Boreal Partners in Flight
2011 Annual Meeting and
Project Summaries

May 2012

Boreal Partners-in-Flight (BPIF) - Annual Meeting Agenda

December 7, 2011

USGS Conference Room

Glenn Olds Hall, Alaska Pacific University, Anchorage, AK

8:30 Welcome and Meeting overview – *Matt Kirchhoff*

8:40 Round-the-room introductions and any news of note – elective by attendees

9:00 Alaska Raptor Group News - *Steve Lewis*

9:30 Discussion (Threats and Opportunities - What could/should BPIF be doing?)

- Climate change
- Disease/genetics
- Changes to the boreal forest
- Energy/Mineral development
- Monitoring and inventory programs
- Species of conservation concern
- Important Bird Areas
- Landscape Conservation Cooperatives and Climate Centers
- Data repositories (eBird, AKN, PIF)
- Other?

10:30 Break (please contribute for coffee and snacks)

Scheduled Presentations

10:45 Peregrine Falcon Use of the Kenai Fjords Coast during the Breeding Season- *Laura Phillips* (Kenai Fjords NP)

11:00 Bald Eagle (*Haliaeetus leucocephalus*) Space Use in a Recently-Deglaciated Coastal Fjord, Icy Bay Alaska – *Steve Lewis* (USFWS)

11:15 Willow Ptarmigan Inventory on the Northern Alaska Peninsula. *Susan Savage* (USFWS)

11:30 Lunch (1 hr 30 minutes, on your own)

1:00 Autumn Passerine Migration on Middleton Island, Gulf of Alaska – *Lucas DeCicco* (USFWS)

1:15 Songbird ecology in shrub-tundra habitats of central Alaska – *Susan Guers* (Alaska Bird Observatory)

1:30 Polygamy and extra-pair paternity rates in Rusty Blackbirds of Yukon Flats National Wildlife Refuge, Alaska – *April Harding Scurr* (Alaska Bird Observatory)

1:45 Update on beak deformities: Evidence of global spread – *Caroline van Hemert* (USGS)

2:00 Towards the development of an Alaskan Node for the Avian Knowledge Network – *Tracey Gotthardt* (Alaska Natural Heritage Program – UAA)

2:15 Land-Bird Plan (Part I, Part II, Funding outlook, timeline) – *Colleen Handel*

2:30 Break (please contribute for coffee and snacks)

3:00 Follow-up to the Morning Discussion – What *Threats* should we be highlighting in our Landbird Plan? What *Species*? What *Actions*? We want to tie these to individual BCRs if possible

- Arctic Coastal Plain and Foothills
- Western Alaska
- Aleutian and Bering Sea Islands
- Northwestern Interior Forest
- Northwest Pacific Rainforest

4:00 Meeting Wrap-up – *Matt Kirchhoff*

- Election of Vice-chair for next year
- Need for all to submit activity reports for annual written report
- Next meeting (in conjunction with 2012 Alaska Bird Conference)

4:30 Adjourn

Minutes of the 2011 BPIF-ARG Meeting

Held December 7, 2011, USGS Conference Room

Glenn Olds Hall, Alaska Pacific University, Anchorage, AK

Call to Order:

Meeting was called to order at 8:45 AM by Matt Kirchhoff (Audubon), BPIF Co-chair. Approximately 40 members were in attendance. A list was circulated for people to sign, including contact information and option for inclusion on BPIF Google Groups email list (see attached; all attending opted to be added to the BPIF email list). Joining telephonically for portions of the meeting were Kristine Sowl (Yukon Delta NWR), Steve Matsuoka (U. of Alberta, FWS), Wendy Nixon (Canadian Wildlife Service—Whitehorse, YT), Pam Sinclair (Canadian Wildlife Service—Whitehorse, YT), and Craig Machtans (Canadian Wildlife Service—Yellowknife, NT).

Welcome:

Matt welcomed the group together, reviewed agenda, and solicited amendments or additional items to cover. (None offered).

Introductions and notices:

Members introduced themselves around the room. News or notice to the group was invited. This included:

- Travis Booms, with the ADFG Biodiversity Program, Fairbanks, announced interest in getting any sighting information on Grey-headed Chickadees for a possible future research-monitoring project.

- Maureen de Zeeuw (FWS) updated group on EPA watershed assessment of Bristol Bay to understand possible impacts of Pebble Mine Development. FWS Alaska Field Office has the lead for Wildlife Assessment, including birds. There are some particularly interesting findings on importance of Marine Derived Nutrients (MDN). The report is in review, and should be available soon.

Alaska Raptor Group (ARG) Report – Steve Lewis (FWS) chair

Steve described the mission and goals of the Alaska Raptor Group, and its steering committee structure. He highlighted some recent and upcoming projects, including:

- Outcome from 2010 Alaska Bird Conference Special Session "Long-term Studies of Alaska's Raptors: Continuing a Valuable Legacy"
    - An upcoming publication by Bob Ritchie (ABR) summarizing 40 years of Raptor Monitoring efforts in Alaska.
    - Also highlighted other authors from the session that had published work recently or are in preparation of publication.
- Discussed Short-eared Owl Conservation in Alaska:

    - Travis Booms and Jim Johnson (FWS) presented a paper on their Short-eared owl migration study at the Raptor Research Foundation annual meeting in Duluth Minnesota this fall.
    - There is continued conservation concern for the bird across its range.

- Raptor Monitoring Legacy:
    - Statewide Cliff-nesting Raptor Survey Effort Questionnaire:
        - An effort to learn what work has recently occurred to survey and monitor cliff-nesting raptor surveys in the State.
        - An ARG board member will follow up questionnaires to discuss with each respondent.
        - The project is limited to cliff-nesting raptors for now, but may be expanded to other raptors in the future.
    - Statewide Cliff-nesting Raptor Database and Long-term Monitoring Index Areas:
        - ARG Steering Committee will be meeting to discuss these topics before proposing to ARG.

- Database is effort to consolidate cliff-nesting raptor nest locations to better address management issues and conservation concerns, identify potential index areas, and facilitate maintenance of data across years and researchers

- Monitoring Index Areas: Areas to maintain long-term monitoring efforts using comparable methodology to support existing monitoring efforts and promote new ones.

- Research and monitoring efforts are ongoing for range of raptors across the state, including Golden Eagles, Short-eared Owls, Peregrine Falcons, and Bald Eagles.

The membership was enthusiastic about the work ARG is doing, and would like to be able to be more informed. Colleen mentioned there is possibility of modifying the BPIF website (housed under USGS) to include a page for the Alaska Raptor Group. There seemed to be agreement this was desirable, and someone from ARG will follow up.

Presentations:

Boreal Avian Modelling Project – *Steve Matsuoka* (U of Alberta): Described broad, collaborative project to compile and analyze data on landbirds across the boreal region of North America. Current initiatives include modeling distributions of birds relative to predicted climate-driven changes in habitat; identifying important conservation areas within BCRs; modeling avian densities relative to forest age and habitat structure; and modeling cumulative effects of future landscape changes during next century. Alaskan data from ALMS and inventory projects are being incorporated into a regional analysis. We are receiving funding from the Arctic LCC and support from the Western Alaska LCC to incorporate and analyze data from Alaska in the Boreal Avian Modelling Project.

