# FEDERAL AID ANNUAL PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF WILDLIFE CONSERVATION PO Box 25526 Juneau, AK 99802-5526

### MIGRATORY GAME BIRDS ANNUAL SURVEY AND INVENTORY PERFORMANCE REPORT

STATE: Alaska GRANT AND SEGMENT NR: W-33-2

**PROJECT NR:** 11.0

WORK LOCATION: Statewide

**PERIOD:** 1 July 2003 – 30 June 2004

**PROJECT TITLE:** Status, Trends, and Public Use of Migratory Game Birds in Alaska

**REPORT DESCRIPTION:** This statewide performance report includes migratory game bird survey and inventory activities. Statewide activities are listed before specific activities by region.

#### PROJECT ACTIVITIES AND ACCOMPLISHMENTS:

#### Statewide:

- 1. Develop ADFG FY 05 work plan/budget request consistent with high priority management needs, federal activities, and state objectives.
- 2. Participate in meetings of the Pacific Flyway Council and Study Committee; complete revisions of high-priority management plans; review and recommend 2003–04 hunting regulations.
- 3. Participate in meetings of the Sea Duck Joint Venture; serve as U.S. co-chair of the Continental Technical Team; emphasize development of funding and partners to achieve work in the SDJV Strategic Plan; contribute to species/population status reports, research planning, and coordination of management projects.
- 4. Band ducks at several sites to meet Pacific Flyway regional duck banding targets, in conjunction with Area Office staff, USFWS, and other banders.
- 5. Evaluate results of 2002 HIP surveys of harvest in Alaska to assess accuracy; monitor 2003 enrollments for adequate registration of hunters; with USFWS evaluate survey sampling design and harvest estimation methods, with emphasis on development of effective surveys for harvest of sea ducks, brant, and sandhill cranes.
- 6. Attend meetings of the Alaska Migratory Bird Subsistence Co-management Council, regional committees and public meetings statewide; cooperatively improve operating guidelines for the system; provide technical information on bird populations, harvest and conservation issues; collaborate with regional management committees and statewide councils to expand and improve subsistence harvest strategies for spring 2004.

7. Plan and produce public information products on migratory bird resources, conservation issues, and agency management and research programs. This includes maintaining Waterfowl Program and headquarters websites; producing brochures, posters, slide shows, and special publications; and cooperating with the ADFG Education and Watchable Wildlife Programs to incorporate migratory game bird information. Participate in continuing cooperative shotgun proficiency and non-toxic shot education programs with USFWS and Hunter Education, including development of annual interagency plans, training instructors and conducting seminars and clinics, and information products. Expand on sea duck information and education initiatives with USFWS, conservation groups, and hunters.

#### **Accomplishments:** (numbers correspond with activity numbers)

- 1. The SFY 2005 Waterfowl Program annual work plans and budgets were developed through analysis of migratory game bird status information, identification of management problems, and assessment of the department's capabilities and role in addressing needs relative to programs by USFWS, U.S. Geological Survey-Biological Resources Division (USGS-BRD), and wildlife agencies of other states. The primary source of status information and process for determining the department's work plans was through the Pacific Flyway Council (PFC) and Study Committee (PFSC). The department actively participated in flyway communications, data exchanges, work sessions, and formal biannual meetings. Waterfowl Program staff also participated in many coordination meetings, technical discussions, and planning functions with USFWS Region 7, USGS-BRD Alaska Science Center, U.S. Forest Service (USFS), and University of Alaska to identify migratory birds issues and develop cooperative projects in Alaska.
- 2. Alaska played an active role on the Pacific Flyway Council (Matt Robus) and Study Committee (Tom Rothe). We participated in a business meeting in July 2003, a national workshop on Adaptive Harvest Management (ducks) and Study Committee work session in January 2004, and a spring business meeting in March 2004. Alaska chaired subcommittees on Aleutian Canada geese, Pacific Brant, and Pacific Flyway sandhill cranes.
  - ADF&G was a key agency in developing revisions to the Pacific Flyway Management Plans for Pacific White-fronted Geese (adopted July 2003), Tule White-fronted Geese (draft in prep.), and Aleutian Canada geese (process established, technical updates begun). In addition, coastal states and the USFWS made development of a Tule goose inventory survey a priority; a radiomark-recapture design was approved in July 2003, geese were marked in September 2003, and ADF&G worked with USFWS Region 7 and USGS to coordinate monitoring of radio-marked birds in Alaska during 2004.

