



Plant Science Says

July, 1999

Move to ABS Building

The move to the new ABS building is pretty much complete. Following are a few comments on the move and the new building:

Don Mathre - "Many thanks to all of you for your considerable efforts in making the move into Ag Bioscience successful. I know many of you went home at night with sore backs and arms. Hopefully, the new labs, offices, conferences rooms, etc. will suit your needs and make your professional life much more productive and enjoyable. Thanks, too, for being patient with me in getting all your change orders submitted. Please let me know if something doesn't happen in this regard in the next week or so."

Nancy Blake - "Grant Magan, the facility services man heading up our moving crew, was very helpful and patient with us as we were less than organized. He tried every way he could to get our big equipment into very tight spaces."

Grants

Bill Grey, Nina Zidack, Barry Jacobsen, David Sands, Nancy Callan, Mareike Johnston, and Gary Strobel

Noxious Weed Grant - This grant concerns a program to study the potential use of biocontrol agents (fungal pathogens) for use against spotted knapweed.

Cathy Cripps

NSF - "Arctic-Alpine Mycobiota: Rocky Mountain Tundra, USA.

Scholarship Awards

Congratulations to **Lynn Goosey** on receiving the Lynch Memorial Graduate Scholarship Award. Lynn is working toward her Ph.D. in Biology and has

been employed in Bob Sharrock's Lab since the Spring of 1997.

Also congratulation to **Ivette Acuna** on receiving the International Graduate Student Award. Essential to receiving this award is a commitment to go back to one's native country and use the knowledge they have gained here.

Travel to Hawaii and Down Under by Laura Carsten

After finishing my Master's degree last December, I decided to take a short break from Plant Pathology. My desire to combine travel with biological field experience led to six months of work in two distinctly different but equally intriguing places. My first job was on Tern Island, a 37 acre coral lump that, together with several other islands, form the French Frigate Shoals. Tern lies about 500 miles northwest of the main Hawaiian Island chain, and is administered by the U.S. Fish & Wildlife Service. The island consists solely of a National Wildlife Refuge whose main purpose is to protect the endangered Hawaiian Monk Seal and to monitor seabird populations.

My first view of Tern was from the window of a six-seater airplane named Rainbow One. My apprehension level rose as I realized I had committed to living on this tiny strip of land for the next three months, with only six other people for company. This anxiety quickly melted into wonder as we approached the island more closely, and I observed thousands of birds wheeling in the air, tending eggs on the ground, and interacting in courtship displays. This was a wildlife photographer's slice of heaven. Not only are the birds incredibly dense across the island, but they exhibit insular behavior— they have no fear of humans.

I primarily worked with two species of albatross during my stay. The black-footed albatross has been declining in numbers for the past several years.

Investigators have found that many of the birds are being caught on the squid-baited hooks commonly used by the long-line fishing industry. Consequently, there is a great deal of interest in the foraging patterns of these birds. One project I worked on involved attaching satellite transmitters to both black-foot and Laysan albatross in order to track their movements. The transmitters revealed that the birds were making 3,000 mile trips over the course of just a few days to forage!

The second half of my six month odyssey took place in Australia. I lived in a small town on the east coast of Queensland called Rainbow Beach. As part of a study investigating the effects of introduced honeybees on the native species of Australia, I observed bees and nectar-feeding birds foraging. The other main project I worked on tracked seed dispersal by fruit doves in the subtropical rainforest. Both projects provided ample opportunities to observe the local wildlife— emus, koalas, goannas (Australian iguanas), and countless Australian birds. The fungal plant diversity in the rainforest was impressive, as well! I finished off the trip with an excursion to the Great Barrier Reef, which contains a truly awe-inspiring assemblage of coral, turtles, rays, invertebrates, and tropical fish. Overall, my travels to both places added a new dimension to not only my biological knowledge, but to my world view— an unparalleled and priceless experience.

