



Field Notes

Friends of the University of Oklahoma Biological Station

Fall 2002

Vol. 2 Issue 1

Contents

Welcome.....	1
In Memoriam: Carl D. Riggs.....	1
UOBS Receives NSF Grant.....	2
August 13 Storm.....	3
Summer 2003 Auction.....	3
Auction Items.....	4
Meet Dr. Gary Wellborn.....	4
Summer 2003 Reunion.....	5
UOBS Field Biology Award.....	5
Summer Session 2003.....	5
Executive Committee.....	5
Alumni News.....	5
Contribution Form.....	6

In Memoriam

Carl Daniel Riggs died on September 29, 2002. We enjoyed the pleasure of his friendship on both professional and personal levels for more than fifty years. Our friendship with Carl began in 1946 when we started graduate studies in the department of Zoology at the University of Michigan. This tall, handsome Indiana boy, who had earned his bachelor's and master's degrees at UM, was well into and enjoying his dissertation research on white bass. Mary's first assignment as a teaching assistant was in a beginning zoology laboratory course which Carl taught. His research completed and ready to write up, Carl left Ann Arbor in 1948 to accept a position in the Zoology department at the University of Oklahoma. As he returned to UM periodically to meet with his advisor, Karl Lagler, our contacts stayed fresh.

Even early on during his 22-year tenure at the University of Oklahoma he made significant accomplishments. Notably for those of us who experienced summers at the University of Oklahoma Biological Station, he was the "founding father". Some of you may have heard Carl tell about teaching a fisheries biology course from a barge on Lake Texoma and the chance encounter with a Madill banker (Norman Brillhart) who also had a joy for fishing. With strong support from the University administration, including President George Lynn Cross, UOBS was born and is still thriving as an outstanding field station. During these early years, he met a young lady, Patricia Bynum, who was a graduate student carrying out research on the parasites

Welcome to Friends of the University of Oklahoma Biological Station

The Friends of the University of Oklahoma Biological Station (FUOBS) has been established under the umbrella of the University of Oklahoma Alumni Association. On July 14, 2001, the organization met and elected officers. Those attending accepted the proposed constitution. The purpose of this organization is to promote and support the Biological Station and to promote connection with its friends and alumni. Any person who is a current or former student, faculty or staff member or friend of the Biological Station may become a member of the club.

of the white bass. She and Carl were wed in June of 1952, had their honeymoon at the station and celebrated their 50th wedding anniversary this past June. Under his leadership, 1950-1969, UOBS enjoyed impressive growth. The research building, the library/administration building three apartment buildings and a boat house were constructed. The facility was abuzz with activity --- graduate students, undergraduate students, high school students, visiting scientists and a talented faculty.



CARL DANIEL RIGGS (1920-2002)

He was intelligent, talented, warm and friendly, had good "people" skills, and during his career clearly was an example

of "chance favors the prepared mind". His efforts and success were not limited to UOBS. Carl attained the rank of Professor in 1962. He was a skilled administrator. This capability is reflected in appointments as Director Oklahoma Biological Survey (1950-1970), Graduate Dean (1965-1971), Vice-President Graduate Studies (1966-1971) and Acting Provost (1970-1971). Additionally, he continued to publish scientific papers and to train graduate students -- a productive academician. There is more. He was active in the Lions Club and served on the Norman City Council. Carl was successful in wearing many hats.

These achievements lead to other opportunities. In 1971 he

accepted an appointment as Vice-President of Academic Studies at the University of South Florida in Tampa. At that time USF was a relatively new university focused on teaching with very modest research activity. During Carl's 30 years he was instrumental in changing that and held a number of positions including Acting President (1997-98) and Coordinator of University Research (1980-86).

We will all miss this great friend who touched so many of our lives and clearly has made a difference.

