

# POSIES & PATHOGENS



DEPARTMENT OF BOTANY & PLANT PATHOLOGY  
OREGON STATE UNIVERSITY

Fifth Edition

June 1993

## NEWS FROM THE DEPARTMENTAL CHAIRPERSON

Dear Alumni and Friends,

It is with some measure of surprise that I find it time to write for the fifth edition of *Posies and Pathogens*. Not only has the year flown since the last edition but it is hard to believe that on August 1, I will have been at OSU for five years. The passage of time is marked not only by changes in the department with retirements and new hires but also within my family as we send our oldest daughter off to college this fall. The youngest daughter, who started kindergarten our first fall, will start our family's last year of elementary school this September at Harding. Our middle daughter will be in 7th grade at Western View Middle School and to all of this, I shake my head in wonder and say, "How can this be?" We've been most fortunate in having been able to have built, that first year, a new house just northwest of campus on the dead-end of Jackson Avenue. The location has made it possible for the girls to come and go to campus and for me to juggle single parenting more easily when my husband travels on research related business. Our property backs up to the Agricultural Experiment Station dairy land and we thoroughly enjoy the rural setting while only being two minutes by car from the Cordley Hall parking lot. As time permits, I am an avid gardener and have buried hundreds of daffodil bulbs each year. I counted over 750 blooming one evening this spring. I delight in how easy it is to grow things in Oregon as well as being dismayed by the pathogens that are just as at home. I believe you could teach a whole introductory plant pathology course out of our yard alone. Even though the speed that the weeds and slugs grow and multiply can be daunting, I find weed pulling to be a gratifying exercise after hours of administrative chores.

Another particular bright spot in my time at OSU has been the high quality of administrators at the college and university level that I work with. I have found OSU to have one of the most accessible and responsive administrations that a university can have and I appreciate this part a great deal. During these often frustrating times, in respect to budgetary challenges in the State, the high quality of people I work with in all aspects of my job makes the long hours and short nights worth it. Hopefully, this next year will see an end to budget cutting and movement towards revenue replacement for education at all levels.

This year has seen numerous changes in the Department and more will occur. Late last summer we began our expansion into the space vacated in Cordley Hall by the Department of Horticulture when it moved into the new Agricultural Sciences Building. We are still in the process of remodeling several

laboratories although the new offices were largely occupied following a painting and pizza party last fall. Because of the addition of new students, faculty and research staff, we are still more cozy in our space than we might be but we greet the growth of our programs as an exciting measure of the Department's vitality. We currently have 70 graduate students under the supervision of our faculty: Fifty-four are enrolled in M.S. and Ph.D. degrees in BPP and the others in Genetics and cross-disciplinary programs such as Environmental Sciences and Molecular and Cellular Biology. Although our undergraduate majors remain at about 30, our faculty serve as advisers for approximately 100 biology and 80 environmental sciences majors.

Three faculty will enter retirement this year after long and distinguished careers in the Department: **Drs. Thomas C. Moore, Norman I. Bishop, and William Denison**. All officially retire on June 30, 1993. Drs. Denison and Moore will continue with 600-hour appointments for one and two years, respectively. You are invited to send letters addressed to any of these three in care of Dianne Simpson at the Department. We will be collecting these to present to the individuals at their "formal" retirement occasions or soon thereafter. Another faculty member, **C. David McIntire**, has announced that he will retire in June 1994 and he will complete his teaching at the end of fall term 1994. We will miss all of these individuals, yet wish them the best of having more freedom in their schedules.

With four upcoming retirements and the virology position currently under recruitment, our unit will be seeing the greatest change in faculty since 1988-89 when five of us came to BPP. The Department looks forward to the search for new colleagues and the opportunities that will come with these hires.

Other news for this past academic year includes the following promotions effective July 1, 1992: **Terri Lomax** to associate professor with tenure; **Joyce Loper** to associate professor (courtesy); **Daniel J. Arp** to full professor. Promotions effective July 1, 1993 include **Kenneth B. Johnson** and **Jay W. Pscheidt** to associate professor with tenure, **Elaine R. Ingham** to associate professor (senior research); and on September 15, 1993, **Bruce P. McCune** and **Patricia S. Muir** to associate professor with tenure. In September 1992, four of our faculty were recognized by the Colleges. The College of Agricultural Sciences awarded **Dallice I. Mills** with the Earl Price Award for Excellence in Research, and **Terri L. Lomax** with the Savery Outstanding Young Faculty Award. The College of Science awarded **Patricia Muir** the Carter Award for Outstanding Undergraduate Advising, and **William C. Denison** with the Award for Outstanding Graduate Teaching. In early June 1993, **Terri Lomax** received a Thomas T. Sugihara Young Faculty Research Award.

Two "new" instructors have been appointed on a recurring basis. Richard Halse will serve as instructor and Curator of the Herbarium and Ms. Melodie Putnam as instructor and Plant Disease Clinic Diagnostician.

Several of our graduate students have received scholarships from the graduate school and other sources, and others have won grants to support their research from various foundations and agencies. All of these awards reflect the high quality of individuals that we have in our departmental programs.

In August 1992, we were delighted to host many alumni and friends for an open house and picnic the day following the APS meeting held in Portland. It was great to have you join us and we hope many more of you will visit in the year ahead. We've been enjoying coffee with our emeriti and friends on an almost regular monthly basis—the third Thursday of each month is the time to join us at 10:00 AM, or you are welcome to join us at any other coffee time as well.

I look forward to my sixth year at OSU with anticipation of more changes and new challenges for administration. I expect our unit to continue to thrive due to the dedication and hard work given by the Department's members. The financial generosity of our alumni and friends has made it possible to enrich our programs in various ways. Elsewhere in this issue are details of some of the ways that your gifts make a difference. A heartfelt THANK YOU! from all of us for helping us (and encouraging us) with your gifts.

Sincerely,

  
Stella Melugin Coakley  
Professor and Chairperson

## NEWS OF THE 1992 APS/MSA MEETING

Botany and Plant Pathology at OSU hosted more than 2100 members and guests at the joint meeting of the American Phytopathological Society (APS) and the Mycological Society of America (MSA), August 8-12 in Portland, OR. Thirty-five countries including the U.S. and Canada were represented. More than 1000 scientific papers were presented by plant pathologists and mycologists who discussed the advances toward controlling diseases and keeping plants healthy to create a healthy planet. The latest technical innovations in equipment and services were presented in more than 27 exhibits. Other highlights included tours highlighting vegetable, small fruit and forest pathology, mycology, and the ornamental/nursery industry.

## NEWS FROM AN EMERITUS

From Tom Allen:

**Summer 1992:** Hello from Yellowstone National Park! I am Artist-in-Residence here and demonstrate watercolor painting in the Old Faithful Inn. They feed me and found a place for me to stay, but the bear keeps trying to come back in! Actually, there are many more bison than bears here. They're bigger than bears but don't eat garbage. However, tourists do buy my paintings and prints of my paintings. Consequently, my work has spread

worldwide. I knew that receiving that Ph.D. in Plant Pathology from the University of California at Davis would pay off someday!

