

Fisheries and Wildlife Program News

Department and Program Information and Faculty Achievements

Inside this issue:

Department and Program Information and Faculty Achievements	1
Recent Publications, Reports, Presentations, and Funding	21
Upcoming Events	26
Job Opportunities and Scholarships	26
Giving Back	26

Fisheries and Wildlife Sciences Program Logo Unveiled



At the Fisheries and Wildlife Sciences 2006 graduation dinner, **Dr. Richard Lancia** unveiled the new program logo (see above). The Fisheries and Wildlife Sciences Program at North Carolina State University is within the Department of Forestry and Environmental Resources and the College of Natural Resources. The logo was picked from numerous submissions received during a year long logo contest. The winning logo was crafted by recent Fisheries and Wildlife graduate **Alison Berner**. Alison received a small monetary award for her efforts. Thank you and congratulations Alison.

Dr. Richard Lancia with the 'logo winner' **Alison Berner**. Photo provided by **Dr. Chris DePerno**



2006 Graduation

The Fisheries and Wildlife Sciences Program wishes all members of the 2006 graduating class the best.

Graduates include:

Bachelor of Science in Fisheries and Wildlife

Alison Rose Berner
Ramsey Thomas Davis
Ashel Nicole Fowler
John Henry Harrelson
Gregory Scott Jenkins
Rupert Hardy Medford
Brent Eugene Mortimer
Brandon Lee Sherrill
Chesley Ladd Ward

Kathryn Ann Cunningham
Luke Alan Decker
Robert Peyton Hale
Brandon Phil Howell
Joshua Kyle McCormick
Jared Perry Milrad
Robert Joshua Noxon
Robert Heath Snow
Kyle Edward Whitehurst

*Congratulations 2006
 Graduates.*



2006 Graduates. From left to right: **Kyle Whitehurts**, **Chesley Ward**, **Robert Snow**, and **Brandon Sherrill**. Photo provided by **Dr. Chris DePerno**

Rob Shuford, former Fisheries and Wildlife student, checks in from Iraq

(Submitted by Rob Shuford and printed with minor edits)

Hello Everyone,

Just wanted to say hi from Iraq. Not much going on my way. This past week was one of highs and lows. At one point we had a few casualties come in and the medical facility started asking for blood. I sent one of my Marines over to take pictures and try to get a story about what goes on over there. I went with him to take some pictures and make sure nobody gave him a hard time. Next thing I know they need B+ and guess what kind of blood I have. So I was the first in line, the first to donate, and was the last blood that was pumped through that young man's body. There was no saving him really so after they tried with my donation they just stopped asking. Sad to say the least. I won't try to get in the details or give you a bunch of drama so I'll just leave it at that.

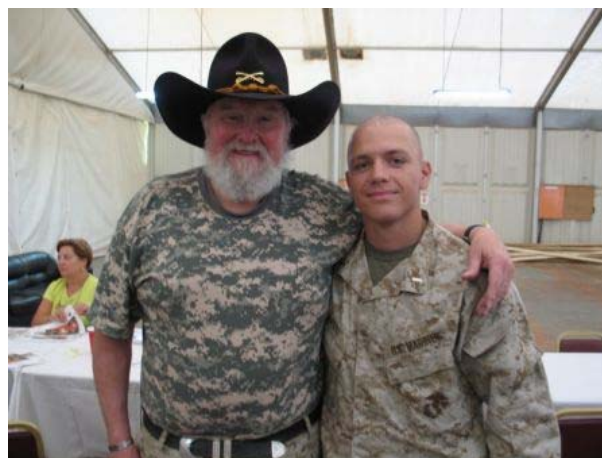


Rob giving blood.

Rob Shuford checks in from Iraq.

The past 2 days we hosted the **Charlie Daniels Band**. He gave one of the best concerts I think most people have ever seen – whether you like his music or didn't know who he was, everyone had a great time. His band members said this was the first time in probably 8-10 years where he used the phrase “Son of a B****” while singing Devil Went Down to Georgia. His crew – the non-band members - were a pain in the butt, but he and the actual band were awesome. That guy is 69 years old and is still coming out to combat zones rocking out all hours of the night.

Rob with Charlie Daniels in Iraq.



We completed a story this week about a regulation put on Marines prohibiting them from wearing synthetic wicking sportswear while performing combat ops because there's a threat that the material will melt to you and fuse to your skin when exposed to flames or explosions. Well, the story has been used in numerous publications and CNN even did a story on it. So, if you happen to catch an article or story about this subject just know that we started it.

So things are cruising right along for me with days blending together and the weeks slowly but surely passing by. Should be home by September at the latest. Hopefully August. Hope all is well your way and that life is being good to you in the states. Keep praying for these warriors facing the enemy and trying to rebuild this country every day. American service members – particularly Marines of course - are doing some awesome things and continue to need the support of everyone back home.

