** all gave presentations on aspects of their research.

Graduate recruitment weekend (March 6-9) was well supported by grad student efforts, and we can look forward to an enthusiastic and bright new cohort of students next Fall.

Amongst those defending in the last year: **Shanti Berryman** (PhD, McCune), **Steve Scheuerell** (PhD, Mahaffee), **Jodie Sharpe** (MS, Zobel), **Carolyn Menke** (MS, Muir), **Kimberly Roberts** (MS, Meinke), and by the

time of publication **Marc Curtis** (PhD, Wolpert) will also have defended.

RECENT THESIS TITLES

Christina Cowger Ph.D. (Chris Mundt) “Effects of host resistance on *Mycosphaerella graminicola* populations”.

Chih-Wen Peng Ph.D. (Valerian Dolja) “Multiple functions of a proteinase in closterovirus life cycle”.

Julie Spears Ph.D. (Kate Lajtha) “The imprint of coarse woody debris on soil biological and chemical properties in the western Oregon Cascades”.

Heather Partipilo M.S. (Mary Powelson) “Seedborne *Phytophthora infestans*: effect of pathogen clonal lineage and potato cultivar on seed transmission of late blight and plant growth responses”.

Scott Holub Ph.D. (Kate Lajtha) “The fate of organic and inorganic nitrogen inputs in an old growth forest of the central Oregon Cascade Range”.

Shanti Berryman M.S. (Bruce McCune) “Epiphytic macrolichens in relation to forest management and topography in a western Oregon watershed”.

Steve Scheuerell Ph.D. (Walt Mahaffee) “Compost teas and compost amended container media for plant disease control”.

Jodie Sharpe M.S. (Don Zobel) “Variation of drought resistance and root regeneration among genotypes of Port-Orford cedar (*Chamaecyparis lawsoniana*)”.

FROM THE HERBARIUM

by Aaron Liston

On March 11, 2003, the Oregon State University Herbarium celebrated the accessioning of specimen number 200,000* into the OSU vascular plant collection. The specimen was a plant of *Nothocalais troximoides* (Asteraceae) collected by retired



Herbarium Curator Kenton Chambers and his wife Henrietta in eastern Oregon in 1995. Thirty BPP department members, students, and herbarium volunteers witnessed the historic event, and enjoyed cake and sparkling cider. The celebration was held in the recently dedicated Bonnie C. Templeton Conference Room.

Pictured above, from left to right: Richard Halse, Steve Gisler, Kenton Chambers, Don Zobel, Henrietta Chambers, and Dianne Simpson. The late Dr. Templeton, and her husband Chester, can be glimpsed in the photograph on the wall. Photograph by Aaron Liston.

*The total number of specimens in the herbarium is approximately 405,000. The algae, bryophytes, fungi, and University of Oregon and Willamette University vascular plant collections have separate series of accession numbers.

FROM THE ELECTRON MICROSCOPE FACILITY

MAKING THINGS VISIBLE

by Al Soeldner

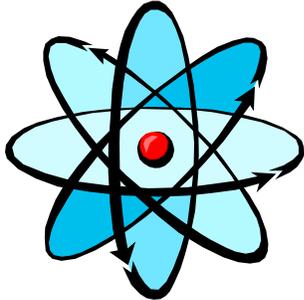
As part of O.S.U's outreach programs I was invited about a year ago to speak to a group of students at Cleveland High School in

Portland about my profession and the field of electron microscopy. I decided, however, that rather than speaking to this narrow topic I would be doing a better beneficial service for these students if I spoke to them in a more general way about career paths and options in the broader area of instrument based analysis. My audience was, after all, at a place in their lives where thinking about education beyond high school and future career choices was probably a frequent activity.

