



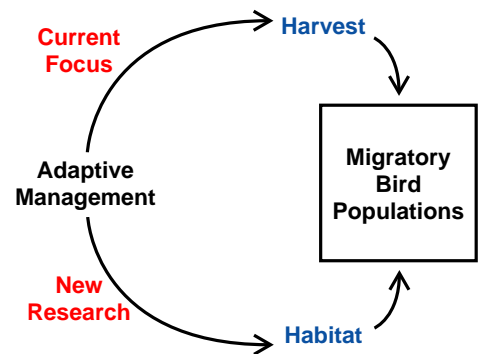
Patuxent Wildlife Research Center NEW FRONTIER IN MIGRATORY BIRD CONSERVATION

A lot of money and work is invested in migratory bird conservation, but managers need a way to determine if their efforts really help the birds. They also need a way to identify how to improve management itself. Patuxent Research Center is developing these evaluation tools for state and Federal managers in a program called Adaptive Management and Assessment.

In FY 1999, the Center launched a major project with the U.S. Fish and Wildlife Service and other state and Federal natural resource managers to understand how habitat and hunting affect populations of waterfowl and other migratory birds. The Center's special role is to develop innovative scientific tools needed for effective conservation programs based on adaptive management strategies. In FY 1999 a \$250,000 increase to the Center's base budget was allocated to support the Adaptive Management initiative.

WHAT IS ADAPTIVE MANAGEMENT?

Adaptive harvest and habitat management makes use of mathematical models to predict how bird populations will respond to harvest and habitat regimes. For example, actual population changes are compared with model predictions, and models are refined to become increasingly effective as objective guidance for setting harvest regulations at sustainable levels and for managing habitat for greatest benefit.



WHY IS ADAPTIVE MANAGEMENT RESEARCH IMPORTANT TO THE NATION?

- U.S. Fish and Wildlife Service uses adaptive management approaches to set harvest regulations.
- Partners in the North American Waterfowl Management Plan have invested more than \$1.2 billion for waterfowl and wetland conservation
- State agencies rely increasingly on adaptive management in regulating waterfowl harvest
- Adaptive Management offers partners a method to manage natural resources more objectively
- Provide new theoretical and modeling tools for integrating population and habitat information to evaluate and improve the effectiveness of conservation programs

WHAT HAS USGS PATUXENT DONE TO MOVE RESEARCH FORWARD?

- Established partnerships with U.S. Fish and Wildlife Service on this initiative
- Began to develop the conceptual framework and modeling tools
- Investigated feasibility of an adaptive management approach to managing migratory bird habitat in the Lower Mississippi Alluvial Valley
- Initiated an adaptive approach to manage impoundments within the National Wildlife Refuge System in the northeastern U.S.