Take Care wherever you are and stay in touch. Talk to you later,

Rob

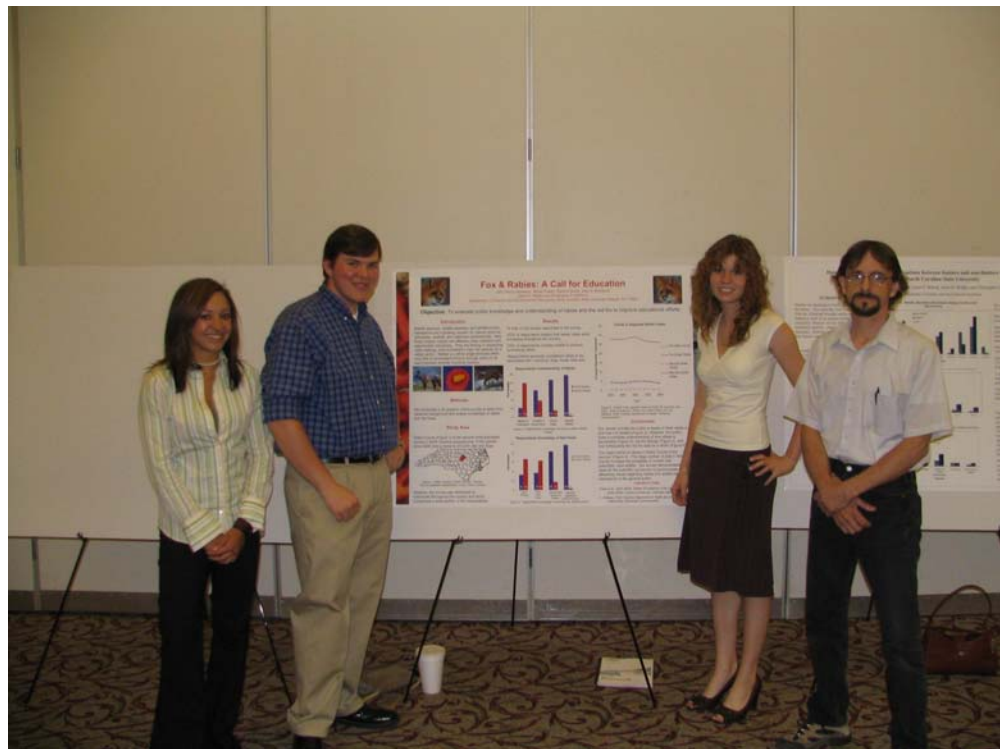
*Thank you for doing
what you do.*



Rob—Thank you for doing what you do!

Undergraduate students win Best Poster

John Harrelson, Nicole Fowler, Sabrina Smith, and John Rochevot, undergraduate Fisheries and Wildlife Sciences students, received the best poster award in the research category at the North Carolina State University Distinguished Lecture Series. The poster was co-authored by **Jason Riddle** (Ph.D. Student) and **Dr. Chris DePerno**. The poster entitled, “Foxes & Rabies: A Call for Education” was prepared as part of FW485 Natural Resource Advocacy course taught by Dr. DePerno and teaching Assistant Jason Riddle. The poster bested many graduate level posters. Congratulations to the red fox team!



*Congratulations to the
Red Fox Team!*

From left to right: **Sabrina Smith, John Harrelson, Nicole Fowler, and John Rochevot**. Photo provided by **Dr. Chris DePerno**

Drs. Greg Cope and Tom Kwak receive Best Professional Presentation

Dr. Greg Cope and Tom Kwak received the **Don Baker Memorial Award** for the best professional presentation at the Annual Meeting of the North Carolina Chapter of the American Fisheries Society. The poster entitled, “Development of novel, non-lethal sampling techniques to assess organic contaminants in fish” was coauthored by R. Heltsley, D. Shea, R. Bringolf, and E. Malindzak. Congratulations!



AMERICAN
FISHERIES
SOCIETY



Annual Meeting Photo Highlights

The 2006 Annual Meeting of the North Carolina Chapter of the American Fisheries Society was held January 31 – February 1, 2006 at the Brown Summit Meeting Facility in Greensboro. A total of 73 members attended the meeting.



Dr. Jim Rice (left) received the Chapter's Distinguished Service Award from President Duane Harrell.

*Congratulations Dr.
Rice, Dr. Cope, and
Lori Davias.*

Dr. Greg Cope (left) receives the Don Baker Award for the best professional presentation at the 2006 Meeting from President Duane Harrell.



The 2006 Rich Noble Award for the best student presentation was won by **Lori Davias**, NCSU. **Dr. Rich Noble** (left) presents the Award to Dr. Jim Rice who accepted in Lori's absence.

North Carolina Chapter of the American Fisheries Society— NCSU Student Subunit Report

The NCSU student sub-unit is excited to report that the beginning of 2006 is as active as the end of 2005. The transition of officers went smoothly and the first item up on the agenda was the North Carolina AFS meeting in Brown Summit, North Carolina. Out of three student speakers at the meeting our sub-unit was represented by one undergraduate and one graduate speaker. **Aaron Bunch** and **Lori Davias** both did a great job with their presentations and Lori was honored with the **Richard L. Noble Best Student Paper Award**. Faculty member **Dr. Jim Rice** was honored with the Distinguished Service Award. The SFS annual raffle was also held at the NC AFS meeting and we are excited to report that we raised \$630 for our sub-unit. YEAH!!!



Jenny Vander Pluym and **Jessica Brewster** display t-shirts and raffle items for the SFS.

NCSU AFS Student Subunit Report.

We would like to thank Great Outdoor Provision Company, West Marine, Orvis, Target, Applebee's, Red Robin, The Carolina Hurricanes, and Barnes and Noble for their generous donations to our raffle. We would also like to thank **Duane Raver Jr., Dr. Greg Cope, Nolan Banish, Dr. Jim Rice, and Jim Dean** for their personal donations. We were barely able to catch our breath after the NC AFS meeting when we were off to the AFS Southern Division meeting. Our sub-unit had four students that traveled to San Antonio of which two, **Lori Davias** and **Jessica Thompson**, were presenters. We have definitely had a busy season of meetings, but we are proud to have had excellent presenters representing our sub-unit!!



First-timer on the electroshocking boat, **Clay Compton**, with one of several largemouth bass that he collected at Yates Mill Pond.

Yates Mill Pond in Raleigh has decided to open its waters to public fishing. On February 24th, our sub-unit conducted a fish population survey of the pond. We had a mixture of undergraduates and graduate students collecting and working up fish. Of course, a first-timer at boat-electroshocking, Clay Compton, brought back the largest largemouth bass.