When asked for a title for this talk, I suggested "Blowing Things Up". Inasmuch as the 9-11 attacks and their aftermath were still much on the minds of everyone, the hostess for this invitation questioned my suggestion. I explained to her the intent of my talk would be to show how scientific and technical disciplines examine the fundamental nature, properties, and processes of the cosmos by magnification and by dissection and made the argument that the suggested title both correctly conveyed that message and at the same time might evoke curiosity about the talk in our prospective audience. Eventually we reached agreement and the title was accepted.

Approximately eighty people attended the talk. Light and electron microscopy were

discussed, but so were particle accelerators, a wide range of spectrometry and chromatographic methodologies, mechanical testing devices, and a variety of astronomical telescopes. All of these tools and methods "blow things up" in one sense or another, making what is small or distant or extraordinarily complex more "visible", either



directly or indirectly, so we may better understand the fundamental nature, properties, and processes of the cosmos.

The subject seemed well received and appeared to have provided some new or different perspectives and insights into the subject of instrument based analysis in members of the audience, as judged by both the amount of note-taking during the presentation and the questions and comments offered from the audience at the conclusion of the talk.

Although few of us may be able to accurately assess the eventual long-term impacts of our educational, outreach, and service activities, our ability to offer insights and suggest options to the groups and individuals we encounter during our careers may be one of the most valuable but least visible "commodities" our programs, the department, and the University bring to others. Opportunities such as this chance to speak to a group of high school students seem to be one way of making these sorts of impacts – well – just a bit more visible.

FROM THE PLANT CLINIC

NEMATODE TESTING SERVICE

by Kathy Merrifield

The Nematode Testing Service survived yet another record-breaking year, logging in 1547 samples of soil and plant materials. The field season began in earnest in early March.

In 2002, extension nematode extractions were performed by **Nadine Wade** (Russ Ingham) and her army of tireless work-study students – Brye Bishop, Rosa Zavalas, and

Rafael Quinteras – while **Kathy Merrifield** (nematologist) spent many long hours counting. An average of about 800 total nematodes (plant parasites, bacteriovores, fungivores, predators, and omnivores) was recovered from each sample. Thus, Kathy counted approximately 1,237,600 nematodes in 2002, or 4,950 each workday!

At the first Seafest at Hatfield Marine Science Center in Newport in June, Kathy provided a Museum Day-type moss-animal display for participants, many of whom were families out for a day at the beach. All ages seemed intrigued by the concept of different kinds of mosses and of little animals in their interstices that, with the mosses, can dry but remain alive. Nematodes, tardigrades, and rotifers performed for Seafesters under the dissecting scope.

The Gospel of Nematodes was spread farther than ever in August, when Kathy joined Lynn Royce, Extension Insect Identification Specialist, for a workshop on moss-dwelling invertebrates at the Invertebrates in Captivity Conference near Nogales, Arizona. Needless to say, Lynn and Kathy took their own moss to this small settlement in the heart of the Sonoran Desert 4 miles north of Mexico. BPP, through the supervision of Al Soeldner, provided a generous allotment of retired compound and dissecting microscopes. The compounds were the very scopes used in Frank Smith's Plant Anatomy classes in days of yore, such as when Kathy took his course in 1974. Major players in the Arizona moss invertebrate drama included the usual cast – Nematoda, Tardigrada, and Rotifera. Arthropoda, with its huge and complex subtaxa, was handled by Lynn. Workshop attendees, most of whom were accustomed to looking at comparatively huge insects and other arthropods, seemed inspired by the tiny and the intricate as well as by the complete ecosystem harbored by mosses.

Following this non-stop yet refreshing interlude, it was back to the grindstone for the final 3-month nematode sample panic of the year. Field season counting ended in mid-December, at which time outstanding nematode species identifications were tackled. The Nematode Testing Service is

proud to announce that the *Tylenchorhynchus* (stunt nematode) species frontier was penetrated in January 2003. At least two species of stunts recovered from NE Oregon are widespread taxa recognized as possible or weak agricultural pests in our area. Further work in this genus could well lead to new records for Oregon.

