



Organized in 1990

VIRGINIA CHAPTER *of the* AMERICAN FISHERIES SOCIETY

Inland Fisheries and Aquatic Resources of Virginia

Chapter Officers:

President:

Scott Smith

Scott.Smith@dgif.virginia.gov

Immediate Past President:

Dan Michaelson

Dan.Michaelson@dgif.virginia.gov

President-Elect:

Bob Greenlee

Bob.Greenlee@dgif.virginia.gov

Secretary:

Robert Humston

HumstonR@vmi.edu

Treasurer:

Steve Owens

Steve.Owens@dgif.virginia.gov

Inside this issue:

| | |
|--------------------------------------|---|
| The view from the throne... | 1 |
| Northern snake-heads updated | 2 |
| Chapter award nominations sought | 3 |
| Annual meeting review | 4 |
| Upcoming meetings | 5 |
| Recent pubs and research of interest | 5 |

Summer (?) Edition 2007

Newsletter Date: July, 2007

A grand proclamation from King Scotch I

Greetings loyal subjects. As Emperor of the Virginia Chapter, one of my duties is to address the masses in our lovely newsletter. Time has certainly flown quickly in my tenure as your Supreme Leader. We have been dealing with many things here in the Old Dominion (which reminds me.... Where is the New Dominion, anyway? I mean, if there's an Old Dominion, then surely it must be "old" because there's a newer one somewhere. If anybody has an answer, I'm sure we'd all like to hear it.); but, as usual, I digress. Several Chapter members have spent many, many hours this spring dealing with the fish kill problems on the Shenandoah, James, and Cowpasture rivers (more on this in this newsletter). Depending upon how things work out, there may be some opportunity for Chapter involvement with this issue.

Additionally, we have already made a fine start to planning our next annual meeting (many thanks to our capable Duke of Arrangements, Sir Fred Leckie). We will be co-hosting a meeting

with the Virginia Tech Chapter AFS in Blacksburg (sometime in late winter, but those exact details are yet to be finalized). This should present us with an excellent opportunity to enhance student involvement with both Chapters. Additionally, we have received a generous contribution of \$1500 from Dominion (a.k.a. Virginia Power) to help defray meeting costs. This gift will allow us to offer students a severely discounted registration cost, and hopefully further encourage student attendance.

Speaking of students, I would suggest that all Chapter members do everything they can to encourage students to apply for our scholarships this winter. We give \$500 to an undergrad and a grad student each year, provided we get enough applications. In the past, you could count the applications for both scholarships on one hand. I would love to see this increase. The money is awarded with no strings attached, so they could spend it on Jimmy Buffet tickets if they

wanted to. Maybe times have changed, but when I was back in seminary school there was a man there who put forth the idea that you could Petition the Lord with prayer..... No wait, I started channeling Jim Morrison and got confused again... What I meant was that when I was back in school I would have loved an extra \$500. Let's see if we can get those young whipper-snappers to actually apply for our scholarships this year. If you have contact with students or professors, remind them of our scholarships and twist some arms if you have to. It looks great on a resume, and \$500 will buy a lot of beer.

On the subject of education, our esteemed Baron of Education, Sir Mitchell Norman, and his (also) esteemed crew of Continuing Educators are busy working out the details for

(see *The view from the Throne* on page 2...)



The Virginia Chapter of the American Fisheries Society is a subunit of the [American Fisheries Society](#). The chapter was established in 1990 to provide fisheries professionals in Virginia with increased access to AFS; encourage the exchange of information among fisheries and other aquatic resource professionals; provide a forum for the discussion, debate, and resolution of aquatic resource issues within Virginia; and serve the Commonwealth by providing expert scientific knowledge to allow for informed decisions concerning the use and development of the state's natural resources.

The View from the Throne: King Scotch's Grand Proclamation (*continued*)

some CE classes for us. There are several possibilities in the works including a canoe/whitewater safety class, a pond management class, and a fish health class. At least one of these wonderful educational opportunities will be available to all subjects of the Kingdom at our annual meeting in Blacksburg.

