Alaska Department of Fish and Game Wildlife Restoration Grant

Grant and Segment No. W-33-11

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, 2012 – June 30, 2013

Report Due Date: September 30, 2013

Partner: Numerous

PRINCIPAL INVESTIGATOR: Dan Rosenberg

COOPERATORS: Mike Petrula, Jason Schamber

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.

Project Activities and Accomplishments

Project Location: Statewide

Objective: Develop ADF&G FY 13 work plan/budget request consistent with high priority management needs, federal activities, and state objectives.

Accomplishments: The FY 2013 Waterfowl Program annual work plans and budgets were developed through analysis of migratory game bird status information, identification of management needs and problems, 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), and University of Alaska 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 2012-13 hunting regulations.

Accomplishments: Alaska played an active role on the Pacific Flyway Council (Dale Rabe) and Study Committee (Dan Rosenberg). Alaska served as Chair to the Pacific Flyway Study Committee and Consultant to the Service Regulations Committee. Alaska served on subcommittees to review management plans for Brant, Cackling Geese, Whitefronted Geese, Dusky, Aleutian, Taverner's, lesser, and Vancouver Canada Geese, Lesser snow and Ross' Geese, Emperor Geese, and Western and Eastern Tundra Swans. The Program Coordinator organized and Chaired a business meeting in July 2012 to review and recommend late-season regulations and Alaska subsistence hunting regulations, a Study Committee work session in December 2012 to review management plans and harvest strategies, and a spring business meeting in March 2013 to review and recommend early season hunting regulations for Alaska. The program continued important leadership roles in coordination of Pacific Flyway Council 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 Pacific Flyway coastal states, USFWS, and Alaska subsistence interests to improve population estimates and maintain fall and winter harvest restrictions to promote dusky Canada geese, cackling geese and Pacific Brant populations and to maintain more liberal harvests of abundant Pacific white-fronted geese and Aleutian geese. We completed a revision to the Flyway Management Plan for the Western Arctic Population of Lesser Snow 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.

The Program Coordinator was appointed to represent the Pacific Flyway Study Committee on the Arctic Goose Joint Venture and on the Harvest Management Working Group, a nationwide collaborative effort among state, federal, and private organizations to improve harvest management.

Objective: Develop funding opportunities and partners to achieve objectives of the Sea Duck Joint Venture (SDJV) Strategic Plan; contribute to research planning, coordination of management projects, and funding allocations; continue development of a population monitoring program.

Accomplishments: Alaska worked with partners in the US and Canada to review and recommend sea duck research and management projects to achieve objectives in the 2008-2012 SDJV Strategic Plan. We reinstituted in 2012 and continued in 2013 a population monitoring program in Southcentral Alaska that we 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 it in 2013 to mark 17 Barrow's goldeneyes in Kachemak Bay, AK with satellite transmitters (see below).

Objective: Band ducks at several sites to meet Pacific Flyway regional duck banding targets in conjunction with other 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. We banded 738 mallards and 1632 northern pintails in August 2012.

Objective: Evaluate results of 2011 HIP surveys to estimate harvest in Alaska and monitor 2012 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 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 Deputy Director Dale Rabe continued work with the Service and 11 Native regional representatives of the AMBCC, participating in meetings in September 2012, January, March, and April, 2013. Department activities and accomplishments include: (1) serving on the AMBCC Exclusion Committee, Invitation Committee, Fall/Winter Harvest Working Group, Indigenous Inhabitants Working Group, and Harvest Survey Committee to address solutions to outstanding regulatory issues and concerns; (2) providing data on population status and trends and design and interpret harvest survey data, (3) assisting with development of 2013 federal subsistence regulations and technical review and analyses of proposals; (4) presenting information on the status and trends of migratory bird populations and harvest in Alaska to the AMBCC; (5) providing guidance and assistance in an effort to develop a fall subsistence hunt; and (6) serving as primary liaison between the AMBCC and PFC. 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, 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 waterfowl Coordinator revised and distributed a flyer to duck stamp vendors clarifying hunting license and duck stamp regulations for the spring/summer subsistence and fall sport hunting season.

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 eider habitat, Environmental Impact Statements for the Izembek National Wildlife Refuge and National Petroleum Reserve and Candidate Notice of Reviews for threatened species.

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 is reassessing the population status of Cackling Canada Geese. The Department is committed to maintaining a 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.

In conjunction with area staff, program staff manages and reports 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. 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 is the Department contact for the Candidate Notice of Review for the Yellow-billed loon

Regional - Interior

Objective: Oversee implementation of the Management Plan for Mid-continent Whitefronted 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.

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 2012, staff banded 738 mallards, 1632 northern pintails and 10 green-winged teal.

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.

Objective: Produce annual estimates of dusky goose production on Copper River Delta (CRD), breeding Canada geese 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, 2012. 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 2,188 goslings were present on the west CRD survey area. Production of dusky Canada geese was 29.7%; lower than the last 4 years (range 37% - 47%), but slightly higher than the 10-yr average (28.1). We met the Pacific Flyway Dusky Canada Goose Management Plan objective of annual production of 20% young (measured as the most recent 10-year average). We did not survey dusky Canada geese on Middleton Island in FY13. The biennial survey was conducted in June 2012 and is next scheduled for June 2014. 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 banded 597 adult dusky Canada geese on the west CRD during 2 banding drives on July 18 and 19, 2012. Three hundred banded birds also received a red neck collar with a unique, white alphanumeric code. Banded birds were comprised of slightly more males (54%). One hundred thirty-three birds marked in previous years (recaptures) were captured in 2012. Recaptures included 2 radio-marked birds previously captured in OR (Ann Minnie, pers.com.). Two hundred-thirty blood quills were collected and archived for future genetics work.

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: Throughout summer, fall, and winter of 2012-2013, program staff monitored the movements of 12 satellite transmitted birds marked in Prince William Sound (PWS) and 6 marked on Middleton Island (MI), Alaska in late May-early June 2011. An additional 5 satellite transmitters PTTs were deployed in PWS and 28 on the Copper River Delta (CRD) in May 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. Geese were captured throughout PWS and the CRD to ensure a broadly distributed sample.

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 2012 and spring of 2013 ADFG searched for VHF radios deployed on Tule white-fronted geese. Radio collars were deployed by CA and OR state agencies at Summer Lake Wildlife Area, OR. A fall 2012 flight was conducted in the Upper Cook Inlet Basin (UCIB) on Aug. 22 prior to southern migration. Forty-five VHF radios were searched for during spring 2013 in Alaska. One flight in the Upper Cook Inlet Basin (UCIB) on May 28 (nesting period) yielded 22 unique frequencies. Another flight in the UCIB during the post-nesting period (June 20) yielded only 18 radios, six of which had not been heard during the May flight. 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 2013 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 form 1999-2003.

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. We placed satellite transmitters in 17 birds and tracked them to nesting locations in Alaska. Movements, seasonal use locations, and philopatry will be compared with goldeneyes marked on coastal wintering areas in British Columbia, Canada and Southcentral Alaska. Monitoring will continue in FY14.

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.

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 monitor the movements of birds to nesting, molting, and wintering locations.

Prepared by: Daniel Rosenberg.