



Kentucky Fish & Wildlife Commissioner's

NEWSLETTER



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Endangered species recovery in Kentucky: restoring the freshwater mussel

By Monte McGregor, Ph.D.

Freshwater mussels are the most at-risk group of animals in North America.

Kentucky has one of the most diverse mussel populations in North America with 41 genera and 103 recognized species (297 in the US). Twelve mussels are presumed extinct, and the U.S. Fish and Wildlife Service lists 22 species as endangered.

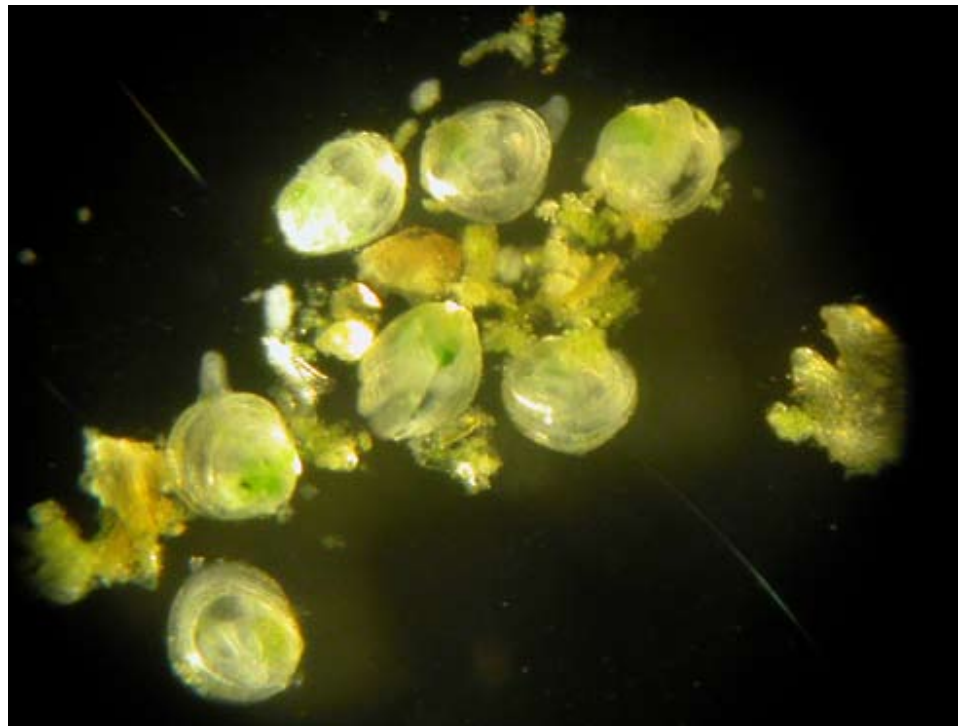
With substantial mussel and fish populations in many of the state's river systems, the potential is high to augment existing areas with low population numbers. As part of our recovery efforts, the Kentucky Department of Fish and Wildlife established the Center for Mollusk Conservation in 2002 in Frankfort, Kentucky, at the Forks of Elkhorn Field Station.

The primary purpose of the recovery program is to restore rare and imperiled freshwater mussels. In the past five years, we have established the facility with natural river-flow tanks that hold freshwater mussels.

As of 2007, the center is holding 60 species of mussels (8 endangered). Many of the mussels have reproduced in captivity, providing valuable information into life cycles, number of larvae, spawning period, handling, and habitat requirements. At the Center, biologists conduct research and develop techniques needed for producing juvenile mussels.

In addition, biologists have developed mussel diets, juvenile nursery systems, and long-term growout systems. The Center's staff is currently culturing multiple species of algae from around the state to feed juvenile mussels.

In the past 3 years, we have been



Juveniles of the endangered pink mucket, *Lampsilis abrupta*, released into the Green River in 2007.