Landbird Update and Yukon Program Summary – *Wendy Nixon* (Canadian Wildlife Service): A total of 32 all-bird BCR plans are due by end of March and then slated for review. A National database has been developed on species, habitats, objectives, and threats. Canadian Wildlife Service has an initiative to address incidental take. Olive-sided Flycatcher is listed as "threatened'. Rusty

Blackbirds and Short-Eared Owl are listed as "Special Concern"; Barn Swallow was recently recommended as Threatened, Bank Swallow is being assessed, and Belted Kingfisher and American Kestrel are candidates for assessment.

There is general concern for populations of aerial insectivores. *Dendroica* is a recently-developed online aid to learning bird songs, and the Status of Birds in Canada website has 100+ landbird species accounts. Major ongoing and upcoming work in the Yukon includes: bird-habitat associations along part of the proposed Alaska Gas Pipeline route; support to Yukon Bird Observatories at Albert Creek and Teslin Lake; development of salvage logging guidelines; wetland surveys; expanded Breeding Bird Survey effort with hired staff in southern Yukon; and completion of on-line breeding bird atlas of BC.

Group Discussion: (led by Colleen Handel)

Colleen highlighted a number of the conservation issues we share in common with Canada. The boreal forest, in particular, is a zone that is extremely important to land birds, and is vulnerable to climate change. The group discussed the need to focus more attention on this zone, and in particular, to consider seeking support from the Arctic and Western Landscape Conservation Cooperatives (LCCs) to support such work. The "boreal" zone, at least in the context that Steve Matusoka reported, includes more than the boreal forest, but extends northward and westward into treeless habitats. The group agreed this trans-boundary work was a priority, and we should seek opportunities for collaborative work with Canadians. Issues identified included climate change, inventory and monitoring, mitigating effects of wind energy development. These issues and needs should be highlighted within the landbird conservation plan, which will be discussed in more detail later in the meeting.

Logo for BPIF:

The group voted to select one of several potential logos designed by Iain Stenhouse for BPIF. Thank you Iain!

Presentations (continued)

Peregrine Falcon Use of the Kenai Fjords Coast during the Breeding Season- *Laura Phillips* (Kenai Fjords NP): Described results of inventory as basis for potential future monitoring effort and to compare with historical surveys in 1985 and 1990. Found most falcons associated with Glaucous-winged Gull colonies, which have increased greatly in size. Subspecific and migratory status of falcons still uncertain.

Bald Eagle (*Haliaeetus leucocephalus*) Space Use in a Recently-Deglaciated Coastal Fjord, Icy Bay Alaska – *Steve Lewis* (USFWS): Used satellite PTT transmitters to track movements of eagles and assess potential predation pressure on Kittlitz's Murrelets nesting in recently deglaciated areas.

Willow Ptarmigan Inventory on the Northern Alaska Peninsula - *Susan Savage* (USFWS): Described results of initial point-count surveys for potential monitoring of ptarmigan populations relative to climate changes. Results suggest line transects may be more suitable than point transects.

Autumn Passerine Migration on Middleton Island, Gulf of Alaska – *Lucas DeCicco* (USFWS): Significant numbers of passerines during fall suggest there may be a regular trans-Gulf migration during autumn that is influenced by storms.

Songbird ecology in shrub-tundra habitats of central Alaska – *Susan Guers* (Alaska Bird Observatory): Plots along Denali Highway suggest songbird phenology varies strongly with elevation. Shrub habitats are changing rapidly in this area, and there are significant conservation threats from mining development.

Polygamy and extra-pair paternity rates in Rusty Blackbirds of Yukon Flats National Wildlife Refuge, Alaska – *April Harding Scurr* (Alaska Bird Observatory): Two-year study of Rusty Blackbirds showed no polyandry or egg-dumping but rates of extra-pair paternity were high; site fidelity was relatively low; clumping of nests was highly variable.

Update on beak deformities: Evidence of global spread – *Caroline van Hemert* (USGS): Recent observations of various songbird species with beak deformities in the UK and northern Europe, India, and South America suggest that Avian Keratin Disorder may be spreading globally. Recent research on histopathology, captive experiments, and prospective epidemiological modeling was described. Etiology is still unknown but testing for multiple potential agents continues.

Towards the development of an Alaskan Node for the Avian Knowledge Network – *Tracey Gotthardt* (Alaska Natural Heritage Program – UAA): Described most recent work with Avian Knowledge Network (and eBird) for Alaskan data and how we can contribute to archiving data permanently.

Land-Bird Plan (Part I, Part II, Funding outlook, timeline) – Colleen Handel

Colleen reported that a near-final version of Part I of the Alaska Landbird Conservation Plan had been completed by Iain Stenhouse, with the help of the Steering Committee. It has now been laid out in print-ready format. She walked the group through the main sections of the copy she had. It follows the Alaska Shorebird Conservation Plan quite closely. The only remaining work to be done includes minor editing, including replacing some pictures of non-Alaskan birds. Colleen noted that the Pacific Coast Joint Venture (PCJV) has provided some funding for editing of Part II of the Plan, combining it with Part I, and printing the completed Plan, but we will likely need some additional funding from other cooperators to finish this project. She and Iain are developing a budget for this aspect of the work. She expressed her appreciation to ADFG, USFWS, USGS, and PCJV for their funding support of the effort thus far.

Discussion: The Alaska Landbird Plan Revision (Colleen Handel)

There are a finite number of things we can focus out time, energy and resources on for the conservation of landbirds in Alaska. The purpose of our landbird plan is to identify threats, establish priorities, and recommend actions. We can identify a long laundry list of threats and concerns, but can we prioritize among competing needs or objectives? To help structure the discussion, Colleen projected the following list of 7 as a start, and asked the group what they thought was most important. The group was invited to add other items.

Possible priorities:

(1) Assessing population trends
(2) Developing habitat suitability models
(3) Forecasting habitat changes
    a. Climate
    b. Development
(4) Understanding population responses to habitat change

(5) Establishing data repositories & coordinating data collection
(6) Modeling/identifying important bird areas
    a. Current
    b. Future refugia
(7) Identifying focal species for each BCR
    a. Foraging guilds
    b. Habitat guilds
    c. Migratory guilds

Some suggested assessing vulnerability should be on the list. Several supported 3 and 4 as higher needs. Another need is reliable climate forecasting, and remotely sensed vegetation layers for the state, both present and projected. The group struggled with the task of prioritizing these, and thought the question might be improperly framed. The goal should be conserving biodiversity and systems, not breaking it into these chunks. Saving species one at a time will never work. Is the "focal species" or species-centric model for planning appropriate? There seemed to be agreement that preserving systems and biodiversity was the common goal, but that actions on the ground, particularly research, had to have a specific spatial and taxonomic focus given resource constraints. Chris Harwood observed people were possibly mixing discussion of goals, getting confused with different levels of a strategic plan, from vision, to goals, to objectives, to specific actions. We end up talking past one another. Dave Tessler noted there is a "Conservation Actions Taxonomy" (see www.conservationmeasures.org) that might provide a common language for designing and measuring our conservation actions. Lead authors for Part II of the Landbird Conservation Plan might give this a look. In the end, we ran out of time trying to prioritize among these various objectives, and punted to the leads drafting the BCR sections in part II of the plan. They are urged to follow the format in the Alaska Shorebird Plan as a guide so this is easier for Colleen or an editor to pull together in a cohesive package.

