

**FEDERAL AID  
ANNUAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME  
DIVISION OF WILDLIFE CONSERVATION  
PO Box 115526  
Juneau, AK 99811-5526

**Alaska Department of Fish and Game  
Wildlife Restoration Grant**

**Grant and Segment No.** W-33-12

**Project No.:** 11.0

**Project Title:** Migratory Game Bird Annual Survey and Inventory: Status, Trends, and Public Use of Migratory Game Birds in Alaska.

**Project Duration:** July 1, 2013 – June 30, 2014

**Report Due Date:** September 30, 2014

**Partner:** Numerous

**PRINCIPAL INVESTIGATOR:** Dan Rosenberg

**COOPERATORS:** Mike Petrula, Jason Schamber, Kyle Smith

**WORK LOCATION:** Statewide (Regions 1, 2, 3, 4 and 5)

**REPORT DESCRIPTION:** This performance report describes the Statewide Waterfowl Programs survey and inventory activities. Activities are listed by geographical region.

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**Project Activities and Accomplishments**

**Project Location:** Statewide

**Objective:** Develop ADF&G FY 14 work plan/budget request consistent with high priority management needs, federal activities, and state objectives.

**Accomplishments:** The FY 2014 Waterfowl Program annual work plans and budgets were developed through analysis of migratory game bird status information, identification of management needs and issues, management plans, and assessment of the department's capabilities and role in addressing needs relative to programs by U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey-Biological Resources Division (USGS-BRD), U.S. Forest Service, Joint Ventures, 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), University of Alaska, and the Sea duck and Arctic Goose Joint Ventures to identify migratory bird issues and develop cooperative projects in Alaska.

**Objective:** Participate in meetings of the Pacific Flyway Council and Study Committee; complete revisions of high-priority management plans; review and recommend 2014-15 hunting regulations.

**Accomplishments:** Alaska played an active role on the Pacific Flyway Council (Doug Vincent-Lang) and Study Committee (Dan Rosenberg). The Waterfowl Program Coordinator served on the Pacific Flyway Study Committee and as Secretary to the Pacific Flyway Council (PFC); and represented the Pacific Flyway on the Arctic Goose Joint Venture and the Harvest Management Working Group. The Waterfowl Program Coordinator Chaired subcommittees to rewrite management plans for dusky Canada Geese and emperor geese and served on subcommittees to review and edit plans for Brant, cackling geese, white-fronted geese, Aleutian, Taverner's, lesser, and Vancouver Canada geese, lesser snow and Ross' geese, and western and eastern tundra swans. The Program Coordinator recommended early-season regulations for sport hunting in Alaska to the USFWS. The Coordinator continued important leadership roles in coordination of PFC activities with the Alaska Migratory Bird Comanagement Council (AMBCC) and worked closely with the Executive Director and committee members to develop and review proposals.

During this reporting period, ADF&G worked with the Pacific Flyway to update the North American Waterfowl Management Plan, and improve population estimates and assess fall and winter harvest regulations to address conservation concerns for dusky Canada geese, cackling geese, emperor geese, and Pacific Brant populations and to maintain more liberal harvests of abundant Pacific white-fronted geese and Aleutian geese. We continued to administer a permit hunt for dusky Canada geese on the Copper River Delta and eastern Prince William Sound in response to population declines. We continued working with the USFWS, North Slope Borough and AMBCC to implement harvest regulations on the North Slope that met the needs of local residents while minimizing the incidental harvest of Steller's eiders and yellow-billed loons.

**Objective:** Participate in meetings of the Alaska Board of Game and review and recommend actions on proposals to the 2014-15 hunting regulations and develop emergency regulations. Maintain waterfowl guide registration program.

**Accomplishments:** The Program Coordinator advised and recommended actions for proposed waterfowl regulatory changes to the Alaska Board of Game (BOG); drafted emergency regulations for the Department of Law; developed press releases to announce regulatory changes; and edited the ADF&G waterfowl regulations booklet. Staff issued waterfowl hunting guide registration cards and maintained the hunting guide database.