One other item I'd like to mention is our newsletter. Our Royal Scribe, Sir Robert, the Marquis de Humston, does an outstanding (and thankless) job putting this newsletter together. It is our duty to assist him however we can. We are all involved with things that would be of interest to the rest of the Kingdom. This newsletter is an excellent tool for transmitting that information. If I were not (practically) infallible, I would be as guilty as anyone of this crime. Luckily for me, the King doesn't make mistakes (it's good to be the King...). We need to use the tools we have at hand, and provide fodder (I mean really interesting news...) for the newsletter. This is one of the few media that reach a large audience of fisheries professionals here in Virginia. We, as a Chapter, need to make better use of it. Please, please, send useful information, factoids, blurbs, or whatever to Robert. He will happily accept what you send and pass it along to the rest of us. This is our newsletter, so let's make it work for us.

On a final note, we all owe our thanks to the efforts of Good King Dan (Michaelson), for his efforts in the relief efforts for fisheries folk on the Gulf coast following the Katrina/Rita storms. With the proceeds raised at the raffle in Danville (thanks again to George Palmer – the Royal Salesman of raffle tickets) the Chapter was able to donate 3 pair of Costa Del Mar sunglasses to coastal fisheries biologists in Mississippi. They can now spot harmful algae blooms courtesy of the Virginia Chapter. Thanks to everybody who contributed to this worthwhile cause.

This concludes the Emperor's message. As always, please let me know if there's anything the Chapter can do for you, or if you have issues that need to be addressed. Remember, this Chapter is full of many fine people with a multitude of abilities. We should all try to take advantage of that situation.

King Scotch I

Questions about his new clothes can be directed to:
Scott Smith
Scott.Smith@dgif.virginia.gov

Alien Invasions: The Latest Word from the Northern Snakehead Taskforce

The following update on the "invasion" of northern snakehead in Virginia and neighboring waters was provided by John Odenkirk, VDGIF Fisheries Division.

- A northern snakehead (*Channa argus*) population was documented in the Potomac River system in 2004. The expansion of this population was monitored from 2004-2007 by various sampling gears – primarily boat electrofishing and angler catch data.
- Electrofishing catch rate increased significantly each year (0.2 fish/hr in 2004 to 6.1 fish/hr in 2006). Reported angler catches during 2006 (24) equaled the combined total of the two previous years. Angler returns through May, 2007 are on pace to exceed reported catches during 2006.
- Mean total length and weight in 2006 were 475 mm (SD=146) and 1381 g (SD=1009), and maximum size increased each year. The largest specimen collected to-date was a 31" female that weighed 12 pounds (May, 2006 electrofishing in Dogue Creek).
- Natural reproduction was confirmed by the location of a nest (September, 2006), and eight year classes were identified based on otolith interpretations.
- Total annual mortality was estimated to be 38%.
- Trends in ovary production and otolith daily ring counts of

age 0 fish suggested protracted and/or repeat spawning from May to September. Females were fecund carrying an average of 40, 786 eggs.

- Collection patterns suggested snakeheads originated from Dogue Creek.
- Seventeen food items, including 15 fish species, were identified from stomach contents. Banded killifish was the dominant food item. Bluegill, pumpkinseed and white perch were also commonly consumed.
- Although population size increased, known range did not appear to increase until spring 2007. The known southern range now extends to Aquia Creek, Stafford County.
- Telemetry data suggested large, adult fish were relatively sedentary and showed minimal dispersion, discrete home ranges and high site fidelity. It is possible that dispersion is occurring mainly from juvenile or sub adult fish.

For more information, contact John.Odenkirk@dgif.virginia.gov



Award Notices: Coming At You Early and Often!

Robert D. Ross Graduate Scholarship Award:

Recipient must be a graduate student in fisheries, biology, or a related aquatic science program at an accredited Virginia university, who demonstrates academic excellence and who wishes to pursue a career in fisheries or related aquatic fields.