Matt and Colleen reviewed where we are with drafts. Steve Kendall and Melissa Cady had drafted very detailed and helpful outlines for all authors to follow for each BCR. BCRs for Western Alaska (2), North Pacific Rainforest (5), and Aleutian/Bering Sea Islands (1) have drafts in various stages of completion, although they have not been reviewed. There is a larger All-Bird Plan for BCR 4 available (written by Susan Sharbaugh at the Alaska Bird Observatory) that may provide a source of good information for that section of the Landbird Plan. Matt noted we currently have no identified leads for the Arctic Plains and Mountains (BCR 3) or the Northwestern Interior Forest (BCR 4), and requested volunteers. Travis Booms volunteered to lead BCR 3 and Maureen de Zeeuw volunteered for BCR 4.

BCR Lead Authors:

- Aleutian/Bering Sea Islands – Jim Johnson, Luke DeCicco, Heather Renner
- Western Alaska - Susan Savage and Kristine Sowl
- Arctic Plains and Mountains – Travis Booms and Luke DeCicco
- Northwestern Interior Forest - Maureen DeZeeuw
- North Pacific Rainforest - Melissa Cady

After the first of year, Colleen will send out drafts completed to date to all lead authors, along with guidelines for format, content, and length. Colleen and Iain will develop a budget for completion of Part II. An initial target date of 31 March 2012 has been set for submission of completed drafts. Colleen will continue to act as liason and editor through this process.

Election of officers:

Matt announced that Jim Johnson (FWS) had accepted nomination to serve as the next vice-chair for the BPIF group, and requested a motion to elect Jim to a 2-year term. Travis Booms so moved, with David Tessler seconding. Motion passed by unanimous acclaim. Thank you for stepping up Jim!

Jim will begin serving a 2-year term that overlaps with the second year of co-chair Michelle Michaud's term. By recent tradition, the co-chair in the second-year of their term has primary responsibility for moderating the annual BPIF-ARG meeting and compiling the annual activity report. Both co-chairs work together to plan the meetings, keep the membership informed of issues throughout the year, and coordinate any group activities, initiatives, or position statements.

Activity Reports:

Matt reminded the group that the annual summary of field activities for summer 2011 is being compiled now, and thanked those who have already submitted their abstracts. These annual summaries serve as a valuable long-term record of landbird work being done in the state (especially work not published). An archive of past reports is available on line at the USGS website. Anyone who has not yet submitted an abstract for 2011 should send that to Matt by February 1. He will circulate a draft for group review before finalizing.

Upcoming Meetings:

Matt announced the time and location of the bi-annual Alaska Bird Conference as October 22-26th, 2012, at the Captain Cook Hotel, in Anchorage.

Matt invited interested BPIF members to attend the Alaska Shorebird Group meeting, to be held tomorrow (Dec 8) in this same conference room.

Other Issues:

The question was asked why the BPIF meetings and AK Bird Conference meetings aren't rotating around the state. The reply was that attendance is generally higher in the central location of Anchorage because transportation costs are lower, and it's most convenient. In the case of the AK Bird Conference, we have had trouble finding a sponsor to take on the planning and financial aspects in other cities. But the group agreed rotating it was a good idea, after the next joint BPIF-ABC conference next October.

Adjourn:

Matt was thanked by the group for his service this past year as Co-chair of BPIF. The meeting was officially adjourned at 5:15 PM.

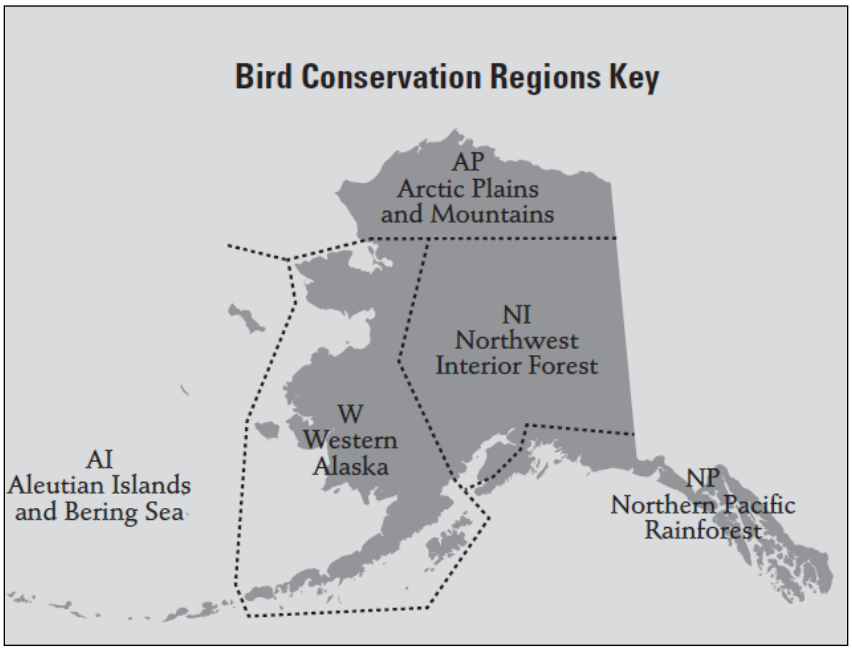
List of Attendees at 2011 Boreal Partners in Flight Annual Meeting:

Name	Affiliation	Email
Matt Kirchhoff	Audubon Alaska	mkirchhoff@audubon.org
Colleen Handel	USGS Alaska Science Center	cmhandel@usgs.gov
Carole Jorgensen	Chugach NF (Anchorage)	cjjorgensen@fs.fed.us
Caroline Van Hemert	USGS Alaska Science Center	cvanhemert@usgs.gov
April Harding Scurr	AK Bird Obs./Humboldt State U.	april1bird@gmail.com
Nicole Pearche	Alaska Bird Observatory	npearce@alaskabird.org
Sue Guers	Alaska Bird Observatory	sguers@alaskabird.org
Erin Cooper	USFS Cordova Ranger District	ecooper@fs.fed.us
Kelly Overduijn	USGS Alaska Science Center	koverduijn@usgs.gov
Cheryl Carrothers	USFS Regional Office (Juneau)	ccarrothers@fs.fed.us
Lisa Pajot	USGS Alaska Science Center	lpajot@usgs.gov
Diane Granfors	US Fish and Wildlife Service	diane_granfors@fws.gov
Kelly Walton	Alaska Natural Heritage Program	ankmw4@uaa.alaska.edu
Marilyn Myers	US Fish and Wildlife Service	marilyn_myers@fws.gov
Erica Craig	Aquila Environmental	aquila_environmental@acsalaska.net
Tammy Wilson	National Park Service--SWAN	tammy_wilson@nps.gov
Robin Corcoran	Kodiak NWR	robin_corcoran@fws.gov
Lila Tauzer	U. AK Fairbanks/Alaska Bird Obs.	lmtauzer@alaska.edu
Travis Booms	AK Department of Fish and Game	travis.booms@alaska.gov
Luke DeCicco	US Fish and Wildlife Service	lucas_decicco@fws.gov
Chris Harwood	Kanuti NWR/U. AKFairbanks	christopher_harwood@fws.gov
Brian McCaffery	Yukon Delta NWR	brian_mccaffery@fws.gov
Maureen de Zeeuw	US Fish and Wildlife Service	maureen_deZeeuw@fws.gov
Amal Ajmi	US Army/Colorado State University	amal.r.ajmi.ctr@mail.mil

