

WATER POLLUTION

Fishing for pollution solutions

■ A Hungarian NGO hopes to solve pollution problems in hundreds of lakes in the Danube basin by removing a non-native species of carp that has upset the waters' ecological balance.

In the 1970s, the grass carp (*Ctenopharingodon idella*), an herbivorous fish from Asia, was introduced to Hungarian lakes for sport fishing and to clear beaches of reed grass. Unfortunately, the move had the unintended consequence of killing off important water-purifying plants in half of the 1,000 lakes where the fish was introduced. The loss of these plants compromised the water quality of half of these lakes, causing algae to bloom out of control and severely harming the natural reproduction of fish stocks.

The Tavirozsa Association of Environmental Protection and Nature Conservation launched a lake rehabilitation project with the support of the United Nations Development Programme's Global Environment Facility (UNDP/GEF) via the Danube Regional Project.

The group tested 10 chemical and physical parameters at 17 sites in three lakes near the town of Veresegyhaz in north-central Hungary. Hydrobiological assessments in two water bodies showed that heavy rains in April and May of 2006 led to significant increases in organic pollution due to the city's poorly contained and over-used sewerage system.

The seeping pollution threatened aquatic ecosystems as well as bathers, but health and environmental authorities failed to measure all the water-quality parameters required by law. Over the summer, Tavirozsa took its own measurements of algae and cyanobacteria chlorophyll and found counts to be four times the acceptable limits. After Tavirozsa submitted its report on the testing, the authorities started to analyse all the required parameters.

After the surveys, the grass carp were removed from a model area in co-operation with an angling association and local council. Rooted and floating native reed-grass species with high nutrient removal capacities (e.g. coontail) were collected from nearby lakes and manually planted in the model lake. Aside from filtering the water, these plants provide feeding and breeding habitat for several other fish species.

News of the project was printed in three local newspapers and posted on the NGO's website (<www.tavirozsa-egyesulet.hu>). Tavirozsa will produce a leaflet about the project and place an article in a nationwide fishing magazine.

The project's next phase will begin in 2007. As numerous lakes in the Danube Basin suffer from the same problem, Tavirozsa plans to educate other NGOs (including the Hungarian National Anglers' Association) about the project and will monitor effects of rehabilitation work.

FISH OUT OF WATER: Project team members purge alien grass carp from a Hungarian lake.



TAVIROZSA



ZOLTAN HAJDU

DOWN THE DRAINAGE: At left, the Mures River, a Danube tributary in Romania. In the centre, Zoltan Hajdu the Romanian NGO Focus Eco Centre, explains the ins and outs of river basin management, while at right, a field trip offers an up-close view of the river-cleansing reed beds.

For one thing, turnout at river basin committee meetings is typically quite low and, in practice, Romania's Water Authority ends up creating water policy itself, Hajdu said. The country activities and pilot projects were designed to address the gaps and improve conditions for participatory decision making through developing additional guidance materials (both for water officials and NGOs) and providing capacity building. There have been examples of more vital committees, according to REC project manager Orsolya Szalasi.

However, much work remains to be done. "Probably 80 percent of river basin committee members do not understand meeting discussions because they're too technical," said Hajdu. What's missing, he said, are fundamental discussions about what people want from their rivers — whether it be more fishing, cleaner swimming beaches, more accommodating shipping lanes or some other goal. The technical talk should be secondary, and best relegated to working groups focused on finding ways to implement the committee's decisions.

At the same time, people who live near rivers should understand basic approaches to issues like flood control and wastewater management.

"Most mayors think water concerns are isolated issues," Hajdu said. "But rivers are part of the life of their communities. They usually say 'just prevent floods' but they don't specify how to do that. The fact is, some types of agriculture need an occasional flood."

Ana Drapa, counsellor at the Water Department of Romania's Ministry of Environment and Water Management, agrees that river basin committees could work more effectively.

"As a ministry, we want to receive more information from the other members of the committees' stakeholders who are involved with water basin planning," Drapa said. "Local authorities need to be more proactively involved in this work. They need to know they have problems that they need to share with the river basin committees in order for the committees to be able to help them and find the appropriate solutions."

"The model of river basin committees is a step forward for Romania because it brings together representatives of all parties interested in water management," Drapa said. "That is something that did not happen in the past."

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