

## Protecting and restoring wild Atlantic salmon habitat

### Gulf of Maine Coastal Program

Atlantic salmon runs were once so numerous in the northeastern United States that their abundance was taken for granted. But in the 1700's and early 1800's, water pollution, overfishing and the construction of impassable dams led to the disappearance of salmon in many New England rivers. By the late 1800's, only a few rivers in Maine sustained wild salmon runs. Today, in spite of significant progress in reducing water pollution, improving fish passage, managing fisheries, and reintroducing salmon, wild salmon runs only remain in a handful of Maine rivers. Currently, the Sheepscot and Ducktrap Rivers in mid-coast Maine, Cove Brook in the Penobscot watershed, and the Pleasant, Narraguagus, Dennys, Machias and East Machias in downeast Maine are the focus of state and federal habitat protection and restoration efforts. Several issues present opportunities for collaboration in the ongoing efforts to restore native salmon in Maine's rivers:

- obstructions to fish passage -- there are several thousand man-made dams in Maine,
- loss of spawning and nursery habitat — from riverbank erosion, water withdrawal and clearing of riverbank vegetation, and
- potential genetic and disease problems between wild and aquaculture salmon.

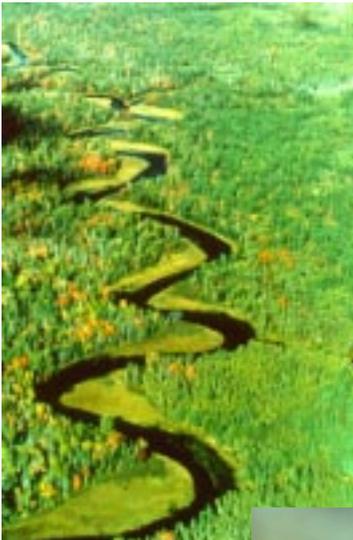
The U.S. Fish and Wildlife Service's (USFWS) Gulf of Maine Program, working in coordination with the Maine Anadromous Fish Program and other USFWS field offices, state agencies, non-profit organizations, industry representatives and stakeholders, is mapping spawning and nursery habitat, developing watershed land cover information, providing assistance to watershed coalitions by identifying potential threats to salmon survival, providing technical assistance to partners in assessing and restoring natural river channels, and developing on-the-ground partnerships to protect salmon habitat.

**Identifying and mapping habitat:** Working with data collected by the USFWS Maine Anadromous Fish Program and the state's Maine Atlantic Salmon Commission, the Gulf of Maine Program has mapped spawning and nursery habitat. Gulf of Maine Program provides this information to fisheries managers who use the maps and data to determine the optimal number of young salmon to stock in order to enhance survival rates. Gulf of Maine Program also provides this information to forest product companies to promote sensitive land management practices near salmon spawning and nursery areas, and to watershed coalitions to catalyze and inform habitat protection and restoration projects.

**Developing regional curves to help restore river channels:** Gulf of Maine Program is working with Trout Unlimited, U.S. Geological Survey, Maine Atlantic Salmon Commission, Maine Dept. of Inland Fisheries and Wildlife and Maine Dept. of Environmental Protection to develop a regional curve for Maine that will provide critical information on the relationship between channel geometry and drainage area. This information will provide baseline information to better inform future restoration work on Maine's rivers.

**Providing assistance to watershed coalitions:** Gulf of Maine Program provides technical assistance to public/private watershed coalitions, including the Downeast Salmon Federation, Project SHARE, Quoddy Regional Land Trust, Sheepscot Valley Conservation Association, Ducktrap Coalition, Atlantic Salmon Federation, Trout Unlimited, and The Nature Conservancy (Maine Chapter). From 1997 through 2002, the Gulf of Maine Program has administered the Maine Atlantic Salmon Conservation Fund, a grant program funded by the National Fish and Wildlife Foundation. In addition, Gulf of Maine Program has provided funds through the USFWS Private Landowners Incentive Program. Four million dollars from these two federal funding sources, combined with more than \$8 million in funds and technical support from many other partners have supported:

- permanent protection of 21,000 acres and 84 river-miles along salmon rivers,
- watershed coordinators to conduct outreach, develop landowner contacts, and prioritize, plan and implement restoration and protection projects, and
- restoration projects at 56 sites, where barriers to fish passage, non-point source pollution, and excess sedimentation have been eliminated.



Dennys River



Juvenile Atlantic salmon

For further information, please contact:

U.S. Fish and Wildlife Service  
Gulf of Maine Coastal Program  
4R Fundy Road  
Falmouth, Maine 04105  
(207) 781-8364  
FAX (207) 781-8369  
fw5es\_gomp@fws.gov  
<http://gulfofmaine.fws.gov>  
Project Leader, Stewart Fefer