Jeff Mason	US Army/Colorado State University	jeffrey.mason@colostate.edu
Laura Phillips	Kenai Fjords NP	laura_phillips@nps.gov
Herman Griese	US Air Force--JBER	herman.griese@elmendorf.af.mil
Jim Johnson	US Fish and Wildlife Service	jim_a_johnson@fws.gov
Mary Ann Benoit	USFS Seward Ranger District	mbenoit@fs.fed.us
Susan Savage	Alaska Peninsula NWR	susan_savage@fws.gov
Sherri Anderson	National Park Service--KATM, ANIA	sherri_anderson@nps.gov
Donna Dewhurst	US Fish and Wildlife Service	donna_dewhurst@fws.gov
Lynn Fuller	Pacific Coast Joint Venture	lynn_fuller@pcjv.org
Jessica Ilse	USFS Girdwood Ranger District	jilse@fs.fed.us
Kristine Sowl	Yukon Delta NWR	kristine_sowl@fws.gov
Steve Matsuoka	University of Alberta/FWS	steve.matsuoka@ales.ualberta.ca
Pam Sinclair	Canadian Wildlife Service	pam.sinclair@ec.gc.ca
Wendy Nixon	Canadian Wildlife Service	wendy.nixon@ec.gc.ca
Craig Machtans	Canadian Wildlife Service	craig.machtans@ec.gc.ca
Steve Lewis	U.S. Fish and Wildlife Service	steve_b_lewis@fws.gov

About this Report

This report summarizes activities related to monitoring, research, and education conducted on land birds in each of the five Bird Conservation Regions (BCRs) in Alaska (Figure 1). Within each BCR, projects are organized by category of work, including monitoring, research, and education. This report compiles voluntarily submitted work, and does not represent a complete annotation of all land bird work conducted in 2011. Persons wishing to cite results from these summaries are asked to contact the identified lead author (or contact person) for permission, and most current results.



PROJECT SUMMARIES

BCR 1 – ALEUTIAN ISLANDS AND BERING SEA

None Submitted

BCR 2 – WESTERN ALASKA

Compiled by Susan Savage, from reports by: Susan Savage[1], Peter Bente[2], Robin Corcoran[3], Tina Moran[4], Christine Peterson[5], Kristine Sowl[6], Michael Swaim[7]

[1](BCR Coordinator), USFWS - Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613

[2]ADF&G, Northwest Regional Office, POB 1148, Nome, AK 99762

[3]UWFWS - Kodiak NWR, 1390 Buskin River Road, Kodiak, AK 99615 (Kodiak)

[4]USFWS – Selawik NWR, PO Box 270, Kotzebue, AK 99752

[5]USFWS - Izembek NWR, PO Box 127, Cold Bay, AK 99559

[6]USFWS – Yukon Delta NWR, PO Box 346, Bethel, AK 99571

[7]USFWS - Togiak NWR, PO Box 270, Dillingham, AK 99576

Monitoring:

Breeding Bird Survey (BBS) Routes

Eleven Breeding Bird Survey Routes were completed: Dillingham (Togiak staff), King Salmon (Alaska Peninsula staff), 2 on Kodiak (C. Trussell of Kodiak College and R. MacIntosh with Kodiak NWR support), Kotzebue (Randy Meyers, retired BLM and Kotzebue staff) and five on the Nome road system (ADF&G staff), and St. Mary's (had not been done since 2002; Laurel Devaney and Ken Russell of the Fairbanks Fisheries Office).

Alaska Landbird Monitoring Survey (ALMS) Plots

Two Alaska Landbird Monitoring Survey plots were completed at Alaska Peninsula/Becharof (19 points were duplicated also).

Christmas Bird Counts (CBC)

Seven Christmas Bird Counts were completed: Bethel (sponsored by USFWS staff), Cold Bay (sponsored by Izembek staff), Dillingham (sponsored by Togiak staff), King Salmon (sponsored by Alaska Peninsula/Becharof NWR), 2 at Kodiak (supported by Kodiak NWR including use of the research boat Ursa Major II), and Nome (supported by community volunteers).

North American Migration Counts

Two North American Migration Counts (May 2011): Dillingham and King Salmon (sponsored by Togiak and Alaska Peninsula/Becharof staff, respectively).

Cliff Nesting Raptor Inventories

Cliff-nesting Raptor Inventory on the Southern Seward Peninsula (ADF&G, Bente & Booms). Aerial surveys were completed in June 2011 (Bente) and individual nesting locations of gyrfalcon and golden eagle were visited for sample collections in July 2011 (Booms). Overall, distribution of nesting pairs was sparse and productivity was low, except for an increased number of peregrine falcon nesting locations in the study area.

Yukon-Delta NWR and ADF&G (Travis Booms) cooperated to conduct cliff-nesting raptor surveys at Ingakslugwat Hills and Askinuk Mountains. Productivity for all cliff-nesting raptors was extremely poor at both sites in 2011.

Raptor Carcass Collections

Raptor First Aid and Transport / collection of carcasses (Alaska Peninsula/Becharof, Izembek, Kodiak, and Togiak NWRs). (Alaska Peninsula: 2 mortalities and 4 injured/sick birds; Izembek: 2 injured Bald Eagles sent to Bird TLC; Kodiak: Bald Eagles – 27 mortalities and 18 injured/sick birds sent to Bird TLC in Anchorage; Togiak 2 mortalities and 1 injured/sick bird).

Avian Database for Alaska Peninsula/Becharof and Izembek NWRs

Alaska Peninsula/Becharof NWR seasonal staff entered several more field camp seasons of incidental bird records, rare bird records and mortalities (accounting for some other rare birds) into the incidental avian observations database maintained at the Refuge. The formatting of these for e-Bird or the Avian Knowledge Network submission continued as time allowed.

Izembek NWR staff continued entry of all historical and current incidental bird records into a new database. These observation records include phonological, rare, and T&E information.

Education / Outreach:

Alaska Migratory Bird Calendar

Alaska Migratory Bird Calendar Contest: Alaska Peninsula/Becharof NWR staff visited nine schools in Bristol Bay and Lake and Peninsula Boroughs. Togiak NWR staff visited twelve public schools to encourage participation. Yukon Delta NWR had more than 207 entries for Alaska Migratory Bird Contest.

Great Backyard Bird Count

Great Backyard Bird Count was sponsored by the staff at Togiak NWR.

Cold Bay School

Izembek NWR staff visited the Cold Bay School and made a presentation on bird identification, to encourage participation in this outdoor activity as well as appreciation for the natural resources in the region.

Community Bird Walks and Tours

Staff of the Yukon Delta NWR conducted a total of 17 community bird walks and tours in the Bethel area. Birding expertise was provided to two birding tours that were conducted on the Gweek River by Kuskokwim Wilderness Adventures. Eight community bird walks were targeted specifically to children and were done in cooperation with the Tundra Women's Coalition and the University of Alaska's Educational Talent Search Program. Staff at Togiak NWR presented information on migratory birds at Dillingham Elementary and led an outdoor bird walk.

Selawik NWR staff, along with a volunteer with the Friends of Alaska National Wildlife Refuges, conducted a series of bird walks in May for Kotzebue residents, and two bird walks/education activities with Selawik children.

Bethel Fair

Yukon Delta National Wildlife Refuge hosted the "Bethel Bird Fest" in conjunction with the Bethel Community Fair on August 27. The Bird Fest was held outside in a community park and included a mist net demonstration, use of binoculars and spotting scopes for bird viewing, and a presentation with a live Great Gray Owl and Bald Eagle by Kristen Guinn of the Bird Treatment and Learning Center.