Chuck and Mary Carpenter

UOBS Receives NSF Grant for Housing Facility Friends of UOBS Seek Matching Funds

The University of Oklahoma Biological Station (UOBS) is proud to announce the awarding of a National Science Foundation (NSF) Field Station & Marine Lab (FSML) Infrastructure Improvement grant (with a substantial OU institutional match) to construct a triplex housing facility to expand and enhance housing accommodations for guest researchers and students. The UOBS faculty has a national and international reputation in aquatic ecology, population and community ecology, and evolutionary biology. Since the founding of UOBS in 1949, thousands of guest researchers, students, and conference participants have visited and stayed at the Biological Station for various lengths of time. Nearly 1100 publications, 150+ theses, and nearly 1100 undergraduate research projects have been completed at UOBS during its history. However, one long-term problem at UOBS relates to the inadequate housing facilities for long-term guest researchers (e.g. sabbatical visitors, post-docs) and accompanying family members.

Pending OU Regents approval, a 3,000 square foot, fully-furnished, triplex guest researcher housing facility will be constructed at UOBS. Construction is slated to begin in early summer 2003 with completion of the project in time for spring 2004 occupancy. Each of the three, fully-furnished apartments will consist of two-bedrooms, two bathrooms, a fully functioning kitchen and living/dining area. One of the units will be handicapped-accessible. The triplex unit will be constructed on a recently purchased 7.3-acre tract (i.e. the "Johnson Tract") of land, adjacent to the main UOBS campus. This three-apartment unit will greatly enhance the ability of UOBS to host longer-term guest researcher teams (up to 6 persons per apartment) or guest researchers and accompanying family members, and will complement present housing facilities that serve the needs of short-term guests (e.g. conference participants).

UOBS is one of the largest field stations in the south-central U.S., and its year-round faculty/staff conduct research related to important issues in population and

community ecology ranging from exotic species invasions to ecosystem studies to evolutionary studies of population genetic structure of various organisms. Nationally and internationally recognized researchers collaborate with UOBS scientists. The benefits from constructing such a housing unit will be seen via increased guest researcher use, allowing more researchers to access unique habitats and features of the region surrounding UOBS, and tackle key ecological and environmental issues. With an increased researcher-base, other programs at the station such as on-site undergraduate and graduate training, as well as public education programs (i.e. K-12 outreach) will benefit from enhancement of the intellectual/scholarly climate at UOBS.

To complete this project, UOBS, in conjunction with the OU College of Arts & Sciences (CAS) must raise a total of \$70,000 over the next 5 years as its part of the institutional matching funds for the grant. This is the type of project that the Friends of UOBS was formed to support. Currently \$15,000 of the match has been raised. If you are interested in contributing to this project, a form is available in this newsletter and will also be linked to the UOBS website (www.ou.edu/uobs/). Make checks payable to The University of Oklahoma Foundation and send the completed form and check to:

University of Oklahoma Alumni Association
Attn: Brenda
900 Asp Ave.
OMU - Suite 427
Norman OK 73019

Contributions may also be charged to your credit card either on the contribution form or electronically on the website link. University policy requires that contributions to the Friends of UOBS go through the Alumni Association, our umbrella organization. If you wish the contribution to be a memorial to Dr. Carl Riggs or another individual, please so note with your contribution so the appropriate family may be notified. Pledges of future contributions for up to two years can also be made.

August Storm Hits Station

On the night of August 13, 2002, we had another reminder of just how quickly Oklahoma weather can change and how dangerous and costly it can be. Some say it was an 80-90 mile per hour straight wind, but after seeing how tree tops were twisted and debris scattered in several directions, it is hard not to believe that there was some tornado activity involved.



Regardless of the type of winds, the problems it caused were dramatic. Wind damage was second only to the 1956 tornado and the worst in my 18 years here at the Station. Major power lines were down, propane lines severed, limbs and debris blocked access and egress. The beautiful new house of our neighbors across the road, Mr. and Mrs. Hambrick, was struck by lightning and burned to the ground. Mrs. Hambrick, who was home, escaped without injury. The students should be commended for taking care of Mrs. Hambrick and staying with her until her husband arrived. Mr. Hambrick had to take an alternate route via Marietta to get here because an overturned truck blocked the road on the south side of the Willis bridge. Our sympathy goes out to the Hambricks.