FROM THE BPP FIELD LABORATORY

by Aaron Henderson

Just a few words to let you know we are still here. The 2002 season started off with a very mild May that felt like the springtime of old. The crops had a slow start and got a real boost with a couple of 90-degree days in early June. The weather patterns seemed unusual with periods of mild temps and rain, to periods of high temps up to 100-degrees in August.

With that said, we had good overall yields in most of the crops. We had especially good yields in the peach, apple, and corn plots.

That goes to show that plants have a mind of their own. Despite the weird weather we had some good outcomes.

Fall came in with a mild and dry October and left us with 17-degree temperatures in early November. The rain felt like it would never get here and then made its presence decisively known in December.

The season seemed to fly by. Overall, farm operations went smoothly with very few bumps in the road. 2003 is already here and who knows what that will hold, but we look forward to the start of a new season.

Until next time,

ABOUT OUR ENDOWMENTS

We have recently expanded our website, <http://science.oregonstate.edu/bpp>, to include information about our endowments. The new pages contain information about memorials, donors, the purpose of the funds, and the beneficiaries.

We are particularly delighted to announce the recent establishment of the **Anita S. Summers Graduate Student Travel Fund**. This fund is made possible by the generosity of

Anita Summers (College of Agricultural Sciences Hall of Fame) and John S. Niederhauser (OSU Honorary Doctorate, 2002) who together, continue to support our department. Proceeds from the fund will be used to support graduate student travel to professional meetings, at which they will present a paper or poster, or are an invited participant.

ABOUT OUR ALUMNI

Judith B. Glad (MS 1975) completed her MS "Taxonomy and ecology of *Mentzelia mollis* Peck and related species" with **Ken Chambers** in 1975.



Her research resulted in the discovery of two new plant species, Packard's mentzelia (*Mentzelia packardiae* Glad) and Thompson's mentzelia (*Mentzelia thompsonii* Glad). After graduate

school, she became an environmental consultant. Her time spent writing or editing technical reports, proposals, and papers for botanical journals complimented an earlier passion for writing fiction. Many attempts to publish science fiction led eventually to her first historical romance "The Queen of Cherry Vale" published by Awe-struck E books. This formed the first part of the "Behind the Ranges" series, and for which in 2000 she was a finalist of Notable and New Authors and of National Readers' Choice Awards. The latest in the series "Knight in a Black Hat" was published in October 2002. She also writes contemporary romantic fiction. More details of Judith's writing can be found at www.judithbglad.com.

Judith grew up in Idaho, and now lives with her husband in Portland, Oregon. They have four children, three granddaughters, and one grandson.

Robert Zeigler (MS 1978) completed his MS "The vegetation dynamics of *Pinus contorta*

forest, Crater Lake National Park, Oregon with Don Zobel. His BS was earned from the University of Illinois in 1972, and a Ph.D. on the superelongation disease of cassava in Colombia, was obtained from Cornell University. Three years as leader of a maize improvement program in Burundi, and then seven years as rice program leader with the Centro Internacional de Agricultura Tropical in Colombia followed. In 1992 he became program leader at the International Rice Research Institute in the Philippines, focusing on rice blast disease. In 1999 he became Head of the Department of Plant Pathology and Director of the Plant Biotechnology Center at Kansas State University.

Cheryl Shippentower (BS 2002) Following completion of a BS in Botany in 2002, Cheryl became Botanist for the Umatilla Tribes in Pendleton, Oregon.

Meagan Hynes (BS 2002) is now a graduate school research assistant at UC Davis, in the Department of Land Air and Water Resources.

Christopher Ellison (BS 2002) is now a graduate student at Scripps Institution of Oceanography, University of California San Diego, on a University of California Regents Fellowship.

Christina Cowger (MS 1997, PhD 2002) is a Research Associate with **Chris Mundt** in the Department of Botany and Plant Pathology, OSU.

Nathan Corbell (Ph.D. 1999) is now an Optometrist in Massachusetts.