Jessica Brewster, Ryan Spidel, Aaron Bunch, and Julie Harris working up fish at Yates Mill Pond.

We continue our busy schedule with a shad/striped bass fishing trip to Battle Park in Rocky Mount on March 25th. Last year's group experienced a combination of stripers and American shad and we are hoping for the same success this year. Hopefully, we will catch enough fish to add a fish fry to our list of events!! On April 1st, we will be paddling down the Neuse River near Clayton, NC picking up trash along the way as we participate in the Neuse River clean-up. We are hoping that Mother Nature isn't a prankster that day and gives us beautiful weather as we pick up tires and trash.

*NCSU AFS Student
Subunit Report.*

We would like to thank **Dr. Larry Nielson**, Provost and Executive Vice Chancellor for Academic Affairs at NCSU, for coming and speaking with us at our January meeting. **Neil Medlin**, environmental supervisor for the NC DOT, will be our featured speaker for the April 4th meeting. As always we invite state chapter members to join us at our meetings or contact us with any events where our participation would be useful. Please feel free to contact **Jessica Brewster**, jrbrewst@ncsu.edu, or **Christin Brown**, chbrown@ncsu.edu, with any ideas or questions you have about our sub-unit or if you would like to become a member of our mailing list.

Submitted by Jessica Brewster, Student Subunit Co-President

Bull Neck Swamp Trip

On 3 May 2006, Department of Forestry and Environmental Resources Faculty visited Bull Neck Swamp. Bull Neck Swamp is a 6,000 acre property in Washington County, North Carolina. Bull Neck Swamp is adjacent to the Albemarle Sound and is managed by the Fisheries and Wildlife Program. The purpose of the trip was to visit and learn about the current and future research and educational opportunities. Additionally, habitat and timber management objectives were discussed. Members that attended the trip included **Dr. Barry Goldfarb**, **Dr. Bronson Bullock**, **Dr. Richard Lancia**, **Dave Woodward** (Zoology Research Assistant), and M.S. students **Stan Hutchens** and **Aimee' Rockhill**. The trip was led by **Dr. Chris DePerno**.



Stan Hutchens, M.S. student, checking a yellow-bellied slider (*Trachemys scripta*) for a PIT tag.

Bull Neck Swamp Trip.

Recent timber harvest on Bull Neck Swamp. All photos provided by **Dr. Chris DePerno**.



Leopold Wildlife Club Members check nest boxes

Brandon Sherrill and **John Harrelson**, members of the Leopold Wildlife Club checked wood duck nest boxes at Yates Mill Pond. They saw two owls on a nest and one wood duck (*Aix sponsa*). The eastern screech owl (*Otus asio*) had a deer mouse in the box and the wood duck was sitting on 6 eggs. Under the supervision of **Dr. Phil Doerr**, the Leopold Wildlife Club has been monitoring nest boxes at Yates Mill Pond for 30 years.

John Harrelson holding a female wood duck at Yates Mill Pond. Photo provided by **Brandon Sherrill**.



Brandon Sherrill holding a female wood duck at Yates Mill Pond. Photo provided by **John Harrelson**.

Nest Boxes!

An eastern screech owl at Yates Mill Pond. Photo provided by **Brandon Sherrill**.



Jimmy Dodson honored by the North American Bluebird Society

Recently, **Jimmy Dodson**, Assistant Forest Manager at Hill Forest was elected to serve on the national board of the North American Bluebird Society (NABS). Jimmy was elected at the National Convention held in late April.

Jimmy is very active with the Cornell Lab of Ornithology and the North American Bluebird Society. He is an active list serve member and provides answers to many individuals with questions about nestboxes, cavity-nesting birds, and other bird/wildlife related information.

This Spring, Tina Phillips with Cornell asked if Jimmy would be willing to be a "TBN -- The Birdhouse Network" ambassador (mentor/speaker/info source) through the CLO for people with questions. Jimmy leads a nestbox monitoring program that encompasses a wide range of habitats and targets multiple species. Also, Jimmy's program is highly management and research oriented with a strong University connection.

At Hill Forest, Jimmy operates a Monitoring Avian Productivity and Survivorship (MAPS) Program. In 1989, the MAPS program was created by The Institute for Bird Populations (IBP) to assess and monitor the vital rates and population dynamics of over 120 species of North American birds to provide critical conservation and management information on their populations. The MAPS Program utilizes mist netting and leg banding at a continent-wide network of monitoring stations. Jimmy will begin MAPS banding for IBP starts at the end of May (after the 21st). He will band every 8-10 Jimmy will be assisted by 3 recent fisheries and wildlife graduates, **Kyle Whitehurst**, **John Harrelson** and **Brandon Sherrill**.

*Congratulations Jimmy
Dodson!*

Congratulations on an impressive accomplishment.



Jimmy Dodson (second from left) instructing at the 2005 Wildlife Summer Camp. Also pictured (left to right) **Kim Jervis**, **Jason Smith**, and **Josh McCormick**.

Bryn Tracy, Division of Water Quality, helps educate undergraduate students

For the past few years Fisheries and Wildlife students have benefited immensely from instruction by, and interaction with, interested agency scientists. Shown here is **Bryn Tracy** (in the brown chest waders) from the North Carolina Division of Water Quality supervising ZO/FW 442 (Biology of Fishes Laboratory) electrofishing in Crabtree Creek. Bryn, an expert in stream fishes, shows student how the fish community structure can be interpreted to help evaluate stream habitat quality. Such interactions allow students to discuss, first-hand, agency activities and potential employment opportunities. Also, Bryn regularly attends our Student American Fisheries Society chapter meetings. We owe him, and others to be featured, our heartfelt thanks for helping us educate our students.

Thanks Bryn Tracy!