**Objective:** Develop funding opportunities and coordinate with partners to achieve objectives of the Sea Duck Joint Venture (SDJV) Strategic Plan; contribute to research planning and coordination of management projects; and continue cooperative efforts to develop a population monitoring program.

**Accomplishments:** Alaska worked with partners in the U.S. and Canada to review and recommend sea duck research and management projects to update objectives in the 2008-2012 SDJV Strategic Plan. We reinstated in 2012 and continued in 2013 and 2014 a population monitoring program in Southcentral Alaska last surveyed in 2003 and continued to monitor results of a population delineation project in cooperation with the

USFWS, USGS, and Canadian Wildlife Service that marked Barrow's goldeneyes in Southeast, AK with satellite transmitters in 2012 and expanded to Kachemak Bay, AK in FY13 and 14 (see below).

**Objective:** Band ducks at several sites to meet Pacific Flyway regional duck banding objectives in conjunction with staff, USFWS, and other banders.

**Accomplishments:** The Waterfowl Program continued its duck banding effort at Minto Flats State Game Refuge (see Regional–Interior). We established and met goals for operational banding needs in Alaska and other states as part of the PFSC and PFC, and the USFWS Adaptive Harvest Management Models for western Mallards and northern pintails. This involved collaboration with USFWS Region 7 to define banding needs and apply banding and harvest data to regulatory prescriptions in Alaska and the Pacific Flyway states.

**Objective:** Evaluate results of 2012 HIP surveys to estimate harvest in Alaska and monitor 2013 enrollments for adequate hunter registration. In collaboration with USFWS, staff evaluated survey sampling design and harvest estimation methods, with an emphasis on development of effective surveys for harvest of sea ducks, brant, and sandhill cranes.

**Accomplishments:** Waterfowl Program staff collaborated with ADF&G Licensing Section and FWS to implement the Harvest Information Program (HIP) in Alaska. This included design and printing of state duck stamps and contracting for production of HIP cards in state duck stamp vendor booklets, evaluation of survey design, improving performance of state license vendors in submitting enrollment cards, and answering numerous inquiries from ADF&G staff, license vendors, and the public. We continued to compile HIP enrollment data and to assess trends in migratory bird harvest and hunter activity statewide. Hunter enrollment cards and duck stamps were distributed to licensed vendors in time for the spring subsistence season.

**Objective:** Program Coordinator serves as the technical representative to the Alaska Migratory Bird Co-management Council (AMBCC). Attend meetings of the AMBCC, regional committees, and public meetings statewide; provide technical information on bird populations and harvest and conservation issues; assist with implementation of the statewide subsistence harvest survey; collaborate with regional management committees and FWS to expand and improve subsistence harvest management strategies for spring/summer subsistence seasons.

**Accomplishments:** The ADF&G Waterfowl Coordinator and Director Doug Vincent-Lang continued work with the Service and 11 Native regional representatives of the AMBCC, participating in regulatory meetings in September, 2013 and April, 2014. Department activities and accomplishments include: (1) serving on the AMBCC Handicraft Committee, Invitation Committee, Transportation Committee, Fall/Winter Harvest Working Group, Standard Operations Procedures Committee and Harvest Survey Committee to develop regulatory proposals and solutions to outstanding regulatory issues and concerns; (2) implementing a federal regulation to allow tribal members in excluded areas to hunt by invitation in included areas (3) presenting information on the status and trends of migratory bird populations and harvest in Alaska to the AMBCC; (4) assisting with development of 2014 federal subsistence regulations and technical review and

analyses of proposals; (5) providing guidance and assistance in an effort to develop a fall subsistence hunt; (6) chairing the Emperor Goose Subcommittee to address a subsistence harvest and revise the Management Plan; and (7) serving as liaison between the AMBCC and PFC including drafting PFC recommendations to support Alaska subsistence harvest regulations. The Program Coordinator also participated in the assessment and review of the statewide harvest survey and coordinated with Subsistence Division staff in this process.

**Objective:** Plan and produce public information products on migratory bird resources, conservation issues, and agency management and research programs.