ADF&G led the Pacific Flyway discussions of recommended changes to the USFWS Canvasback Harvest Strategy; this included coordination among diving duck committees of all flyway councils, briefing PFC consultants, and providing input on changes that were incorporated in June 2004. ADF&G was prominent in a review of harlequin duck regulations in the flyway (USFWS request), and developed bylaws amendments for both PFC and PFSC to clarify organizational purposes and financial matters in relation to IRS rules.

- 3. The Waterfowl Coordinator represented the Pacific Flyway and served as U.S. co-chair of the Sea Duck Joint Venture (SDJV) Continental Technical Team (CTT): managed CTT assignments to complete species status assessments; coordinated development of the 2004 package of proposed projects and funding allocation recommendations (November 2003). Worked with Management Board chairs to plan SDJV work plans and meeting schedules, develop guidelines for a new initiative on population monitoring efforts, and summarize project funding and partnership data for 2000–2003.
- 4. During this reporting period, the Waterfowl Program continued its duck banding effort only at Minto State Game Refuge (see Regional Interior). To date, the Pacific Flyway Study Committee and USFWS have not made adequate progress in completing the Western Mallard Model or determining feasibility of a continental Pintail Model. Until the models are adopted and geographic banding targets are determined, we will continue a maintenance level of banding.
- 5. Waterfowl Program staff collaborated with ADF&G Licensing Section and FWS to improve the Harvest Information Program (HIP) in Alaska for the 2003 and 2004 hunting seasons. Specific tasks included coordination with FWS Harvest Surveys (Laurel, MD) to ensure that HIP forms and data entry protocols were accurate and consistent with federal regulations and program needs; contracting for production of HIP cards in state duck stamp vendor booklets; improving performance of state license vendors in submitting enrollment cards; answering numerous inquiries from ADF&G staff, license vendors, and the public; and monitoring hunter enrollment data acquisition. We continued to compile HIP enrollment data from 1998–2002 to assess migratory bird hunter activity statewide.
- 6. The ADF&G Waterfowl Coordinator and headquarters staff continued work with the Service and Alaska Native representatives for the Alaska Migratory Bird Comanagement Council (AMBCC). Department activities and accomplishments included: (1) served on the AMBCC Technical Committee to develop regulatory options, prepare technical analyses, and present information on the status of migratory bird populations and harvest in Alaska (ADF&G contributed analyses of subsistence and recreational harvest data); (2) participated on the Harvest Survey Committee to design a comprehensive statewide subsistence harvest survey.
- 7. In the area of public information products, the program frequently provided answers to questions and technical information to the public, other agencies and conservation groups on a wide variety of topics concerning waterfowl biology, management, and hunting. Specifically, program staff maintained and improved the Waterfowl Program web site, expanding pages on satellite telemetry of scoters, harlequin ducks, and sandhill cranes, and expanding information on migratory bird hunting and regulations. Provided documents for public access on ADF&G websites. Waterfowl staff transmitted technical information on management and research projects at EVOS science conferences, the 3<sup>rd</sup> North American Duck Symposium, and the North American Crane Workshop.

Since 1989, ADF&G has supported a statewide clearinghouse for advice and information on lead poisoning in waterfowl and effective use of nontoxic shot. The Waterfowl Coordinator worked with Hunter Information and Training (HIT) to plan nontoxic shot program products, including a standard CD slide show, HIT handbook materials, and community clinics. The Coordinator conducted a training session for agency educators and conducted a waterfowl hunter clinic in Anchorage (August 2003).

# Regional - Northern and Western:

- 1. Participate in meetings and coordination of annual activities of the Y-K Delta Goose Management Plan with AVCP, USFWS, and Pacific Flyway Council.
- 2. Meet and communicate with Y-K Delta, Bristol Bay, and other interest groups to develop revisions to the Pacific Flyway management plan for emperor geese.
- 3. Participate on the Spectacled/Steller's eider Recovery Team; assist with completion of a Steller's Eider Recovery Plan; cooperatively develop annual work priorities.

