



BioNotes

A NEWSLETTER OF THE DEPARTMENT OF BIOLOGICAL SCIENCES

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DR. SHERRI DEFAUW JOINS DSU BIOLOGY FACULTY

Dr. Sherri L. DeFauw was chosen in June as an associate professor of biology to replace Liz Peeler. Dr. DeFauw comes to Delta State from McPherson College in Kansas.

She holds the B.S., M.S. and Ph.D. degrees in biology from Wayne State University. At McPherson, she taught introductory biology, comparative vertebrate anatomy, evolution and genetics. She has over nine years of college teaching experience prior to coming to DSU.

Dr. DeFauw has extensive research credentials and has been a recipient of several

NSF-funded grants. Her primary areas of research specialization include salamander systematics, behavior, ecology and evolution; physiological and behavioral ecology of vertebrates; functional morphology; Permo-Triassic and Pleistocene herpetofaunal assemblages; landscape ecology; and ecotoxicology.

Dr. DeFauw's initial teaching responsibilities at Delta State University include Principles of Biology, Readings in Biology and Vertebrate Embryology. She plans to offer a new course in field herpetology in the future. ©

THE FALL 5th ANNUAL SCIENCE SYMPOSIUM LINEUP ANNOUNCED

The fifth annual Elliott-Nowell-White Science Symposium will be held Thursday, October 10 and Friday, October 11. The annual event, sponsored by Drs. Robert and Mary Elliott, features prominent researchers in the physical and biological sciences.

This year's keynote speaker is Dr. John H.L. Watson, a pioneer in the early development and application of electron microscopy. A retired physicist and mathematician, he taught at the University of British Columbia prior to retirement. He is the author of over 100 papers on electron microscopy and its applications in medical science. Dr. Watson will deliver a paper entitled "Origins of electron microscopy on the North American continent at the University of Toronto" at Thursday night's opening session.

Friday morning, Dr. Mark D. Clark, principal research chemist at Eastman Chemical Company in Kingsport, Tennessee, will present the opening paper, "The evolution of a polymer chemist". Dr.

Clark is a native of Kosciusko and a DSU alumnus.

At 9 a.m., John Dahu, Robert Keeton, and Rick Martinchalk, all Elliott Summer Interns, will reflect on summer research experiences at the Elliott Mastology Clinic in Baton Rouge.

Dr. Robert Elliott will follow with an update on the Elliott science program. At 10:15 a.m., Dr. Watson will present a paper entitled "Early applications and development of electron microscopy at the University of Toronto."

The special invited speaker, Dr. Alan Feduccia, a Cleveland native, will conclude with his paper, "Bird Evolutions (Big Bang)". Dr. Feduccia is the S.K. Heninger Professor in the Department of Biology at the University of North Carolina, Chapel Hill. He also serves as the Chair of the Division of Natural Sciences at UNC. His primary research interest is vertebrate evolutionary biology, with emphasis in avian evolution. ©

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BIONOTES

A Newsletter Of The Department Of Biological Sciences

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STUDENTS IN THE NEWS

FOUR DSU GRADS HONORED AT GRAD CEREMONIES

Four Delta State University students were honored at the school's 69th commencement exercises on Saturday, May 11th, when they received "First Diploma's" for four years of perfect academic performance.

Albert Wayne "Sonny" Tutor and Rachel Alana Voth, both biology majors from Greenville, Heather Renee Ransome, a chemistry major from Southaven, and Oscar C. Miles, a history major from Cleveland, achieved perfect 4.0 averages during their four years at DSU.

Louis Baioni, chief financial officer at Dunavent Enterprises in Memphis and a 1956 Delta State graduate, to the graduates he hopes they will always remember the day for "not only the feelings of pride and accomplishment, but also what it took to get you here - the self-discipline, the sacrifices, the hard work and the support of your family and friends."

Degrees were awarded to 736 graduates including 587 baccalaureate, 139 master's, six education specialists and four doctorate of education degrees.

STUDENT MILESTONES

Jon Caudill (Cleveland, '94), was admitted to medical school at the University of Mississippi Medical Center in Jackson.

Chris Cummins (Grenada) has entered the medical technology program at the Mississippi Baptist Medical Center in Jackson.

Sonny Tutor (Greenville, '96) and Heather Kaye Killebrew (Lexington) have been accepted to the Dental School at the University Medical Center in Jackson.

Shannon King is studying physical therapy at Arkansas State University in Jonesboro. Tara Durastanti Elliot has been accepted into PT school at the University of Tennessee at Memphis. Seven biology students from DSU have been accepted into the physical therapy program at the University of Mississippi Medical Center in Jackson. Included are Alicia Woods (Greenville), John Chadwick Johnson (Belzoni), Leslie Flanagan (Leland), Tracey Phillips (Rosedale) and Kendrick Morris (Batesville). Trey Hodges has been accepted into both the physical and occupational therapy programs at UMC-Jackson.