**Accomplishments:** 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, regulations, and hunting. Program staff maintains, reviews, and updates department web pages on migratory birds including research projects, endangered species information, and information on migratory bird hunting and regulations. The Waterfowl Coordinator edited and revised the hunter regulations brochure and coordinated with USFWS special agents to assure consistency with federal regulations. Waterfowl Coordinator and staff transmitted technical information on management and research projects to the Pacific Flyway, at state and federal coordination meetings, and scientific conferences. The Program Coordinator and Staff submitted a manuscript for publication entitled “Seasonal Movements and Distribution of Steller’s Eiders (*Polysticta stelleri*) Wintering at Kodiak Island, Alaska” which was accepted.

**Objective:** Work cooperatively with other state and federal agencies, non-governmental organizations, and divisions and programs within ADFG to formulate, review, evaluate, and comment on land use plans, management plans, resource development plans, the NEPA process, Endangered Species Section 7 consultation, and other state and federal special areas management and regulatory functions.

**Accomplishments:** Program coordinator and staff have reviewed permit applications for ecological impacts and mitigation strategies for energy development projects (oil and gas, wind, hydroelectric), large scale mining projects, state special area management activities and planning documents, section 7 consultation for development in Steller’s and Spectacled eider habitat, Environmental Impact Statements for the Izembek National Wildlife Refuge and Candidate Notice of Reviews for the Yellow-billed loon and Kittzlet Murrelet.

#### **Regional - Northern and Western:**

**Objective:** Restore cackling Canada geese to 250,000 and emperor geese to 80,000. Maintain the status of other waterfowl above population objective through Y-K Goose Management Plan and Pacific Flyway Council. Monitor the harvest of Tundra Swans.

**Accomplishments:** The Program Coordinator represented the Department at meetings of the Waterfowl Conservation Committee of the Association of Village Council Presidents and is working collaboratively on efforts to revise the Yukon-Kuskokwim Delta Goose Management Plan, the Pacific Flyway Emperor Goose Management Plan and the Pacific

Flyway Brant Management Plan. The Y-K Delta Goose Management Plan has expired and is up for renewal. It remains in effect by continuing agreement. The Waterfowl Coordinator, members of the PFSC, the Oregon Farm Bureau, the USFWS, and the AVCP Waterfowl Conservation Committee met to discuss population status and changes to the Management Plan and resolve management concerns regarding cackling geese survey methodologies, population estimates and objectives, and harvest strategies through the AMBCC, PFSC, and PFC processes as well as resolve issues of agricultural crop depredation while maintaining subsistence opportunities.

The Program Coordinator, working with the Pacific Flyway and AMBCC has reassessed the population status of Cackling Canada Geese and successfully achieved population objectives. The Department maintains its commitment to the Y-K Delta Goose Management Plan that supports populations necessary for subsistence hunting. Working within the framework of the AMBCC, the Waterfowl Coordinator has kept Native Regional Representatives informed of the 2013 revision to the Pacific Flyway management plan for the Western Arctic Population of lesser Snow Geese, the updated Pacific Brant Management Plan, and is working cooperatively with the AMBCC to revise the Emperor Goose Management Plan.

In conjunction with area staff, program staff manages and reports to the Pacific Flyway on results of Tundra Swan permit hunts in GMU's 17, 18, 22, and 23.

**Objective:** Participate on the Spectacled/Steller's Eider Endangered Species Recovery Teams; assist in implementation of Recovery Plans; cooperate in development and implementation of effective population assessment and recovery tasks. Update annual work priorities on the Steller's Eider and Spectacled Eider Recovery Plans.

**Accomplishments:** As a member of the Recovery Teams, 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. The Waterfowl Coordinator has coordinated with the USFWS Regional Director and the North Slope Borough on future directions for eider management. The Program Coordinator drafted ADF&G's position on the reintroduction of Steller's eiders to the YKD staff and the Program Coordinator participated in stakeholder meetings and coordination of recovery efforts for Steller's eiders, Spectacled eiders, and Yellow-billed Loons. The Program coordinator was the Department contact for the Candidate Notice of Review for the Yellow-billed loon and drafted ADF&G's comments.

### **Regional - Interior**

**Objective:** Oversee implementation of the Management Plan for Mid-continent White-fronted Geese with Central and Mississippi Flyway states, and affected users in Interior and Northwest Alaska.