Wolfpack in the land of Devils (submitted by Warren Mitchell)

Earlier this spring I traveled to Tasmania, Australia, with the assistance of the Fisheries and Wildlife Program. I write this to share my experience with fellow students and professors, and sincerely thank our program for its support. “Tazzy,” as locals are apt to call their smallest state, is a remote island between Australia and the Southern Ocean. A famous point of origin for Antarctic voyages, it is a one hour plane ride south of the mainland. With an area comparable to West Virginia, Tasmania’s population is just over half that of Wake County. So... for what reason would a member of our Pack find himself in Tasmania??

With a history of ocean expedition and natural resource management, the capital city Hobart was a first-rate setting for a fisheries meeting. In late March the International Council for the Exploration of the Seas hosted a gathering of the Working Group on Fisheries Acoustic Science and Technology.

Complementing this meeting was a 5-day course, *BioAcoustical Oceanography: Theory and Practice of Fisheries Acoustics*. Both were attended by fisheries professionals from all over the world, and council members encouraged student participation. I followed the suggestion that one should take advantage of professional training opportunities while in school. Student readers should note here that international meetings and courses often offer drastic student discounts. While investing in my professional development was an intimidating decision, one powerful outcome is to encourage other students to fiercely consider such an adventure, wherever it may take you.

Wolfpack in the land of Devils!



Warren next to the FTV Bluefin, a 113’ fisheries research and training vessel chartered for use during the course through the Australian Maritime College.

Dr. John Horne, a professor at the University of Washington, was the instructor for the course, and his expertise and preparation for the task were both evident. It was attentively hosted by SonarData, a Tasmanian software development company. The course opened with a history of acoustic research, and an intense look at the equations which allow us to translate sound energy into useful scientific quantities. Day two covered contemporary techniques to process

digital data, and day three saw our first trip away from the classroom. Convening at an oceanographic institute, a bank of networked computers awaited our hands-on use. Class members suspended a tungsten sphere below an acoustic system which was deployed in the harbor, and we simulated a vessel's system calibration. I was particularly pleased with this exercise, as it combined theoretical concepts and practical tips for work at sea. On day four we planned the sampling design for a research cruise by allocating crew and vessel time, choosing the route, preparing a data collection strategy and prioritizing tasks. The afternoon put us to sea, bouncing sound against the marine residents and substrates of the Derwent River estuary. Class morale might have peaked as students new to ship-deployed acoustics watched penguins splash in the waves around the vessel. We deployed water quality instruments, operated underwater cameras to verify hard reef substrate, and ensured the vessel adhered to the cruise track. Every student had the opportunity to keep the survey log, alter settings which would maximize the data quality and plot detected fish schools in real-time on three-dimensional software.

Friday morning we analyzed our data and discussed what could be reasonably concluded from the brief cruise. The week ended with an open question/answer session with Dr. Horne, where I had the opportunity to ask questions related to my own research and discuss ideas with colleagues in a casual afternoon session. We celebrated the week at a local eatery. I was obliged to sample a delicious kangaroo steak in the spirit of international solidarity.

In the 15th century, Leonardo da Vinci noted that he could hear ships approaching from beyond the horizon by putting his ear to a partially submerged cylinder. Today, it is the odd commercial fishing vessel without a SONAR screen within arms reach of the captain's chair. We know the shape of our deepest lakes and estimate the biomass of our greatest oceanic fisheries through an understanding of sound. Even recreational "fish finders" in use on Lake Jordan operate on the same basic principles.

Wolfpack in the land of Devils!



A scene from Hadley's Hotel in Hobart, Tasmania, site of the classroom portion of the course. The class was attended by 23 students and professionals from six nations and four states within the US. Instructor Dr. John Horne is seen standing at far left; Warren seated fifth from the right.

In my research for NC State, our acoustic system propels tiny sound pulses quickly across the main channel of the Roanoke River. Each pulse bounces off targets in the environment which have a density different than water, and returns as an echo along with information on how far away the target was. At its simplest, these data are used to generate an estimate of the American shad and striped bass which have returned from salt water to spawn. More precisely: acoustic information, a whack of physics equations, a pile of relevant literature and a firm understanding of the aquatic environment produce that run size estimate. We've come full circle on WHY I would seek additional training! I can't be more pleased that I did; my experience in Tasmania was sublime. I am grateful for the support of my program, my major professor, Joe Hightower, and my university. I can only encourage students in this program to take such a risk: surf the net for opportunities, introduce yourself, ask questions, and figure it out.

Tasmanian devils do not travel in small tornados, but a prudent student of science should verify such things in person.

Dr Richard Lancia receives the College of Natural Resources Outstanding Advisor of the Year Award

At the 2006 Graduation Ceremonies, it was announced that **Dr. Richard Lancia** was selected as the College of Natural Resources Outstanding Advisor of the Year. A plaque was presented indicating that Dr. Lancia was a "Facilitator of Student Success".

Congratulations!

*Congratulations Dr.
Richard Lancia—CNR
Advisor of the Year!*



Dr. Richard Lancia with the honorary plaque. Photo provided by **Dr. Chris DePerno**

Warren Mitchell receives the 2006 Marine Fisheries Fellowship

Warren Mitchell, an M.S. student in Zoology (Fisheries and Wildlife Sciences), received the 2006 Marine Fisheries Fellowship from North Carolina Sea Grant and the North Carolina Division of Marine Fisheries (DMF). This competitive fellowship is open to graduate or post-graduate students at southeastern universities and colleges from Maryland to Texas. Warren will work with DMF on analyses of a 20+ year long-term data set on larval and early juvenile fish ingress at Pivers Island Bridge near Beaufort Inlet, NC as well as participate in bridgenet sampling. Results and recommendations from Warren's research will help DMF assess and manage North Carolina's marine fisheries.



