

Tilapia, Important Fish

Tilapia is the most important food fish in the world. It is delicious, fast-growing and able to withstand poor water quality conditions. But in North Carolina, tilapia has another use. At least two large industries, Carolina Power and Light Company

Some states allow introduction of another fish, grass carp, for algae and aquatic plant control. But grass carp can live for many years and grow very large in North Carolina. For that reason, it is illegal to bring them into our state. Policymakers are afraid the grass carp will compete with game fish for habitat or eat beneficial aquatic plants. For example, some aquatic vegetation is very important to ducks and geese. Unlike the grass carp, however, tilapia will not survive winters in North Carolina.

More than two dozen species of tilapia utilize the

By
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UNC Sea Grant



and Texasgulf Chemicals Corporation, are using tilapia to control vegetation. Consequently, the tilapia are paying big dividends.

Few people around here have ever heard of tilapia. They come from Africa and look a lot like bream. They can live in fresh or brackish water and withstand many conditions fatal to most fish. But, they cannot live in water colder than 50 degrees F. Their major source of food is algae.

Algae and aquatic plants can be a big problem for industries that regularly move large volumes of water. The Texasgulf phosphate mine in Beaufort County moves up to 60 million gallons of water per day through dewatering canals in order to strip mine phosphate. Algae and plants clog the canals and must be removed. That used to require expensive equipment and considerable labor. Now, Texasgulf stocks tilapia and saves \$15,000 to \$20,000 per year.

Carolina Power and Light Company uses tilapia to eliminate aquatic vegetation clogging intake screens at one of its electricity-generating plants. Sixty thousand fish were stocked at a cost of \$15,000. Almost one million dollars were saved in one year.

The same characteristics that make tilapia so attractive to large corporations should also appeal to private pond owners. Besides clogging water transport systems, algae can be unsightly and a hindrance to recreation.

various niches of the food chain. Some eat microscopic plankton, some eat filamentous algae and some will eat the tender shoots of rooted aquatic plants. But none of the species can survive below 50 degrees F for long periods of time. Because of this limited growing season, it is unlikely populations could get out of control. Thus, they offer a temporary management tool for seasonal peaks of nuisance vegetation.

Tilapia are a prolific species. They can reproduce rapidly, and even small tilapia are capable of breeding. Feeding the fish is relatively inexpensive because they don't require animal protein. For these reasons, fingerling tilapia for vegetation control should be relatively inexpensive. They can be purchased from a hatchery utilizing warm water, or a small percentate can be overwintered in warm water and allowed to begin reproducing in the spring. As the aquatic plants increase production, so should the fish.

Farmers will be interested to know that livestock or poultry manure can fertilize a pond to grow tilapia. The tilapia can then be used directly for feed or made into a fish meal. The fish have a high quality flesh, are extremely nutritious and are absolutely delicious. So, as tilapia become more familiar to people, they could become an important food fish. But for the time being, they are important to industries interested in controlling aquatic vegetation.

(Ecological aquaculture utilizing tilapia will be the topic of a future column.)

Computer Show

All the major computer manufacturers will present \$25-million worth of their equipment at the "Virginia-Carolina Computer Show & Office Equipment Exposition, April 23 to April 25 at the Pavilion in Virginia Beach.

Computers from Wang, Data General, Hewlett-Packard, Lanier, Radio Shack, Wanatabe, Heathkit, Texas Instruments, IBM, Vols, Raytheon, Dictaphone, Xerox, Atari, NCR and others will be on display and for sale - some at incredible bargain prices - at the show.

There will be 30,000 square feet of business and personal computers, word and data processors, telecommunications equipment, computer graphics, office machines, software systems, software consultants, computer supplies and accessories and video games.

The world's first and only rock n'roll robot band - the Nuclear Diode Robot Band - will perform throughout the three-day event. This computerized, four-piece band performs electro-pop, synthesized music through a whirring, blinking and flashing of mechanized NASA parts.

Show hours are 11 A.M. to 6 P.M. on Friday and Saturday, noon to 6 P.M. on Sunday. Admission is \$4 for adults and \$2 for children 12 years and under.

For further information contact Linda Roth, (202) 842-3470.

Pork consumption increased from 59.4 pounds per capita in 1977 to 73.5 pounds in 1980.



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COMET RICE	.55L
POT PIE MORT	.79E
103/.99	.79E
PRODUC	1.09E
16 OZ COKE	.00U
BT DEP	1.12H
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TOTAL	31.20

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GROCERY	1.61 L
NON-FOOD	1.99 L
PRODUCE	2.99 D
GROCERY	2.79 L
MEAT	4.27 L
NON-FOOD	.99 L
GROCERY	.69 D
GROCERY	2.39 L
GROCERY	1.39 L
PERISHBL	.31 L
103/1.00	.34 L
GROCERY	.69 L
GROCERY	1.10 L
GROCERY	.72 L
MEAT	1.89 L
GROCERY	.76 L
PERISHBL	.43 L
103/1.29	.89 L
PRODUCE	.59 L
PRODUCE	1.99 L
COKE PRODUCT	.60 H
BOTL DEP	34.34
SUBTOTAL	1.99 L
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