## Accomplishments: (numbers correspond with activity numbers)

- The Waterfowl Coordinator attended a meeting of the AVCP Waterfowl Conservation
  Committee in December 2003. The committee was reactivated after a 2-year hiatus and,
  thus, reviewed a substantial amount of updated information on goose and duck populations of
  interest. Participants also spent much of the time discussing the process for establishing
  spring hunting regulations and specific proposals for 2005.
- 2. Little progress has been made in reconvening an inter-regional planning group for emperor geese. Critical business items for the AMBCC superceded efforts by the participants to revise the emperor goose plan.
- 3. ADF&G contributed to completion and implementation of the Steller's eider Recovery Plan. The Waterfowl Program staff has worked with the Steller's and spectacled eider teams to update annual work plans and funding priorities, review survey data, and design research projects to address information needs. ADF&G completed a Steller's eider survey project for Lower Cook Inlet (ESA Section 6 funding) and designed a satellite tracking project on birds wintering in Kodiak.

#### **Regional - Interior:**

- Work with Central and Mississippi Flyway states to implement the Management Plan for Mid-continent White-fronted Geese; monitor annual status of diminished Interior/ Northwest Alaska breeders and review analysis of survival and harvest patterns throughout their range by USFWS and USGS-BRD.
- 2. Band ducks at Minto Flats State Game Refuge to meet Pacific Flyway regional duck banding targets, in conjunction with Area Office staff and USFWS.

#### **Accomplishments:** (numbers correspond with activity numbers)

1. The Waterfowl Coordinator participated in a biological review of information gathered on Midcontinent white-fronted geese in interior Alaska (September 2003). He also coordinated exchanges of information on flyway planning processes and hunting regulations for this population with local USFWS staff and Tanana Chiefs Conference. Participated in a meeting with Mississippi and Central Flyway technical representatives (January 2004) to plan a timeline, review process, and public involvement for revision of the inter-flyway management plan, due in 2005. We explored the need to develop restrictive harvest regulation prescriptions, given that the declining population likely would trigger action in 2005; the need to involve Alaska subsistence hunters was recognized.

2. The department has continued to work with Pacific Flyway states to plan and implement a flywaywide duck-banding program to support population modeling of western mallards and pintails. During August 2003, local flooding caused by heavy rainfall inundated preferred trapping locations. As a result, below average numbers of ducks were banded (*n* = 852) composed of 50% northern pintails, 47% mallards and 3% of other duck species.

#### Regional - Southcentral:

- Conduct an aerial survey to produce an estimate of dusky Canada goose production on Copper River Delta (CRD).
- Conduct ground surveys to estimate Canada goose numbers and production on Middleton Island.
- 3. Evaluate survey methods to produce indices for Canada geese in Prince William Sound.
- 4. Band and mark 200-300 dusky Canada geese in late July 2003; as feasible, capture, band and radio-mark Canada geese from PWS.
- 5. Conduct aerial surveys to enumerate Tule white-fronted geese on the principal molting area in Kahiltna Valley and on Cook Inlet coastal marshes.
- 6. Conduct a winter boat and aerial surveys of sea ducks in Kachemak Bay; estimate abundance and trends and record distribution.
- 7. Assist Region II with ground surveys to count urban Canada geese and annual production in Anchorage; develop the model-driven annual population estimate; lead a cooperative capture operation to mark a sample of urban geese for local and flyway studies.

#### **Accomplishments: (numbers correspond with activity numbers)**

- 1. The July 2003 dusky Canada goose production survey was flown over the west Copper River Delta on July 26. The survey aircraft was a Robinson R22 helicopter with pilot and one observer. Weather conditions were favorable. Survey coverage was similar to previous years over the west delta, from Copper River Islands to Point Whiteshed, and Egg Island. A total of 5,929 geese were counted on the survey, including an estimated 446 young. Production of young dusky Canada geese on the Copper River Delta in 2003 (7.2%) was the lowest recorded since 1995. ADF&G participated in the annual meeting with USFS, USFWS and USGS-BRD to review results of 2003 surveys and research on the breeding grounds and coordinate field activities for 2004.
- 2. Dusky Canada geese are counted on Middleton Island in alternate years. A ground-survey was conducted 20-22 June 2004. We counted 1,499 adults and 618 young Canada geese during the 3-day survey. We estimated that 37% of the population was composed of young. Numbers of adult geese have been similar indicating little change in the size of the breeding population over the last 8 years. The high productivity of this island population is undoubtedly related to the lack of mammalian predators.
- 3. No progress was made on this task because staff time and funding was not available.
- 4. During July 2003, dusky Canada geese were captured on nest sites and during molting drives on the Copper River Delta; 369 were banded and marked with neck collars. USGS-BRD