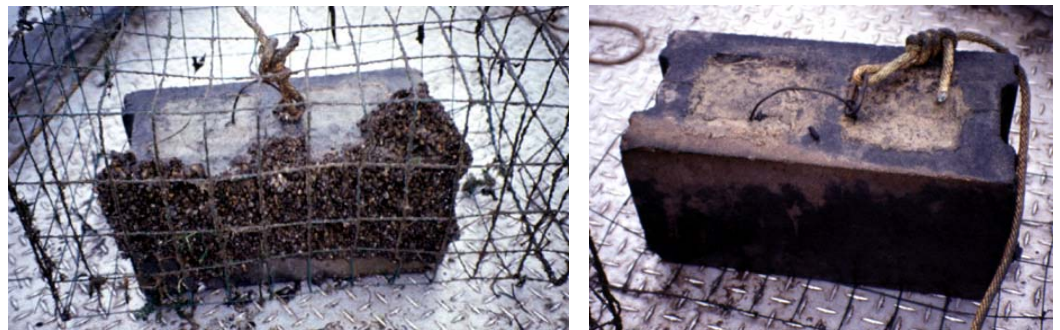
*Congratulation Warren
Mitchell!*

Warren holding a southern flounder (*Paralichthys lethostigma*) that was caught while electrofishing for his fieldwork. The flounder was captured on the Roanoke River—185 kilometers upstream of the mouth, near Halifax. Although biologists are unsure why flounder move that far up river, they are caught occasionally.

Zebra Mussel Invasion of Upper Mississippi River Chronicled

Fisheries and Wildlife faculty members **Dr. Greg Cope** and **Dr. Joe Hightower**, along with Michelle Bartsch of the U.S. Geological Survey's Upper Midwest Environmental Sciences Center in La Crosse, Wisconsin, recently published an article on the population dynamics of zebra mussels during their initial invasion of the Upper Mississippi River. An age-structured model, similar to those used in fish stock assessments, was fitted to zebra mussel density and size data—the first study of its type performed in North America. The fitted model provided information about growth, mortality and recruitment during the initial invasion. During the study period, the annual density of zebra mussels in Pool 8 of the Upper Mississippi River increased from 3.5/m² in 1992 to 14,956/m² in 1996. The average densities would have been about 20% greater, if not for predation by certain species of fish and waterfowl.

Cope, W. G., M. R. Bartsch, and J. E. Hightower. 2006. Population dynamics of zebra mussels *Dreissena polymorpha* (Pallas, 1771) during the initial invasion of the upper Mississippi River, USA. *Journal of Molluscan Studies* 72:179-188.



*Dr. Chris Moorman
receives positive
feedback!*

Photograph of a caged (left) and un-caged (right) concrete block deployed in Pool 8 of the Upper Mississippi River, demonstrating the effects of predator (fish and waterfowl) exclusion on zebra mussel density.

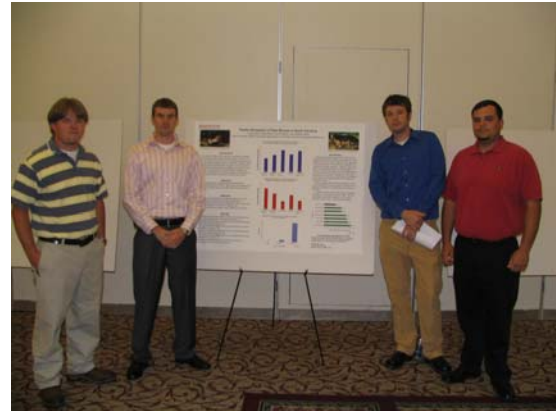
Dr. Chris Moorman receives positive extension feedback

Dr. Chris Moorman received 17 post-meeting survey responses from the 20 attendees at a workshop on *Whole Farm Management for Wildlife* in Warren County, North Carolina. The respondents owned 2329 acres, leased 1639 acres, and consulted on 900 acres. Of the 17 respondents not already implementing the practice, 4 (28%) planned to use prescribed fire, 8 (73%) planned to thin their timber stands, 9 (60%) planned to use cost-share programs, 4 (33%) planned to install native, warm season grass plots, and 6 (46%) planned to disk fallow areas for wildlife.

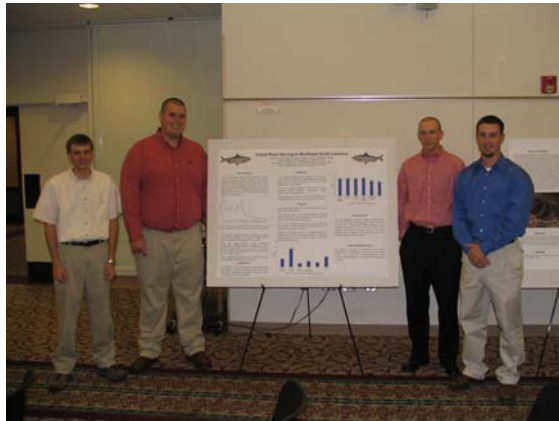
Undergraduate students present posters at the North Carolina State University Distinguished Lecture Series

Undergraduate student in presented posters for their semester long research project as part of FW485 Natural Resource Advocacy course taught by **Dr. Chris DePerno** and Teaching Assistant **Jason Riddle**.

From left to right: **Greg Roane, David Sellers, Nathan West, and Cody Paul**. The poster was entitled, "The red wolf in North Carolina (*Canis rufus*)."