LETTERS FROM ALUMNI

Bob Ames (BS 1974, MS 1977)

Dear Stella and Department Friends:

With the exception of occasional visits and phone conversations with Bob Linderman and Joyce Loper, I have been relatively silent over the years. I still hold Oregon and OSU fondly in my heart and hope to retire to Oregon someday.

Upon completion of my MS under Bob Linderman, I became a Staff Research Associate in Plant Pathology at UC Berkeley. After about 2 years, I started a PhD program at Colorado State University in the Dept. of Forest and Wood Sciences under Pat Reid. My office space and research was at the Natural Resource Ecology Lab where I was part of a multidisciplinary team studying below ground nutrient cycling processes.

Other members of the team at CSU included Elaine Ingham and Russ Ingham. Upon completion of my Ph.D., I was hired as a Research Microbiologist with USDA/ARS at the Western Regional Research Lab in Albany, Calif., working with Gabe Bethlenfalvai. I left USDA (biggest mistake of my career) about a year or two before Gabe's group was transferred to the USDA/ARS Horticultural Crops Research Lab in Corvallis. I left USDA to become Manager of Research and Development at a private plant disease diagnostic lab in Kingston, Washington. After about 3 years, they let me go due to financial problems.

My wife Harriet, also an OSU alum ('74, Wildlife Dept.), and I started growing specialty mushrooms in an effort to keep our property in Wash. Ten years of mushroom farming (shiitake, oyster, maitake, enoki, lion's mane,



eryngii, nameko) took its toll on us physically and financially so we shut down the operation and sold the property early this year (2002). In

February, 2002, I accepted a position as Senior Staff Scientist at

Advanced

Microbial Solutions in Pilot Point, Texas. AMS produces microbial products used in building soil structure, reducing soil salinity problems and enhancing microbial functions in the soil. Our products are marketed for agriculture, turf and ornamental applications as well as soil remediation of petroleum spills. I have now rejoined the American

Phytopathological Society, so I hope to see more Botany & Plant Path. people at future meetings.

Best wishes to all. Contact information is listed below.

Dr. Robert N. Ames
Senior Staff Scientist
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Email: bames@superbio.com

LETTER FROM FORMER FACULTY

Richard E. Ford, PhD. Cornell U 1961. Following my degree, the USDA hired me to work on virus diseases of peas. I had 3 job offers based on my resume plus an interview with W. J. Zaumeyer, world bean and pea expert, while at the APS meeting in Green Lake, WI. in 1960. New degree holders generally did not make on-site visits during the interview process in those days, with the exception of industry hires. What a change from the intense process for current graduates! I chose OSU over Maine and Beltsville. **Roy Young**, then Head of the Botany and Plant Pathology Department here, welcomed me and provided an Assistant Professor adjunct appointment. After I had lived here for nearly 5 years I moved on to Iowa State University in 1965 to establish a plant virology course and a new virology program in response to the corn virus epidemic.

Richard Hampton transferred here from the Prosser Columbia Basin Research Station to continue the pea and bean research I had initiated. Jim Baggett, vegetable horticulturist, was my close friend, colleague and cooperator working with a half dozen virus diseases on pea. I knew I would move back to Oregon "sometime", so in preparation in late 1965 I purchased a 40-acre Douglas fir property on Neuman Rd. My dream was to live in the woods in retirement. After 7 successful years doing maize virus research in Iowa the University of Illinois hired me to Head the Plant Pathology Department on the Urbana-Champaign campus in 1972, a

position I held until 1992. I maintained a modest research program on corn and soybean viruses during my administrative days with the help of graduate students, post doctorals and visiting professors. We were able via backcross breeding techniques to move genetic resistance to MDMV [maize dwarf mosaic potyvirus] from starchy field corn into sugary sweet corn. My major contribution, with lots of help internationally (Univ. of Belgrade and CSIRO, Melbourne), followed unique developments in serology and protein chemistry. This allowed us to unravel the many spurious research results in corn/sorghum/sugarcane during a quarter century. We showed that four viruses were the cause of numerous virus diseases reportedly caused by MDMV, i.e. maize dwarf mosaic-MDMV, Johnsongrass mosaic-JgMV, sugarcane mosaic-ScMV and sorghum mosaic-SgMV.