In the midst of all of this chaos, driving rain, lightning, downed power lines and a flaming house, stood approximately 55 summer session students, professors and teaching assistants in the final week of August summer session classes, all witnessing the calamity. For

those who had never seen Oklahoma's weather at its worst, it was an eye-opening experience. But through all the turmoil came resilience. We could have easily closed the Station, but thanks to everyone's courage we carried on. We were without electrical power for 18 hours, no hot water, no lights, no A/C, but plenty of good ole positive will-power. Classes continued and the cooks kept everyone well-fed including the firemen, REA, OU Physical Plant workers, electricians, etc. working to put things back together. I'm proud of all of them for hanging tough when the going got rough. It was a good example of how order can come out of chaos. Most importantly, nobody was injured.



Thanks to Physical Plant; Housing; Vice President for Research, Dr. Lee Williams; College of Arts and Sciences, Dean Paul B. Bell, Jr.; Bill Henwood; and Provost and Senior Vice-President, Dr. Nancy Mergler for their generous help with the funding. We have finally gotten all the limbs and tree tops removed, all the broken glass replaced, and all the power lines repositioned. We are now getting new roofs on "A" and "B" buildings and a new laundry facility.

Hopefully next August won't be so exciting, but again we're in Oklahoma and who can predict "Okie Weather"?

Richard Page, Facilities Manager
University of Oklahoma Biological Station

PLANS FOR FUND-RAISING AUCTION FOR REUNION 2003

The initial fund-raising auction at Reunion 2001 was a resounding success. In spite of short notice, \$1,062 was raised, primarily due to the Herculean efforts of Julia Yoshida. She's a dedicated shopper at estate, antique, and garage sales in the Boston, MA area, and brought lots of items. Other friends donated a number of books and other items that also swelled the results of the sale.

We hope to have pictures of some items on the UOBS web site. Notice there are some items that will make excellent holiday presents for 2003. It's not too early to begin

planning!

For 2003 the auction is also shaping up to be a great one. We need your help in contributing items with a nature or academic or southwestern theme for sale and fund-raising. Let's help Julia turn this into a record-setting auction to raise matching funds for the NSF grant for a new residential unit at UOBS (see related article in this issue).

Following are some of the wonderful items you can expect to see at the 2003 event. Please scour your collection or keep your eyes open at sales for items to contribute to the sale.

If you have items to contribute to the auction, contact Julia at julia_yoshida@lahey.org or Donna at dcobb@ou.edu

Summer 2003 Auction Items

1. 1st ed. (1849) Royal Octavo Audubon Print of PRAIRIE DOG. 6" X 10". Excellent condition. (bid to start at \$300)
 2. 1st ed. (1849) Royal Octavo Audubon Print of POUCHED JERBOA MOUSE (*Dipodomys phillipsii*) 6" X 10". Excellent condition. (bid start \$175)
 - 3-4. Commemorative dinner plates of OU (1930's?), 10.5" Wedgwood, Red on White with floral bas-relief border: THE MEMORIAL UNION; THE ADMINISTRATION BUILDING. (bids start \$60)
 5. Texas Hatters Custom made Beaver Hat. Straw 7-56. (estim. \$30)
 6. Univ. Texas 18 K gold plate 7 Blazer Buttons. Gold and red. (bid start \$40, estim. value \$100)
 - 7-8. Fishing shirt; Aloha shirts with fish or turtles. In sizes from small to extra large (estim value \$15-40)
 9. Original metal amphibian sculpture "Dinner by candlelight" (bid to start at \$60)
 10. Two fish prints from the original "Railroad Surveys" dating to the 1850's (bid to start at \$25)
-

Meet Dr. Gary Wellborn



I joined the faculty of the University of Oklahoma in the fall of 1996, with a joint appointment in UOBS and the Department of Zoology. I have thoroughly enjoyed my affiliation with both units, and feel that I have now made the transition from the 'new guy' who is just learning the ropes to finding a comfortable niche at OU. What I have enjoyed most here is the warm and supportive friendships I have with faculty, staff, and students.