*FW 485 students
present at the
Distinguished Lecture
Series!*



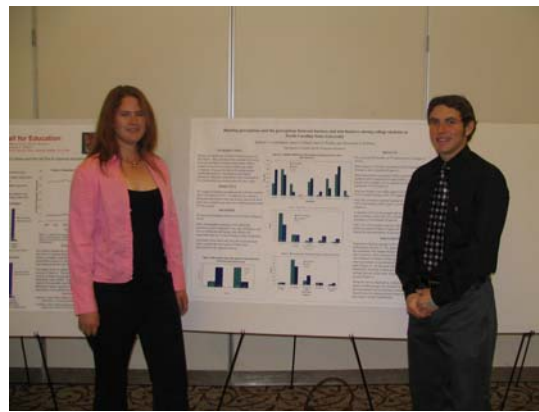
From left to right: **Jason Smith, Ryan Spidel, Will Ricks, and Jeff Lee**. The poster was entitled, "Inland River Herring in Northeast North Carolina."

From left to right: **Luke Decker, William Ridgeway, Tim Ward, and Jennifer Harrod**. The poster was entitled, "Dam removal in North Carolina."

All photos provided by **Dr. Chris DePerno**.



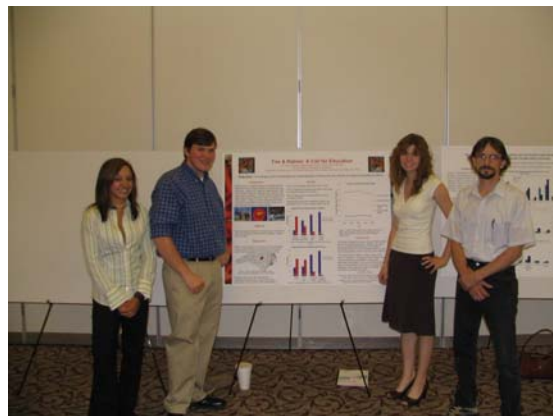
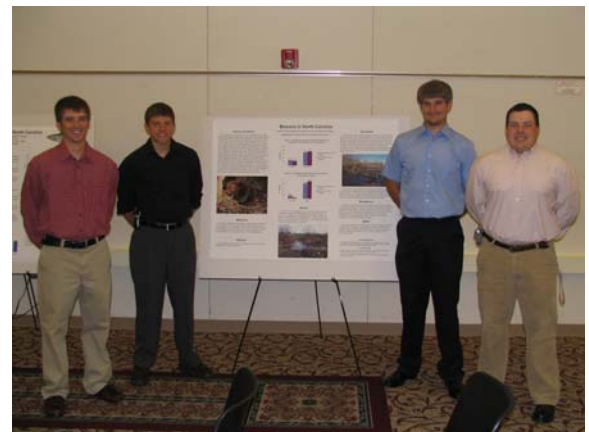
From left to right: **James Seuberling, Caroline Reddy, Kyle Whitehurst, and Andrew Smith.** The poster was entitled, "A comprehensive analysis of the proposed under sea warfare training range:national defense needs and marine wildlife protection."



From left to right: **Katherine Cunningham and Jarod Milrad.** The poster was entitled, "Perceptions of hunting and how hunters and non-hunters view each other among North Carolina State University college students."

*FW 485 students
present at the
Distinguished Lecture
Series!*

From left to right: **Andrew Partin, Gabe Karns, Brandon Horne, and Brandon Bridges.** The poster was entitled, "Beaver in North Carolina."



From left to right: **Sabrina Smith, John Harrelson, Nicole Fowler, and John Rochevot.** The poster was entitled, "Foxes & Rabies: A Call for Education."

All photos provided by **Dr. Chris DePerno.**

Rare Fish Research Featured in Smoky Mountain News

Cooperative research on a rare and undescribed mountain fish, the sicklefin redhorse, being led by Fisheries and Wildlife Master's student **Scott Favrot**, advised by **Dr. Tom Kwak**, was recently featured in an in-depth article in the Smoky Mountain News (10 May 2006). Reporter Becky Johnson accompanied Scott and U.S. Fish and Wildlife Service Biologist Mark Cantrell afield to review the research in the Hiwassee River system near Murphy, North Carolina. The sicklefin redhorse is a sucker species that occurs only in the Hiwassee and Little Tennessee rivers in the Appalachian Mountains of North Carolina and Georgia. This fish was long overlooked by ichthyologists and is just now being described by Dr. Bob Jenkins of Roanoke College, Virginia. Scott's research objectives involve the reproductive ecology of the fish, and he's sampling the fish by electrofishing, with river weirs, and through visual observations, in addition to radio tracking them to identify spawning habitat and migratory behavior. This is the first intensive ecological study on this species, and agency biologists are anxious to utilize the results. The sicklefin redhorse is sufficiently rare that it is a candidate species for protection under the Endangered Species Act, and Scott's results will contribute to management of the species and its habitats.

For the complete story, see...

Have you seen this fish?

Researchers probe new species called the sicklefin redhorse

By Becky Johnson * Staff writer

http://www.smokymountainnews.com/issues/05_06/05_10_06/out_seen_fish.html

*Rare fish featured in
Smoky Mountain News.*



Scott Favrot, Fisheries and Wildlife M.S. student, with a sicklefin redhorse along the banks of Valley River, North Carolina.