The University of Illinois had an aggressive international agriculture program in many parts of the world. This provided and opportunity for professors and students with such interests to gain invaluable experiences. I traveled to more than 25 countries doing administrative reviews, lecturing and doing cooperative research. My sabbatical leaves were done at Agriculture Canada in Vancouver, and Queensland University of Technology in Brisbane, Australia.

After my retirement in 1998 I was selected as the Executive Director of the Consortium for International Crop Protection [CICP]. Eleven Land Grant Universities and the USDA are members of CICP. The director's office is located wherever the Executive Director lives, and since OSU is one of the members of CICP and since I moved to Corvallis in 1999 to build a new home in the Ford Forest (is 40 acres a forest or a woodland?), it follows that the CICP office is housed in Cordley Hall 2033 {space kindly supplied by IPPC, the Integrated Plant Protection Center}. I have come full circle and thoroughly enjoy the climate and the people of Oregon once again. And I still reminisce about the Terry Baker football heyday, the Mel Counts basketball heyday and excellent distance trackmen and wrestlers in the early '60s here

at OSU. And Circle Blvd was just in the plans and Walnut Blvd was just an idea.

HONORS AND AWARDS

Faculty

Everett Hansen, Professor, was named Fellow of the American Phytopathological Society.

Aaron Liston, Professor, received the 2002 Rupert Barneby Award for Legume Systematics from the New York Botanic Garden.

Norman Bishop, Professor Emeritus, was selected as a member of the Diamond Pioneer Agricultural Registry in October 2002.

Bruce McCune, Professor, won the 2002 College of Science Carter Award for Graduate Teaching.

Kenneth Johnson, Professor, received the F.E. Price/Agricultural Foundation Award for Excellence in Research.

Joseph Spatafora, Associate Professor, won the College of Science Thomas T. Sugihara Young Faculty Research Award.

Cynthia Ocamb, Assistant Professor, received the Phi Kappa Phi Emerging Young Scholar Award.

Valera Peremyslov, Senior Faculty Research Assistant, was named as OSU Outstanding Faculty Research Assistant.

Students

Susan Crow was awarded for her highly commended presentation "Determination of root and litter influences on forest SOM and nutrient cycling in a long term input manipulation study" at BIOGEMON 2002 in Reading, UK.

Jay Well was named as 2002 Outstanding Senior, an award made possible by the Bill and LaRea Johnston Fund for Undergraduate Education.

Heather Carpenter received the Dean's Scholarship in the Natural Sciences.

Jennifer Dutton received a C. and H. Fulton Memorial Scholarship.

Bailey Edgley received the P.L. and W.C. Heitmyer Scholarship.

Joseph Gilbuena received the Jean L. Siddall Memorial Scholarship.

Jonathan Reed received a C. and H. Fulton Memorial Scholarship.

John Schenk received a Katherine R. Pamplin Scholarship from the Portland Garden Club.

Kristin Skinner achieved a first place award for her poster presentation at the Center for Gene Research and Biotechnology Retreat in Bend in September 2002.

Katherine van Wormer received a Jean L. Siddall Memorial Scholarship.

MEETING ANNOUNCEMENT

by Gayle Hansen

Associate Professor (Senior Research), BPP and HMSC, Oregon State University and local organizer for the 2003 PSA/SOP meeting.

2003 PSA/SOP Annual Meeting to be in Oregon

Please plan to join us this year at the 2003 Annual Meeting of the Phycological Society of America and the Society of Protozoologists that will be held from June 14th –19th at the Westin Salishan Lodge and Golf Resort in Gleneden Beach, Oregon. We plan to take full advantage of the excellent conference facility and wonderful cuisine at this AAA Four Diamond Resort. Be sure to bring your wading boots because at the beginning of the meeting the tides will be some of the lowest of the year. Seaweed enthusiasts are encouraged to come one day early to join the Northwest Algal Symposium participants in a special intertidal trip to Seal Rock State Park and then to join us the following day in a PSA-sponsored trip to the protected Marine Gardens at Otter Rock.