**Fall 1992:** Hello from Switzerland! A tour group from Portland, Oregon took me along as their artist. Donna got took too! We stayed at a four-star cave in Thun and have painted most of the country in two and one-half weeks. It's like living in Toy Land! Just heard that most of the group wants to come back in Fall of 1994. Retirement is so stressing!

## NEWS FROM ALUMNI & FRIENDS

From George L. Barnes:

I graduated from OSU with a Ph.D. in Plant Pathology in 1953, under the direction of Dr. Milbrath with some experience with Dr. Roy Young. The last time I was on campus was in 1972 when my wife and I took a vacation in Hawaii. Last year I wanted to attend the APS/MSA joint meeting in Portland and the reunion in Corvallis but my wife and I were needed to run our daughter's Wild Birds Unlimited store in Tulsa while she and one of her employees operated a booth during a home show. (We know the business because we work at her store every Saturday and during the Christmas holiday.)

I retired from Oklahoma State University in 1986 after 28 years of service as a plant pathology researcher (pecan diseases, small fruits diseases, alfalfa diseases), teacher (fungus physiology, plant disease control, pesticides in the environment), and as an extension specialist (vegetables and ornamentals) between 1960 and 1986. Previously, I worked as a fungicide researcher for Olin-Mathieson Chem. Corp at Ohio State and at the on-screening laboratory at Port Jefferson, Long Island, NY. (P.S: Dick Converse had my job, working on diseases of pecans, before I came to Oklahoma State.)

Please keep on sending a copy of *Posies and Pathogens* as I find it very informative and nostalgic. Charlie Leach and I exchange Christmas letters every year and I appreciate his viewpoint on departmental events and people. Best wishes to all.

Sincerely,

George L. Barnes, 424 Donaldson, Stillwater, OK 74075-7907.

From Julius L. Heinis, Ph.D., OSC 1954

(Editor's note: Dr. Heinis has written three times since the last Posies; this is a condensation of his news)

Dear Posy,

I read the Posies and Pathogens as well as the other Newsletters I get from Oregon State and assorted other places where I have done time. I am quite a bit upset that I don't know of whom you are talking. It seems that everybody I knew and liked retired or died. So—not all news is good news! This will be my 26th year here at Florida A&M University, Tallahassee. I am active in the Faculty Senate, but not always listened to, especially when I propose rotation of Departmental Chairmen, Deans and such, as in European Universities.

Just when I thought I am about ready to start my career, the calendar says I am up for retirement pretty soon. So, how not to get bored after being so active? I have managed to survive,

despite occasional professional ruts. It was tough in the 60's to get a job—and I have never sent one of my students to study Plant Pathology. I hope your present students have it easier—or you don't keep so many. I still like plants, preferably healthy ones. Tropical plants are quite exciting to me and especially fruit trees. I did a bit of consulting, like in Jamaica and the Bahamas, but this may not be enough for retirement.

I do a lot of computing. This is exciting. Things I do include: letter-writing like this one by WordPerfect or Wordstar, estimation of retirement benefits by Lotus, tax-calculation, weather, stocks, \$-exchange rates, etc., by CompuServe. Family tree can also be done—we are 1607 Swiss!

So where is colleague X? Can one of you folks make out a Data Base of persons associated with the Botany Department? All I have to do then is enter a Date, Name . . . and I find out “whatever happened to brother X.”

Sorry I couldn't come to Corvallis in August and enjoy the reasonable dormitory quarters, your coffee, and great fellowship. You see, at the same time, August 9-14, 1992 was the meeting of the Caribbean Food Crops Society in Santo Domingo. Six weeks in Costa Rica to do Spanish and tropical fruit, flights (in my Cessna) to Bahamas, Grand Turks, Dominican Republic, where my paper on parasitic plants went well. I found out there is a large number of parasitic higher plants (besides mistletoes and dodder) that are consistently ignored by plant pathology textbooks. I also thought of Dr. Lew Roth and his dwarf mistletoes, etc. In September, Margaret (wife) and I spent two weeks in Switzerland (where I am from). I finished the year teaching botany and bacteriology at Florida A&M University in Tallahassee.... a good year.

I enjoyed the article “From the Botany Farm.” Dr. Leach arrived at OSC the year before I did (in fall of 1951). I helped him tear down the barn, pour cement, etc., and was pleased at getting one dollar per hour. Weekends I may have done a bit better by picking walnuts on the farm behind the Botany farm. Chuck, others and I really had it tough in those years. I remember the most (and dearly) respected Dr. Dietz, the Chairman. Jack Horner, Clarke Porter, Duane Torgeson, and Malcolm Corden were others, besides those mentioned, that were with us in the early 50's. Several of these people were WWII veterans with families and cars. From Jack Yale I learned “Ours is to do or die, not to reason why.” Thursday nights I danced the Blue Tango at the Cosmopolitan Club in the Memorial Union. I am also still thankful for several good dinners with faculty and colleagues. By now most of us “have gone the distance” and reached retirement age. Too bad, I feel I have not yet started in my career.

I look forward to your next Posy Newsletter (as well as the Fishwrapper called “Oregon Stater.”)

So greetings to the coffee crowd— like Dr. Leach et al. Best of luck to all of you.

Sincerely,

Julius L. Heinis, 1924 E. Indian Head Dr., Tallahassee, FL 32301. CompuServe ID 72500, 17

From Kirsten Hural

As an alumna, I have been receiving Posies and Pathogens for a couple of years and thought I should write an update of my current situation. I finished my M.S. (1985) in Plant Pathology

before you came on as chairperson. I worked on powdery mildew of roses under Duane Coyier (now retired) at the USDA Horticultural Crops Lab.

In 1985 I moved to Ithaca, NY with Gene Yogodzinski (M.S. '85 Geology) whom I married in 1988. For nine months I worked at the Boyce Thompson Institute as a technician in a lab researching fungal pathogens as biological controls for insects. I became fascinated by insects, and saw this as an area where I could pursue my interests in mycology too. Now I am about to finish my doctorate (hopefully spring '93) here at Cornell. I have been studying the population ecology and genetics of a fungal disease (*Pandora neoaphidis*; Zygomycetes: Entomo-phthoraceae) of the pea aphid (*Acyrtosiphon pisum*). My husband, Gene, defended his Ph.D. in geology in June 1992 and is currently teaching at Hamilton College in Clinton, New York. On December 24, 1992 we had a son, Alexander Hural Yogodzinski. Currently we are both looking for jobs, post-docs or otherwise. If I am ever in Corvallis I will certainly stop in and visit Cordley Hall and perhaps even give a seminar.

Sincerely,

Kirsten Hural, P.O. Box 150, Little York, NY 13087.