Employee of the Month—Alice Pilgeram (131 ABS)



Dr. Alice Pilgeram is a native of Browning, a small town on the Blackfeet Indian Reservation in northern Montana. Alice attended Browning High School and later as an

undergraduate student at Montana State University, received her degree in Microbiology. Alice enjoyed the finer parts of college, such as taking Organic Chemistry as an elective. Shortly after graduation, Alice linked with Dave Sands in heading

up a chicken project in Arkansas. Alice found this experience very interesting, but plans no return trip to Arkansas. After two years in the South, Alice returned to Montana State University and enrolled as a graduate student in Plant Pathology (but under the wing of Joan Henson in Microbiology). Here Alice met her husband Dan Marsh while knocked out during a volleyball game. Dan came to her rescue and the couple married years later at Comdex in Las Vegas (the rumors of Alice and Dan dressing as Elvis and Priscilla Presley have not yet been substantiated).

After receiving her Ph.D. at Montana State University, Alice ventured to Salinas, California for a two-year stint as a post-doc for the USDA. Upon return to Bozeman, Alice again linked with Dave Sands to run the Biocontrol of Weeds Lab. Alice's main areas of interest include DNA characterization of *Sclerotinia sclerotiorum* and virulence enhancement of *Fusarium oxysporum*. She also loves tennis in the summer, racketball in the fall and quilting year round.

Lab of the Month—Dr. Sands Lab (131 ABS) by Rich Hohne

Dave Sands' Biocontrol of Weeds lab has blossomed into a cutting edge lab for control of noxious weeds. In 1982, Dr. Sands began to focus on biological control of noxious weeds with fungi and bacteria. This research was conducted in the Dave's Bacteriology lab, but an infusion of federal funds facilitated a new lab. The basement of Leon Johnson Hall soon housed the Biocontrol of Weeds Lab. The fresh air and brilliant views allowed for some truly great research in the area of noxious weed control.

The Biocontrol of Weeds Lab is comprised of many key individuals. Dave Sands offers his expertise, but Dr. Alice Pilgeram (see "Employee of the Month") is the true leader of the lab. Alice coordinates all research activity, as well as aiding in the development of graduate students and student labor. Tim Anderson is the lab's field coordinator. A Bozeman native, Tim conducts all field research as well as heading the Indian ricegrass project. Tim has been instrumental in the development of this gluten-free grain and the establishment of a grower cooperative in Malta. Rich Hohne acts as grant writer and is known as the lab "scribe." Rich also enjoys helping Tim with his field research as well as helping Alice Pilgeram with other lab duties. Student laborer Tessa Trebesch has become a fixture in the lab and provides invaluable technical support to Alice. Graduate student Susan

Nelson and summer workers also call the lab home.

The Biocontrol of Weeds Lab is currently engaged in several diverse projects. Biocontrol of knapweed, spurge and Canada thistle show tremendous promise. Other projects include vaccine delivery systems for bison, and biocontrol of kudzu in South Carolina. The Biocontrol of Weeds Lab is a great place to bounce ideas or just have a cup of freshly brewed coffee.

New Employee - Stacy Bieberdorf (Seed Lab)



Hailing originally from Sonoma County, California, I resided in Northern Montana and Canada before settling in Bozeman three years ago. I arrived here to finish my degree in Agronomy, now known as Plant Protection. I graduated in May and was lucky enough to land a job at the

Montana State Seed Testing Lab so I can continue to recreate in this area. I really enjoy rock climbing, but I also mountain bike, spend some time running, find yoga very therapeutic for the sore muscles, and love working in the garden. One day I hope to own some land where I can raise mushrooms.

July Birthdays:

Susie Couch	2
Catherine Powers-Cash	3
Pat Hensleigh	5
Cheryl Johnson	5
Dan Bergey	7
Jack Riesselman	9
Deven See	11
Eric Smidansky	20
Susan Siemsen	22
Anneke Metz	28
Ray Ditterline	29

Happy Birthday!