

# Last Call for River Herring

By Peter Himchak, Supervising Fisheries Biologist

Recreational anglers have long enjoyed the accessibility and privilege of catching their own bait in pursuit of their fishing activity. Whether it is mullet, eel, silversides, killifish, grass and sand shrimp or river herring, an angler in New Jersey has been afforded the opportunity to gather his or her own bait by using a dip net, beach seine, cast net, lift or umbrella net, shrimp trawl, killipot and even angling. There are gear and seasonal restrictions and harvest limits on some bait fisheries, but an ample supply of the desired bait was usually available—until now. Recreational anglers will no longer be allowed to catch their own river herring bait, nor will commercial fisheries be permitted, when a moratorium is placed on taking river herring in New Jersey, effective January 1, 2012.

**How did this come about?** River herring, including both blueback herring and alewives, are anadromous fish which live most of their adult lives in the ocean and return in the springtime to natal rivers and streams to spawn. Recreational anglers await this annual spring migration when sufficient herring numbers are concentrated migrating toward spawning areas. Here they are readily available to be taken as prized bait, usually destined to become live bait in the striped bass recreational fishery.

River herring have endured a barrage of abuses over time, including habitat loss either due to dam construction and insufficient (or a total lack of) fish passage opportunities to their spawning grounds; habitat and water quality degradation in critical spawning and nursery habitat; overfishing; significant by-catch/discard mortality in other commercial fisheries and also predation. The river herring resource along the Atlantic coast has been in precipitous decline since the 1950s. Very few of the vibrant, sustained spawning runs from years ago remain today.

### **How do we restore river herring stocks?**

While preemptive management actions were taken by several states including Massachusetts, Rhode Island, Connecticut and North Carolina—as well as those shared waters along the common border of Virginia and North Carolina—to implement moratoriums on river herring fisheries in recent years, continued declines in river herring stocks were still observed. More aggressive action was necessary.

Thus, the Atlantic States Marine Fisheries Commission (ASMFC), a compact of all 15 Atlantic coastal states, implemented Amendment 2 to the Interstate Fishery Management Plan for Shad and River Herring in May 2009. The plan requires states to submit for approval sustainable fishery plans demonstrating the sustainability of

river herring runs in order for direct or by-catch fisheries on river herring to continue in state waters or else a moratorium on the harvest of all river herring fisheries in state waters will be imposed effective January 1, 2012. New Jersey does not have sufficient data to develop and submit a sustainable fishery plan for any run of river herring and hence must implement such a moratorium.

**Two major actions are being taken** by the National Marine Fisheries Service to monitor and mitigate for losses of river herring in commercial fisheries in the Exclusive Economic Zone, the federally managed marine waters from 3–200 nautical miles offshore. Through the New England Fishery Management Council, Amendment 5 to Fishery Management Plan for Atlantic Herring is being developed to document levels of harvest and to mitigate by-catch losses through area or seasonal closures. This high degree of monitoring by-catch/discard mortality will require extensive at-sea observer coverage and portside sampling to assess fishing mortality impacts on river herring stocks.

Additionally, the Mid-Atlantic Fishery Management Council is developing Amendment 14 to the Fishery Management Plan for the Atlantic Mackerel, Squid and Butterfish Fisheries, to monitor by-catch/discard mortality of river

herring in these offshore fisheries and to develop mitigating strategies to minimize fishing-related mortality for river herring.

The demise of most river herring stocks did not occur overnight, just as their recovery to a restored status will be no quick fix. In addition to the moratoriums, other issues such as monitoring and mitigation of fishery management strategies, critical spawning and nursery habitat issues also must be addressed. River herring habitat improvement projects are needed.

**Dam removal programs are essential** to restore river herring spawning habitat. Where dams cannot be removed, the installation of fish ladders or passageways must be considered to “lift” river herring over these physical impediments, allowing the fish access to historical spawning habitat.

Unfortunately, river herring have not been a high priority fishery to receive dedicated research and management funds. To restore this fishery, that approach must change. Regrettably, when January 1, 2012 arrives and the river herring harvest moratorium goes into effect, anglers will no longer have access to these formerly abundant baitfish. The ramifications of their decline reaches far beyond a day fishing with family or friends.



### **Completed Fish Ladder, Great Egg Harbor, Lenape Lake—**

Water flows from the lake into the modified former ice passage behind the power house whose foundation is seen on the far side of the ladder structure. The fish ladder makes several turns before exiting parallel to the river's flow. Internal wood baffles provide resting areas for fish that must work upstream against both gravity and the river's flow.

Photo credit: Fred Akers, Great Egg Harbor River Council