- crews that have been conducting work on breeding ecology annually have marked a sample of geese for other study purposes. They marked 73 birds in 2002 and 359 in 2003. Collectively, these efforts ensured that the Pacific Flyway marking goal was met.
- 5. From April through July 2004, program and USGS-BRD staff flew aerial surveys for radiocollared Tule geese in upper Cook Inlet. Radio collars were deployed by state and federal agencies during February 2003 (Sacramento Valley; n = 5 radios), August 2003 (Innoko NWR; n = 33 radios), and September 2003 in Oregon (Summer Lake; n = 43 radios). The primary search areas included those traditionally used by Tule geese along the Susitna River drainages and coastal locations extending from Redoubt Bay east to the Knik River. Additional flights were conducted north of the Alaska Range on the Innoko and Yukon Delta NWRs. We heard 46 radios (57%) at least once during our tracking effort in the upper Cook Inlet basin. Most radios (n=39) were heard in late April – early May prior to nest initiation. Of these 15 were never heard again in upper Cook Inlet and we assumed they departed the survey area. Thirty-two radios were heard during the nesting period along the upper Susitna drainage and on Susitna Flats, but only 11 were heard with relative consistency. Three mortality collars were retrieved, one nest was located, 10 radio birds and about 180 Tule geese were observed during an intensive survey of the Susitna drainage in early June using a R22 helicopter. Survey flights conducted on the Innoko and Yukon Delta NWRs produced 10 and 19 radios, respectively. Four radios were not heard on earlier surveys in upper Cook Inlet increasing our sample to 50/81 located radios. Twenty-five radios, however, were previously heard in the upper Cook Inlet basin indicating that a large segment of the population moved across the Alaska Range to molt. Tule geese on the Y-K Delta were heard ca. 50 km north of Marshall, a newly discovered molting area for Tule geese. During an R22 survey of molting areas in the upper Kahiltna and Tokositna river drainages, no radios were heard and only 59 geese were observed during the survey, similar to numbers counted in 2002 and 2003, but far below the 800+ geese observed on these molting lakes in the mid-tolate 1990s.
- 6. Fieldwork for the five-year Kachemak Bay sea duck survey project concluded in March 2003 (last reporting period). A final summary report is in preparation to describe the number and species composition of wintering sea ducks, and to examine factors that contribute to annual variability in survey results.
- 7. The Waterfowl Program provided technical assistance to Region II and cooperating agencies to conduct surveys of urban geese in Anchorage during 2000–2004, as well as manage banding operations. Program biologists analyzed survey data, applied the mark-recapture models, and generated a population estimate of 1,448 geese in 2003. The population estimate for 2004 is currently being analyzed. Preliminary results suggest little change from the 2003 estimate. Waterfowl staff will continue to coordinate with and assist the Anchorage Waterfowl Working Group in gathering management data and implement strategies to maintain the goose population near the recommended population level of 2,000 geese.

# Additional Federal Aid-funded work not described above that was accomplished on this project during this segment Period

1. The Waterfowl Coordinator continued to work with ADF&G staff, USFWS, and non-governmental organizations to complete a draft strategic plan for inclusion of most of Alaska

in the Pacific Coast Joint Venture (PCJV), a habitat program under the North American Waterfowl Management Plan. A state steering committee met several times to review sections of the plan and complete a document for public distribution; program staff took the lead on articulating waterbird population objectives and writing several target area descriptions.

Submitted by: Thomas C. Rothe, Michael J. Petrula, Daniel H. Rosenberg

# **Statewide Project Costs (in thousands):**

| State Share (25%) | Federal Share (75%) | Total    |
|-------------------|---------------------|----------|
| \$ 64.2           | \$ 192.7            | \$ 256.9 |