I have taught a variety of courses, both at the Biological Station and on the Norman Campus. At the Station, I had the pleasure of teaching Field Methods in Ecology for two summers. This course focuses on the concepts and applications involved in actually doing science in the field, and included both group and individual research projects. In addition to the summer course at the Station, I also teach courses in Norman, including Principles of Ecology,

Books:

11. Hartel, KE, Halliwell, DB, Launer, AE. 2002. Inland fishes of Massachusetts. Color plates signed by Hartel (MCZ, Harvard U). (start at \$40)
12. McClane's standard fishing encyclopedia and international angling guide. 1965. Holt, Rinehart, and Winston. Color plates of lures. (start circa \$60)
13. Hillerman, Tony. 2001. Seldom Disappointed - A Memoir. Inscribed "for Friends of UOBS". (\$40)
14. Child, Julia. 2000. Julia's Kitchen Wisdom. signed (start at \$21)
15. Garrido, OH and Kirkconnell, A. 2000. Field Guide to the Birds of Cuba. signed by Kirkconnell. (start at \$20)
- 16-17. Sibley, D. Sibley guide to birds. inscribed "to a friend of UOBS" with scissortail drawn in color. (start at \$37) and Sibley guide to bird life and behavior. 2001. inscribed "to a friend of UOBS" with lesser prairie chicken drawn in color (start at \$47)
- 18-19. Sibley, D. both 1st ed., 1st printing, each inscribed "to a friend of UOBS": Sibley's birding basics, 2002, with a painted bunting in color; and Sibley's birding basics. 2002, with a black-capped vireo in color (each start at \$16)

Limnology, and Field Ecology.

My research focuses on the ecology, evolution, and behavior of aquatic invertebrates. Most of my work since joining OU has centered on understanding the diversification of a group of freshwater crustaceans, specifically amphipods in the genus *Hyalella*. I began studying these creatures, more or less by accident, as a Ph.D. student at the University of Michigan. By sheer luck, they have turned out to have a very interesting story to tell. This group of animals exhibits several remarkable qualities, and have led naturally to some interesting research questions. Briefly, amphipods in this genus are distributed widely throughout the New World. Until recently, it was thought that the genus was mostly represented in North America by a single widespread species, *H. azteca*. Recent genetic studies (particularly one study by a Canadian researcher), however, have revealed a substantial level of diversification in the group. We now know that there are many species in North America, some widespread with broadly overlapping distributions, and others endemic to single habitats. One remarkable paradox in this diversification is that the species often exhibit substantial genetic differentiation, but very little, if any, morphological differentiation. Thus one current research avenue involves trying to resolve this paradox.

To provide a flavor for the kinds of issues I explore, I will briefly describe some current projects in my lab. First, I have been working with my OU colleague, Dr. Richard Broughton, to construct a phylogeny (evolutionary tree) for the *Hyalella* species. This work involves DNA sequencing

and using computer algorithms to reconstruct the history of diversification. Understanding the evolutionary history is critically important because it allows us to distinguish among some competing hypotheses pertaining to the evolution of some important morphological and behavioral traits in the group, and can shed light on biogeographic properties of this diversification event. One offshoot of this work is that I am now working with a Chilean researcher, Dr. Exequiel Gonzalez, to officially name and describe these species, and will be visiting him in Chile in January-February 2003 to work intensively on the project.

A second current project, in conjunction with my graduate student, Rickey Cothran, is to explore ecological questions that arise from the discovery that many habitats are home to two or three species of *Hyaella*, with these species exhibiting no apparent morphological or ecological differences among them. An interesting aspect of this

work is that, because these species have no known morphological features that distinguish them, we must use genetic (DNA) methods to identify them. It is this amazing similarity in morphology that gives rise to the key conceptual issue we are investigating: how can such apparently identical species coexist in a community?