Mary Margaret Vandevender (Delta City) will be going to pharmacy school at Samford University, Birmingham, AL.

Natalie Norwood (Water Valley) has been accepted into the graduate program in the Department of Pharmacology at the University of South Alabama in Mobile. Rob Thomas (Leland) has a graduate teaching assistantship in the Department of Biology and Environmental Sciences at McNeese State University

in Lake Charles, LA.

Dave Rice (B.S. Environmental Science, '95) was awarded a graduate assistantship at Gulf Coast Research Laboratory for the 1996 summer term. He took the course in marine phycology during the first term and assisted Dr. Ernst Peebles in Marine Science II: Marine Biology during the second term. Dave also photographed students conducting biology field work for use in promotional brochures for the laboratory.

A number of DSU biology undergraduates participated in summer research and other programs. Chuck Flowers (Mattson) was at the Gulf Coast Research Laboratory this summer. Audra Gallaspy (Greenwood) conducted research at the Konza Prairie Preserve in Kansas in a Prairie Research Experience For Undergraduates program sponsored by Kansas State University at Manhattan, KS.

Three undergrads conducted research as Summer Research Interns at the Elliott Mastology Research Institute in Baton Rouge, LA. Included are John Dahu (Clarksdale), Robbie Keeton, and Rick Martinchalk (Lambert).

Kajuandra Harris (Shaw) participated in the Medical Education Reinforcement and Enrichment Program (MEDREP), Tulane University, New Orleans, LA.

BIOLOGY STUDENTS INDUCTED INTO PHI KAPPA PHI HONOR SOCIETY

Seven students in the Department Of Biological Sciences were awarded membership in the Honor Society of Phi Kappa Phi by the Delta State Chapter during the spring semester. Included are Charles Bland, Jennifer Kent, Seth Kleinbeck, Tammy Mallette, Jeff Overstreet, Jerry Sheppard and Albert "Sonny" Tutor.

Phi Kappa Phi is the largest and most respected academic honor society open to students in all academic disciplines. Membership is only offered to students with the highest scholastic standing. Forty-nine students accepted membership in the spring induction. These new members rank in the top ten percent of the senior class with a minimum grade point average of 3.66.

A reception for the new members was held in the Delta Room in Ewing Building on the DSU campus on April 21.

BIOLOGY STUDENT PARTICIPATES IN RESEARCH AT NIEHS THIS SUMMER

Laurie Thibodeaux (Greenville) conducted research this summer under the direction of Dr. Michael L. Cunningham at the National Institute Of Environmental Health Sciences, Research Triangle Park, North Carolina. Miss Thibodeaux is a 1996 Elliott Scholarship recipient. ©

BETA BETA BETA HONORS NEW INITIATES

Dr. Ed Williams, Faculty Advisor for Beta Beta Beta Honorary Biology Society, announced 34 initiates into the society on April 11th. Three honorees were DSU faculty members including Dr. William A. Hayes, Professor of Biology, Dr. John D. Tiftickjian, Professor of Biology, and Dr. Samuel P. Faulkner, Assistant Professor of Biology.

The initiation ceremony for was held on Sunday, April 28th. Student initiates included Christopher R. Akers, Gabrielle M. Balam, Andrew W. Bell III, Jennifer C. Bradley, Vivian H. Braswell, Brenda H. Brown, Ansley P. Carney, Kenneth K. Corley, Kevin C. Edwards, Jennifer L. Farrar, Lori M. Hoke, John C. Johnson, Kimberly A. Kelly, Jennifer C. Kent, Catherine L. Kowalewski, Falba E. Lamastus, Michael D. Makamson, Tammy R. Mallette, Steven C. Melton, Kendrick Morris, Daniel E. Moss, Guidano Napoli, Allison L. Nicholson, Joe A. Olivi, Jeffrey W. Overstreet, Jennifer J. Pitts, Heath E. Scott, Jerry M. Sheppard, Michael D. Smith, Chevis L. Trammell, and Michael R. Wimberly II. ©





FACULTY & ALUMNI IN THE NEWS



ALUMNI NEWS

Dr. Lawrence (Larry) Goldstein, M.D. (B.S. Biology, '68) was past president of the Mississippi OB-GYN Society, and is the current chair of Women's Health Services at River Oaks Hospital in Jackson.

Fred (Trey) Cooke III (B.S. Biology, '95) is conducting masteral work in biology at Sam Houston State University. He is studying alpine ecology and western birds at Sam Houston's field biology station in Dubois, Wyoming.

Will Tierce (B.S. Chemistry/Environmental Science, '84) moved in mid-February to Soda Springs in southeastern Idaho. His wife Nancy and son Trey are to move up in June. Will was recently promoted to manager of quality control at Kerr-McGee Chemical Corporation's Soda Springs operation. In April, 1996, while working as a graduate student at Mississippi State, Will was inducted into Beta Gamma Sigma, an honorary business fraternity.