**Accomplishments:** Staff continues to monitor annual status of Interior/ Northwest Alaska breeders in conjunction with the USFWS and review analysis of survival and harvest patterns throughout their range with USFWS and USGS-BRD and reviews hunting regulations with counterparts in the Central and Mississippi Flyways. The program coordinator has worked with the Central and Mississippi Flyways to coordinate activities to discuss Mid-continent White-fronted Geese Management Plan revisions.

**Objective:** Band ducks at Minto Flats State Game Refuge to meet Pacific Flyway regional duck banding targets, in conjunction with other ADF&G staff and USFWS.

**Accomplishments:** The department has continued to work with Pacific Flyway states to plan and implement a flyway wide duck-banding program to support population modeling of western mallards and northern pintails. During trapping efforts on the Minto Flats State Game Refuge in August 2013, staff banded 903 mallards, 301 northern pintails.

### **Regional – Southcentral:**

**Objective:** Maintain dusky Canada geese to prevent ESA listing; progress toward 20,000 birds and annual production of >20% young; implement the Pacific Flyway management plan and Focal Species Action Plan.

**Accomplishments:** ADF&G continued to work with Pacific flyway states and USFWS to monitor the population status and harvest of dusky Canada geese. ADF&G continued to implement its registration permit hunt in GMU 6 and close harvest if we reached a quota of 40 birds. The Program coordinator worked closely with the Chugach National Forest to incorporate dusky Canada Geese as a “species of conservation concern” in the Assessment Phase of the Forest Management Plan Revision.

**Objective:** Produce annual estimates of dusky goose production on Copper River Delta (CRD), monitor population status and production on Middleton Island; develop methods to obtain indices of geese breeding in Prince William Sound (PWS).

**Accomplishments:** ADF&G conducted the annual dusky Canada goose production survey over the west Copper River Delta on July 17, 2013. Individual survey methods and coverage were similar to previous years over the west delta, from Copper River Islands to Point Whiteshed, and Egg Island. We estimated that 1,626 goslings were present on the west CRD survey area. Production of dusky Canada geese was 45.0; based on this survey, the Pacific Flyway Dusky Canada Goose Management Plan objective of achieving annual production of 20% young has been met every year since 2008 (measured as the most recent 10-yr avg).

We conducted a survey of Canada geese on Middleton Island from June 17-19, 2014. This biennial effort is directed at documenting growth of this island group and periodically determining its status as part of the dusky Canada goose population. Survey methodology was similar to surveys conducted from 1996-2012. We counted 1780 adult and 1021 young Canada geese on Middleton Island during 3 days of surveys. Average brood size was 3.59 goslings (SD = 1.5). We estimated that 1324 goslings were present in 369 broods. The number of adult geese, goslings and broods observed in 2014 was the highest recorded for the island. We did not evaluate recruitment of Middleton Island goslings at this time due to lack of funding.

**Objective:** Band and mark with neck collars up to 600 dusky geese semi-annually on CRD.

**Accomplishments:** Staff in cooperation with the US Forest Service, Pacific Flyway states, and the Canadian Wildlife Service bands adult dusky Canada geese on the west CRD every

other year. No banding drives were conducted in FY14. The next banding drive will be in July 2014.

**Objective:** Monitor satellite-marked Canada geese from Middleton Island and PWS. Deploy additional transmitters as feasible, including a minimum of 15 breeding birds on the CRD.

**Accomplishments:** Program staff deployed 16 satellite transmitters (PTT's) on nesting females on Middleton Island in FY14 and monitored these plus an additional 33 PTT's deployed in Prince William Sound (n=5) and the Copper River Delta (n=28) in 2013. Female geese were captured on the nest using remotely detonated bow traps. Clutches were removed for genetics samples and to determine where unsuccessful breeding birds molt.

**Objective:** Conduct aerial surveys to locate VHF-marked Tule white-fronted geese during the breeding and molting season, and enumerate Tule geese on the principal molting area in Kahiltna Valley and on Cook Inlet coastal marshes.

