

STATE OF THE STRAIT MONITORING FOR SOUND MANAGEMENT



A BINATIONAL CONFERENCE ON THE DETROIT RIVER ECOSYSTEM

Convened December 2004 by Great Lakes Institute for Environmental Research, University of Windsor, The Greater Detroit American Heritage River Initiative of Metropolitan Affairs Coalition, The Detroit River Canadian Cleanup, The Detroit River International Wildlife Refuge, The Detroit Water and Sewerage Department, and other organizations.

Cover photos: photos left and center (upper and lower): Recreational fishing in the Huron-Erie Corridor (lower center photo by Kurt Byers, Michigan Sea Grant Extension, courtesy of United States Environmental Protection Agency, Great Lakes National Program Office; other photos courtesy of OMNR); upper right: Scientist sampling water, benthic invertebrates and sediment in Lake Erie (photo courtesy of Environment Canada and University of Windsor); lower right: Longear sunfish (*Lepomis megalotis*) (photo courtesy of Nicolas Lapointe)

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MONITORING FOR SOUND MANAGEMENT

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6.7. AERIAL CANVASBACK SURVEY OF LAKE ST. CLAIR, DETROIT RIVER AND WESTERN LAKE ERIE

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Introduction

The coordinated canvasback survey began in 1974 to provide a systematic survey of canvasbacks on major staging areas prior to arrival of most birds on the wintering grounds. The canvasback (*Aythya valisineria*, Figure 1) is endemic to North America (Johnsgard 1992), and most are typically found staging in the Mississippi Flyway during November (Bellrose 1980). The survey has been completed during 28 years (no survey in 1980) and provides information that can be compared to breeding population estimates and January counts to help ascertain canvasback status. Since canvasbacks feed on wild celery and other lake-bottom materials, the canvasback population status reflects water quality and ecosystem health.



Figure 1. Canvasback.

Methods

State agencies, the U.S. Fish and Wildlife Service, and the Canadian Wildlife Service have cooperated to survey major canvasback migration and wintering areas every year since the sites were selected in 1974. Several traditional canvasback migration staging areas were selected in Michigan and other Mississippi Flyway locations for inclusion in the coordinated canvasback survey. Important areas in Michigan included Lake St. Clair, the Detroit River, and Lake Erie.

Surveys in Michigan were conducted using one observer (plus the pilot) from a fixed-wing aircraft, flying 160–200 km/hr (100–125 mph) at 45–60 m (150–200 ft) altitude. Observers recorded all canvasbacks roosting, feeding, or flushing from water bodies. In

Michigan and other Mississippi Flyway locations, air or ground surveys were conducted on or around November 5 during most years. Due to inclement weather and scheduling conflicts, survey dates for all areas across the Mississippi Flyway ranged from October 24 to December 11 over the 25-year survey period (J. Lawrence, Minnesota Dept. of Natural Resources).

Several states have not participated in the November canvasback survey during recent years, but major migration staging areas continue to be monitored.

Results and Conclusions

The Upper Mississippi River, Lake St. Clair, the Detroit River in Michigan and Long Point, Ontario remain the major staging areas for canvasbacks in early November. Figure 2 shows the abundance of canvasbacks observed on the Detroit River during the November survey. The Upper Mississippi River count of 209,290 birds during the 2003 coordinated survey was the second highest count on record. In 2003, for the second consecutive year, most of the canvasbacks on Lake St. Clair were once again seen on the Canadian side.

Both the Michigan side of Lake St. Clair and Long Point, Ontario had near record or record-low counts of canvasbacks.

The May Breeding Population Survey indicated 558,000 canvasback in 2003, 15% above the 2002 estimate and 1% below the long-term (1955-02) average (Figure 3).

The November canvasback survey should be continued to monitor populations. This survey identifies staging and wintering areas that are of significant importance to canvasbacks.