From Jeanne Debons (Ph.D. 1986, with Mary Powelson and Scott Overton)

Fred Crowe, in his subtle but effective way, has tricked me into responding to the call for contributions from the further reaches of the Department of Botany and Plant Pathology:

In between connections of airplanes seemed like a good place to tackle some type of cohesive description of my activities. Once again I find myself in the employ of OSU. This is the fourth time and fourth job description and department. Where to start? After my initial job as Research Assistant with Mary Powelson, then getting my release papers (Ph.D. 1986) from Botany and Plant Pathology, I did a Post-Doc for a year in the Statistics Department. Then in 1988, the Central Oregon Experiment Station (then in Redmond) hired me as a Research Associate. Measure 5 came to liberate me in 1991. The next couple of years have provided a vast variety of experiences that have taken me as far away as Malawi, Africa, but most included local consulting in statistics, technical writing, computer applications, and yes, even some plant pathology. I have also taught at the Central Oregon Community College for a couple of years, part-time. Oh yeah, we've been working for Mt. Bachelor ski area here, right outside Bend, for several years so we can ski free. Franz Helfenstein (the other half) has a full-time tenure track position in the Math Department of C.O.C.C.

Well, OSU has hired me again through the Oregon International Research and Development Department for a 16-month USAID job in Cairo, Egypt. I'll be acting as a scientific writing advisor to the Agricultural Research Center there, but I hope to get out after work and get some plant pathogens on my hands. Keep your eyes out for my Disease Note about Malawi. Anyway, that's how it looks from here. And they are about to call for my plane. If anyone is passing through Cairo between now and July 1994, let me know. My address: Jeanne Debons, CID/NARP Project, P.O. Box 41656, Tucson, AZ 85717-1656. All mail will be forwarded by air pouch twice a week (and will be very much appreciated!). Be happy!

From John M. Barnes:

I am delighted to write you with information on my activities, as items for *Posies and Pathogens*. It seems only a short time since I led the CSRS review of your department; a lot of things have happened in the interim.

I am preparing to continue my assignment as Senior Scientist in the President's Council on Environmental Quality, working on the National Acid Precipitation Assessment Program (NAPAP). The principals would like for me to stay through September 1993. The 1990 amendments to the Clean Air Act mandated the continuation of this Program, with an open-ended lifetime. This office is the focal point for Federal planning and program development, cooperating with several key agencies. Our thrust is to evaluate the costs and benefits of acid deposition control, and determine what reductions in sulfur and nitrogen emissions are necessary to prevent adverse effects to various sensitive sectors.

Working at this level of government is stimulating, to say the least! Many "sovereign princes" pose continuing challenges in the art of negotiation, but we have been successful in achieving win-win outcomes in most cases. My work builds on programs I managed in CSRS on acid rain monitoring networks and the effects research grants program. The focus has much more to do with linkages among source emissions, deposition, loadings and effects.

There's not much plant pathology on my menu over here. Cliff Gabriel, and colleagues operating as "shared faculty," keep things moving in CSRS and out in the network. I don't travel nearly as much as I once did; I miss it not! Glad to receive your newsletter. Please keep me on the mailing list.

Warmest regards to the compatriots in the department.

Sincerely,

John M. Barnes, Senior Scientist, National Acid Precipitation Assessment Program, 722 Jackson Place NW, Washington, DC 20503

## FROM THE BOTANY FIELD LAB

I am sorry that I missed the barbecue on August 13 at Avery Park for the Alumni and Friends Day. It was a mistake on my part—the second one I've ever made in my life! I did miss seeing a lot of old friends, but a few of you stopped by to see me at the farm and noticed one of the big changes that has taken place. That is the development of the golf course. You may remember seeing corn or wheat farmed by Wink Brown on that acreage. Today it is being covered by golf balls, and we get our share from the driving range. So if you have the inclination to play golf, come by and see us first. You can pick up those range balls in our plots and practice on the driving range free of charge, courtesy of the Botany and Plant Pathology Field Lab.

If you need golf balls for the course, we have some "pre-hit" ones at 3/\$1.00. Monies go toward our fall barbecue. I have suggested to Dr. Coakley that for a small charge we could open our back gate and let you play holes #11 through #17—this may help bring in some revenue!

—Lew Tate

## DEPARTMENT ALUM RECEIVES FACULTY TEACHING HONOR

Word has been received from Oklahoma State University, Stillwater, that an alumnus of this department has been honored for his excellence in teaching. Dr. Ronald J. Tyrl, Professor of Botany at "the other O.S.U.," was one of just seven faculty members, selected campus-wide, to receive the Regents Distinguished Teaching Award at Oklahoma State. Ron did his graduate studies in our department, receiving his M.S. degree in 1967 and his Ph.D. in 1969, under the direction of Ken Chambers. His research involved pioneering studies of the distribution of polyploid races of "yarrow," *Achillea millefolium*, in the Pacific States, and the significance of hybridization to the taxonomy of that genus.

The Regents Awards at Oklahoma State University were given for the first time in November of 1992. Criteria for the awards included, "evidence of significant and meritorious achievement in the instruction of students, as shown by unusual effort devoted to ensuring the quality of the classroom learning experience; and high scholarly standards for both the rigor and currency of course content and the level of student performance." Winners received a plaque and a permanent salary increment of \$1,000 annually.

Ron has been on the faculty at Oklahoma State since 1972. He previously has won Outstanding Teacher Awards from the College of Arts and Sciences and from the Mortar Board Honor Society. He also has received the Agronomy Students Association Excellence in Teaching Award. Ken says it is somewhat ironic that Ron has been winning teaching awards at Oklahoma, because at Oregon State his graduate appointment was as Curatorial Assistant in the O.S.U. Herbarium, and he never served as a graduate teaching assistant in our department. We evidently did not make the best use of his talents (although Ken does say that he was an excellent curatorial assistant).

## FROM THE CLASSIFIED STAFF

Since the last issue of *Posies and Pathogens*, there have been many changes with the classified staff. Itsue Pfund and Tina Atkinson will soon be learning a newly implemented accounting software system connected through the OSU ethernet network. This new system includes a Journal Voucher system and a Purchasing/Accounts Payable system which will be used by accountants across campus. Dianne Simpson has taken on responsibility for the Environmental Sciences undergraduate program and helping to develop the Environmental Sciences graduate program. Jackie Poppleton has been busy publishing our weekly Botany & Plant Pathology internal newsletter. Leona Nicholson continues to work as Dr. Coakley's Administrative Assistant. Blaine Baker is coordinating the reconditioning of several laboratories and offices that we inherited from the Horticulture Department when they moved into the new Agricultural Sciences Building.

We have also had a few position changes within our staff. In September, Itsue cut her hours back to 6 hours a day to allow her to spend more time with her children. We hired Jim Astin to help Itsue with the accounting for the Agricultural Research Foundation (ARS) and Gift accounts. Jim left in

January to accept a full-time Accounting Technician position in the Department of Horticulture. Virginia Veach accepted the position Jim vacated and she continues to work on other projects for our Department. Virginia also works part-time for the Biology Program.