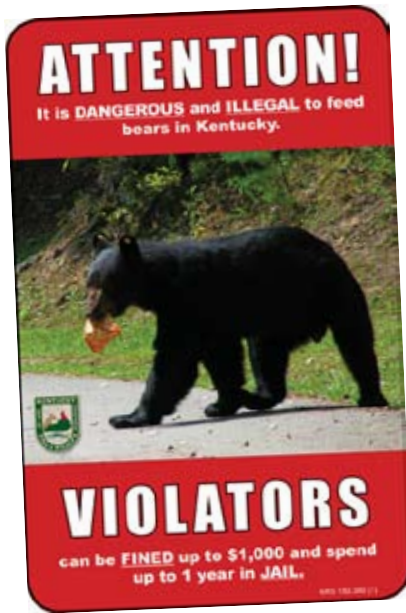
conducting extensive field surveys in the Licking River, Green River, and other locations throughout the state in an effort to locate and monitor rare species. In 2007 staff biologists in cooperation with the US Fish and Wildlife Service and the Tennessee Wildlife Resources Agency were able to collect adult pink muckets and propagate juveniles for release into the wild.

On July 5, biologists from the Center were able to release 1,100 juvenile pink mucket mussels into the Green River at Munfordville. This site is located in a high priority Conservation Area (Interior Low Plateau Karst Area) listed in the Wildlife

Action Plan for species of greatest conservation need.

The Green River has 71 species of mussels and 150 species of fishes and is considered one of the most diverse tributaries of the Ohio River system. The Munfordville site has 55 species and is considered to be one of the most diverse sites in the country. The release is the first of many planned for the Green River to augment low population numbers.

We hope that years from now, our efforts will increase population numbers and eventually allow the delisting of many endangered species of mussels.



Watch for new black bear posters

With black bear activity on the rise and contacting people more and more, look for these posters to begin showing up in country stores, schools, shopping malls and many other places people frequent and congregate.

Once native to all of Kentucky, bears are naturally recolonizing the state after disappearing about 100 years ago due to habitat destruction, disappearance of the American chestnut tree and harassment by people.

With bear sightings reported throughout nearly all eastern Kentucky counties, many central counties and as far west as Green, Washington, Nelson, Hart and Allen counties, it is likely many Kentuckians may be experiencing black bears nearby for the first time.

Many Kentucky communities are capitalizing on the bears' return by holding festivals and elevating them to major local tourist attractions.

Just keep passing the word to enjoy them, let them be wild bears and do not feed them. Leaving food scraps out will cause them to see people as a source of easy food, turn them into nuisance bears, and likely lead directly to their destruction.

Minor Clark Hatchery hosts big fishing event

Approximately 125 children and 250 adults attended the 2007 kids fishing event at Minor Clark Fish Hatchery on June 2nd making it a huge success.

All that participated had fun and many filled their stringers with catfish and trout, and their hearts with memories of a day well spent with friends and families.

Event registration began at 7 a.m. with eager young anglers awaiting the first cast. All registered children received a small starter kit tackle box and, if needed, a cup of bait (corn, wax and meal worms, and night crawlers). Rods and reels were also loaned to those not having appropriate gear.

During the registration a medical helicopter landed safely on the hatchery grounds for all children and adults to enjoy. Local fire and rescue were also present demonstrating their special skills and informing all on proper use of life jackets.

Once the fishing event ended, several activities were available: knot tying, "pin a tail on a fish", a casting contest, and

door prizes awarded to the children via a random drawing.

Finally, everyone enjoyed a delicious cookout with hot dogs and hamburgers, potato chips and cold soda.

The event was fun filled and enjoyed by all. A special thank you goes to all that were involved and those making donations. These were: Wal-mart, Muskies Inc., local banks, U.S. Forest Service, Fire and Rescue, Air Med, and to all Department employees involved. Special thanks to the Minor Clark hatchery staff for the use of ponds and their care for the trout and catfish.

Next year the efforts may need to be doubled, stocking both catfish and trout in similar numbers, and increasing the number of ponds to two. We also need to purchase additional bait, hotdogs and hamburgers.

The event went great and was well received by both the public and KDFWR employees.





Recently restored section of Brushy Creek. Note the structure which helps hold grade allowing for riffle-pool formation, and the new floodplain area (matting and staking) providing overflow.