Dr. Edra S. Kimmel of Brandon, M.D. (B.S. Biology, '88; MSNS, '92) received her M.D. degree from the University of Mississippi Medical Center in May. She is a honors member of both Alpha Omega Alpha and Phi Kappa Phi.

Wade Baskin of Starkville (Physical Therapy Major, DSU; BS in PT, University Medical Center, '91) now owns two physical therapy clinics. He is currently building a wellness center. Wade serves on the Board of Directors of the Mississippi Physical Therapy Association.

Dr. Victoria (Torey) Callicutt, Duluth, Georgia (B.S. Chemistry/Biology, '91), is practicing denistry in Roswell, Georgia, after her 1994 graduation at the University of Tennessee-Memphis School Of Denistry.

Carl L. Grubb (B.S. Biology '57) has taught at Mississippi Delta Community College for 35 years. He just rotated off the DSU Sports Hall of Fame selection committee after serving a 5-year term.

Jim Bolden (B.S. Environmental Science, '92) of Jefferson, Louisiana, has been accepted into the doctoral program in oceanography at Louisiana State University in Baton Rouge.

WILLIAMS HONORED BY MISSISSIPPI LEGISLATURE

Dr. Grady E. Williams, III, Professor Of Biology, was honored at a reception in Jackson on March 19th by the Mississippi State Legislature at their ninth annual Higher Education Appreciation Day Working For Academic Excellence (HEADWAE). Ronnie Musgrove, Lieutenant Governor, noted that being a HEADWAE honoree reflected Dr. Williams' level of dedication and commitment to his profession and students.

Dr. Williams has taught biology at DSU since 1977. He was honored at the Spring 1995 commencement ceremonies as the recipient of the S.E. Kossman Outstanding Faculty Award.

FACULTY ATTEND "BIOLOGY IN ACTION" SYMPOSIUM

Dr. Samuel Faulkner, Assistant Professor of Biology, and Dr. William Hayes, Professor of Biology, participated in a National Science Foundation sponsored symposium at Radford University, Radford, Virginia, May 21st through May 25th.

At the symposium, they shared ideas and materials related to teaching critical thinking in biology and designing active, investigative laboratory encounters.

Dr. Hayes presented a workshop on teaching critical thinking skills and applications in biology. Dr. Faulkner presented a poster session entitled, "Quantitative Lab Experiences with Photosynthesis and Respiration".

FACULTY AND STUDENT PRESENT AT SOUTHWESTERN ASSOCIATION OF NATURALISTS MEETING

Dr. William Hayes, Professor of Biology, and Charles "Chuck" Flowers Jr., undergraduate biology major, attended the spring Southwestern Association of Naturalists (SWAN) meeting in McAllen, Texas.

Dr. Hayes presented results from collaborative research on crayfish communications with Dr. Carol Hayes, Assistant Professor of Psychology. Their paper was entitled "Analysis of display channels in the crayfish, *Procambarus clarkii* (Decapoda, Cambaridae)".

Flowers presented a paper entitled, "Analysis of nest site competition between cliff (*Hirundo pyrrhonta*) and barn (*Hirundo rustica*) swallows at an artificial structure". This research was co-authored with Dr. William Hayes and Dr. Ed Williams, Professor of Biology.

BIOLOGY FACULTY MEMBERS HONORED

Mrs. Liz Peeler was honored by Delta State at the annual retirement recognition ceremony on April 19th. Peeler has served as an assistant professor of biology at DSU since 1992.

Dr. Robert A. Stewart was recognized for 25 years service in the Department at the April 19th Service Awards Program. Dr. Stewart came to Delta State after receiving his doctorate at Arizona State University.

FAULKNER LECTURES AT USM SUMMER WORKSHOP

Dr. Samuel Faulkner, Assistant Professor Of Biology, conducted a lab and lecture session on wetland plant identification at a summer workshop for life science and biology teachers at The University Of Southern Mississippi. This wetland ecology workshop was part of the Earth Focus project, an environmental education program of USM's Center for Science and Mathematics Education. The workshop was held from July 8 through the 19th.



ELLIOTT SCHOLARS ANNOUNCED

Dr. Ed Williams, Chair of the Elliott Program of Excellence Committee, announced the 1996 recipients of Elliott Scholarships on April 1st. The scholarship is a supplement to the recipients' university funds in an amount that will provide full tuition and fees, room and board, and a \$700 book allowance.

The Elliott Scholars for 1996 include biology majors Leslie Flanagan (Leland), Brock Goodwin (Drew), Chris Shelby (Madison), Laurie Thibodeaux (Greenville), and Chemistry major Lee Aldridge.

IN MEMORIAM

Steve W. Tanous was killed at age 25 in an automobile accident in West Tennessee in late September. He had lived in Memphis since mid-March, and was the Director of Rehabilitation Services at Holly Springs Memorial Hospital in Holly Springs, Mississippi.