We would like to welcome Joyce Puderbaugh and Sandra Staehlin to our Department. Joyce was hired in November to fill the position of Office Specialist/Receptionist in our main office. Sandra was hired in March to fill the Office Specialist position for the Extension Plant Pathology office. Christina Richards left this position in January to accept a job in the Administration Building working for the Assistant Vice President for Undergraduate Studies.

—Tina Atkinson

## FROM THE GRADUATE STUDENTS

We have more graduate students than ever, approximately 70, including students affiliated with the Genetics program. We also inherited several "new" graduate students due to the closure of the General Science Department.

**Fall Foray:** Special thanks to friends and family who attended the Potluck/Campout at Mary's Peak. After dinner, we hiked to the top of Mary's Peak to enjoy a beautiful sunset. Three brave souls camped out that night while the others returned to warm, dry beds in Corvallis. Confronting a Pacific storm with the Noble Firs, several questions were asked: Hey, maybe we should have set up the tents? Are we having fun yet? Wet, But Not Cold!

**Winter Party:** Thanks to all who attended the annual Winter Party sponsored by the Graduate Student Association (GSA). The Botany Band performed with special guest Truman Price calling the contra dance steps. Good food, good music and good dancing were the highlights of this extravaganza. See ya next year!

**Seminar Speakers:** On October 30, Dr. Michael Boehm presented his graduate work on the suppressive characteristics of peat amended potting soil. Special thanks to Department Chairperson Dr. Stella Coakley and all who attended the reception for Mike. Mike is working in Dr. Joyce Loper's lab at the USDA. Dr. Robert Kremer from USDA-ARS in Columbia, Missouri, accepted our invitation to speak in May on his research using plant pathogens for weed control. He was the third seminar speaker in our series on "Novel Approaches to Plant Protection." The graduate students have sponsored these seminars from a grant donated by Entotech.

**Our Newest Alumni:** Congratulations to all of our recent graduates! The future's so bright that we have to wear shades!

### Receiving the M.S.:

Mark Azevedo is continuing his work on seed endophytes at the USDA Forage Seed Service in Corvallis. Julie DiLeone is working as a research assistant for the Plant Disease Clinic. Suzanne Gaudreault is currently working on novel approaches in the biological control of plant disease in Ken Johnson's lab. Doug Goldenberg is conducting sensitive plant surveys for the U.S. Forest Service in the Fremont Ranger District, California. Hans Wittig is working as a research assistant with Jay Pscheidt in fruit disease management at OSU.

### Receiving the Ph.D.:

Muhammad Bashir returned home to Islamabad, Pakistan to work as a research scientist. Nancy Fredricks is working for the U.S. Forest Service at the Wind River District, Washington. Paul Kohnen lives in the Portland area. Thomas O'Dell is a Research Associate in the Department of Botany at the University of Washington. Thomas is studying the associated fungal community of different plant ecosystems.

**Graduate Student Awards & Honors:** Tina Dreisbach was inducted into the College of Agricultural Sciences Registry of Distinguished Students in April. Michael Holmes and Heather Scheck received Graduate Merit Fellowships. Marielle Hoefnagels, Joseph Telefici and John Wheeler all were awarded Oregon Sports Lottery Scholarships. Joseph Telefici also was selected for a Graduate School Fellowship.

—Michael Holmes and Marielle Hoefnagels

## FROM OUR ON-CAMPUS FACULTY

From Everett Hansen:

I experienced a first this spring; I think it is a first for the Department. My graduate class in History of Plant Pathology has seven students, all women! While the University and the country as a whole struggle with equal opportunity for women in science, Botany and Plant Pathology has done the job! At least at the graduate student level. We have 54 graduate students this year, 30 of them are women. As these classes graduate, there will be no more excuses for gender inequities in hiring and advancement in Biology.

Another first this spring . . . the Department sponsored a \$50 prize (from alumni donations) for "Best Project in Plant Science" at the Northwest Science Expo, the regional high school science fair. The winner was Carol Volk, a sophomore at Crescent Valley High School, in Corvallis of all places. Her project, "Methanol Enhanced Growth in Wheat and Beans," showed much of the sophistication of a Master's thesis. We have invited Carol to present her project to the Department in the near future.

It's pushing 21 years that I have been in the Department! Earl Nelson retired from the Forest Service this spring and that started me counting. I learned a lot from Earl—how to run a compass line in the brush, find *Poria* (now *Phellinus*, soon to be *Inonotus*?) in the snow, and how to play shuffleboard in Shelton and pool in Longview. Last week I found myself showing off the work of my first students. I showed Borys Tkacz's plots on Mary's Peak to a group of Canadians and they, in turn, demonstrated the latest applications of the root rot model that grew out of Keith Reynolds' master's work with Bill Bloomburg in Victoria. I reminded the Forest Service pathologists along on the tour that they have quite an investment in Paul Hennon's work on the Root Rot Control Demonstration Area, and was pleased to notice that Paul Hessburg and Jeff Witcosky didn't eradicate all of the blackstain on Mary's Peak. I have a great plantation now for teaching and show-off field trips, with blackstain and *Armillaria* rampant, enough laminated root rot and annosus to keep me



honest, and a bear chewing on the young trees to add an extra measure of excitement.

I am having at least as much fun now as in the old days, if only because there are more students around. My own work is focused on population genetics of *P. weirii*, just like 20 years ago. Among my students, Tina Dreisbach is putting a modern twist on Lew Roth's pioneering look at population structure in *P. pini*, while Marion Murray and Mike McWilliams are the latest in a long line of students working on *Phytophthora lateralis*. That circle comes part way 'round this fall when Larry Englander returns on sabbatical, working with *P. lateralis*. Brennan Ferguson plans to pick up the blackstain banner and with encouragement from a group of timber companies see what innovative ideas can be found to slow the critter down. *Armillaria* is new to me but certainly not to OSU; Pablo Rosso is sorting out the environmental controls on disease development on the west side. The nursery project keeps rolling along, now under the direction of Jeff Stone and supported by the Forest Service to continue the search for cultural/biological alternatives to methyl bromide fumigation of nursery soils. With so much work to be done there is little time to brood on the impending financial disaster. So I don't.

From Bruce McCune:

One of the main reasons that Oregon is a squishy place to live is the multicolored sponge of bryophytes and lichens that coats anything moving at an average velocity of less than 1 mm/hour. Even my neighbor's seldom-used truck is turning from white to orange as lichens (*Xanthoria*) gradually cover it (he promised he wouldn't wash it).

