

# 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.

## Shrimp Gumbo Anyone?



### Freshwater Shrimp Harvest Goes Well

Mike Nardella, above, shows some of his freshly harvested shrimp, taken from his Harrison county pond, shortly before selling it to clients who drove to his farm to get them straight from the water. Mike harvested his two ponds in early October to get them out before the pond temperatures dropped too low. He stocked his ponds in June, and four months later, he had produced 450 pounds, some of which ended up going to Stonewall Jackson State Park, Tamarack, and the Canaan Valley Institute. Marketing is an important factor in the success of raising freshwater shrimp.

The short growing season makes it a challenge to get the majority of the shrimp population large enough to bring top dollar. Mike is in the process of preparing an indoor heated tank that will use recirculating water. This approach will allow him to buy the post-larvae (baby shrimp) in February, stock them into his indoor tank, see to it that they are well cared for, and in June, when the outdoor water temperatures are warm enough, he will have a jump-start on the growing season. As long as these shrimp remain a novelty item, they'll bring good prices. Good luck Mike!

## Ken's Corner

Aquaculture is an important part of the recreational fishing industry in West Virginia. About half of all fee-fishing businesses do not grow the fish they need. They are purchased from growers or fish distributors around the state. Fishing clubs, resorts, municipalities and private landowners also purchase fish to stock ponds, lakes and streams. The West Virginia Division of Natural Resources operates seven hatcheries in the state and stocks more than 700,000 pounds of trout annually into public waters. All together over a million pounds of fish are distributed in West Virginia for the recreational fishing industry. Virtually all of them are farm grown.

This year's Aquaculture Forum will focus on the use of farm-raised fish in recreation. Cyril Logar, professor of marketing at WVU, will present results from a survey of anglers who hold West Virginia fishing licenses. The idea is to find out what kind of experience W.Va. anglers are looking for and to increase opportunity to meet that demand.

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Aquaculture products comprise a significant portion of five (\*) of the top ten seafood products eaten in the United States today. Catfish and clams are the only ones that are primarily produced domestically. The successful culture of seafood products has brought prices down to where more people can afford to buy them. Restaurants account for nearly 70% of all seafood consumed in the United States.

### SEAFOOD CONSUMED IN THE UNITED STATES

2001 data from Seafood International

*Shrimp	3.4 lb./person/yr
Tuna	2.9 lb./yr
*Salmon	2.02 lb./yr.
Pollock	1.2 lb./yr.
*Catfish	1.15 lb./yr.
Cod	0.56 lb./yr.
*Clams	0.46 lb./yr.
Crabs	0.44 lb./yr.
Flatfish	0.39 lb./yr.
*Tilapia	0.35 lb./yr.

China, Japan and the United States are the world's three largest consumers of all types of seafood. Historically, seafood consumption has been very sensitive to economic factors. With declining prices, that relationship may weaken.

## United States Trout Farmers Association meets in West Virginia

The USTFA annual meeting was held in Shepherdstown, W.Va., Oct. 16-18, 2003. The National Conservation Training Center was a great spot for the meeting because it is located along a country road in the extreme eastern part of our state. Many artifacts, photos, and maps, dealing with over a century of this country's natural resource policies, and the people who were leaders in this field, are scattered throughout the many buildings making up this large complex.

**Dr. Jeff Tinsaw**, as president of the organization, moderated much of the meeting and provided useful insight into the various issues relating to production and marketing of rainbow trout. With nearly 90% of U.S. production occurring in the Northwest, we tend to rely on reports from Idaho concerning waste management issues, production problems, and price changes. Prices are down out there, and the waste issues continue to feel like a dark cloud over the industry's head. **Gary Fornshell** remains one of the most active members when it comes to regulatory issues. He let us know how the EPA is thinking as they develop and begin to implement a national plan to reduce waste from aquaculture operations.

Our own **Dr. Ken Semmens** presented a good overview of what West Virginia University is doing and showed pictures of a number of new sites that will be raising trout next year.

Considerable time was spent discussing just how the organization could or should promote recreational fishing as a means to increase demand for this healthy food. Some erroneous data about toxins in trout was used out of context in a national publication, and the consequences of that blunder have had a negative impact on the use of trout in a healthy diet.