Monitoring Avian Productivity and Survivorship (MAPS)

Robin Corcoran[1]

[1] U.S. Fish and Wildlife Service, 390 Buskin River Road. Kodiak, AK 99615-6851 (907) 487-2600.

The summer of 2011 marked the second season of the Kodiak Refuges' Monitoring Avian Productivity & Survivorship Program (MAPS) at Refuge headquarters on the Buskin River State Recreation Area. This season, Refuge employees and volunteers banded 217 birds representing 13 species, and recaptured 45 birds including 16 birds banded last year. In general resident (non-migratory) and short distant migrants had higher capture and return rates and higher productivity compared to long-distance migrants. Cooperators from the community included Cindy Trussell, biology professor at Kodiak College, and Rich MacIntosh, a retired biologist with NOAA Fisheries and local bird expert. Despite the early morning hours working before sunrise to set up nets, this summer we had 30 volunteers from the Kodiak community participate, including several enthusiastic youngsters.

Media

Weekly episodes of Bristol Bay Field Notes were completed and broadcast on the local radio station, KDLG (Togiak NWR).

Issues

Kodiak Airport Draft Environmental Impact Statement is expected to be released for both public and agency review in summer 2012. Kodiak Airport has two runways with insufficient Runway Safety Areas (RSA). Alternatives include runway expansion on the north side of the airport that would impact the mouth of the Buskin River, important salmon, wintering waterfowl, and landbird habitat.

Hard Rock Mining: The Platinum Mine recently changed hands and an Environmental Assessment is being written regarding impacts on Togiak NWR. The mine site includes subsurface properties of the Refuge between Goodnews and Chaguan Bay. Activity continues with the Pebble Mine (potentially the largest gold & copper mine in North America; straddling n the upper Kvichak and Nushugak drainages) which is still in the pre-feasibility and pre-permitting stages.

The Omnibus Public Land Management Act of 2009 was signed into law on March 30, 2009. As directed in the Act, an EIS is currently being drafted to evaluate the impacts of a proposed land exchange between USFWS and the State of Alaska and the King Cove Corporation for the purpose of constructing a single-lane gravel road between the communities of King Cove and Cold Bay, Alaska through the Izembek Wilderness portion of Izembek National Wildlife Refuge. The EIS for this project was released for public review in March 2012.

Renewable Energy Development: Multiple entities continue to consider the development of alternative energy to save money, reduce the carbon footprint, and/or supply energy in remote areas where other options are limited. See the 2010 report for additional details. Alaska Peninsula and Izembek NWR completed environmental compliance in preparation for installation of several wind generators in the vicinity of refuge complex buildings. Izembek began installation in fall of 2010. Due to design issues, the project has been delayed and Alaska Peninsula Refuge project by the same contractor has been put on hold. Izembek staff is designing a project to evaluate the effects of these wind turbines on birds at the refuge.

Research

Abundance and Distribution of Cliff-Nesting Raptors and Ravens on the Southern Seward Peninsula, Alaska

by: Peter J. Bente, Alaska Department of Fish and Game, P.O. Box 1148, Nome, Alaska 99762-1148, USA; correspondence: peter.bente@alaska.gov

Aerial helicopter surveys of 16,000 km^2 of cliff-nesting raptor habitat over a six-year period show trends in occupancy, abundance, and distribution of Golden Eagle *Aquila chrysaetos*, Rough-legged Hawk *Buteo lagopus*, Gyrfalcon *Falco rusticolus*, Peregrine Falcon *Falco peregrinus*, and Common Raven *Corvus corax*. Of 635 locations examined within tundra habitat, bird occupancy ranged from 36–48% of surveyed sites yielding an average nesting density of 0.2 attempts/km^2. Gyrfalcons demonstrated stability, averaging 41.6 locations/yr, but showed high variation in site selection when 70% of 155 occupied locations were used once or twice in 6 years. Comparatively, one location was occupied for all six survey years. Annual occupancy by Golden Eagle ($\bar{x}$ =37.3), Peregrine Falcon ($\bar{x}$ =7.8), and Common Raven ($\bar{x}$ =40.6) varied in distribution and selection of alternate nest sites in successive years. Rough-legged Hawk numbers were highly variable, ranging from 57–118 occupied locations. High occupancy rates across cumulative years are suggested by observations of 150 unoccupied sticknests/yr. Cumulative loss of nearly 60 nest structures/yr through winter wind-scour or snow loads is characteristic of the area and some cliffs retained nest scars of bleached rock indicating no recent rebuilding of structures. Instability of nest structures in response to erosive pressures may contribute to the high variability of nest site selection associated with cliff-nesting raptors in this area of tundra habitat in western Alaska.

Abundance and Multi-year Occupancy of Gyrfalcons Falco Stuicolus on the Seward Peninsula, Alaska[1]

By Peter J. Bente, Alaska Department of Fish and Game, Division of Wildlife Conservation, P. O. Box 1148, Nome, Alaska 99762-1148, USA; ; correspondence: peter.bente@alaska.gov.

The purpose of this work is to determine inter-annual variability in abundance, occupancy, distribution, and nesting success of Gyrfalcons (*Falco rusticolus*) and other cliff-nesting raptors within 14,150 km^2 of the Seward Peninsula in western Alaska. From 2005 through 2010 comprehensive helicopter surveys were used for annual inspections of 679 discrete rock cliffs typically occupied by raptors within the study area. Based on 1,372 cumulative nesting events at 454 unique locations, Gyrfalcons comprised 18% of total raptor occupancy, ranging from 40 – 43 locations annually. Individual Gyrfalcon observations (n = 250) show use of 154 separate cliff locations by single birds (16%; n=39), unsuccessful pairs (11%; n=28), and successful pairs (73%; n=183). Nest types and usage included: cliff stick nests constructed by other raptors and ravens,

1 BENTE, P. J. 2011. Abundance and multi-year occupancy of Gyrfalcons F*alco rusticolus* on the Seward Peninsula, Alaska. *In* R. T. Watson, T. J. Cade, M. Fuller, G. Hunt, and E. Potapov (Eds.). Gyrfalcons and ptarmigan in a changing world. The Peregrine Fund, Boise, Idaho, USA. DOI 10.4080/gpcw.2011.0204

73%; rock ledges, 16%; man-made structures, 7%; and tree stick nests, 2%. Mean nearest neighbor distances varied from 8.8 to 10.0 km with distances ranging from 0.8 to 37.6 km indicating that both clustered and dispersed nesting are characteristics of this area, each strongly influenced by local topography, dissected rock cliffs and broad lowland areas with no cliffs. Clustering of closely-spaced alternate nesting locations yields 96 unique nesting areas with minimal inter-annual overlap and maximum distance separation among occupied sites, suggesting that pairs have relatively high rates of movement to 'new' nesting areas in successive years. Based on iterative counts of pair occupancy at the same location (n=248 nesting events), the majority were occupied 1-yr (n=79 nesting events) before becoming vacant. Longer periods of pair occupancy were observed at 30 locations with 2-yr tenure (n=60), 14 locations with 3-yr (n=42), 8 locations with 4-yr (n=32), 4 locations with 5-yr (n=20) and 3 locations with 6-yr occupancy (n=18). Since abundance of pairs is stable through time, the high frequency of 1-yr nesting events suggests variable site selection and low nest-site tenacity among pairs. Gyrfalcon occupancy ranged from 31 – 39 pairs, yielding a maximum nesting density of 2.7 pairs per 1,000 km^2. Successful pairs varied annually from 72 – 93% of total occupied locations; brood size (n=183 locations with nestlings) ranged from 2.35 – 2.70 young/successful pair (1.50 – 2.23 young/total pair). Hatch dates ranged from 7 May to 27 June with low intra- or inter-annual nesting synchrony and little evidence of re-cycling due to nesting failure. Brood size rates are probably minimum values due to errors associated with finding or counting nestlings from an aerial survey platform. Even if brood rates assessed in June decline as fledging approaches, the observed values remain high enough to explain the stability of numbers and pairs in the Seward Peninsula population.

