

Fish Tales Newsletter

West Virginia's Aquaculture Newsletter is produced to help inform, educate, and update those interested in producing quality aquatic products, in a sustainable manner, for the recreational and food fish markets.

Trout Technology

Imagine a trout that has the ability to use natural growth hormones so efficiently that it grows to over 6 pounds in as little as 16 months. The "trick" to this improved growth rate is that a gene from another fish is incorporated into the trout (and salmon) so that the same level of growth hormone results in growth rates nearly three times faster than any non-transgenic trout.

You can stop imagining now. On Prince Edward Island, in Canada, a company called **Aqua Bounty Technologies** has been conducting genetic research on trout and salmon for nearly two decades. The company has not only succeeded in getting this huge increase in growth rate, but more importantly the trait is inherited by future generations of fish. Aqua Bounty hopes to sell the improved fish and fingerlings to interested commercial operations.

Don't hold your breath. As you might have guessed, there are regulatory and environmental issues that have yet to be defined before even one of these transgenic (a gene from another animal) fish can be used for commercial production in the U.S. Escapement and allergic reactions are only two of the problems that need to be resolved before this new technology will find its way into the human food chain.

(see **Aqua Bounty** on page 2)



Farmer Profile: Andrew Zetts

From deep in the Carpathian Mountains, a little more than a century ago, a man decided to leave his homeland and began a long journey that ended in Pennsylvania. He bought land in 1900 and began a carp farm. At that time it was common to transport fish in barrels and feed trout to the pigs. Two generations later this man's grandson decided he would follow in his footsteps by buying 72 acres of land in Berkeley County, W.Va. and dig a few ponds to raise fish.

Today, **Andrew Zetts** has the largest fee fishing business in West Virginia and he sells over 20 varieties of fish for stocking ponds and lakes. In the photo above, Andy (center) is holding a large flathead catfish that was caught in one of his fee fishing ponds, then released again. For the past 26 years Andy has been raising fish from his 50 some production ponds in Inwood, W.Va.

Like most farmers, Andrew enjoys the lifestyle. The development around his farm is threatening his water source, and as land prices continue to rise he finds himself with purchase offers for a farm that is not even for sale. The most profitable species, according to Andy, are the carp and catfish. This is mostly due to the fishing tournaments that serve as an outdoor alternative to slot machines and dog tracks. The ponds are open from March to October. (contact Andy at 304-229-3654)

Successful Fish Rearing Cooperative in Pennsylvania

Our neighbors to the north have an envious arrangement. The Pennsylvania Fish and Boating Commission (PFBC) is the agency responsible for the management and protection of aquatic resources in Pennsylvania. The Commission has developed a tremendous cooperative that, according to the 2004-2005 annual report, sponsored over 170 volunteer nursery units that resulted in over one million additional fish stocked for recreational fishing.

Nearly half of that total are brook trout (510,200), with 474,750 rainbows, 212,100 browns, and 27,940 golden or palomino trout. The trout average 11.2 inches in length, are just over one year old and are stocked into public waters each year. The state run hatchery system produces trout averaging 7 inches.

The cooperative nursery unit program began back in 1965 when **Bob Brown** was hired to help get the project off the ground. In 2005 an incredible 180,000 volunteer man-hours were recorded by the various cooperatives. **Cecil Houser** is the supervisor of the co-op nursery unit and he directs the two others for the 400 plus inspections that are made every year.

The PFBC supplies these co-ops with fingerlings every fall. There are now three full time fish specialists that inspect each co-op or club twice per year. Most of the inspections are routine. During the summer these specialists become fish doctors by diagnosing disease and helping to treat sick fish. About 20% of the inspections are due to emergencies, are construction related, or are for prospective members.

Each club can apply for up to \$3,000 to make improvements to the facility but that money cannot be used to pay for feed or electricity. Preference is given to those with a 1:1 matching funds. Applications are approved by the commission and every other year seminars are held to show off the improvements that were made at many of the clubs. This provides an incentive to others to apply for their own improvements.



HB 4678 Dies a Sad Death

As mentioned in our last issue, House Bill 4678 was designed to change the legal status of fish manure from industrial waste to an agricultural waste. Unfortunately the bill did not advance for final approval by the Senate. This important issue will need to be addressed during the 2007 legislative session.

Aqua Bounty

(from page 1)

Regardless of the hurdles that must be overcome, the U.S. Food and Drug Administration is presently reviewing this new product under the Food, Drug and Cosmetic Act. This means it will be subjected to the highest of standards of safety before any approval will be granted.

