



Swanson Creek Natural Resource Damage Assessment - January 2002

Nesting Bird Studies

Eagles, Ospreys, and Great Blue Herons

NOAA, the U.S. Fish and Wildlife Service (USFWS), and the Maryland Departments of Natural Resources (MDNR) and Environment (MDE) are conducting a natural resource damage assessment (NRDA) for the April 2000 Pepco pipeline spill in Swanson Creek near Benedict, Maryland. This effort involves identifying and restoring resources and services injured by the oil, and is being done with the cooperation of the responsible parties, Pepco and ST Services. Below is summary information about three recently completed nesting bird studies.



An osprey nesting on the Patuxent River.

Study Methodology

The study objectives were to determine whether the oil spill affected the reproductive success of ospreys, great blue herons, and bald eagles. Nests of these birds were monitored until the young left the nest (i.e., fledged).

Results - Osprey

Over a hundred osprey nests in the Patuxent River were monitored; forty-four were located within the middle section of the river thought to be impacted by the spill and twenty-eight were upstream. Ten adult osprey were observed to be oiled, four of these (two pairs) were successfully trapped, cleaned and released.

Results indicate no detectable population-level impacts on reproductive success. The mean of 1.50 young fledged per active nest in the middle section was similar to the twenty-five year average of 1.51 for the river. In addition, there were no significant differences in survival rates of nestlings from the middle and upper sections of the river in 2000 or the number of young produced in 2000 and previous years. However, there was evidence of localized impacts to individual nests, with an estimated 17 osprey young lost due to the oil spill and associated clean-up activities.

Results - Great Blue Herons

Twelve heron nests in Swanson Creek and seventeen in Black Swamp Creek located roughly four miles upstream were monitored from mid-May through mid-June 2000. Results indicate no detectable effects of the oil spill on the reproductive success of the Swanson Creek herons. There were no significant differences in the mean number of birds fledged or survival rates of nestlings between the sites. There was some uncertainty with the results due to the delay in initiating monitoring, which began almost a month after the spill occurred. Consequently, a follow-up nesting bird survey was conducted in spring 2001 at both colonies. Results indicate the number of breeding birds at both colonies was similar to or greater than in 2000.

Results - Bald Eagles

Two active bald eagle nests were located within Swanson Creek and a third active nest was identified near Cremona Creek. Two of the three nests initially contained two nestlings, one in Swanson Creek and the other in Cremona Creek. In mid-April, the Swanson Creek nest was destroyed by high winds, resulting in the death of both nestlings. The two nestlings successfully fledged from the Cremona Creek nest.

Investigators

Study plans were developed jointly by scientists from the USFWS, MDNR, the Patuxent Wildlife Research Center, and Pepco. Biologists from USFWS, Pepco, Nanjemoy Creek Environmental Education Center, and Maryland-National Capital Park and Planning Commission conducted the nest inspections and monitoring.

Full reports available on website

www.darp.noaa.gov/neregion/chalkpt.htm

For more information

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