McEWEN CONDUCTS CELL & MOLECULAR BIOLOGY WORKSHOP

Dr. Rosalina Hairston, Professor of Biology Education, University of Southern Mississippi, and Dr. Malcolm McEwen, Assistant Professor of Science Education, Delta State University, held a three-day "drive-in" workshop on cell and molecular biology at Delta State during late

FACULTY & ALUMNI, cont. on pg 6

GIVE BACK TO DSU! Donate \$2 Million BY The Year 2000!

In our last issue of BioNotes, we highlighted the ongoing DSU program '2 Million by 2000'. We've only a few years to go. Please reach into your hearts (and checkbooks) and donate what you can to help us reach our goal of a \$2 million endowment for the sciences by the year 2000. DSU alumni have overwhelmingly supported our new Bologna Performing Arts Center. Can we not do the same for the sciences? Remember - your donation is tax-deductible. We also need donations in a number of specific areas - in laboratories, for instrumentation, and in our natural history museum. With legislative cutbacks to higher education, this endowment is more important now than ever before. Your donations will help keep our departments competitive both academically and technologically. Support DSU's sciences! ©

AN INTERVIEW WITH LIZ PEELER

INTRODUCTION

Liz Peeler is a woman who in a relatively short period of time has made a major impact in the Department of Biological Sciences and Delta State University. She completed her last teaching year at DSU during this spring semester.

Peeler received her baccalaureate degree from Berea College, Kentucky and her Master of Art in Teaching (Biology) in at Vanderbilt University. At Vanderbilt, she studied with Dr. Elsie Quarterman, a pioneer in studies in plant community ecology in the southeastern United States. Peeler came to Delta State University in 1992 where she taught until her retirement this spring.

At DSU, she has tirelessly and enthusiastically taught such courses as Principles in Biology, Readings in Biology and Vertebrate Embryology. As assistant professor in biology, she has always been willing to spend extra time with her many students. Being the only woman professor in the biology department, she has served as teacher and counselor not just for biology majors in general, but has also served as a friend and role model for women students in our program. Mrs. Peeler argues that while "technically", science is open and receptive to women, "women are not very obvious in this profession." Peeler was instrumental in the formation of a campus-wide women's forum to discuss and promote women's issues at DSU.

After retirement, she returned to Jackson, Mississippi. She will ultimately retire with her husband Dr. Dudley Peeler to the mountains of North Carolina within the next several years.

THE INTERVIEW

Beverly King - What made you choose the field of biology?

Liz Peeler - I can't say that I always knew that I wanted to go into biology, but what I do remember is as a young person I always enjoyed being outside. And when I went to college at Berea in Kentucky, I certainly remember I took a lot of different courses, and biology was one that just really appealed to me and I stayed in that field.

Beverly King - Who were some of the people who inspired you in this field or just in school in general?

Liz Peeler - I think that my biggest inspirations were my grandmother and mother. My grandmother was a professional woman - she was a social worker. And so it never occurred to me that I would not go to college and that I would not also have a profession, because they were my role models. My grandmother always worked and so did my mother and so did a lot of aunts. And that's a very different thing I think for my time, because when I was young, most women were not professionals - they did not work. So I think rather than having somebody in the sciences who really motivated me particularly to sciences - I have my mother and my grandmother who motivated me to be a professional.

I do remember an elementary teacher telling that she thought I should be a teacher and I always thought, "Oh, no, I don't want to do that". I never really thought of myself as a teacher even all through undergraduate school. Not until I went to graduate school at Vanderbilt did I think of teaching. Because I went to Vanderbilt graduate school on an assistantship and part of my obligation was to teach lab, and I really just became infected - infected with teaching! I just really fell in love with it and I really enjoyed my graduate work - especially my undergraduate (teaching) work.

Also, at Vanderbilt in graduate school, Dr. Elsie Quarterman was very helpful to me and very inspirational to me. She was primarily a botanist - I took several courses with her and I think she really did a lot to encourage me.

Beverly King - How would you see a woman in your field then?

Liz Peeler - At Vanderbilt at the time - there were two women in the biology department that I remember out of a total of maybe 12 or 15, which is not a big proportion - but at least they were represented and represented well.



Beverly King - How many women professors were in this department when you came to Delta State - were there

any other women professors?

Liz Peeler - There was a woman professor before I came, but there was a time lapse. I'm not sure when she left. But I think there's never been more than one, and there have been times when there were none.

Beverly King - There have only been two women over the years?

Liz Peeler - That's all I remember - I've heard of Dr. Mabel Raspet who was here before me and if there was another woman before her, I don't know about that.

Beverly King - OK. Do you think that science is open and receptive to women?

Liz Peeler - I think it is technically. I think there is a perception however that it's not a field for women. Because when young girls look at the sciences as a profession, women are not very obvious - they're becoming more so. But if you look at a profession, you have a mental image of who those people are, and for the most part in the sciences until fairly recently, the picture you would get would be a white male. And that, while it doesn't say you can't come into this profession, it sends a very subtle message.

Beverly King - How were you received by the male professors at Delta State when you first started at DSU?