Recent Publications, Reports, Presentations, and Funding

Publications & Reports

- Brown J.J., J. Perillo, **T.J. Kwak**, and R.J. Horwitz. 2005. Implications of *Pylodictis olivaris* (flathead catfish) introduction into the Delaware and Susquehanna drainages. *Northeastern Naturalist* 12:473-484.
- Cope, W. G.**, M. R. Bartsch, and **J. E. Hightower**. 2006. Population dynamics of zebra mussels *Dreissena polymorpha* (Pallas, 1771) during the initial invasion of the upper Mississippi River, USA. *Journal of Molluscan Studies* 72:179-188.
- Heltsley, R.M., **W.G. Cope**, D. Shea, R. B. Bringolf, **T. J. Kwak**, and E.G. Malindzak. 2005. Assessing organic contaminants in fish: comparison of a non-lethal tissue sampling technique to mobile and stationary passive sampling devices. *Environmental Science and Technology* 39: 7601-7608.
- Kwak, T.J.**, W.E. Pine, III, and D.S. Waters. 2006. Age, growth, and mortality of introduced flathead catfish in Atlantic rivers and a review of other populations. *North American Journal of Fisheries Management* 26:73-87.
- Moorman, C. E.** 2006. NC Birding Trail Steering Committee. 2006. The North Carolina Birding Trail: An Informational and Marketing Brochure.
- Ulyshen, M. D., J. L. Hanula, S. Horn, J. C. Kilgo, and **C. E. Moorman**. 2005. The response of ground beetles (Coleoptera: Carabidae) to selection cutting in a South Carolina bottomland hardwood forest. *Biodiversity and Conservation* 15:261-274.

Recent publications and reports!

Presentations

- Cunningham, K. A., J. P. Milrad, J. D. Riddle, and C. S. DePerno**. 2006. Perceptions of hunting and how hunters and non-hunters view each other among North Carolina State University college students. The 15th Annual North Carolina State University Undergraduate Research Symposium, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (K. A. Cunningham and J. P. Milrad—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)
- Cunningham, K. A., J. P. Milrad, J. D. Riddle, and C. S. DePerno**. 2006. Perceptions of hunting and how hunters and non-hunters view each other among North Carolina State University college students. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (K. A. Cunningham and J. P. Milrad—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)

Recent Publications, Reports, Presentations, and Funding

Presentations

Decker, L., W. Ridgeway, J. Harrod, and T. Ward. 2006. Dam removal in North Carolina. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (L. Decker, W. Ridgeway, J. Harrod, and T. Ward—Undergraduate Fisheries and Wildlife Students)

DePerno, C. S. 2006. Wildlife Damage. Presented to 25 individuals of Chatham County, Chatham County Agricultural Center, Pittsboro, North Carolina.

Harrelson, J. H., A. N. Fowler, S. N. Smith, J. H. Rochevot, J. D. Riddle, and C. S. DePerno. 2006. Foxes & Rabies: A Call for Education. The 15th Annual North Carolina State University Undergraduate Research Symposium, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (J. H. Harrelson, A. N. Fowler, S. N. Smith, and J. H. Rochevot—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)

Harrelson, J. H., A. N. Fowler, S. N. Smith, J. H. Rochevot, J. D. Riddle, and C. S. DePerno. 2006. Foxes & Rabies: A Call for Education. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (J. H. Harrelson, A. N. Fowler, S. N. Smith, and J. H. Rochevot—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)

Karns, G., A. Partin, B. Horne, and B. Bridges. 2006. Beaver in North Carolina. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (G. Karns, B. Partin, B. Horne, and B. Bridges—Undergraduate Fisheries and Wildlife Students)

Kwak, T.J., E.G. Malindzak, and J.R. Brewster. 2006. Introduced flathead catfish, dam removal, and endangered species. *Invited speaker* to a symposium on "Catfish ecology and management" at the Annual Meeting of the Southern Division of the American Fisheries Society. February 8-12, San Antonio, Texas.

Kwak, T.J., E.G. Malindzak, and J.R. Brewster. 2006. Introduced flathead catfish, dam removal, and the endangered Cape Fear shiner. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. January 31-February 1, Greensboro, North Carolina.

Heise, R.J., **T.J. Kwak, W.G. Cope,** and W.C. Starnes. 2006. Dam removal efficacy: an ongoing study of the freshwater mussels and fishes on the Deep River at Carbondon Dam. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. January 31-February 1, Greensboro, North Carolina.

*Recent publications and
reports!*

Recent Publications, Reports, Presentations, and Funding

Presentations

Cope, W.G., R.M. Heltsley, D. Shea, R.B. Bringolf, **T.J. Kwak**, and E.G. Malindzak. 2006. Development of novel, non-lethal sampling techniques to assess organic contaminants in fish. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. January 31- February 1, Greensboro, North Carolina. *See Award*

McCormick, J. K., C. L. Ward, R. A. Lancia, and C. S. DePerno. 2006. Herpetofauna Research at Hill Forest. The 15th Annual North Carolina State University Undergraduate Research Symposium, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (J. K. McCormick and C. L. Ward—Undergraduate Fisheries and Wildlife Students)

Moorman, C. E. and S. Moore. 2006. Ecosystem for the Homeowner: Backyard Conservation Practices. The Wildland Fire Symposium: Living With Fire In The Urban Interface, Greensboro, NC (6 people).

Moorman, C. E. 2006. Communicating the Role of Wildland Fire. The Wildland Fire Symposium: Living With Fire In The Urban Interface, Greensboro, North Carolina (4 people).

Moorman, C. E. 2006. Managing for Backyard Wildlife. New Hope Audubon, Chapel Hill, North Carolina (15 people).

Moorman, C. E., and T. Buman. 2006. Prescribed Fire Liability Insurance in North Carolina. North Carolina Prescribed Fire Council Meeting, Greensboro, North Carolina (20 people).

Moorman, C. E. 2006. Vertebrate Species in Need of Fire. North Carolina Prescribed Fire Council Meeting, Greensboro, North Carolina (20 people).

Moorman, C. E. 2006. Wildlife Management in the Urban-Rural Interface. Urban and Community Forestry Training, Winston-Salem, North Carolina (15 people).

Moorman, C. E. 2006. Butterfly Gardening with Native Plants. Hillsborough Garden Club, Hillsborough, North Carolina (25 people).

Moorman, C. E. 2006. Biomass Utilization and Wildlife. Energy from Wood: Exploring the Issues and Impacts for North Carolina, Raleigh, North Carolina (200 people).

Recent publications and reports!