Stream and Wetland Restoration Program has 4 new projects under construction

The KDFWR Stream and Wetland Restoration Program currently has four new in lieu fee mitigation projects under construction that will restore over 9,000 feet of stream habitat in eastern Kentucky; Upper Laurel Creek (Lawrence County), Trace Creek (Boyd County), Red Lick Creek (Estill County), and Terry's Branch (Knott County).

With the addition of these projects, a total of 12 restoration projects have been completed since the start of the program 3.5 years ago. The 12 completed projects will result in over 5 miles of restored streams and one restored wetland.

The program now has information on the Department's web site and additions such as photographs, interactive map link, and individual project descriptions will be added soon. The link is at: fw.ky.gov/streamandwetlandrestoration.asp.

The stream habitat in these four new projects had become severely degraded or eliminated primarily because of physical modifications and other anthropogenic disturbances. The stream channels were incised with no floodplain access leading to high bank stress. Banks and substrates were continuing to actively erode producing sediment pollution and eliminating

riffle-pool habitat. The result was a net loss of aquatic habitat.

The restored reaches will have a net gain in habitat. The finished stream project will have bank full benches for floodplain access and reduction of stress where before the banks were actively eroding. Increased sinuosity will restore the original grade helping riffle-pool complexes form naturally to sustain aquatic habitat.

Re-vegetated riparian zones will provide streambank stabilization and carbon sources for the stream while providing wildlife habitat and travel corridors for terrestrial fauna. The riparian zones are typically planted with 400 to 600 stems per acre of native plant species.

The leading sources of impairment to Kentucky waterways are related to physical causes including sedimentation from erosion or non-point sources, habitat alteration, and modification of stream channels.

These impairments lead to reduced stream habitat, water quality degradation, and impacts to fish and aquatic animals. This ultimately leads to fewer fish and fishing opportunities. KDFWR's stream restoration projects target degraded streams to reduce these threats, and create

KDFWR welcomes new and returning employees

Diane McKenzie is the new Administrative Specialist at Minor Clark Fish Hatchery in Morehead.

Diane worked for Law Enforcement five years before moving to Morehead where she has been in the Fisheries Division as an interim for the last 2 1/2 years. She has been a great asset to Minor Clark Fish Hatchery and the Department and will continue to do so.

Tanya Wilson is the new Administrative Specialist II in the Information Center. Tanya came from the Secretary of State's office where she handled new business incorporations and limited liability companies' filings.

Tanya now works in the Information Center answering the public's questions, and sending out information to the public regarding rules and regulations.

Kristy Stroud was hired as an interim CEPL I at Salato and moved into the full-time CEPL I position. Kristy has worked at Camp Currie as a camp counselor and recently earned her degree from the University of Kentucky in Natural Resource Conservation.

After a short stint with Kentucky Vehicle Enforcement, Conservation Officer Doug Detherage returned to KDFWR effective July 1st. Doug began his first stint with KDFWR Law Enforcement Division January 1, 2002. Before LE he worked in the Engineering Division.

He is assigned to Shelby County.

a net gain in aquatic habitat.

KDFWR conducts stream restoration projects on private and public lands statewide. Bringing our resources together in cooperation with private landowners allows us to find common ground where working lands, aquatic habitat, and clean water can coexist.

Rube nails another one

Captain Doc Hodges received a request for canine assistance from Kentucky State Police Detective Leonard S. Smith of Post 2 in Madisonville on June 15, to help look for a murder weapon that was used in a Princeton double homicide along 2 ½ miles of Caldwell County roadway.

Hodges hit the road with his Labrador, Rube, and immediately sought help from conservation officers canine units Daniel Richardson, Marcus Bowling and Scott McIntosh, and a Lexington-based BATF canine unit.

Kentucky State Police (KSP) units had already searched a large highway with no results and had reason to suspect a weapon might have been discarded along a 2 ½-mile stretch of the smaller Old Wilson Warehouse Road a few miles north of Princeton.

They began their search about 3 p.m. Temperatures were in the 90s with high humidity and the dog handlers decided to protect their dogs by working in 250-yard segments, one on each side of the road. Hodges and the BATF agent took the first duty.