When I first visited Corvallis, I thought, "THIS would be a great place to live." There were lichens and mosses dripping off the trees and shrubs, even on campus. On most college campuses the average gutter would contain gum wrappers and the like, but to my delight I found that OSU gutters contained *Evernia prunastri*! *Ramalina farinacea*! *Parmelia hygrophila*! etc. From an ecosystem perspective, lichens and bryophytes may seem like icing on the cake, a kind of benign decoration. But government agencies are less interested in lichens as decoration than in their well-known value as above-ground canaries-in-the-mine. Lichens have no cuticle and no roots and are therefore dependent on atmospheric sources for their nutrition. They are efficient absorbers of anything airborne (short of small birds). This is often their undoing, as they are perhaps the most sensitive organisms to SO<sub>2</sub> and certain other pollutants.

BPP had not had a real bryologist since Ethel Sanborn (30's and 40's), until last year, when Dr. Dan Norris, a bryologist of world reknown, retired from Humboldt State University in California. Their loss was our gain, since Dan moved to Corvallis, where he now holds a position as Courtesy Professor. Dan is nearing completion of a much-needed moss flora of California. Meanwhile, he continues to be one of the leaders in tropical bryology. We have already benefited from his *gratis* teaching and tutorials in bryology.

In the past two years, research on bryophytes and lichens at OSU has expanded greatly. Five faculty, several postdoctoral associates, and six graduate students are working in this area at present. The current major projects are sponsored by the EPA and USDA Forest Service. In most cases there is a connection

to air quality. For example, Dr. Patricia Muir and Dr. Abbas Shirazi are studying the effects of formaldehyde-enriched mists on a common nitrogen-fixing lichen, *Lobaria pulmonaria*. Dr. Muir found that formaldehyde occurs in high concentrations in Willamette Valley fogs, and is now experimentally misting lichens and tree seedlings.

Another connection to air quality is the adoption of lichens as indicators of air quality in the national Forest Health Monitoring Program, sponsored by the EPA and the U.S. Forest Service. The purpose of the FHM Program is to monitor the condition of the nation's forest resources. I have the role of "indicator lead" for lichens in the program, meaning that I have responsibility for designing and implementing effective methods for collecting field data and analyzing those data. This is a fledgling program, with pilot and demonstration studies in progress in the southeast Coastal plain (Georgia to Virginia), Colorado, and California. Eventually, lichens and other indicators will be sampled in all forested areas in the United States, using a hexagonal honeycomb-like grid pattern.

Bryophytes and lichens are prominent in Alaskan ecosystems and several of us are working there. Dr. Jesse Ford, Research Associate Professor in Fisheries and Wildlife, and BPP master's student William Daly, are studying lichen growth rates and accumulation of airborne toxic materials in Arctic lichens, as part of the EPA's Arctic Contaminants program. Master's student Chiska Derr has been working on methods for experimental transplants of epiphytic lichens as well as lichen ecology in the coastal forests of southeast Alaska. A third master's student, Linda Hasselbach, is working with the National Park Service on the relationships between cryptogams and higher plants on the Alaska Peninsula.

Another area of research activity is the effects of alternative methods of forest management on biomass and species composition of epiphytes. In particular, it is urgent that we explore the possible consequences of "new forestry." The most intriguing aspect for us is determining the effect on epiphytes of mixed-aged-class management. This summer, two studies will be launched. Doctoral student Stephen Sillett will intensively study epiphyte distribution in a young stand with scattered veteran trees. His experiments will attempt to separate two classes of factors that limit epiphyte development, dispersal limitations and environmental limitations. In a companion study, I and student Jeri Peck will collect epiphyte data from many mixed-aged stands in the Cascade Range, the stands varying in density of the veteran trees. These studies are being coordinated with parallel studies on tree regeneration and undergrowth responses to scattered residual trees after natural disturbances.

The only member of the lichen and moss research group with a long history at OSU is Dr. William Denison, who continues his study of lichens as fungi and lichen biomonitoring. Largely because of Dr. Denison's extensive network of associates and many contact hours with undergraduates, the lichenology course taught last winter by Denison and me attracted over thirty students, including regular attendants from Bend, Eugene, Salem, and Carson WA.

Although most of the research is ecological, we have two graduate students working on taxonomic problems. John Wheeler is studying the systematics of liverworts, particularly the genus of small thallose liverworts, *Riccia*. John is working with Dr. Aaron Liston (normally a vascular plant systematist) on this problem, and hopes to apply molecular

techniques to resolve some of the outstanding problems in this genus. Sherry Pittam, working on the lichen genus *Usnea* and curation of the mycological herbarium, comes to us with an exceptional background for a graduate student. Sherry was co-founder of the national Rare Lichens Project while she was working at the Smithsonian Institution. This project continues to be a success. It has spawned numerous regional efforts toward assessing rarity of lichens and has been an important vehicle for moving forward species that need protection under the Rare and Endangered Species Act.

Although lichens and mosses are neither posies nor pathogens, they are blooming at OSU!

## FROM THE HERBARIUM

The major news of the past year was the announcement that Oregon State University and the University of Oregon have officially agreed to merge their two herbaria. The UO herbarium will be transferred to Corvallis in June, 1993. The combined herbaria (including the separate Morton E. Peck Herbarium) contain approximately 370,000 specimens and represent the world's most useful and comprehensive collection of the Oregon flora. The merger was triggered by budget pressures from Oregon's Measure 5, mandating that state agencies be as efficient as possible with less resources. The merger will permit access to the state's botanical collections to continue to be freely available with reduced administrative expenses. The UO collection will initially be housed on the ground floor of Cordley Hall, while the OSU herbarium remains on the fourth floor. However, plans are underway to allow for the eventual merger of the two herbaria in a ground floor location.

The herbarium is fortunate this year to have three excellent students contributing to the curation of the collection: Denise Horton, an undergraduate in Crop Science, is responsible for the mounting of plant specimens. She also supervises specimen freezing—the insect control method that has replaced the traditional chemical fumigation. Sherry Pittam (B.Sc. Oregon State University) is presently creating a computerized database for the 50,000 specimen mycological collection. Sherry worked as a museum technician and research assistant at the Smithsonian Institution from 1988-1992, where she gained considerable expertise in lichen curation. She returned to OSU in January 1993 to complete her M.S. degree. John A. Wheeler (M.S. California State University, Fullerton) is also beginning his first year as a herbarium graduate research assistant, and is a Ph.D. candidate in the Department. His thesis research will focus on the evolutionary relationships of the genus *Riccia* (Hepaticae).

The herbarium continues to sponsor the "Botanica Exotica" seminar series. Each month, a slide show highlighting the flora and vegetation of an exotic location is presented. Talks this year have taken us to Pakistan, Turkey, Syria, Baja California and Guam.

A total of 1810 specimens were accessioned into the collection in 1992. For the second year in a row, close to 5000 specimens were borrowed by OSU staff and students for their research in plant systematics. A total of 879 specimens were received as gifts or exchange. Only 547 OSU specimens were borrowed by other institutions, while 5039 specimens were sent out as gifts or exchange. A total of 75 students and professional botanists visited the OSU herbarium in 1992.