Willow Ptarmigan Pilot Study, Alaska Peninsula, May 2011[2]

Susan E. Savage, Kevin J. Payne and Robert T. Finer

U.S. Fish and Wildlife Service, Alaska Peninsula / Becharof National Wildlife Refuge, PO Box 277, King Salmon, AK 99613, susan_savage@fws.gov

Willow ptarmigan (*Lagopus lagopus*) are a species of management interest because they are heavily used by both sport and subsistence harvesters; adults, chicks and eggs are important prey items for several species of raptorial birds (Hik 1986, Hannon et al. 2003), foxes, wolves, and potentially lynx (Klausen et al. 2010, O'Reilly and Hannon 1989); they are a sentinel species for climate change (see conference abstracts: Gyrfalcons and Ptarmigan in a Changing World 2011, The Peregrine Fund); they may be used as indicators of any contaminants that may be transmitted to the subarctic environment from distant sources (Pedersen et al. 2006). While ptarmigan have been well studied in other regions of North America and Europe, relatively little work has been done in Alaska (work by Weeden in the 1960's-1970's; West and Meng 1966, Taylor 1999 and 2000), and virtually none on the Alaska Peninsula (subspecies described in West et al. 1970). Although they are a "Game" bird and managed under resident species regulation, as opposed to migratory bird regulation, to date the Alaska Department of Fish and Game (ADF&G) had little funding to study them on the Alaska Peninsula[3]. Small game (including ptarmigan) hunting is authorized under four Guide Permits on the Alaska Peninsula/Becharof NWR. Unguided hunters may take ptarmigan under sport regulations (August 10 – April 30; 20/day, 40 in possession) and the same season and

2 See Appendix A for literature cited

[3] ADF&G hired a small game biologist in summer of 2011 who is currently exploring the possibility of trend counts around the state and in fall 2011 began soliciting wing collections from hunters (Richard Merizon pers. comm.).

bag limits apply to all rural Alaska Residents hunting on Federal Land. Ptarmigan are not covered under the *Alaska Subsistence Spring/Summer Migratory Bird Harvest* regulations.

This year the Alaska Peninsula/Becharof NWR embarked on a pilot study to test the feasibility of gathering trend data and habitat data for willow ptarmigan. This study was conducted on the Northern Alaska Peninsula at fixed-wing accessible locations around Becharof Lake and near Blue Mountain. We used a bekking call survey similar to that used by Alaska Department of Fish and Game Biologist Taylor in GMU 13. Eight sunrise and one sunset transects were completed at five locations between 17 and 30 May. Along these transects we completed 58 bekking call point counts. After correcting for likely duplicate observations, we determined that 194 individual male ptarmigan were detected during point counts, and 241 individual male ptarmigan were detected either at point counts or en route. The female count was 4 during point counts and 7 en route. This resulted in an average of 3.3 (by transect range of 2.4 to 3.8) male ptarmigan per point count or 4.2 (range of 3.2 to 5.2) male ptarmigan if en route birds were included. In contrast to Taylor's (1999, 2000) results in GMU 13 , a very small percentage of males reacted to the playbacks (8%). Since this is the first year of the study, we make quantitative assessments of any population trends. The report includes information about ptarmigan habitat associations, and incidental birds and mammals also seen during the survey. Suggestions to improve the survey are included in the report.

BCR 3 – ARCTIC PLAINS AND MOUNTAINS

Compiled by Melanie Flamme[1]

[1] Biologist, NPS Yukon-Charley Rivers National Preserve and Gates of the Arctic National Park and Preserve, National Park Service, 4175 Geist Road, Fairbanks, AK 99708, (907) 455-0627.

Monitoring

Breeding Bird Survey (BBS) Routes

We completed two BBS routes near Yukon-Charley Rivers National Preserve this summer. The routes occurred along the stretch of the Taylor Highway near Eagle, Alaska (Eagle Route) and along the stretch near Chicken, Alaska (Chicken route). This is the fifth year we conducted the Eagle route and the first year for the Chicken route.

Peregrine Falcon Monitoring

We completed the 36th year monitoring of the American peregrine falcon (*Falco peregrinus anatum*) population along the upper Yukon River including Yukon-Charley Rivers National Preserve. In 2011, we surveyed 265 km (165 miles) of the upper Yukon River by boat for peregrines. Fifty-four territories (the most ever recorded for the second year in a row) were occupied by American peregrine falcons along the upper Yukon River in 2011 (53 pairs and 1 single adult). Thirty-seven of 53 pairs (69.8%) were successful, and produced 75 nestlings. Productivity (≥ 1 nestling observed) was 1.42 nestlings per total pair and 2.03 nestlings per successful pair (Table 2). Between 1973 and 2011, the number of total and successful pairs nesting along the upper Yukon River has been steadily increasing, though the percentage of total pairs nesting successfully has been declining. In 2008, 2009 and 2011, new territories were established on bluffs not previously used by

peregrines in over 35 years of observations. This may be attributable to increased competition for resources due to increased density.

We also collected 1 addled egg for contaminants analyses to assess the levels of persistent organic pollutants (e.g. DDT, and PCBs) and heavy metals (e.g. mercury and cadmium) present in American peregrine falcons on their wintering grounds. These were submitted to Dr. Angela Matz, our collaborator at USFWS, who will handle the processing and analyses of the contaminants samples. One egg was swabbed for genetics analyses.

Education/Outreach

Bird Outreach

In 2011, the joint Gates of the Arctic National Park and Preserve and Arctic Inventory and Monitoring Network outreach program occurred for its third year in Anaktuvuk Pass with Tracie Pendergrast and Melanie Flamme. The program was expanded in 2011 to include programs on yellow-billed loons, ravens and owls. Additional educators, DaleLynn Gardner and Stacia Backenso were trained to develop and conduct programs so that additional schools in northern villages can be reached in the future. Programs were conducted in every grade level at the school and an evening presentation on yellow-billed loon studies was provided for the community.

Peregrine Falcon Outreach

Developed a new camera system for live-viewing of American peregrine falcons on the upper Yukon River at Eagle Bluff eyrie. The camera has remote pan, zoom and focus and its own IP address. The YUGA NPS recently acquired a hughs.net site so it will be possible in the near future to view the live-feed from the eyrie from any computer with internet access. We hope to get the system operational for viewing next summer (2012).

BCR 4 – NORTHWEST INTERIOR FOREST

Kanuti National Wildlife Refuge

Chris Harwood and Tim Craig- Kanuti National Wildlife Refuge, 101 12th Avenue, Room 262, Fairbanks, Alaska, 99701; correspondence christopher_harwood@fws.gov and timothy_craig@fws.gov

Monitoring

First Arrivals/Spring Migration Phenology

Kanuti Refuge personnel stationed at the Kanuti Lake administrative cabin on the Kanuti River have recorded spring (first) arrival dates for migrants since 2008. Each year staff have arrived at the cabin no later than 1 May, pre-dating most landbird migrants. Daily checklists of all bird species are also maintained. Other phenological (leaf out, insect emergence, etc.) and hydrological (break-up, flooding) data are also recorded.