An interesting meeting took place a few days before the USTFA meetings. **Scott Ryan**, manager of **Trout Lodge and Angler's Resort**, was host to **Bill Townsend of Trout Lodge Inc.**, in Washington State. In the late 1990s, Scott got a letter from a lawyer representing Trout Lodge Inc., the Washington-based largest trout egg producer in the world. It seems there was concern about the use of the "Trout Lodge" name. Scott barely even knew of this other Trout Lodge business, but he took the letter to the owner and "things were worked out with a reasonable solution."

Bill was aware of this ruckus years ago, and he came to southern West Virginia looking for potential sites where Trout Lodge Inc. might expand, under the right conditions. Bill was surprised to take three flights, drive eight hours, and find himself in front of a truck that read "Trout Lodge." He thought it was a bad joke on him.

## Did YOU KNOW?

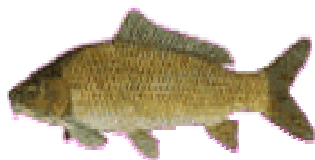
The West Virginia Aquaculture Forum will be held on Saturday, Jan. 17, 2004, at WVU Jackson's Mill. Take Exit #105 from I-79 at Jane Lew, W.Va. To register, call 304-293-6131 ext.4231

### Southern Secret Crayfish Creole Recipe



¾ pounds uncooked peeled crayfish  
½ cup each of diced green pepper,  
onion, and celery.  
2 cloves of fresh minced garlic  
1 pound of diced red tomatoes  
8 ounces of canned tomato sauce  
3 tablespoons of sesame oil  
2 teaspoons of cornstarch  
2 pinches of salt  
1 spurt of sugar  
1 dollop of chili powder  
1 splash of Worcestershire sauce  
1 dash of hot pepper sauce  
1 shot of red or white wine

Sauté garlic, onion, and celery in hot oil until tender. Add tomatoes, and everything else except the cornstarch, green pepper, and shrimp. Simmer uncovered for 45 minutes. Mix 1 tablespoon of water with the cornstarch, and stir into the sauce. Continue stirring until the sauce thickens and bubbles. Stir in the green pepper and shrimp. Cover and simmer for five minutes. Serve over rice with your favorite wine.



### Got Any Barley?

Barley straw has been shown to be an effective product to control pond algae. Place one pound of loose barley straw (in a net bag) for every 2000 square feet of surface area (one kilo/400m<sup>2</sup>) into a shallow area. It works best with sunlight and some water movement. As the barley decomposes, homoc acids are produced, which kill algae. Decomposition is a slow process that lasts most of the summer. Moving the bags around will help if there is poor water movement in the pond. It will not harm plants or fish.

## Bluefield State College Aquaculture Program

**Dr. Julie Delabbio**, associate professor of commercial aquaculture at Bluefield State College, is directing the only aquaculture degree offered by West Virginia's higher education institutions.

The two-year program is a practical approach to training future aquaculturists in the state. Although Alabama, Washington, Florida, and Rhode Island have a long history of training students in aquaculture, the Bluefield State program is a well-organized series of classes and practical experiences allowing West Virginians to pursue their interest in aquaculture without having to spend a small fortune.



The courses deal with water quality, nutrition, feeding, fish physiology, and instrumentation, that is, how to use some of the devices used by a fish farmer.

Researchers at West Virginia University have used some of Julie's aquaculture students to help collect field data from bioassay projects in the southern part of the state.

For those interested in this quality program, Julie can be contacted at Bluefield State College, 219 Rock St. Bluefield, WV 24701.

Phone: 304-327-4291  
Fax: 304-327-4072

**Ken's Column (continued from page 1)**

Public agencies may have done this for their programs, but it hasn't been done for the private sector. We have a beautiful state relatively close to large populations. Given abundant water sources, there should be many different ways private businesses and landowners can use live fish to enhance satisfaction of both visitors and residents.

You will hear me state over and over that the business of aquaculture is not about raising fish. It is about people selling fish to other people at a profit. You may believe that the West Virginia Aquaculture Association is only for people who grow fish. I don't agree. It seems to me that anyone who serves the grower, and anyone served by the grower should have an interest in this new industry. It is easy to focus on the fish and leave people out of the picture.

I will look for you at the Aquaculture Forum.

We are looking for articles by W.Va. producers. Please contact Dan Miller at 304-293-4832, ext. 4465.  
We encourage everyone to become active in developing the aquaculture industry in West Virginia.