



# *The Commission's New* **HABITAT MANAGEMENT DIVISION**

by Linda Steiner

“Build it and they will come” isn’t just true of fictional ballparks. Build it and “they”—fish and other aquatic life—will be there.

That is the purpose of the Pennsylvania Fish & Boat Commission’s new Division of Habitat Management. The Division will help the Commission fulfill its mission of providing fishing and boating opportunities, by addressing the relationship between quality habitat and quality fishing, says R. Scott Carney, Division chief.

Although the Commission has been involved for decades in habitat improvement, this is the first time those programs and activities have been grouped under one division.

The Commission’s cooperative habitat improvement programs, Adopt-a-Stream and Adopt-a-Lake, were formerly in the Division of Environmental Services, enhancing and restoring waters so they host healthier ecosystems. In the new Habitat Management Division, the Adopt-a-Stream and Adopt-a-Lake programs have been enhanced, while other programs with similar goals have been added.

“Unbuild it and they will come” could be a watchword of the third program in the new Division.

The functions of improving fish passage and removing unnecessary dams were formerly in the Commission’s Division of Research. Now joined together, the Lake Habitat Section, Stream Habitat Section and Fish Passage Section are the heavy hitters of the Habitat Management Division. The trio has pennant-winning potential.

“Historically there has always been a relationship between quality habitat and quality fishing,” says Carney. “Through protection and enhancement of aquatic resources, the Commission has always been active, but now we’ll be more proactive.”



*Before: Livestock had full use of the stream corridor and vegetation was grazed low. No shading to the stream channel, many areas of stream bank erosion, little in-stream fish cover. A 2000 pre-project survey within this stretch turned up only 10 wild brown trout from 5 to 9 inches*

## **Outgrowth of the National Fish Habitat Initiative**

The emphasis on habitat comes as an outgrowth of the National Fish Habitat Initiative, in which Commission Executive Director Dr. Douglas Austen has been a principal player. Through Dr. Austen’s leadership and the new Division’s staff, the Commission is in the forefront, nationally, in restoring and enhancing aquatic habitats. And that translates to better fishing and stewardship of aquatic resources.

The new Division’s approach includes elements of



*After: Improvements included installing stream bank fencing and livestock crossings, planting native shrubs and trees to supplement the natural vegetative growth, and installing in-stream structures made of logs and stone to provide stability and aquatic habitat. A 2007 survey documented 168 wild brown trout from “young-of-the-year” fish to those over 13 inches.*

Photos courtesy of the Habitat Management Division

the National Fish Habitat Action Plan. The plan is a national investment strategy to make conservation dollars go further, by leveraging governmental and privately raised funds to build partnerships to fix fisheries problems. Here in Pennsylvania, the Habitat Management Division is taking the expertise of Commission professionals, identifying lakes and streams in need of habitat help, and employing various funding mechanisms to do the job.

## Publicly accessible waters

Similar in purpose and policy, the Division's Adopt-a-Lake and Adopt-a-Stream programs differ mainly in the habitat needs of still vs. flowing waters. In both, projects are initiated only on publicly accessible properties, either publicly owned or private but open to the public. The Division staff works with many cooperators and partners, says Carney, such as watershed groups, angling clubs, lake associations and state and federal agencies. For adopt-a-water projects, the Habitat Management Division provides assistance in determining needs, designs the enhancements, obtains permits and, with the help of the partnering group or agency, builds and installs the structures.

Types of installations might be wooden porcupine cribs that are sunk in a lake to provide fish spawning structure. Or they might be logs anchored and angled into a creek bank, backed by rocks, to narrow, speed up and redirect flow, creating a better stream environment. Up to \$2,000 is available from the Commission to groups doing adopt-a-water projects, which must be matched 1:1 by the cooperator in cash or volunteer time and effort.

"One thing we can offer," says Carney, "are extremely effective methods that afford an opportunity for partners to participate, and they're low-cost."