—Aaron Liston, Herbarium Director

## From the Messinger Desert Expedition:

Students whose main interests include the documentation and explanation of plant diversity cannot escape fascination with the arid land floras of North America. At OSU we are fortunate to have easy access to Oregon's piece of the Great Basin, but experience in warm deserts is more difficult to come by. The Sonoran Desert, with its giant cacti and tree yuccas, holds particular allure. Through the generosity of department alumni, seven students associated with the Herbarium were able to participate in a vascular plant collecting expedition to the Sonoran Desert during spring break of 1993.

Our route crossed three of the four great North American deserts. Our first night we camped at Walker Lake in the Great Basin's shrub steppe. Midway through the second day of travel, we entered the Mojave Desert, the transition marked by shouts at the first cholla, the first Joshua Tree. Most of the route was several thousand feet above sea level, and the spring bloom had not yet come, although at one stop we estimated seedling density of several annual species at several hundred per square meter.

Our descent into Death Valley compressed weeks of seasonal change into minutes. The alluvium above the valley floor was green and carpeted with yellow composites and purple *Phacelia*. *Encelia farinosa* was in full bloom. Most species were new to us. Those we keyed included *Sarcostemma hirtellum* (a "climbing milkweed"), the composites *Atrichoseris platyphylla* ("gravel-ghost"), *Geraea canescens*, and *Psathyrotes ramosissimum*; *Mojavea breviflora*, and *Eremalche rotundifolia* ("desert five-spot"). We made camp after dark on a high alluvial fan above the valley, and continued south after a brief early-morning frenzy of photography, plant identification, and breakfast.

We arrived in the Kofa National Wildlife Refuge well after dark and spent about an hour searching for a suitable campsite. Giant cactus by flashlight and bombing on nearby military reserves lent a surreal air. The scene that greeted us on waking was in reality no less bizarre. While we knew what to expect, the physiognomic adaptations that enable plants to survive the extreme conditions of the Sonoran desert are, upon reflection, as awe-inspiring as any product of an artists' imagination.

The Refuge is in western Arizona, north of Yuma. It contains several igneous mountain ranges, including the Castle Domes and the Kofas, with deeply eroded canyons and broad bajadas, separated by wash-cut plains and desert pavement. Elevations on the refuge are between 1000 and 5000 feet, although most of our collecting was around 2000 feet. Annual rainfall in the Sonoran Desert averages between 100 and 300 millimeters. The refuge is on the western edge of the Sonoran desert, so much of this rain falls in winter. The landscape's aspect is defined by saguaro, ocotillo, and cholla in all their glory. Shrub cover and diversity are high. A dense bloom of *Phacelia* lent a blue tinge to the whole country. We were able to spend three days collecting in excellent weather, keying each day's catch by lantern light. On our final morning in the desert, the canyon rims were obscured by billowing clouds. Light rain fell as during our visit to a high side canyon and its grove of *Washingtonia filifera* ("California Fan Palm"). This storm followed us home, and on our final night of travel we were glad of the shelter provided by the Malheur Field Station.

Our collecting yielded quite a bit of diversity, even at the family level: in all, we returned with over sixty collections representing 57 species in 27 families. Several of these

families, such as Zygophyllaceae, Simmondsiaceae, Rutaceae, Acanthaceae, and Nyctaginaceae, are not well represented in Oregon. Indeed, the sole U.S. representatives of several families with more southerly distributions occur in the southwest. Collection of duplicates for exchange brought the number of specimens to about 200. All of us encountered at least one plant family for the first time, and many genera and species were new to us. About ten of our collections are species previously unreported on the Refuge, and duplicates of these will be donated to their herbarium.

For some of us, this all-too-brief foray provided the first exposure to a unique biome. Our new knowledge of the Sonoran flora and our renewed sense of wonder over natural selection's diverse products are of equal professional consequence. Enhancement of Oregon State's herbarium collection is a valuable byproduct of this rare educational experience. We would like particularly to thank Drs. Coakley, Liston, and Zobel for their encouragement and assistance.

Even as scientific fashion places increasing emphasis on laboratory study and resource-intensive research, the need for workers with a strong understanding of natural diversity is becoming more acute. This expedition indicates the potential for, and the relative economy of, continuing departmental support for field training of committed students.

—Wes Messinger

## FROM THE FACULTY RESEARCH STAFF

The Department's Faculty Research Staff is a diverse and talented group of individuals, whose numbers have been increased this year by the addition of (how odd) a diverse group of talented individuals. We warmly welcome these newcomers to the department from their many walks of life.

Our newest RA, **Dr. Abbas Shirazi**, joined Dr. Patricia Muir in March 1993 as a Faculty Research Associate, post-doctoral, to study the effects of formaldehyde-enriched mist on plants. Dr. Shirazi is from Iran, and received his Ph.D. in environmental stress physiology from the Department of Horticulture at OSU in 1992.

Two other post-doctoral RAs have joined Dr. Chris Mundt's project recently. In January, 1993, **Dr. Johanne Brunet** began work on the analysis of Dr. Mundt's wheat cultivar mixture data from a population genetics perspective. Her background is in population biology and population genetics, and she has worked in the Botany Department at the University of Washington (Seattle) and in the Department of Ecology and Evolution at the University of Chicago. Johanne and her husband, **Dr. Jerry Cooperstein** (Physics), are the proud parents of one of the world's cutest kids, **Stephan**, born July 24, 1992. Dr. Brunet, from Montreal and a native French speaker, was welcomed with relief by **Dr. Christian Lannou**, the other of Dr. Mundt's post-doc RAs. Dr. Lannou, a Parisian, joined the project in November, 1992, for a ten-month study of the competitions between stripe rust races in cultivar mixtures through mathematical simulation. He received his Ph.D. from INRA (Institut National de la Recherche Agronomique) and Orsay University. Christian is an avid and talented oil-painter.

In October 1992, **Jim Lenihan** began work as a postdoc for **Dr. Ron Neilson** on a project funded by the National

Park Service to determine the sensitivity of Central Grassland vegetation to climatic change. Prior to his RA appointment, Dr. Lenihan conducted his dissertation research within EPA's Global Change Program, and received his Ph.D. from the Geography Department at OSU late last year.

**Nanci Pascoe** began working for **Steve Alderman** in May, 1992, with a half-time appointment for three years to survey grass seed production in the Willamette Valley. She is monitoring the levels of three diseases of grass seed to determine the effects of the new management practices implemented to decrease field burning. Nanci received her Master's Degree in Soil Microbiology from UC Berkeley.

Also joining the Botany and Plant Pathology Department from the recent merger with General Science are **Jesse Chaney** and **Blake Farnsworth**. Jesse has worked for Dr. Ron Neilson since November 1991 as a research assistant in global climatology, funded by the EPA. Jesse is also a Ph.D. student in the Computer Science Department at OSU. Before joining Dr. Neilson, he worked for Hewlett-Packard, Inc. in Corvallis.