The United States is the largest market for Canadian aquaculture products. Canada has more business friendly regulations than the U.S. concerning genetic research. That is why the trout and salmon research has been conducted in Canadian territory and not in the U.S. For more information visit the company web site: www.aquabounty.com

Did YOU KNOW?

Two one-day pond workshops will be held on June 23 and 24 in Wheeling and Moundsville. For more info. call (304) 843-1170.

Grading Fish Saves Money

How can the separation of 2 inch fish from 3 inch fish save you money? In many ways. Trout farmers routinely grade fingerlings to prevent cannibalism, which increases survival, and improves production. By removing the "hogs" from the population everyone gets better access to the feed, resulting in better growth. This will have a positive impact when harvesting fish, resulting in fewer sub-marketable fish and less labor in separating the undersized fish from the "sellers". Smooth vertical bars work well as graders in most tanks because the fish handling is kept to a minimum, resulting in less stress for the fish as well as the farmer.

Trout Lodge and Angler's Resort has a new owner.

The beautiful property (photo) located in Lindside, W.Va. that was initially built in the 1940's as a private fishing club, was sold last month to **Luis Marmol**.



The previous owner and manager, **Scott Ryan**, rebuilt the facility over the past decade from a state of disrepair. Scott will be moving to Virginia, just across the border, in order for his kids to attend one of the higher education universities in that state. Luis plans to continue to produce trout and expand the marketing and production levels. Good luck to both Scott and Luis.



WVAA Elects a new Board

The West Virginia Aquaculture Association held a meeting to elect new board members recently which resulted in the following positions being filled.

President: **Jon Browning**
Vice President: **Paul Richards**
Secretary: **Rob Nichols**
Treasurer: **Ken Semmens**

Congratulations to all!

Simpson Creek Comes Full Circle

Mayf Nutter, musician and actor originally from Bridgeport, wrote and recorded a hit song years ago titled "Simpson Creek". In the song he sang, "Simpson Creek won't ever run clean again, sulfur water runs red where the big fish used to swim." Now the creek has run pretty much full circle since trout are now swimming in what used to be "sulfur water." When contacted by locals, Mr. Nutter said "Congratulations to you on all the good work you are doing for my hometown area."

750 pounds of rainbow trout were stocked along a nearly 2 mile section of Simpson Creek starting near Bridgeport Fire Department and continuing through Bridgeport City Park, in Harrison County, W.Va.

Iron laden water from various mining operations in Harrison County has a negative impact on the local fishing. Simpson Creek is just one of many sites that are slowly returning to a condition where trout can be stocked to provide a successful recreational experience.

Visitors are looking for something to do while they are in Bridgeport and Clarksburg, and hotels are able to offer packages that include fly fishing instruction and guided trips both on Simpson Creek and into the mountains. It also is a fantastic opportunity for local residents to stream fish for trout without making a trip into the mountains.

Just a few miles from here another effort is underway to treat a mine drainage loaded with iron. **Lou Schmidt**, who works as Project Manager for the WV Division of Environmental Protection, is working to install a low maintenance iron removal device, without using any chemicals, to improve the stream so that a small trout hatchery can use the cleaned water after the iron is precipitated out.

By treating the larger flows, some watersheds can be improved to the point where fish can survive once again where sulfur water had previously choked the higher quality fish out of the system. Efforts are underway to find funding for only the electrical costs needed to treat the water. This is estimated to cost less than \$8,000 per year. Perhaps this will spur Mayf Nutter to write a new verse for the Simpson Creek hit. One that will speak about tangled lines and tying flies, if you know what I mean.

Fish for Stocking

Bass, Bluegill, Yellow perch, Channel Cats,
Koi, Grass Carp, Fathead minnows, & Rainbow trout.
Delivery Available.
Rainbowhead Farms
Mike Nardella
1-800-498-9260 or 304-288-5402

Fish for pond stocking. Lowest prices in area.
Koi, Grass carp, Bass, bluegills, goldfish, catfish,
bullfrogs. 304-548-7117

We are encouraging contributions to Fishtales newsletter by W.Va. residents. If you are interested in contributing, please contact Dan Miller at dmille31@wvu.edu or call 304-293-4832, ext. 4465. The deadline for the next issue of Fishtales is Sept. 1, 2006.

This publication is available in a printable format, on the web at:
<http://www.wvu.edu/~agexten/aquaculture/newsletter.htm>

Programs and activities offered by West Virginia University Extension Service are available to all persons without regard to race, color, sex, disability, religion, age, veteran status, political beliefs, sexual orientation, national origin, and marital or family status. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Dept. of Agriculture. Director, Cooperative Extension Service, West Virginia University.