Recent Publications, Reports, Presentations, and Funding

Presentations

Moorman, C. E. 2006. Whole Farm Management for Wildlife. Warren County Landowner's Meeting, Warrenton (20 people).

Moorman, C. E. 2006. Managing Your Backyard for Wildlife. Lee County Homeowner's Meeting, Sanford (40 people).

Moorman, C. E. 2006. Communicating the Ecological Role of Fire. Triangle Chapter of SAF, Raleigh (25 people).

Moorman, C. E. 2006. Landscaping for Birds and Other Wildlife: The Basics. Chatham County Extension Office, Pittsboro, North Carolina (12 people).

Moorman, C. E. 2006. Landscaping for Birds and Other Wildlife: The Basics. Orange County Master Gardeners, Hillsborough, North Carolina (18 people).

Reddy, C., C. S. DePerno, and C. E. Moorman. 2006. Landscaping for Wildlife: A Demonstration on the North Carolina State University Campus. The 15th Annual North Carolina State University Undergraduate Research Symposium, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (C. Reddy—Undergraduate Natural Resources Ecosystem Assessment Student)

Riddle, J. R., and C. E. Moorman. 2006. Effects of Landscape Context on Early-Succession Songbird Nest Success in the Coastal Plain of North Carolina. NC Partners In Flight Annual Meeting, Raleigh, North Carolina (J. D. Riddle—Ph.D. Student)

Riddle, J. R., C. E. Moorman, and Fern Perkins. 2006. Maximizing the Impacts of Field Borders for Quail and Early-succession Songbirds: What's the Best Design for Implementation? 2006 College of Natural Resources Future of Forests and Natural Resources Distinguished Lecture Series, Raleigh, North Carolina. (J. D. Riddle—Ph.D. Student)

Seuberling, J., C. Reddy, A. Smith, and K. Whitehurst. 2006. A comprehensive analysis of the proposed under sea warfare training range: national defense needs and marine wildlife protection. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (J. Seuberling and K. Whitehurst—Undergraduate Fisheries and Wildlife Students)
(C. Reddy and A. Smith—Undergraduate Natural Resources Ecosystem Assessment Students)

*Recent publications and
reports!*

Recent Publications, Reports, Presentations, and Funding

Presentations

Spidel, M. R., J. B. Lee, W. E. Ricks, J. B. Smith, J. D. Riddle, and C. S. DePerno. 2006. Inland River Herring in Northeast North Carolina. The 15th Annual North Carolina State University Undergraduate Research Symposium, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (M. R. Spidel, J. B. Lee, W. E. Ricks and J. B. Smith—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)

Spidel, M. R., J. B. Lee, W. E. Ricks, J. B. Smith, J. D. Riddle, and C. S. DePerno. 2006. Inland River Herring in Northeast North Carolina. North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (M. R. Spidel, J. B. Lee, W. E. Ricks and J. B. Smith—Undergraduate Fisheries and Wildlife Students)
(J. D. Riddle—Ph.D. Student)

West, N., D. Sellers, C. Paul, and G. Roane. 2006. The red wolf in North Carolina (*Canis rufus*). North Carolina State University Distinguished Lecture Series, McKimmon Center, North Carolina State University, Raleigh, North Carolina. (D. Sellers—Undergraduate Fisheries and Wildlife Student)
(N. West, C. Paul and G. Roane—Undergraduate Natural Resources Ecosystem Assessment Students)

FOR SALE at the Wildlife Store—T-shirts and Hats Proceeds benefit the Leopold Wildlife Club

Shirts = \$10 for Leopold Wildlife Club Members (all sizes available)

Shirts = \$12 for non-members

Hats = \$12 for Leopold Wildlife Club Members

Hats = \$15 for non-members

We will mail items to you (please add \$3.00 shipping/handling). Please specify size and make checks out to **Leopold Wildlife Club** and mail checks to **Cindy Burke**, NCSU, Fisheries and Wildlife Sciences Program, Turner House, Box 7646, Raleigh, NC 27695-7646.



Recent publications and reports!

Upcoming Events

Leopold Wildlife Club

The next meeting for the Leopold Wildlife Club will be at the beginning of the fall 2006 semester. Specific dates will be posted at a later time.

Job Opportunities and Scholarships

Please see the NC State Fisheries and Wildlife Sciences website for additional information, current position announcements, scholarship opportunities, and links to job websites.

<http://www.cfr.ncsu.edu/for/fishwildlife/>

Giving Back

Giving Back!

Giving Back

It only takes a moment to make a huge impact. NC State offers a wealth of programs that educate students and provide assistance to the community, but we need your help. Your contribution to the College of Natural Resources can make a huge impact on all facets of university life and ensure that these valuable programs can continue. The College of Natural Resources needs the support of our alumni and friends. Please consider making a gift today through the NC State Annual Fund or contact **Jennifer Viets Catalano** at 919-513-7734 or jennifer_viets@ncsu.edu.

Also, you may consider giving to our 2 Summer Camp student endowments (1 Fisheries, 1 Wildlife). These endowments help undergraduate students attend the Wildlife and Fisheries Summer Camp. For more information on how to contribute, contact **Dr. Richard Lancia** at 919-515-7586 or richard_lancia@ncsu.edu.

Compiled and edited by:

Christopher S. DePerno, Ph.D.

Assistant Professor, Fisheries and Wildlife Sciences

Department of Forestry

College of Natural Resources

North Carolina State University

Turner House, Box 7646

Raleigh, NC 27695-7646

919-513-7559 (office)

919-334-8935 (cell)

919-515-5110 (fax)

chris_deperno@ncsu.edu

*Nice Planters and
Benches!*



Planters and benches at the Turner House. The planters and benches were made from cypress and constructed by **Dr. Chris DePerno**. Stop by the Turner House and have a look.