The meeting will begin with registration and a mixer on Saturday evening, June 14th, and end with the banquet and awards ceremony on Wednesday night, June 18th. There will be numerous talks and posters, and four excellent symposia are planned:

(1) Advances in Protistology, (2) Controls of Planktonic Microalgae, (3) Changing Coastal Ecosystems, and (4) Linking Algae, Oceanography, and Marine Ecology. Special lectures will be given by Pat Tester on "Copepod-ology for the phycologist", David Scott on "Acidocalcisomes in Trypanosomatids", and Rick McCourt on

"Oregon's first phycologists". An education workshop on "Using Algae as Model Organisms in Teaching" has been organized by Roy Lehman, and a post-meeting course on Primer-5, a well-known multivariate analysis package, will be taught by its author, K. R. Clarke.

The website for the meeting with registration and abstract forms is posted at <<http://conferences.orst.edu/PSAandSOP>>. We hope to see you there!

IN MEMORIAM

DEWAYNE C. TORGESON 1925 – 2002 (from the *Ithaca Journal*)

Dewayne Clinton Torgeson, 76, passed away on Saturday, August 17, 2002 in Ithaca, NY.

He was born on October 1, 1925 at home on the family farm in Ambrose, North Dakota, the first of four children of Sander Lincoln Torgeson and Mabel Isabelle (Myers) Torgeson. He served in the U.S. Army from 1945-1946 before attending Iowa State University where he majored in Botany and graduated with a B.S. in 1949. He obtained a Ph.D. in Plant Pathology from Oregon State University in 1953 on "The epiphytology and etiology of *Phytophthora* induced root rot disease of *Chamaecyparis* in Oregon" with **Roy Young**.

Dr. Torgeson began working at Boyce Thompson Institute for Plant Research, then located in Yonkers, NY, in 1952. He remained with Boyce Thompson for 38 years, first as a Plant Pathologist researching the development of new fungicides and insecticides, then a Program Director for Bioregulant Chemicals, and finally as Corporate Secretary from 1973 until his retirement in 1990. He and his family moved to Ithaca when Boyce Thompson relocated to the Cornell University Campus in 1978. He served on the Board of Directors of both Boyce Thompson Institute and Boyce Thompson Southwestern Arboretum. His publications include "Fungicides: An Advanced Treatise" 1967. He was an avid gardener and exercise enthusiast.

He is survived by his loving wife of 46 years, Kathryn (Welker Weiss) Torgeson, and their three children, James Sander Torgeson of Lockport, NY, Kristina May Torgeson of New York, NY, and Sander Dewayne Torgeson of Danby, NY; sister Frances Sulentic of Waterloo, IA, and brother Richard Torgeson of Hazel Park, MI; and was predeceased by sister Lorene Torgeson of Waterloo, IA.

Donations may be made to Boyce Thompson Southwestern Arboretum, 37615 Hwy 60, Superior, AZ 85273

THANKS are due to **Sue Jepson** for collecting the information, layout, editing, and handling the mailing list; **Dianne Simpson** for proof reading; **Tom Allen** for the logo; **Ken Chambers** for the name; and **Bonnie Hall** for the flower print.



Northwest Balsamroot, *Balsamorhiza deltoidea* by **Bonnie Hall**



**OREGON STATE
UNIVERSITY**

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I'm making a gift of \$_____ to **Botany and Plant Pathology** and would like to direct it to the following:

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- Oregon Flora Endowment
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- Posies and Pathogens Newsletter
- Anita Summers Graduate Student Travel Fund
- Botany and Plant Pathology Endowment in Honor and Memory of Alumni and Friends

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