

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.

Farmer Profile

This is a new addition to the newsletter that focuses on an individual involved in the aquaculture industry in our great state. **Rodney Kiser** took the photo of Steve (below) and visited his farm recently. Rodney will continue to provide this kind of information for *Fish Tales Newsletter* so that we can get to know each other a little better.



Steve Haines (above) is the owner/operator of **Flowing Springs Farm** in Hampshire County. Steve raises rainbow and brook trout in raceways fed by an 800gpm spring. Steve sells trout, 6 inches and up, can live haul up to 400 pounds, and produces 40,000 pounds annually. Steve has been involved with aquaculture since 1979. If you are interested in purchasing fish or production advice, you can contact Steve at:

Flowing Springs Farm
PO Box 92
Delray WV 26714

Phone: 304-496-1028
E-mail: fsf@citilink.net

Flowing Springs Farm is located in Hampshire County just off State Route 29 between Delray and Rio.

Cheat Mountain Trout Company on the Move

John Fitzgerald, owner and operator of Cheat Mountain Trout Co., has recently built a new concrete raceway system in Pocahontas County. John is leasing a 600+ gpm water source for the new operation and has stocked 80,000 fingerlings into the system already. The quality raceways, as seen in the photo below, are made from reinforced concrete measuring 60 feet long and 6 feet wide. John makes his living pouring concrete so the high quality of the raceway construction is no surprise. Previously, John was sharing a different spring water source in Pocahontas County with Morgan Sheets. Both men were raising rainbow trout and marketing their fish in the recreational market.

Cheat Mountain Trout Co.'s new concrete raceways:
by Rodney Kiser



Did YOU KNOW?

CLEAR WATER

Clear water usually means water that is low in productivity. With more garden ponds being constructed for aesthetic reasons, however, it is common to hear pond owners say they want clear water to see the fish, but have difficulty getting the pond clear. Productivity is related to the amount of nutrients in the water. Specifically, the less phosphorus in the water, the less aquatic plant growth. Phosphorus commonly enters the water from: SEDIMENT CYCLING or WATERSHED RUNOFF (lawn fertilizer, septic systems) or POINT SOURCE (fish food). Treating ponds with alum (aluminum sulfate) will bind the phosphorus in the water and remove it as an available nutrient by precipitating it into the sediment. Alum will reduce alkalinity in the water so be sure you have at least 50ppm alkalinity to begin with. Alum is best applied as a slurry over the surface of the pond. (See SRAC pub. # 460.)

SUPERSATURATION

An excess of dissolved gasses in water (supersaturation) can cause massive fish kills without much evidence that supersaturation of gasses was the cause. For this reason, it is helpful to know what causes supersaturation. Causes: algal blooms, rapid increase in temperature, an air leak with pumping, dam spillways, and pumping well water.



New Fish Processing Plant in Man, W.Va.

Just a few miles down the road from the Arctic char production farm, there is a brand new fish processing plant. The growth of West Virginia Aqua, LLC has led to the new investment in order to increase product quality control. The processing facility, located under the new bridge in Man, W.Va., is focused on processing the arctic char production coming from the nearby recirculating facility.

In the last issue of *Fish tales Newsletter*, **Jonathon Browning** told us that construction was progressing well at the new plant. He now says that a pin bone machine is installed along with a fillet machine. There was a problem with the gutting machine, which delayed the opening of the plant. Jonathon expects that the processing plant will become operational in October.

New Federal Effluent Guidelines

Some producers have asked about the new aquaculture regulations being implemented by the Environmental Protection Agency. For the most accurate and updated information, please visit: <http://www.epa.gov/guide/aquaculture/ea/ea.htm> This Web site will give you more details than you may care to read about. Appendix C discusses production levels and basically states that the new regulations will apply to farmers producing 100,000 pounds/year or more. The proposed production threshold of 100,000 pounds/year or more was based on an analysis of economic impacts at the farm. WVDEP requires an NPDES permit if more than 20,000 pounds is produced at a site in a year.