Liz Peeler - I can say without reservation that I have never worked in a better environment than here, and I've worked in a number of different places in addition to being a college teacher. But they have been most helpful, very supportive. It's just been an excellent environment in which to work. The only thing is that I have - it would be nice to have had a female colleague - for social reasons - or, just, you know - you can't go out with the guys. Just as a personal friend, that would have been nice.

Beverly King - What about the students? Did they seem to react to you any differently because you were a female teacher?

Liz Peeler - I can't say that I noticed anything in particular, except in the readings classes where we do a lot of discussion and we talked about women in science and we talked about the obstacles that women have in going into science and I think a lot of the males in those courses - certainly not all of them - but some of them did not understand what I was trying to get across and that I was trying to get them to look at things objectively with an open mind and to understand the problems that women have faced in the past. I think some of them didn't understand.

Beverly King - Probably, they accused you of being a feminist and saying "Oh yeah - you don't know"

Liz Peeler - Oh, yes - right. And unfortunately I think a lot of times male students, if you promote women in science, if you promote women - they view that not as a pro-women sort of thing, but anti-male - which is very unfortunate, because nothing could be further from my mind, and that it's an advocacy both for men and women. But some people can't see things that way - they feel like if you are pro-female in science, you must be anti-male, which is ridiculous actually. I think that that there have been some bad consequences in not encouraging more (women). It's sort of a cycle. You need to have enough women in sciences so that young girls, young women, realize that they can go into that field - its not really closed to them. It's sort of a hurdle you have to get over. Until you have more women in science, you're not going to have as many young women thinking they can go into science. So, we may have to do some special things to build up the number of women professionals in the sciences.

Beverly King - Yes. I agree.

Liz Peeler - We did a little survey here a few semesters ago and most of the women students that we surveyed felt that women were as capable of becoming scientists as are men. But they thought that it was harder for a woman to become a scientist than it was for a man.

Beverly King - And why is that still true?

Liz Peeler - Whether or not it's true - it is certainly the perception, and perception is really important - it can really slow you down if you think that it's just too hard and you can't do it.

Beverly King - Do you think there is any certain quality or trait that you would tell a women student that she would need to possess to do well and succeed in biology?

Liz Peeler - I don't think there are any qualities that women students need that are not the same for men students. Traditionally, I think we think of science as being done more along the lines of the way men do things and the way men think about things. Women do things in a different way and sometimes think about things in a different way. Certainly that's not to say that women's ways of thinking about science and doing science are better than men, anymore than men's ways of doing and thinking about science are better. There's value in both of them. One thing that strikes me most about biology, about life in general, is the great diversity. We talk about diversity as being important in ecosystems, genetic diversity as being important in survival of species. I think science would be better off with a more diverse population of men, women, blacks, hispanics, other points of view, other backgrounds. It would give us new ways of looking at problems in science. There is obviously no "best" way to do science.

Beverly King - For example, in nature, to have all kinds of difference?

Liz Peeler - Of course! You know - the way we emphasize this in general biology all the time. If there is one thing that is characteristic of biology - it is diversity. Whether you study it at an ecosystem level or even down on a cellular level. Without that diversity, ecosystems lose, species lose, communities lose, and I think science could lose. I think science would be better with a more diverse input.

Beverly King - That's a good point. How important are women in science?

Liz Peeler - It's important for women to be in science because I think every adult should have the opportunity and the encouragement to do what is fulfilling to them and for many women, science is that. They really feel excited about the work.

Beverly King - When you helped start a women's group at Delta State, what did you hope that it would give this campus?

Liz Peeler - The main thing I was interested in was - when we had surveyed our biology majors on women biology majors, we found out that there were some obstacles that they had uniquely as women. And I think the biggest hurdle for a woman not just in science, but in any profession, is having a sense that you can do it, having confidence in yourself. What I wanted to do was get groups of women students and faculty together to support each other, to encourage students who were interested in science just to go for it, that you can do it, and that you have support among your peers and colleagues for doing that.

One of things that women traditionally have done and done well is to be cheerleaders for others - women are cheerleaders for their children and for their husbands. But lots of times, women don't have cheerleaders for themselves. You just need somebody to say "Yeah, you know - I'm doing a great job - go for it!" What I really wanted was to build a sense of community among young women interested in pursuing careers, professions, not just in the sciences, but in history, English or whatever.

Beverly King - That was a great idea - hopefully someone will continue it. It's going to be easier because you've done the groundwork.

Liz Peeler - I think we learned a lot from just that short experience. I learned what young women today are interested in, and I think that the perceptions and the obstacles that young women today face, are really sort of different from what we faced thirty years ago. That's one of the things that needs to be addressed and some of them are still the same. One of the biggest concerns that young women students have expressed to me is the dilemma of choosing between a career and a family. Frankly, that's not something that most men worry about. They just assume there will be a wife to take care of the family - and it's more of a responsibility of a woman to take care of children - and it's hard to be both a professional and a mother - or a father, if you're an active father. A lot of young women have that drive to pursue a career, but they really don't want to give up the joy of having children too - and they're not sure about how you can do both.