That's a consideration for small, local organizations, which are usually long on volunteerism but short on cash. These groups often rely on county conservation districts for guidance, and the new Habitat Management Division, says Carney, will build on the capacity of the districts by providing more information and technical assistance to them.

## Privately owned waters

Waters that aren't publicly owned or currently publicly accessible are also integral parts of a watershed, and the Division offers technical assistance to enhance stream and

lake habitats on private property. They provide advice and design work and explain permitting, but the Commission doesn't contribute financially from the Fish Fund or provide staff to perform the actual work, Carney says.

"This gives us the flexibility to work on some private properties, because we need to view our waterways as ecosystems," says Carney. "We can't simply go just where the public has access."

He says that funds for private landowner assistance come from federal funding, including the U.S. Fish & Wildlife Service, State Wildlife Grants and the Landowner Incentive Program. Working with private landowners also lets Commission personnel make contact and develop relationships, perhaps moving toward opening the water to fishing or acquiring easements.

## Staffing, money

Doing all that takes staff. The complement is currently 11 full-time and four part-time employees. Envisioned is a staff of 20.

Enhancing aquatic habitats takes money, too. "As we continue to develop as a Division, we're trying to get as much 'soft' money as possible to do the work," Carney says. Traditional funding has been "hard" dollars, such as that from the Sport Fish Restoration Fund (Dingell-Johnson) and fishing license sales. "Soft" money would come from grant sources, both public and private, such as grant pro-

grams administered by the National Fish and Wildlife Foundation, U.S. Fish & Wildlife Service, the National Oceanic and Atmospheric Administration, and others. Also important is Growing Grower funding, from the Pennsylvania departments of Environmental Protection and Conservation and Natural Resources. Although the Commission can't apply directly

for Growing Greener funds, its partner organizations can.

## Dam removal

Sometimes the major fix a stream needs is to remove an outdated dam or to install a fishway. The American shad comes to mind immediately, and that was Carney's former assignment, restoring historic runs by facilitating the fish's movement upstream past dams or by removing the barriers. Having a Fish Passage Section in the new Habitat Management Division is sensible, not just for shad, but for many



*Types of habitat structures might be wooden porcupine cribs that are sunk in a lake to provide fish spawning structure.*

fish whose natural movement patterns have been interrupted by blockages.

Many small dams in Pennsylvania are a legacy of a past economy based on water power. Some are several centuries old and many have deteriorated. Through the years, silt buildup behind breastworks has destroyed aquatic habitat and filled the original pool. It's no surprise that dam removal has come into its own in recent years. As an example, Carney cites old mill dams that no longer have a purpose.

"It's difficult to justify spending \$500,000 for a fishway," he says, "if the dam isn't likely to be there after the next high water event."

Dam removal is a template on how to fund other habitat projects, says Carney. More than 120 small dams have been removed statewide, with grant money generating about \$5 million in state and federal funding and from other sources. Some projects have been permitted through and accomplished with nonprofit organizations like American Rivers, which has a field office in Pennsylvania. American Rivers has leveraged several million dollars so far for dam removal in Pennsylvania.

"We've been working very closely with American Rivers and the Pennsylvania Department of Environmental Protection (DEP) in this effort," says Carney. "We can take the ability of nonprofits to apply for grants and help move the individual projects forward."

Pennsylvania leads the nation in dam removal for stream restoration. Carney says the public is now embracing the concept and understanding the need to remove obsolete flow obstructions, resulting in healthier streams and fisheries. The Habitat Management Division and partners are currently advancing about 60 projects with over 100 requests from dam owners for assistance.

## Where should we do what?

Who determines which waters are most in need of habitat work and which treatment method to use? Stepping up to the plate for that are the six regional habitat biologists the Commission is hiring. They will be grouped under the Regional Habitat Section and headquartered in the major watersheds: Upper Ohio and Lake Erie, the lower Ohio, the lower Susquehanna River, upper Susquehanna, North Branch of the Susquehanna, and the Delaware River.