**Blake** is the RA manager of the physiological ecology, controlled-environment lab on the roof-top of Weniger Hall. He's been there for three years, but only recently, with the demise of General Science, has he been adopted by the B&PP crowd. Blake has been working with Dr. Winner studying plant responses to man-induced changes of the environment, including ozone pollution and global warming/greenhouse gas scenarios.

When we put out the call to the RAs for mentionable events and news, we found that the past year has been relatively quiet, though not for everyone. **Hans Wittig** and **Marilyn Mohr** are pleased to report the birth and subsequent lightning-like growth of their daughter, **Grace Helena Wittig**, born June 3rd, 1992. **Kathy Merrifield** tells us she was pleased to have several opportunities to give presentations about nematodes to grower groups and professional societies this year. Her most responsive audience, however, was the sixth grade science class at Western View Middle School in Corvallis. An impressive group of young investigators extracted their own nematodes and asked provocative questions. They also demonstrated fine musical ability by singing nematode songs.

Each year we like to update folks on the fine members of our research staff who have moved on to other directions. **Stacey Fisher**, formerly the Plant Clinic Diagnostician, has taken a new position in integrated pest management of ornamentals with a farm community in New Knoxville, Ohio. While we miss both her expertise and her inimitable commentary, she assures us that she is very happy. **Natalie Goldberg** returned to Tucson, Arizona after completing one year of a postdoc in **Mary Powelson's** laboratory. She is currently doing a postdoc with **Judith Brown** at the University of Arizona, working on virus transmission by white flies. **Sharon Krueger** has transferred to the Dept. of Fisheries and Wildlife to work with **Carl Schreck**. She is evaluating fish genetics for the purpose of expanding protection by the endangered species act to unprotected species. **Dick Samson**, former Senior Research Assistant with **Tom Allen**, is now with the USDA-ARS Roman L. Hruska U.S. Meat Animal Research Center in Clay Center, Nebraska as a Biological Laboratory Technician. Dick is mapping genes in cattle, pigs, and sheep. **Dave Stein** left **Dr. Carol Rivin's** laboratory in January of 1993 to work for Antivirals Inc. here in Corvallis as a Molecular Biological Technician.



## FROM THE PLANT CLINIC

The Plant Clinic has reopened and has been fortunate enough to entice the highly talented, charismatic, and extremely modest Melodie Putnam to come to Oregon State University. Melodie was snatched away from Purdue University (West Lafayette, Indiana) where she was the Director of the Plant and Pest Diagnostic Laboratory, a multi-departmental diagnostic facility. Prior to Indiana, Melodie was the regulatory plant pathologist for the Maryland Department of Agriculture and Supervisor of the Survey and Laboratory Support Group in the Plant Protection Section.

But now Melodie has decided to leave behind the paperwork and other delights of administration to return to her native state to do some honest work. She is now the Chief Diagnostician in the Plant Clinic. Melodie enjoys working with sick plants and receives much satisfaction from successful inoculations. Melodie is assisted in her diagnostic adventures by Julie DiLeone, a recent recipient of an M.S. degree from our Botany and Plant Pathology Department. Both Melodie and Julie are kept busy with the plant pathological pleasures resulting from the wettest spring in 10 years. Both are happy to be in the Clinic and are forging ahead into new diagnostic frontiers. Watch for them in the "new Diseases" section of *Plant Disease*.

—Melodie Putnam

## FROM THE E.M. FACILITY

A gift from the M.J. Murdock Charitable Trust and funds from Oregon State University's Research Office allowed the Electron Microscope Facility to install an analytical electron microscope (AEM), with X-ray spectrometer and image analysis system, in 1990. At present, about 50 OSU faculty and students have become trained AEM operators. Many other faculty and students routinely obtain data from the AEM, assisted by trained operators or Facility staff. The feature analysis system has been especially useful for investigators. One recent project used feature analysis to size soil particles ingested by larval and adult soil insects. The study correlated soil insect demographics and feeding behaviors with residual pesticide loads, soil type (sand, clay) and climatic factors to develop more environment sensitive pesticide application recommendations.

The AEM has also created possibilities for more complimentary microscopic and bulk structures studies. Working cooperatively with the College of Oceanography's Electron Microprobe Facility, structure and chemistry of materials from several cubic centimeters to a few tenths of one cubic nanometer can be evaluated. OSU's microprobe was also acquired through a generous Murdock Trust gift. Possession of the AEM enabled us to compete successfully for an NIH grant for equipment that freeze-stabilizes biological specimens, and a DOE grant for equipment that thins metallic and ceramic materials. These preparation tools are necessary for modern transmission microscopy.

The Facility's scanning electron microscope (SEM) is almost 20 years old. Performance requirements for research SEM's have profoundly changed since 1970, so one of our current goals is to replace the SEM with a new microscope. Seeing atomic level structures and processes requires image resolution below 1.5 nm, five times better than our SEM can achieve! In addition, new SEM's offer good images at low

beam voltage, light element spectrometry, and will record and archive images in computer-compatible digital formats. A new SEM will complete modernization of our Facility, greatly improving our abilities to train students with state-of-the-art equipment and methods. We will need \$240,000 to purchase a new microscope; federal, corporate, and private sponsors are being sought.

—Al Soeldner

## IN MEMORIUM

Paul W. Miller (May 1901 - July 12, 1992)

Cryptside services for Corvallis resident Paul W. Miller were held on July 14, 1992 at Oaklawn Memorial Park Mausoleum. He died in his Corvallis home at the age of 91.

Paul was born to Arthur J. and Florence L. (Seats) Miller in Mt. Vernon, Indiana where he attended elementary school. He attended high school in Louisville, Kentucky. He attended the University of Kentucky from 1919 to 1924, receiving a bachelor's degree in agriculture in 1923 and a master's degree in 1924. He attended the University of Wisconsin from 1924 to 1929 at which time he received his doctorate. Paul married Carrie A. Lee in 1926. She preceded him in death in 1988.

Miller worked as an instructor of plant pathology and research assistant at the University of Wisconsin from 1927 to 1929. He was an agent of the Bureau of Plant Industry for the USDA in 1929; an associate plant pathologist for the USDA from 1930 to 1942; and a plant pathologist for the Agriculture Research Station with the USDA from 1942-1968. He retired on December 31, 1967 after working 38 years with OSU. He wrote many articles on diseases of apples, walnuts, filberts and strawberry root rot.

He was a member of Sigma XI, Phi Sigma, Alpha Zeta, Delta Tau Delta and Men's Garden Club. He was a charter member of the Corvallis Rose Society serving as president and on many committees, and edited the Corvallis Rose Society Bulletin, "The Bonnie Briar Bush," for 10 years. He was a member of the American Rose Society and a member of the Royal National Rose Society. As an accredited ARS rose show judge he won many awards at shows in the Pacific Northwest.

He is survived by his sister and brother-in-law, Emily and Joseph Blanton of Maggie Valley, North Carolina, two nieces, two nephews and many close friends.