"We hadn't quite gone 100 yards yet when I saw a small pond off in the woods," said Hodges. "I worked toward it to see if there were foot prints around it, and then on the way back out, Rube perked up. He winded it from about 20 feet and we found an SKS rifle about 20-25 feet off the roadway in the taller weeded area. It could not be seen from the road.

"We really got lucky to find it that quick," said Hodges. "KSP and the local officers were really thankful for our help. This probably made their case."

Zalla graduates DOCJT's Academy of Police Supervision



KDFWR Conservation Officer Sergeant Brett P. Zalla was among the 20 Kentucky law enforcement officers to graduate the class. Zalla is the first Law Enforcement Division supervisor to attend the course.

The three week course offers instruction to officers who hold supervisory positions within their departments and covers such topics as ethics, integrity and leadership. The course uses the well known Situational Leadership curriculum for instruction in various styles of being a good leader/manager/supervisor.

All KDFWR Law Enforcement Division supervisors will be attending either this three week course or other supervisory

related courses as part of their mandated, yearly recertification training.

Law enforcement officers from 14 agencies across the commonwealth were recognized at a graduation ceremony Friday, June 29, 2007, for completing the Kentucky Department of Criminal Justice Training's Academy of Police Supervision (APS).

APS, also called the sergeant's academy, is a three-week, 120-hour training program targeted for newly promoted sergeants or officers who are on their agency's promotion list to become sergeants.

Today's graduating class was the 22nd to complete APS since the program began in 2003.

While in APS, students participate in classes focusing on the role of a supervisor, as well as leadership, resolving conflict, managing diversity, monitoring officer performance, professional image, legal issues for supervisors, ethics, interpersonal communication, effective written communication, making decisions, solving problems, managing critical incidents, public speaking, emotional survival, budgeting, media relations and others.

The program includes reading and writ-

ing assignments and scenario-based exercises designed to enhance the students' ability to perform at the supervisor level in their agencies. APS is hands-on, with as much skill demonstration as classroom work.

KDFWR Law Enforcement Director Col. Robert Milligan was the guest speaker at the ceremony.

"As leaders, one of your most important duties is driving change," Milligan told the officers. Leadership involves "calculated, intelligent risk taking," as well as the ability to challenge beliefs and traditions, he said.

Law enforcement leaders need to have vision - to be able to think beyond the present to set the direction for the future at their agencies, Milligan said.

APS is a stepping stone to the Department of Criminal Justice Training's Criminal Justice Executive Development program, which is a five-week advanced leadership course offered once a year for supervisors at Kentucky's small and medium-size law enforcement agencies. Potential CJED students must rank sergeant or above and be selected by a committee to take part in the course.

We've been "slimed"

A new invasive algae species was spotted in Kentucky recently.

Didymosphenia geminata, or "didymo", is a colonial diatom that was found in the Cumberland River below Lake Cumberland during routine trout electrofishing by the Lake Fisheries Research section in early June.

This algae produces extracellular stalks that are many times larger than the diatom cell itself. These massive colonies of stalked diatoms can result in the algae covering huge expanses of the streambed.

This is what appears to be happening on the Cumberland tailwater. The algae, also colorfully called "rock snot", appears as dirty white to brown masses covering rocks or gravel on the river bottom. Visually it may appear slimy, but it actually feels like wet cotton or wool to the touch.

The combination of the lowering of Lake Cumberland for dam repairs and the continuing drought have resulted in extremely low flow conditions in the Cumberland tailwater, which are likely favoring the intensity of the infestation.

Ecological ramifications as yet are not fully known. Several other state fish and game agencies have been dealing with didymo in their trout tailwaters for several years...most notably the White River



in Arkansas and the South Holston and Clinch Rivers in Tennessee.

A Tennessee Wildlife Resources Agency biologist who works with trout in east Tennessee reports no detectable negative effect on the trout population or the macroinvertebrates. The most immediate effect will be the inconvenience that didymo poses to anglers.

Any lure or fly that comes in contact with the bottom will be fouled with bits of the algae. Masses of the stuff are also constantly breaking loose and then floating downstream on the surface, so there will be headaches for anglers fishing surface presentations as well.

There are no currently known controls for didymo feasible for wide-scale application on rivers.