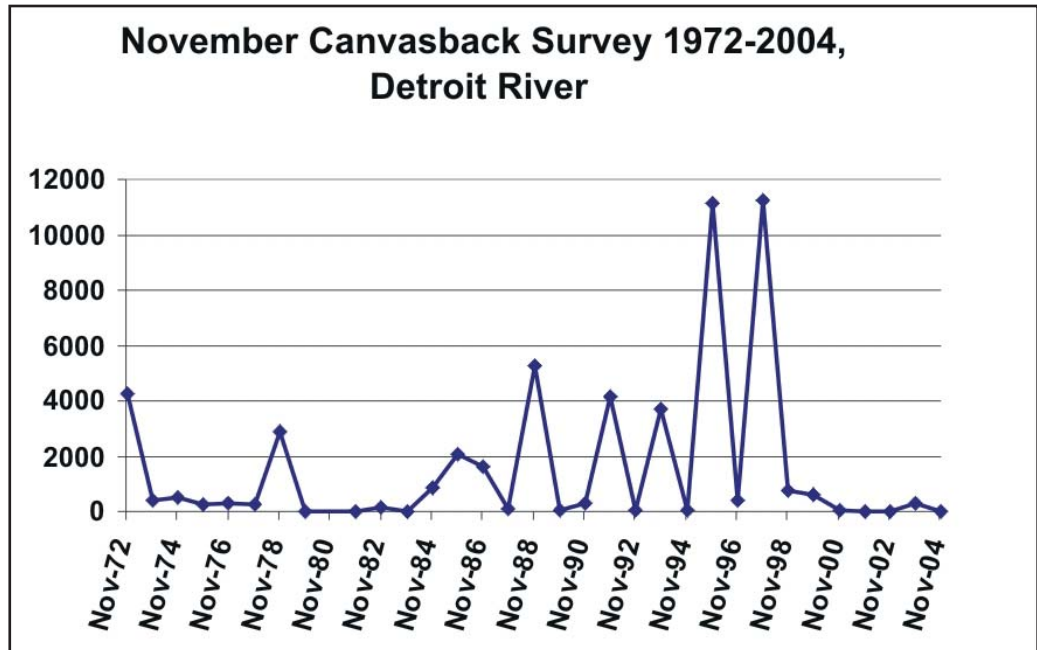


Figure 2. Abundance of canvasbacks on the Michigan side of the Detroit River observed during the November canvasback survey from 1972–2004.

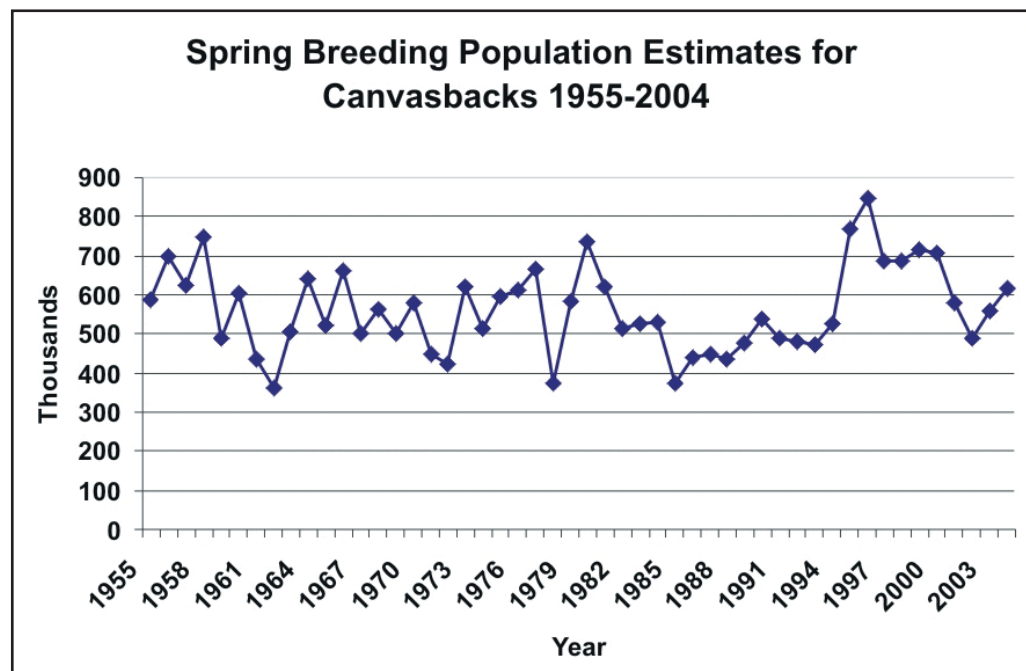


Figure 3. Spring Breeding Population Survey estimates for canvasbacks, 1955–2004.

References

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