USGS Patuxent Wildlife Research Center - State Agency and Other Partnerships

The USGS Patuxent Wildlife Research Center (PWRC) has a productive history of working with Federal and State agencies, and with private corporations and groups for the purpose of conducting specific research and monitoring studies. This fact sheet describes Patuxent's on-going science partnerships with the states of Alabama, Delaware, Florida, Georgia, Maryland, Michigan, and Pennsylvania and with the Smithsonian Institution.

The total amount spent by PWRC in FY 2002 in support of state related research needs totals $886,000. While States provide a relatively small amount of financial support, they nevertheless provide substantial amount of in-kind support. A total of $1,334,000 is being provided in support of nomenclature and taxonomy for the Smithsonian, and $483,000 is being provided in support of research associated with the Department of Defense, principally, the US Army Corps of Engineers.

Highlights

PWRC is partnering with the District of Columbia, the University of Maryland, the US Army Corps of Engineers, and the National Park Service to monitor biological effects of wetland and associated upland habitat restoration along the Anacostia River in Washington, D.C. Although the monitoring studies constitute the basis of the relationships, equivalent energy is spent with the partners in planning, evaluating and adjusting efforts on the ground to bring about best possible results. Current efforts involve establishing new wetlands in the face of resident Canada Goose grazing pressure. In the photo pair below, the image on the left (Year 1, 2000) shows a successfully restored marsh, following planting under the protection of temporary fencing. The image on the right (Year 2, 2001) reflects the loss of wetland cover due to goose grazing. This loss also reduces species richness, including important preferred plant species.

Restoration of tidal wetlands at the Kingman Lake site in the Anacostia watershed began during the fall of 1999. A 5-year program to monitor various aspects of the restored wetlands at the site started in 2000. Vegetation and soil characteristics are important and are being monitored because they affect biogeochemical and hydrologic functioning, the value of the habitat for fish and wildlife species, the aesthetics of the site. Monitoring of soils will include measurements of soil particle size, organic matter, and oxidation-reduction (redox) potential. Vegetation monitoring includes two components: standing vegetation and buried viable seeds. The study is providing a measure of the degree of success as the reconstructed marsh becomes re-established as a freshwater tidal wetland.

Survival rate of the southeastern coastal population of the Painted Bunting is being determined in research underway to determine the demographics for the species. Since 1966, Painted Buntings have declined an average of 2.8% annually in the southeastern United States. The breeding range of the southeastern coastal population does not overlap that of the species along the northern Gulf Coast and south central part of North America, nor do the winter ranges of the two populations overlap, so the populations under study are unique. The primary objective in this research is to determine annual survival of the Painted Bunting population by age class and sex within the southeastern United States. Twenty study sites have been established in the four-state area (NC, SC, GA, FL). Buntings are being trapped using mist nets at baiting stations during the months of April through September each year. All buntings trapped are banded and uniquely color marked with colored leg bands with observations being conducted during May and June. Data thus collected allows the calculation of annual survival rates based on resightings the following year and is providing an insight into the population decline as well as complementing other research in the Southeast.

PWRC's Biological Survey Unit at the Smithsonian Institution's National Museum of Natural History (NMNH) traces its roots back to a formal partnership with the Smithsonian established in 1889. Biological Survey Unit staff conduct research on the systematics, nomenclature, and biodiversity of vertebrates and acquire, curate, and manage scientific collections. The NMNH and Biological Survey Unit work together for the mutual benefit of the National collections and the national and international scientific communities they serve. The Unit shares laboratory facilities and research tools with the Smithsonian, and both parties jointly develop policies established to benefit the care and use of the collections and associated data. The Unit has curatorial responsibility for over 900,000 amphibians, reptiles, birds, and mammals of North America from the Panamanian/Colombian border to the North Pole, Hawaii, the Bahamas, and the West Indies. The curatorial activities include collecting specimens, identification of specimens, processing and cataloging incoming collections, bioinformatics, routine care and protection of specimens and associated data records, handling of specimen loan transactions, and progress toward improvement of the collections.

State agencies are dependent on PWRC-generated data from certain long-term monitoring programs for setting conservation policies and priorities. The Breeding Bird Survey, also a critical source of information for the US Fish and Wildlife Service, is used by nearly all State natural resource agencies. The North American Amphibian Monitoring Program, coordinated by PWRC, is largely a collection programs managed by State agencies that have agreed to certain science-based standards and protocols, enabling data to be evaluated at larger geographic scales. A similar type of partnership between States and PWRC is evolving in the colonial waterbird monitoring arena.

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