I think young women should not have to make that choice. They should understand that it will not be an easy choice. It would probably be easier to do one or the other. But, certainly, you can do both!

Beverly King - Well, what about your husband? Has he been supportive of your career?

Liz Peeler - I wish for all my young female friends here at Delta State - that they could find a Dudley Peeler. He has been always tremendously supportive of whatever I wanted to do, and very helpful with the children and the household chores. In fact, the last four years have been a kind of an unusual sort of situation for us. I've lived here in Cleveland during the week and gone home on the weekends, and it has been difficult. But in the long term, it's been good for both of us too. It has been a growing experience for us. I was asked about this a lot when I came up here to interview, one of my colleagues now, said during the interview, "Well, I'm surprised that Dudley would let you do this". And we just kind of laughed about that. I have heard in the past, guys say, "You know, my wife can work if she wants too as long as my dinner's ready at five-thirty." And they probably think that's being supportive. I hardly think it is. I think it's important for both men and women to have a spouse that they respect.



"...I think science would be better off with a more diverse population of men, women, blacks, hispanics, other points of view, other backgrounds. It would give us new ways of looking at problems in science...."

-Liz Peeler

there are some. So I think the guys need to have a woman too as a role model if you will, to know that "Hey, it's not just your profession, it's an open profession!"

Leaving Delta State is going to be difficult, leaving teaching is going to be difficult. I absolutely adore teaching. I wish for all of my students that they will find a profession that is as satisfying to them as teaching biology has been to me. There isn't anything I would rather have done with my life than being a biology teacher and raising three children. ©

Editor's Note: Beverly King is an environmental science major. She was editor of the student-run "Earth News", DSU's environmental newsletter, during 1995 and 1996. She is continuing her studies at DSU in environmental issues and environmental journalism.



June. The workshop focused on basic concepts of cell biology and the cell cycle, DNA science, recombinant DNA technology and its applications, ethical and societal issues associated with molecular biology, and careers related to cell and molecular biology.

Workshop activities included hands-on labs, lecture with labs by molecular biologists and biochemists, using the learning cycle, simulations, role playing, problem solving, computers, and supplementary curriculum resources for teaching cell and molecular biology.

McEWEN REPRESENTS MSTA AT NATIONAL MEETING

During July 19-21, Dr. Malcolm McEwen, represented the Mississippi Science Teachers Association at the National Science Teachers Association's (NSTA) Chapters and Affiliate Groups meeting in Flagstaff, Arizona. The purpose of the meeting was to have science teacher organization representatives share the successes of their organizations, to develop strategies for attacking problems that the organizations hold in common, to interact with the NSTA Board of Directors, and to provide input into formulation of new NSTA initiatives.

McEWEN AND CASTLE ATTEND MICROBIAL DISCOVERY WORKSHOP

Dr. Malcolm McEwen and Mrs. Marilyn Castle, biology instructor at Cleveland High School, were selected to attend the Microbial Discovery Workshop sponsored by the American Society for Microbiologists during August 3-9, 1996 at California State University-Los Angeles.

This team-based one-week hands-on workshop demonstrated how the microbial world can be used in a dynamic way to stimulate interest in science for all students. Based upon the workshop, McEwen and Castle will conduct at least one inservice training session for area science teachers during the 1996-97 academic year.

STEWART & FAULKNER ASSIST IN NATURE TRAIL DEVELOPMENT

Dr. Robert Stewart, Professor of Biology, and Dr. Sam Faulkner, Assistant Professor of Biology, assisted Mr. Early Ewing of Rosedale at

the Great River Road State Park in Rosedale on May 10th. Mr. Ewing is developing several nature trails at the park. In conjunction with establishment of the new trails, Drs. Stewart and Faulkner helped identify native trees, shrubs and herbs growing along the proposed trails. Several additional field surveys are planned to identify plants occurring during the summer and fall.

HAYES CONDUCTS MID-WESTERN WORKSHOPS

Dr. William Hayes, Professor of Biology, was invited to present two workshops for faculty at Concordia College, Moorhead, Minnesota, June 17-21. The workshops were entitled, "Introduction to designing investigative laboratories," and "Introduction to critical thinking".

Later in the summer, Dr. Hayes and Dr. Carol Hayes, Assistant Professor of Psychology, presented two workshops at the 1996 Nebraska Wesleyan University Institute for Critical Thinking in Lincoln, Nebraska, July 19-20. These workshops were entitled, "What next?: Teaching decision making with choices and consequences," and "Thoughtful exploration of science content: Concepts, principles and theories."

Dr. Hayes is a frequent regional and national presenter and trainer in subjects relative to teaching scientific thinking and critical thinking across the curriculum.