Each state regulatory agency is required to enforce the federal regulations when they become law. However, the state can require even more strict environmental regulations with regards to solid waste and nutrient discharges. WVDEP has drafted new Concentrated Animal Feeding Operation (CAFO) regulations. WVDEP's Bob Bates said CAFO regulations do not apply to fish farms.

Regardless of the environmental regulations, it is in the best interest of every farmer to develop a plan for how he or she will deal with solid waste and nutrient discharges. Best management plans (BMPs) have shown how a fish farmer can actually lower the cost of production simply by choosing a quality feed and feeding it properly to the fish. This in itself can reduce waste and save money. It requires a few calculations and an experienced eye if there are large swings in water temperatures. Do yourself a favor and take the time to develop a waste



W.Va. Dept. of Agriculture Fish Wagon at Wine and Jazz Festival

The beautiful weather on Sept. 11-12 resulted in large crowds at the 11th annual West Virginia Wine and Jazz Festival held at Camp Muffly, just south of Morgantown. This was the first year the Fish Wagon attended the event. Based on the reaction of the 200-plus people who tried the **fresh rainbow trout cakes**, the new product was well received. Many people asked where the trout cakes could be found after the festival. For now, the only place they are on the menu regularly is at **The Purple Fiddle Café** in Thomas. The fish cakes are the result of **Canaan Valley Institute's** product development research done by **Mary Beth Gwyer**. This same group helped provide a gourmet lunch for the Aquaculture Forum participants earlier this year.

The Fish Wagon is available to those with a Food Service Workers Permit and a commitment to sell West Virginia fish products. The fish wagon was paid for (by W.Va. taxpayers) with a grant from the West Virginia Department of Agriculture. It has been at the State Fair for the last two years, where the Monroe County FFA has sold West Virginia raised and processed trout sandwiches and other aquacultured products to fair-goers.

During the upcoming year, West Virginia University and Gourmet Central will be collaborating on product development using aquacultured products. There is an effort to get the Fish Wagon at more festivals and even WVU home football games if the products are well received by the public. The Fish Wagon is a resource that can be used to promote the sale of value-added fish products. For fish farmers, that could translate into a slightly higher price for their product.

Ken's Corner

Perhaps you have heard of the Aquaculture Food and Marketing Development Project here at WVU. You are receiving this newsletter through a grant we receive from the federal government to fund this project. While there are many questions that can be asked by WVU faculty, we have chosen to emphasize work that may lead to economic development in two different ways. The first research focus is development of the mine water resource for commercial production of coldwater fish like trout or char. The second research focus is utilization of farm-raised fish for recreation. Faculty from Resource Economics, Marketing, Animal Science, Food Science, Engineering, Recreation and Parks, and Extension are working together to develop aquaculture in West Virginia. The project Web site (<http://www.caf.wvu.edu/afmdp/>) features products of this research. Two pilot scale raceway systems are in operation; one in Monongalia County utilizes treated mine water, and the other in Hardy County utilizes spring water. WVU Extension now has three people to reach out to existing and potential fish farmers. Dan Miller works mostly with mine water, but also handles questions regarding effluents, shrimp, and tropical fish. Rodney Kiser, new to Extension as of July 1, will focus on the utilization of farm-raised fish for aquaculture and processing. His experience growing up on a trout farm in Virginia is a great asset. I manage the program; develop facilities, workshops, and publications; respond to inquiries, etc. We are here to help.

The third annual prawn harvest occurred in Harrison County on Sept. 24. **Mike Nardella**, a board member of the West Virginia Aquaculture Association, has successfully grown the freshwater shrimp since 2002 in his farm ponds.

NOTE: John Fitzgerald suffered a heart attack in late August. He is on the road to recovery at press time. From all of us in the fish business, we wish John a full recovery as soon as possible.

We are encouraging contributions to Fishtales newsletter by W.Va. residents. If 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 Dec. 30.

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

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