Conducting research on these amphipods has been a great ride for me. I have often thought that I was very lucky to stumble upon a research system that has continually yielded surprising new findings. Still, I wonder if this system is really any more remarkable than any other that I might have pursued. After all, there are lots of fascinating new discoveries reported in research journals all the time. Perhaps the real lesson is that nature is wonderfully complex and interesting, and any close look at nature will reveal fascinating new observations. I hope so!

Summer 2003 Reunion

Mark the dates of July 11-13 on your 2003 calendar. That's the weekend for the biennial reunion of the Friends of the University of Oklahoma Biological Station. It promises to be a great time with interesting field trips, a killer fund-raising auction (see story in this issue), discussion of the Pre-collegiate Academy now in its 13th year, plenty of time for visiting, ground-breaking for the new NSF/OU-

sponsored visiting researcher residential unit, great food, and more. We look forward to seeing you all there.

UOBS Field Biology Award

The Friends of the University of Oklahoma Biological Station will be sponsoring a UOBS Field Biology award to a high school student at the Oklahoma Junior Academy of Science annual meeting in April 2003.

Summer Session 2003

UOBS is pleased to announce the following courses for Summer Session 2003:

Session I (18-31 May)

Experimental Design in Ecology
Field Studies on Non-Flowering Plants
Introduction to Stream Ecology
Molecular Techniques for Field Biology
Wildlife Conservation

Session II (3-15 August)

Field Botany
Field Insect Ecology
Field Mammalogy
Reservoir Fish Ecology

Executive Committee:

President: Dr. Bruce Smith
Vice Chair/chair-elect/newsletter editor: Dr. Joe D. Maness
Secretary/Treasurer: Dr. Bedford M. Vestal

Board of Directors:

Dr. Kim Hauger, Tulsa, OK
Mr. Delmas Northcutt, Denison, TX
Mrs. Ellen Rowe Phillips, Madill, OK
Dr. Ron Tyrll, Stillwater, OK
Dr. Caryn Vaughn, Norman, OK
Dr. Julia Yoshida, Concord, MA

Dr. Larry Weider, (ex-officio), Norman, OK

UOBS Alumni News

Let us hear from you! Friends of UOBS is an excellent way to reestablish contacts with old grad school friends, faculty, etc. In future issues we plan to include news items from station alumni. Contact Donna Cobb at dcobb@ou.edu / (405) 325-7430, Bedford Vestal, carabed@sbcglobal.net / (405) 364-5973.

The University of Oklahoma Alumni Association
900 Asp Avenue, Suite 427
Norman, OK 73019-4849

Non-Profit Organization
U.S. Postage
PAID
University of Oklahoma

Mailing Label

**FRIENDS OF THE UNIVERSITY OF OKLAHOMA BIOLOGICAL STATION
CONTRIBUTION**

Name(s) _____
Home Mailing Address _____

Occupation(s) _____
Business Mailing Address _____

Daytime Telephone () _____
Evening Telephone () _____
E-Mail address _____
Years attended/taught/worked (circle one) at UOBS _____
____ Check payable to OU Foundation is enclosed.
____ Bill me for \$ _____ in _____ of 2003, and for \$ _____ in _____ month of 2004
____ Charge \$ _____ to my _____ Visa, _____ Mastercard, _____ Discover, _____ American Express
Credit card number _____
Expiration Date _____ Signature _____
____ I wish this contribution to be in memory of _____
____ Contribution to go to Building Fund _____ Other (list purpose) _____
____ I wish to donate volunteer time instead of, or in addition to, money.
If a list of donors is published, please list my name(s) _____
as _____
or _____ Do not publish my name.

Mail form to: University of Oklahoma Alumni Association
Attn: Brenda
900 Asp Ave, OMU - Suite 427
Norman OK 73019

Office use: \$ _____ I 32580 I 980 I D1 I