FACULTY TEAM ATTENDS NSF BIO WORKSHOP AT UNIV OF OREGON

Drs. William Hayes, Malcolm McEwen, and Samuel Faulkner, represented Delta State University at the University of Oregon's Workshop Biology project to be held at Eugene, Oregon, July 26th through August 1st. The Workshop Biology project, developed with funding from NSF and FIPSE over the last five years, offers an effective approach to teaching non-majors' biology as well as a set of principles and processes for continuously improving teaching.

The Workshop Biology project was expanded this summer to include biology instructors from institutions nationwide. The workshop allowed biology professors from across the country to share ideas and experiences in teaching non-majors' biology, gather useful ideas and resources from one another, collaborate on adapting ideas for individualizing courses, and establish working relationships with other participants and with workshop facilitators. ©

DEPARTMENT OF BIOLOGICAL SCIENCES INITIATES NEW ADMISSION POLICY FOR UNDERGRADUATES

A new admission policy for undergraduates who declare a biology major at DSU has been published in the 1996-97 DSU undergraduate bulletin. The Department of Biological Sciences will henceforth initially admit declared biology majors on a provisional status. Students who demonstrate satisfactory performance on a core of introductory course in biology and chemistry will then be granted full admission into our programs.

The policy was developed by department members over the past several years to insure that all students gain basic knowledge and skills in introductory core courses that are prerequisite for advanced studies in biology. Beginning this year, students will be required to complete Bio 100 (Principles of Biology), Bio 102 (General Botany - when required for the major), Bio 103 (General Zoology), and Che 101, 102, 103, and 104 (General Chemistry lecture and laboratory) with a grade of C or better on each course.

According to the new policy, any grade below C on these core courses must be removed by repeating the course with a C or better. Once students have completed these core requirements, they receive full admission status and can attempt advanced courses in biology, i.e. 200+ level coursework. Students without full admission status will not be allowed to take advanced coursework in the department.

At the close of each semester, students' records will be reviewed by both their advisors and the chair of the Committee on Undergraduate Programs. Students will be notified by letter when they achieve full admission status. The policy also applies to transfer students. For details of the new policy, new students should consult the current DSU bulletin or their advisors.

Similar policies have been adopted by the Departments of Physical Sciences and Mathematics. ©

MAMP SCIENCE AND MATH PROGRAM WINDING DOWN

According to an August report by the Associated Press, within a year, Mississippi's eight state universities will discontinue a federally funded program designed to introduce minority students to technological fields.

The Mississippi Alliance for Minority Participation (MAMP) has assisted universities statewide in recruiting minority students into science and engineering programs, and has improved both retention of those students and graduation rates, according to Mary Jasper, the program coordinator at Mississippi State University.

The upcoming academic year will be the program's final year unless the National Science Foundation (NSF) provides funds for an additional year. The Washington-based NSF has provided \$1 million each year since 1993, with the state Institutions Of Higher Learning (IHL) providing a matching amount. Jasper noted that an additional year's funding is possible.

MAMP at Delta State University is directed by Michael Smith. Delta State's summer MAMP program has offered "boot" camps that include short courses in chemistry, math and biology, coupled with field trips and camp-outs. ©

DSU BIOLOGY JOINS REIS FIELD BIOLOGY STATION CONSORTIUM



This spring, the Department received notification that it was accepted as a member of the Reis Biological Station Consortium. This effort was spearheaded by Dr. William Hayes. Drs. Hayes and Sam Faulkner visited the station during May to inspect the facilities and both returned giving an enthusiastic "thumbs up".

Reis Biological Station is an ongoing project of St. Louis University and participating colleges and universities. The station is located in the Mark Twain National Forest on several hundred acres in the Missouri Ozarks about an hour's drive southwest of St. Louis. The station is about seven and one-half hours from Delta State University.

The Reis Consortium consists of 17 colleges and universities. Included are St. Louis University, Maryville College, McKendree College, Missouri Baptist College, Missouri Western State College, Northeast Missouri State University, Southern Illinois University at Edwardsville, Stephens College, Westminster College.

The station is located adjacent to Huzza Creek, a clear-water chert/gravel bottom stream that feeds into the Meramac River. The station is surrounded by typical Missouri Ozark uplands dominated by oak-hickory forests. Nearby cedar glades, calcareous fen wetlands and karstic caverns are easily accessible to field station participants.

Also on the property is a large open meadow area that has been part of an ongoing prairie restoration project. Over 60 species of native prairie flora have been reintroduced into the area since 1984.

The upland forest support oak-hickory community plant assemblages. Mesic understory species including orchids, geranium, wild ginger, trout lily, Jacob's ladder, bloodroot and phlox, proliferate at the bases of the steep rocky hills.

On the dry ridges and plateaus, shooting star, puccoon and similar plants abound. The steep topography coupled with the nearly level floodplain meadow along Huzza Creek afford diverse habitat for birds and other beasts.

As members of the station, we can use the station for field trips, short courses and full-term summer courses. We have full access to teaching and research facilities at the station. DSU students may enroll for credit in summer session courses at the station. A popular course offered through St. Louis University is the "Spring Flora Of The Missouri Ozarks".

