

Snails in Purchase area fish production ponds

I have received reports and have collected snails in local fish production ponds. In some instances, the ram's horn snails were identified, in addition to other species. Ram's horn snails are small (about the size of a dime, or smaller) and can be found in large numbers in shallow waters or on pond vegetation. All snails can be potential vectors of fish diseases. However, the Ram's horn snail carries the *Bolbophorus* trematode which infects catfish. Pelicans, the final host, eat infected fish and transfer the trematode from pond to pond via their feces. Snails contract the parasite and release the trematode to search for a fish host, which completes its life cycle.

I have not received reports of pelican sightings on Purchase area fish culture ponds, however they are active at night and may go un-noticed. Pelicans are reported to be very difficult to discourage once they have become accustomed to fishing in aquaculture ponds. In some states it's legal to kill a few pelicans by permit, but hazing and keeping them moving to other waters is the most practical means of control. I spotted dozens of white pelicans in addition to large flocks of cormorants on Lake Barkley during November of 2003. At least during the fall and winter, the birds are in the Four Rivers region.

Trematodes, better known as flukes to many, are parasitic. Infected fish feed poorly and may eventually starve. Unfortunately, noticeable mortality of catfish does not occur. Fish must be baited with feed into a small seine that cuts behind them while trapping them in the corner of a pond. Twenty to thirty fish should be examined for the parasites. Small raised, red or white spots appear on the tails of infected fish. Fish may remain infected for one year.

Ponds that have infected fish (not just the snails) should be treated with shoreline applications of hydrated lime or copper sulfate in a band 3 to 4 feet out from the bank. Dry hydrated lime can be applied at 80 lbs per 100 feet of shoreline, or as a slurry of 4.0 to 4.7 lbs of lime per gallon at a rate of 20 gallons per 100 feet of shoreline. Given the low alkalinities of many Purchase area ponds and its potential toxicity to fish, the use of copper sulfate should be evaluated on a case by case basis. The use of snail eating triploid black carp is illegal in Kentucky. Maintaining control of aquatic vegetation in shallow areas and along the shoreline is believed to help discourage the establishment of large snail populations. *Much of this information contained herein was obtained from articles published in the September 2004 issue of the Catfish Journal.*

Please contact the Graves County Extension office (270)247-2334 or my e mail fwynne@uky.edu if you have any questions. Forrest Wynne, State Extension Specialist for Aquaculture