Breeding Bird Survey (BBS)

Neither of Kanuti NWR's two Breeding Bird Surveys (BBSs) was done in 2011. Kanuti's BBSs have not been done since 2008 due to scheduling conflict with other projects.

ALMS Point Counts

Kanuti NWR has participated in the Alaska Landbird Monitoring Survey (ALMS) since 2003. Kanuti is responsible for 2 plots, each of which is done every two years. In 2011, the Refuge entered into an agreement with the Alaska Bird Observatory (ABO), a North and West Alaska Cooperative Ecosystem Studies Unit (NWA-CESU) partner, to complete the 2 ALMS surveys. ABO did the same surveys for Kanuti in 2009. The surveys were completed in June 2011 and the data will be forwarded to the USGS Alaska Science Center which currently manages the statewide ALMS database.

Kanuti Inventory Point Counts

In addition to the ALMS monitoring surveys, Kanuti NWR has also conducted simultaneous bird and bird-habitat "inventory" surveys on the Refuge since 2004. These surveys occur at plots that are laid out in a systematic, random, sampling scheme spaced at 10 km intervals that are the loci for a Refuge-wide biotic and abiotic inventory. The bird inventory surveys follow the sampling design and field protocols of the statewide ALMS program, and thus can contribute directly to the regional habitat modeling component of ALMS. The main difference between the two survey protocols is that the inventory plots are half the size (12 points, instead of 25) of the ALMS plots. Of the 60+ available plots identified within the Refuge, bird and bird-habitat sampling has been conducted at 15 plots so far. The same Alaska Bird Observatory crew that completed the 2 ALMS plots in 2011 also completed 3 inventory plots in June 2011.

Northern Goshawk Survey

Kanuti NWR staff conducted a pilot inventory of nesting/territorial Northern Goshawks in the Kanuti River watershed using broadcast calls in 2011. The crew used a modified USDA Forest Service protocol in which goshawk calls were broadcasted from a boat at predetermined stations along the Kanuti River. Goshawks were detected at 4 of 80 calling stations. A more detailed report of the effort is available from biologist Tim Craig.

Alaska Bird Observatory

Compiled by Sue Guers[1], April Harding Scurr[1,2], David Shaw[1] and Tim Walker[1],

[1]Alaska Bird Observatory, 418 Wedgewood Drive, Fairbanks, AK, 99709; [2] Department of Wildlife, Humboldt State University, 1 Harpst St., Arcata, CA, 99521

Monitoring and Education/Outreach

ABO's Banding Station, Creamer's Field Migratory Waterfowl Refuge, Fairbanks

- Completed our 20th year of banding songbirds at the Creamer's Field Migration Station;
- Banded 4,290 birds of 45 species from 25 April – 30 September 2011;
- Operated CFMS with the help of over 85 volunteers with 2,275 hours of service;
- Trained and supervised 2 interns and 6 banders during the spring and fall seasons;

- Collaborated with the Institute of Arctic Biology at UAF to test for avian influenza (H5N1) and San Francisco State University to test for avian malaria;
- Educated more than 2,000 people who visited CFMS and attended banding demonstrations; and
- Co-authored a paper entitled "How safe is mist netting? Evaluating the risk of injury and mortality to birds." was accepted to the journal Methods in Ecology and Evolution. This paper used banding data from CFMS as well as other banding data from organizations throughout North America.

Although our capture rates were somewhat lower than average, the species diversity was high this year and made for several exciting banding days! Some of the more unusual captures this year include: a Merlin, two Lesser Yellowlegs and twelve Solitary Sandpipers (due to lots of water in the seasonal wetland this spring), four American Three-toed Woodpeckers and four Black-backed Woodpeckers (all males), three juvenile Brown Creepers, an adult male Golden-crowned Kinglet, two Bohemian Waxwings and four Golden-crowned Sparrows.

Monitoring

Tree Swallow Project, Creamer's Field Migratory Waterfowl Refuge, Fairbanks Alaska

- Completed our **13th** year of monitoring the Tree Swallow (and a few Violet-green Swallows) population at Creamer's Field;
- Monitored 35 Tree Swallow (and 8 chickadee) nests from building to fledging stage;
- Had 42% occupancy rate for boxes (n = 104 total);
- 20th May = first lay date; 7th June = first hatch date; most nests fledged by last week of June;
- Had three Tree Swallow nests fail entirely; five nests experienced 1-3 nestlings die, but still fledged young; so 91% of nests produced at least one fledge (32/35);
- This year's project was coordinated by UAF student Maire Hunt with help from AmeriCorps member Ashley Halvorson and UAF student Kathleen Gerdes. Kathleen worked with ABO as part of a collaboration with Dr. Jon Runstadler's Veterinary Genetics and Immunology Lab at UAF. She collected hundreds of blood samples Tree Swallow nestlings that she will screen for avian malaria.
- This steadfast leadership team was assisted by an enthusiastic and dedicated crew of six youth who contributed over 150 hours checking nest boxes, recording data, and assisting with banding!

White Mountains Surveys

June of 2010 and 2011 ABO conducted point counts in the White Mountains National Recreation Area (BLM) north of Fairbanks. In 2010 we surveyed the area near and within the Mt. Prindle Research Natural Area and in 2011 we sampled along the west side of the Pinnell Mountain Trail. Points were randomly selected within alpine habitats. We used a repeated sampling protocol in which each point was visited at least twice and usually 3 times. All sampling took place between 8 and 29 June, and between the hours of 0300 and 1000 in the morning. We used community occupancy models to estimate the average probability of occupancy, and zero-inflated Poisson mixture models to estimate the average number of individuals within a site.

Seventy-four (74) Points were sampled in 2010 and 85 points were sampled in 2011. The most commonly detected species at the Mt. Prindle site were: American Pipit, American Robin, American Tree Sparrow, Fox Sparrow, Savannah Sparrow, White-crowned Sparrow, and Wilson's Snipe. At the Pinnell Mountain site the most common species were: American Pipit, American Tree Sparrow, Fox Sparrow, Lapland Longspur, Savannah Sparrow and White-crowned Sparrow.

Detection probabilities were < 0.30 for most species in both sites, although the most common species generally had higher probabilities of detection. After accounting for incomplete detection, the estimated number of species present was 39 (95%CI: 30-56) and 46 (95%CI: 33-66) for the White Mountains and Pinnell sites, respectively.
Complete results will be presented to the BLM and posted on ABO's website by January 2012.
(Thanks to Josh Schmidt for the vital help with study design and analysis).

ALMS Surveys

Other crews participated in the Alaska Landbird Monitoring Survey (ALMS), a program to monitor breeding landbird populations in roadless areas. Crews flew to the National Petroleum Reserve-Alaska (NPR-A), Arctic National Wildlife Refuge and Kanuti National Wildlife Refuge to survey landbirds. The crew in Kanuti National Wildlife Refuge also conducted bird surveys on several inventory plots on the refuge. Funding for the work on the NPR-A and Arctic National Wildlife Refuge was provided through an ADF&G State Wildlife Grant while funding for the work on Kanuti came from the Refuge though a Cooperative Joint Venture Agreement.