Robert E. Jenkins Undergraduate Scholarship Award:

Recipient must have junior or senior class standing at an accredited Virginia college or university, pursuing a four-year degree and a career in aquatic resource management or conservation.

Eugene W. Surber Professional Fisheries Biologist Award:

Given to a professional fisheries biologist based on either the number of years of significant contributions to the field of fisheries science or on the basis of a single very significant contribution during the calendar year.

Natural Resource Conservationist/ Citizen Conservation Award:

Given to a citizen conservationist or a natural resource professional who has demonstrated outstanding protection or enhancement of aquatic resources on their property or who has made significant contributions to the protection of aquatic resources within the state of Virginia.

More information and applications are available at:

http://faculty.virginia.edu/vcafs/awards_scholarships.htm

Please direct any questions, applications or submissions to Dan Michaelson:

Dan.Michaelson@dgif.virginia.gov

2007 North Carolina and Virginia Joint AFS Chapter Meeting, Danville, VA

The North Carolina and Virginia Chapters of the AFS co-hosted a very successful annual meeting in Danville, VA on February 26-28. A total of 109 members attended with an almost equal split between the North Carolina and Virginia Chapters. Student turnout from Virginia and North Carolina was excellent.

The meeting kicked off on the 26th with the VA Chapter business meeting where new officers were installed. **Dan Michaelson** (VDGIF) from President to Past President, **Scott Smith** (VDGIF) from President Elect to President, **Steve Owens** (VDGIF) was elected Treasurer taking over duties from **George Devlin** (VDEQ), and **Robert Humston** (VMI) was re-elected to another term as Secretary. Awards were presented to **Tom Gunter**, VDGIF (Professional Service Award) and to **Trace Noel** (Outstanding Conservationist). Best Virginia student presentation was awarded to **Ryan McManamay** (Virginia Tech) for "The effects of stream resources on fish and macroinvertebrate nutrient composition and nutrient excretion." One \$500 scholarship was awarded to **Jeremy Shifflett**.

The North Carolina Chapter business meeting was held on February 27th. Newly initiated officers were **Kent Nelson** (NCWRC) President and **Christian Waters** (NCWRC) President Elect. **Lawrence Dorsey** (NCWRC) became Past President, **Duane Harrell** (Duke Power) ended his term as Past President, and **Brian McRae** (NCWRC) continues as Secretary Treasurer. **Richard Mode** was presented the Fisheries Conservation Award recognizing his efforts for conserving trout habitat and resources. The Richard L. Noble Best Student Presentation Award was presented to **Brad Garner** (NCSU) for "Intensive grass carp stocking effects on reservoir invasive plants and native fish populations." The W. Don Baker Best Professional Presentation Award was presented to **Robert Barwick** (NCWRC) for "Evaluating property owner willingness to implement shoreline habitat improvement techniques." The chapter paid a portion of student lodging expenses to assist travel to the meeting. **Dr. Tom Kwak** presented **Aja Tajiri**, the Hutton scholar whose internship was funded by the chapter and also mentored by chapter members.

Professional presentations began on the morning of the 27th. The overall meeting theme was management of shared North Carolina/Virginia resources. The program consisted of 25 (11 of which were student presentations) excellent talks and two posters, including one student poster. In addition to scientific presentations, **Bob Curry** (NCWRC) talked about the Southern Division AFS disaster relief efforts to assist Hurricane Katrina recovery in Gulf states and **Dr. Brian Murphy** (Virginia Tech) gave an eye opening presentation on the preliminary impacts of the Three Gorges Dam construction on Yangtze River fisheries in China.

Socials were held both evenings with two separate raffles (VA Chapter emceed by **George Palmer** and North Carolina State Student sub-unit emceed by **Marybeth Brey**) on the 27th. Both raffles were very successful and very fun for all involved. Part of the proceeds from the VA Chapter raffle will be used for Hurricane Katrina relief.