We hope a return to more normal flows sometime in the future will reduce the intensity of this nuisance algae.

Oh, the things we Google

By Charlie Baglan

The list includes music videos, previews of upcoming movies, Paris Hilton being released from jail and more. The choices are boggling. If someone's thunk it or taped it, YouTube.com has it.

Now, it has "Kentucky Afield" TV. The famed website, once known as more of a cinema for cell phone cameras and home movies, has grown to boast 6.1 million videos. A couple dozen of that growing number are segments from "Kentucky Afield." More on that list in a moment.

First, the burning question: Why would such a conservative government office like the Kentucky Department of Fish and Wildlife ally itself with such a geeky internet craze? Answer: Because people watch. YouTube is nothing less than an online phenomenon and it's not just I-pod wearing seventh graders peering in, it's the world.

"Truth is, it all sort of happened by accident," reveals a stunned Brian Voland, associate producer for the show. "One of our regular TV viewers noticed a friend on a goose hunt we aired last winter. Wanting his buddy to see it, he recorded it and uploaded it to YouTube.

We weren't aware until we plugged "Kentucky Afield" into the search box one day out of curiosity. We not only found our segment, but that it had been viewed more than 13,000 times!"

YouTube.com is a public relations tool that cannot be denied. With half of its registered users under 20 years old, this could help bring the outdoors to a new and younger audience. It may assist in re-connecting with others who are now busy working adults.

This site provides conservation practices in Kentucky with a global reach. With the variety of topics we're

See "Google," page 6.

"Google," continued

presenting, we hope to drive more people to our own website, our show, magazine, camps, to our woods and to our waters.

The opportunity is there, as well, for anyone to purchase a license or full-length DVDs. Still, to watch, the YouTube user must initiate the search. When they do, here is some of what's waiting:

- The Story of Doug Travis
- Wildlife Artist Rick Hill
- Cogan's Woods
- Hybrid Fishing Under the Lights
- Control Burn on Wildlife Management Areas
- State Record Fish
- Elk Hunting
- Deer Processing
- Father's Day Fishing ...and more

Note, just like fishing, YouTube has size limits. For example, posted videos must be less than ten minutes, ruling out posting complete shows. Fact is, some of our clips are less than two minutes and some just 30 seconds. These are advertisements and vignettes to whet your appetite.

"Kentucky Afield" TV Executive Producer Scott Moore says, "We've been expanding for a year to DVD sales, cable and commercial television stations in addition to our weekend schedule on KET.

"YouTube is just another outlet to reach people who love the outdoors. This time; it's worldwide and it's absolutely free."

Click here to visit www.youtube.com. There is no fee or registration required.

Notice: The Kentucky Department of Fish and Wildlife supports parental guidance when browsing this site or any search query.



Information Center folks get out of the office and onto the range

KDFWR Information Center personnel spend their days taking phone calls about every topic under the sun.

There is no substitute for outdoor experience to help answer these questions from the public.

Hunter Education Supervisor Bill Balda recently took a group of Information Center personnel and others from the Information & Education Division to the Kleber WMA shooting range in Franklin County to give them hands-on experience with .22 caliber rifles and handguns.

"Firearms questions are difficult for me, because I feel like I can't answer them," said Information Center employee Tia Edwards. "I've been told this stuff before, but actually doing it really made the lights go on. I know what people are talking about now."

One question the public often asks references the number of rounds they are allowed to have in their rifle for deer hunting. Balda brought along a semiautomatic

.22, which helped illustrate the 11-round maximum regulation. "I know what it means now, that you are allowed 10 rounds in the magazine and one in the chamber," said Edwards.

New Information Center employee Tanya Wilson also found the experience helpful. "I learned a lot about pistols," Wilson said. "I'd never shot one before, and I didn't realize people hunted with them."

Channing Mitchell, who joined the department in June to assist Michael Gray with marketing, often helps the Information Center on the phones. The shooting practice helped her overcome her fear of guns. "I guess you're more afraid of the unknown," said Mitchell. "This showed me there was nothing to be afraid of."

Venita Bright, coordinator of the Kentucky AWAKE website, and Information and Education Division Secretary Susan Saufley also joined in for some shooting practice.