**Accomplishments:** As part of a cooperative Pacific Flyway project, in the fall of 2013 and spring of 2014, ADFG searched for VHF radios deployed on Tule white-fronted geese. Transmitters were deployed by CA and OR state agencies at Summer Lake Wildlife Area, OR. ADF&G conducted a fall telemetry monitoring flight in the Upper Cook Inlet Basin (UCIB) in August 2013 prior to fall migration and detected 15 radios that were deployed in California and Oregon in spring of 2013. A total of 35 radios were available for detection in Alaska during the summer of 2014. ADF&G conducted two aerial telemetry flights (May and June) and detected 23 unique radio-collared birds during the nesting period and 18 during the post-nesting period including 6 not detected during the May flight. In cooperation with the USFWS a survey was conducted on the Innoko NWR on July 11 and detected 2 radio-marked birds and a survey flight of the Muddy Lakes area (Yukon Delta NWR) conducted on August 7 detected 18 radio-marked birds. Results were shared with the Yukon Delta and Innoko National Wildlife Refuges and Pacific Flyway states.

**Objective:** Continue and expand population surveys and radio telemetry projects to assess the number and seasonal distribution of wintering sea ducks in the Gulf Coast, Kodiak, and Cook Inlet regions; link wintering birds to seasonal use areas.

**Accomplishments:** As part of a multi-year project staff conducted boat and aerial surveys of wintering sea ducks in Kachemak Bay in March 2014 to estimate the number and distribution of sea ducks inhabiting the bay during winter. A skiff survey of the shoreline was conducted to estimate sea duck species utilizing near shore habitats. We also surveyed transects in deeper water from a fixed winged aircraft to estimate species in offshore areas. When completed, species composition and abundance will be compared with results from previous surveys conducted from 1999-2003. In addition staff conducted a molt survey for harlequin ducks in Kachemak Bay in August 2013 and located approximately 1,000 harlequin ducks, primarily males.

**Objective:** Capture, band, and mark wintering Barrow's goldeneyes in Kachemak Bay, Alaska to study winter movements, distribution, and site-fidelity.

**Accomplishments:** The waterfowl program led a cooperative Sea Duck Joint Venture Project with the U.S. Fish and Wildlife Service, the Alaska SeaLife Center, and Environment Canada to delineate the population of Barrow’s goldeneyes wintering in Southcentral Alaska. In FY staff monitored 12 satellite transmitters deployed in FY13. Movements, seasonal use locations, and philopatry will be compared with goldeneyes marked on coastal wintering areas in British Columbia, Canada and Southcentral Alaska.

**Objective:** Assist Region II and IV addressing urban waterfowl management and land use issues.

**Accomplishments:** Staff advised and supported the efforts of a citizens group to monitor snow geese and sandhill cranes on the Anchorage Coastal Wildlife Refuge and the Program Coordinator worked with the Greatland Trust, DNR, and ADF&G’s Habitat Division to work towards acquiring wetlands adjacent to the Palmer Hay Flats State Game Refuge.

In FY14, the Waterfowl Program implemented a new project to assess the health of urban mallards in cooperation with a graduate research project at the University of Alaska Fairbanks. We marked 195 birds with metal leg bands and colored tarsus bands to conduct survival analysis and gain information on seasonal movements; and sample birds for body condition, genetics, parasites, avian influenza, and food habits (stable isotopes).

**Objective:** Monitor population status of Vancouver Canada geese transplanted to the Kodiak Archipelago.

**Accomplishments:** ADF&G in cooperation with the Kodiak NWR implanted 7 Vancouver Canada geese on Shuyak Island with satellite transmitters. Staff are monitoring movements and planning to conduct an aerial census in 2015.

#### **Regional – Southeast:**

**Objective:** Monitor movements of Barrow’s goldeneyes captured and marked in Southeast Alaska in FY12.

**Accomplishments:** As a continuation of a cooperative Sea Duck Joint Venture Project with the U.S. Fish and Wildlife Service, U.S. Geological Survey, Simon Fraser University, and Environment Canadian project begun in FY12 to delineate the population of Barrow’s goldeneyes wintering in Southeast Alaska, waterfowl program staff continued to work with cooperators to analyze data and report on results.

**Prepared by:** Daniel Rosenberg.