Contributions may be made to the Corvallis Rose Society in care of Clara C. Miller, CRS Treasurer, 5010 SW West Hills Road, Corvallis, OR 97333.

Marlene R. Nelson (Dec. 18, 1955 - April 28, 1993)

Marlene Nelson died of natural causes at Good Samaritan Hospital in Portland, OR. She was born and raised in Iowa and moved to Oregon in the mid-70's. She returned to Iowa for a time before moving back to Oregon in the early 80's.

Marlene was the Botany and Plant Pathology Department Fungicide Technician from July of 1986 to May of 1991, and with funding changes, she moved over to Greenhouse Operations. Her hobbies were fishing, horseback riding and the care of her three dogs. She also enjoyed riding and working on her Harley-Davidson motorcycle.

Marlene is survived by her husband Wally and her father, Larry Olson of Winchester, Kentucky.

Thanks are due Jackie Poppleton for typing the newsletter, Leona Nicholson for handling the mailing list, Eric Henry for collecting the contributions and doing the editing, Tom Allen for the logo, Joe Hanus for computer help, and Bill Brandt and Larry Moore for the use of their Macintoshes and laser printers.

## FROM THE CONTRIBUTION CORNER

The Department thanks each of its alumni and friends for the gifts you have sent this past year. These donations have made a big difference to our morale! Your donations have been used to assist graduate students to attend professional meetings, contribute to two graduate student symposia, support outside speakers, print *Posies and Pathogens*, and send a group of students on a collecting trip (the "Messinger Desert Expedition"). Special funds are used for the indicated purpose. Without your help, we would be less able to provide quality opportunities for our students. Please remember, no gift is too small.

## THANK YOU.....

to Professor Tom Allen for donating an original watercolor for the raffle at the BPP Alumni Picnic last August. The Chairperson is particularly appreciative of his generosity because Paul Koepsell drew her name from the coffee can full of raffle tickets! The raffle proceeds will benefit programs for the department's students.

## A SPECIAL THANK-YOU.....

A very special thank you is due to Bonnie Hall, who has donated artwork at cost to be sold on behalf of the students in BPP. Due to her generosity, over \$800 has been raised on the prints alone. She has made available a selection of 16" x 20" numbered and signed original serigraph prints. Each matted print features a different flower of Witham Hill: Purple Iris, Blue Violet, Spring Beauties, Poppies, Twinflower, and Trillium have appeared so far. "Twinflower" has also been used on the T-shirt sold by the graduate students this past year. "Blue Iris" is also available as blank note cards. If you visit the department, please be sure to ask Leona Nicholson to show you the prints we have in stock; others can be ordered. The following is a description of Bonnie's background and work.

"Bonnie Hall has been doing scientific illustrating for more than 40 years -- in subjects that include entomology, anthropology, and botany -- at the Universities of Oregon, California, and Michigan and, for the last 25 years, at Oregon State University. She graduated from the University of Oregon in 1953, earned a Master of Arts degree in Zoology at the University of California at Berkeley, and has been a member of the Guild of Natural Science Illustrators. Accuracy is carefully maintained. Each of Bonnie Hall's botanical illustrations is faithful to growth form, color, and structural detail of the plant. And each print is an original serigraph, hand made by the illustrator. These limited edition botanical portraits are of the overlooked, the undervalued or, in some cases, the threatened species of wildflowers native to our Northwest landscape. May they be both decorative and informative to a wide audience."

## WANTED: Opportunities for student group field expeditions

I would like to see an endowment established to provide income to fund group trips by graduate and undergraduate students under the sponsorship of one or more faculty members. For example, it is my goal to provide all students with at least one opportunity to take a trip such as was taken (the "Messinger Expedition" described elsewhere in this issue) during spring break. The proceeds of the endowment would be used to defray transportation costs for such expeditions. Are any of you interested in helping establish this endowment? The goal is \$20,000, which should provide approximately \$1,000 per year for a major excursion. Gifts of \$500 or more per donor are sought to build this fund. Donors' names will be published in *Posies and Pathogens* unless the gift is designated as anonymous. Beneficiaries will be advised of your generosity.

—Stella Coakley

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Please send contributions to (envelope enclosed):

Botany and Plant Pathology Fund  
E.R. Jackman Foundation, Oregon State University  
Strand Agriculture Hall 122  
Corvallis, OR, 97331-2212

## CONTRIBUTION FORM

Contributions can also be sent to the Department at any time; if sent directly, please be sure to indicate that your check is a donation and how you want the donation used. Please make all checks payable to the E.R. Jackman Foundation. Please indicate on this form where you would like your donation used:

☐ Where need is greatest  
☐ Graduate student support (to benefit research & travel)  
☐ Newsletter  
☐ Establishment of endowment for student group trips  
(if possible, gifts of \$500 or more)

☐ Bill and La Rea Johnston Endowment Fund for Undergraduate  
Education  
☐ Harry K. Phinney Memorial Fund  
☐ Edward K. Vaughan Book Fund

NAME \_\_\_\_\_

FOR ALUMNI:

Year \_\_\_\_\_  
Degree \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP CODE \_\_\_\_\_

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## LET US KNOW WHAT YOU ARE DOING!

We would love to hear from you—and so would other alumni; please send us information on your current location, job, family, etc. Your responses are an important part of *Posies and Pathogens*.

Mail to: Dr. Stella M. Coakley, Chairperson  
Botany and Plant Pathology  
OSU -- Cordley Hall 2082  
Corvallis, OR 97331-2902

If you can't find time to write a letter, use this handy form:

Name \_\_\_\_\_ Class of \_\_\_\_\_ Degree \_\_\_\_\_

Address \_\_\_\_\_

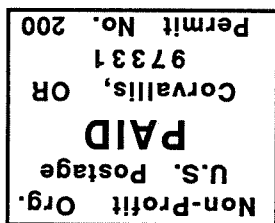
Information you would like to share in the next issue of *Posies and Pathogens*:

News that you would like to see in *Posies and Pathogens*:

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### REQUEST FOR ADDRESSES OF ALUMNI

When our address file was transferred to the Alumni Office a few years back, some names were lost. We'd appreciate you asking any OSU Botany & Plant Path. alumni that you know whether they received this newsletter. If they did not, please have them contact the Department and we will add their name to the list and send a newsletter to them. Thank you for helping us find our "lost" alumni.



*Bonnie Hall & Associates*  
Department of Botany and Plant Pathology  
Oregon State University  
Cordley Hall 2082  
Corvallis, OR 97331-2902  
ADDRESS CORRECTION REQUESTED

A SAMPLE OF BONNIE HALL'S BOTANICAL SERIGRAPHS\*



**PURPLE IRIS or FLAG**

Reproduced from an original screen print by Bonnie Hall

\* Available as 4-color reproductions, 5" x 7" notecards (\$10.00/box of 8) or 16" x 20" prints (\$50.00) + postage