Dan Michaelson & Kent Nelson



The Chapter EXCOM committee held court over a rousing business meeting. Interim Secretary Eric Brittle (VDGIF) was sharp in his EXCOM debut, and incoming president Scott Smith looked strangely at ease in his new seat. Discussion of the wallpaper in the meeting room of the Comfort Inn briefly turned heated, but tension dissolved when it was revealed that the pattern was provided at no additional surcharge.



Jeremy Shifflett (James Madison University) received the Robert E. Ross Graduate Research award and walked away with 500 clams and a handshake from Odenkirk. When questioned later, Shifflett would not reveal which one he valued more.



Tom Gunter, formerly of VDGIF, received the Eugene W. Surber Professional Service Award for his many career contributions to managing fisheries in Virginia. In particular, he was recognized for his hard work as leader of the highly successful American Shad Restoration Project.

Direct all communications
regarding the newsletter to:

Robert Humston
Virginia Military Institute,
Department of Biology
Lexington, VA 24450

Phone: 540-464-7433
Fax: 540-464-7699
E-mail: humstonr@vmi.edu

Visit us on the Web at:
<http://faculty.virginia.edu/vcafs/>



Upcoming Meetings:

August 5-10: Ecological Society of America Annual Meeting, San Jose, CA www.esa.org

September 2-6: AFS Annual Meeting, San Francisco, CA. See www.fisheries.org/afs2007

October 8-11: Second International Symposium on Tagging and Tracking of Marine Fish with Electronic Devices. Spain. www.unh.edu/taggingsymposium

October 21-24: Annual Conference of the Southeastern Association of Fish and Wildlife Agencies. Charleston, WV. www.seafwa2007.org

November 8-8: Mid-Atlantic Stream Restoration Conference. Rocky Gap Resort, Cumberland, MD. www.canaanvi.org

Recent / Upcoming Research and Publications of Interest

- Copeland, J. R., D. J. Orth, and G.C. Palmer. 2006. Smallmouth bass management in the New River, Virginia: a case study of population trends with lessons learned. *Proceedings of the Southeastern Association of Fish and Wildlife Agencies*. In press.
- Hewitt, D. A., D. M. Lambert, J. M. Hoenig, R. N. Lipcius, D. B. Bunnell, and T. J. Miller. 2007. Direct and indirect estimates of natural mortality for Chesapeake Bay blue crab. *Transactions of the American Fisheries Society* 136: 1030-1040.
- Hewitt, D. A., W. E. Pine, III, and A. V. Zale, editors. 2006. *The AFS Guide to Fisheries Employment*, 2nd Edition. American Fisheries Society, Bethesda, Maryland.
- Humston, R., J.S. Ault, J. Schratweiser, M.F. Larkin, and J. Luo. 2007. Incorporating user-group expertise in bonefish and tarpon fishery research to support science-based management decision making. In: *Biology and Management of Tarpon and Bonefish Fisheries*. J.S. Ault (ed). Taylor and Francis / CRC Press.
- Humston, R. and D. Harbor. 2006. Geologic analyses for evaluating watershed heterogeneity: implications for otolith microchemistry studies. *Proceedings of the Southeastern Association of Fish and Wildlife Agencies*. In press.
- Jiang, H., et al. 2007. Tag return models allowing for harvest and catch and release: evidence of environmental and management impacts on striped bass fishing and natural mortality rates. *North American Journal of Fisheries Management* 27:387-396.
- Miranda, L.E. 2007. Approximate sample sizes required to estimate length distributions. *Transactions of the American Fisheries Society* 136:409-415.
- Norman, M. 2007. Preliminary results of water quality monitoring in three coastal plain, VA streams. Poster presented at the Virginia Citizens Water Quality Summit, University of Virginia. For information contact Mitchell.Norman@dgif.virginia.gov.
- Roberts, J.H. and P.L. Angermeier. 2007. Movement responses of stream fishes to introduced corridors of complex cover. *Transactions of the American Fisheries Society* 136:971-978.