Carney is enthusiastic about the role the regional habitat biologists will play. They will coordinate habitat projects at the local level, not only those benefiting fisheries, but also



*Turtle basking platforms are designed for painted turtles and redbellied turtles.*

reptiles and amphibians, species for which the Commission has oversight. The regional habitat biologists will identify priority needs and work with area fisheries managers, established groups, such as watershed associations and conservation/angling organizations, who have local knowledge of problem areas.

"A lot of these groups want to do good things,

but they don't have the capacity to do it by themselves or know where to begin," says Carney. "We'll help by doing the work necessary to get the project moving, including determining the best approach for watershed restoration, designing projects, getting the grants and permits, retaining contractors, project oversight and more."

## Needy habitats

Restoration needs differ from region to region, says Carney. In western Pennsylvania, acid mine drainage is a huge problem, while in the southcentral and southeast, agriculture and urbanization affect the health of aquatic habitats. As examples of what's being done, he points to recent projects in Centre County's Spring Creek Watershed. In the southeast, dams have been removed on Pennypack Creek and hickory shad restocked. In the northwest, projects have been completed on Fourmile Creek and other Lake Erie tributaries with steelhead runs.

In the Northcentral Region, the Kettle Creek Watershed is being worked on. In the southwest, there's the effort with DEP on the Stonycreek River and other streams, the partnership with Reliant Energy to fund habitat restoration, and coordinated efforts with the Loyalhanna Watershed Association. Soon, Commission web site users will be able to pick a watershed of interest and find information on habitat work there, says Carney.

The Habitat Management Division is currently involved with the Pennsylvania Department of Conservation and Natural Resources (DCNR) on comprehensive projects at four state park lakes: Glendale (Prince Gallitzin State Park), Pymatuning, Sayres (Bald Eagle State Park) and Nockamixon. These projects are pilots for future work. They will be funded by DCNR, the Wild Resource Conservation Fund and State Wildlife Grant funds provided by the Commission, says Carney.

The whole idea, says Carney, is that "we want to be the leaders. When people think of aquatic habitat restoration, we want them to think of the Commission. I don't think we were thought of that way in the past, and we're changing that." □

## Division of Habitat Management

### *Division Chief*

**R. Scott Carney**  
450 Robinson Lane  
Pleasant Gap, PA 16823  
814-359-5124

### *Lake Habitat Section*

**David F. Houser**  
Pleasant Gap State Fish Hatchery  
450 Robinson Lane  
Bellefonte, PA 16823-9620  
814-359-5219

### **Ben Page**

Pleasant Gap State Fish Hatchery  
450 Robinson Lane  
Bellefonte, PA 16823-9620  
814-359-5162

### *Fish Passage & Dam Removal Section*

**David P. Kristine**  
450 Robinson Lane  
Pleasant Gap, PA 16823  
814-359-5106

### *Stream Habitat Section*

**Karl Lutz**  
Pleasant Gap State Fish Hatchery  
450 Robinson Lane  
Bellefonte, PA 16823-9620  
814-359-5191

### **Dave Keller**

Pleasant Gap State Fish Hatchery  
450 Robinson Lane  
Bellefonte, PA 16823-9620  
814-359-5158

### *Regional Habitat Section*

Habitat Management Area 1

### **Ken Anderson**

Rt. 62, HCR2, Box 1  
Tionesta, PA 16353-9729  
814-560-1201

Habitat Management Area 2

### **Jason Detar**

Pleasant Gap Fish Hatchery  
450 Robinson Lane  
Bellefonte, PA 16823-9620  
814-359-5119

Habitat Management Area 3

### **Kristopher Kuhn**

5560 Main Road,  
P.O. Box 88  
Sweet Valley, PA 18656-0088  
570-477-3985

Habitat Management Area 4

### **Gary Smith**

236 Lake Road  
Somerset, PA 15501-1644  
814-279-3080

Habitat Management Area 5

### **Charles McGarrell**

844 Big Spring Road  
Newville, PA 17241-9473  
717-776-5871

Habitat Management Area 6

### **Vacant**

P.O. Box 356  
Revere, PA 18953-0356  
610-847-5983