Facilities at the station include a lodge, bunk houses, a research building, a classroom, and an outdoor classroom pavilion. Showerhouses were recently added. The station maintains 15 canoes for use on Huzza Creek and other local streams.

There are excellent educational opportunities for our students and faculty to conduct floristic studies and research, ornithological, herpetological and amphibian research, and aquatic entomological research.

Dr. William Hayes will offer Animal Behavior and Stream Ecology at Reis this summer. Dr. Sam Faulkner will offer Ecology and possibly Terrestrial Plant Ecology in June at Reis.

Other field courses are planned. ©

ERRATUM

The Dept. Of Biological Sciences Home Page address was misprinted in the last issue of BioNotes. Our address is: <http://www.deltast.edu/academics/artsci/bio/intro.html>

THE JUSTINE O. SCHMIDT PAIN INDEX

Sweat Bee - Light and ephemeral, almost fruity. A tiny spark has singed a hair on your arm. Pain Rating: 1

Fire Ant - Sharp, sudden, mildly alarming. Like walking across a shag carpet and reaching for the light switch. Pain Rating: 1.2

Bull-horn Acacia Ant - A rare, piercing, elevated sort of pain. Someone has fired a staple into your cheek. Pain Rating: 1.8

Bald-faced Hornet - Rich, hearty, slightly crunchy. Similar to getting your hand mashed in a revolving door. Pain Rating: 2

Yellow Jacket - Hot and smoky, almost irreverent. Imagine W.C. Fields extinguishing a cigar on your tongue. Pain Rating: 2.2

Harvester Ant - Bold and unrelenting. Like somebody is using a power drill to excavate your ingrown toenail. Pain Rating: 3

Southern Paper Wasp - Caustic and burning, with a distinctly bitter aftertaste. Like spilling a beaker of hydrochloric acid on a paper cut. Pain Rating: 3.3

Pepsis Wasp - Blinding, fierce, shockingly electric. Like a running hair drier has been dropped into your bubble bath. Pain Rating: 4

Bullet Ant - Pure, intense, brilliant pain. Like walking over flaming charcoal with a three-inch nail embedded in your heel. Pain Rating: 4+

Rattlesnake - Deep, penetrating agony. Unmistakably full-bodied. Analogous to shooting a hot slug into your arm. Pain Rating: Well off the chart. ©

(from 'Biology Majors' Newsletter, University of Oregon, Spring 1996)

DSU BIO ALUMNI & FRIENDS:

WE WANT TO HEAR FROM YOU!

ΔBioNotes is published 2-3 times per year for alumni, students and friends. Send information on your career & professional achievements to:

**Bionotes • Dept. Of Biological Sciences
Delta State University, Cleveland, MS 38733**

You can e-mail us at: marshdoc@aol.com
or call: Samuel P. Faulkner, 601 846 4251.



UPCOMING DATES

National Association of Biology Teachers, National convention, Charlotte, NC, Oct. 16-19, 1996. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

National Science Teachers Association, Western area convention, Phoenix, AZ, Oct. 17-19, 1996. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

National Science Teachers Association, Southern area convention, Atlanta, GA, Oct. 31-Nov. 2, 1996. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

Mississippi Science Teachers Association, State convention, Broadwater Beach Hotel, Biloxi, MS, Nov. 7-8, 1996. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

National Science Teachers Association, Eastern area convention, Toronto, Ontario, Canada, Nov. 21-23, 1996. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

Mississippi Academy Of Sciences (MAS), 61st Annual Meeting, February 20, 21, 1997, Biloxi, MS. Contact Dr. Catherine Cotten, 601/477-4115 or e-mail: ccotten@jcc.cc.ms.us

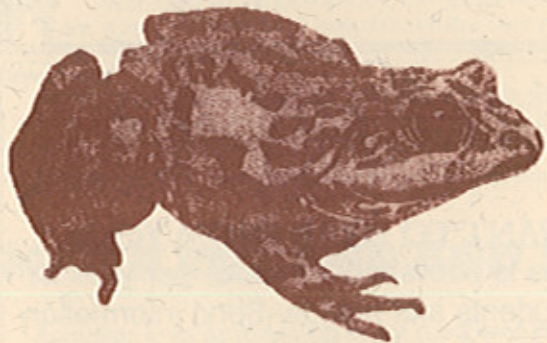
National Science Teachers Association, National convention, New Orleans, LA, April 3-6, 1997. Contact Dr. Malcolm McEwen @ 601/846-4248, FAX 601/846-4402, or e-mail: mmcewen@dsu.deltast.edu

Medical College Admissions Test (MCAT), Contact DSU Biology Department @ 601/846-4240 or write: MCAT Program, P.O. Box 4056, Iowa City, IO 52243-4056 for current deadlines and test dates.

BIONOTES NEWSLETTER

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A nature lover is a person who,
after being treed by a bear, enjoys
the view.

Anonymous