Research

Polygamy and extra-pair paternity rates in Rusty Blackbirds of Yukon Flats National Wildlife Refuge, Alaska

April Harding Scurr [1,2], T. Luke George [2], Susan M. Sharbaugh [3], George K. Sage [4], Sandra L. Talbot [4], and David Tessler [5]

[1] Alaska Bird Observatory, 418 Wedgewood Dr., Fairbanks, 99701 AK, USA
[2] Department of Wildlife, Humboldt State University, 1 Harpst St., Arcata, CA, 99521 USA; correspondence: April Harding Scurr, E-mail: ahardingscurr@gmail.com
[3] University of Alaska Fairbanks, 505 South Chandalar Dr., Fairbanks, AK, 99775
[4] Alaska Science Center, US Geological Survey, 4210 University Dr., Anchorage, AK 99508, USA
[5] Alaska Department of Fish and Game, 333 Raspberry Rd., Anchorage AK, 99518 USA

Abstract Awareness of the Rusty Blackbird *(Euphagus carolinus)* intense population decline and lack of basic ecological knowledge of the species have triggered a series of recent research projects. Many aspects of the species ecology still remain to be studied, particularly those aimed at identifying variables that limit population growth. The mating system of the Rusty Blackbird was examined on Yukon Flats National Wildlife Refuge, Alaska, USA in 2009 and 2010, using a combination of behavioral observations and genetic methods. Four polymorphic microsatellites developed for other avian species, QmAAT21, QmAAT31, Aph54, and Mp2-43 were used to assess rates of extra-pair paternity and instances of polyandry. Feeding rates and nest defense

behavior of color-banded birds were employed to identify the social parents of each nest. In contrast to the previous studies of Rusty Blackbird, these results indicate that a minimum of 7% Rusty Blackbird males are polygamous. Polyandry was not found in the Rusty Blackbird; females were socially monogamous, however there were high rates of extra-pair paternity found in ≥ 33% of nests and ≥ 13% of nestlings. Further studies are needed to investigate the role of environmental and social factors influencing the mating systems and the rates of polygamy and EPPs in the Rusty Blackbird.

Songbird ecology in shrub-tundra habitats of central Alaska

Susan L. Guers, Alaska Bird Observatory, 418 Wedgewood Dr., Fairbanks, AK, USA99701; Correspondence: sguers@alaskabird.org

From May 15 until 2 August 2011, the Alaska Bird Observatory studied the breeding ecology of seven songbird species within the shrub-tundra habitat along the Denali Highway (MP 22-32). This project described the avian community and current habitat conditions while providing a baseline for understanding how predicted climate changes may impact the avian community in this part of Alaska. Our techniques included nest searching and monitoring, target-netting and banding, point-counts, spot mapping and vegetation assessment. Together, these methods should provide much-needed demographic and habitat association data for central Alaska's shrub-tundra landbirds. The habitat variables we measured can be monitored and modeled over time. This habitat model, applicable at both the local and landscape level, can relate avian abundance to specific habitat variables and potential climate-induced habitat changes. This region and its associated breeding ecology species are likely to experience many changes in the upcoming years. Understanding some basic population parameters relative to habitat structure will be extremely helpful for songbird management as a whole and these species in particular.

U.S. Department of the Army - Fort Wainwright - Tanana Flats Training Area (TFTA) and Yukon Training Area (YTA), Alaska

Amal Ajmi[1]

[1]Department of the Army, Directorate of Public Works, IMPA-FWA-PWE (Ajmi) 1060 Gaffney Road #4500, Fort Wainwright, Alaska.

Monitoring

Breeding Bird Survey (BBS)

FWA has participated in the BBS program since 1982. A total of 18 species, (349 individuals), was detected during the 2011 Little Salcha BBS. Swainson's Thrush (18%), Yellow-rumped Warbler (16%), and Dark-eyed Junco (14%) were the most numerous species detected. Training and logging activities in the YTA may alter habitat in the coming years. Changes in bird species composition will be documented as changes to habitat occur.

ALMS/Off-Road Point Counts

FWA has participated in ALMS since 2006. Two ALMS plots have been successfully established in the YTA. A total of 18 species, (184 individuals), was detected during the 2011 ALMS. Bad

weather conditions hampered the completion of all points, however we were successful in surveying 17 grid points. Varied Thrush (18%), Dark-eyed Junco (17%), and Ruby-crowned Kinglet (16%) were the most numerous species detected.

In 1998, the Alaska Bird Observatory studied the distribution of landbirds among habitats on the TFTA and YTA at Fort Wainwright. With increasing demands on these training areas, we decided to resample the point counts and vegetation for changes in habitat and species composition. The 2011 season was the final year of a four-year effort to resample the'98 points; 34 points were sampled in the YTA. The four year project successfully surveyed a total of 614 points:

- YTA 247 points, 43 species (1161 individuals).
  Dark-eyed Junco (17%), Swainson's Thrush (14%) and Yellow-rumped Warbler (9%).

- TFTA 367 points, 71 species (2557 individuals).
  Swainson's Thrush (9%), Lincoln's Sparrow (8%) and Orange-crowned Warbler (7%).

Cavity nesting Ducks

In 2000, a duck box project was initiated on Fort Wainwright, Alaska. The purpose of the project was to encourage cavity nesting waterfowl to take residence on lake and river systems, and provide educational and aesthetic value to boaters and outdoor enthusiasts on military lands. The waterfowl species targeted by this project, are the Bufflehead, *Bucephala albeola*, Barrow's Goldeneye, *Bucephala islandica*, and Common Goldeneye, *Bucephala clangula*. Currently, there are a total of 19 boxes placed on FWA.

Prior to the 2007 season, the purpose of the project was to determine usage. Nesting success was secondary information and not considered quantifiable. In 2009, nest box monitoring, brood surveys, and Indicated Breeding Pair (IBP) surveys were initiated on FWA water bodies. Qualitative data has provided optimal survey periods with which to assess use and productivity of YTA and FWA water bodies. 115 IBP and 18 Broods were detected at FWA in 2011. In 2011, we also placed a game camera at a known active box to better estimate hatching dates. On 15 June 2011 we obtained photo documentation of Common Goldeneye duckling emergence from a nest box, estimating hatching date as 13 June 2011. We will continue surveys and monitoring in 2012.

Ruffed Grouse Drumming Surveys

Ruffed grouse surveys were initiated along Quarry Road Yukon Training Area (YTA) in 2003. Methods are consistent with state and national survey techniques. The route was run four times between April 28th and April 29th. Seven Ruffed Grouse were detected at 5 stops. Data was compiled and incorporated into the Ruffed Grouse population status in Interior Alaska as part of the Upland Game report submitted annually by W. Taylor.

Olive-sided Flycatcher Presence / No Detection Surveys in Tanana Flats Training Area

This project was designed to detect the presence of Olive-sided Flycatchers on TFTA at Fort Wainwright, Alaska during the breeding season. This survey along with historical OSFL documented locations will provide necessary information for a proposed multi-year assessment that will include breeding phenology, reproductive success and territorial mapping to elucidate habitat requirements and use on Military lands in the Interior. OSFL data will also be used for the creation

of habitat map layer which will ultimately identify areas that are used by these migratory birds. Habitat mapping will aid in the sighting and scoping of future projects on Fort Wainwright and ultimately keep the USARMY Alaska in compliance with the Migratory Bird Treaty Act.

The Tanana Flats Training Area encompasses 2645.616 km² (1,021.48 miles²). Ground surveys were conducted using rotary aircraft for transportation. Points were selected prior to the surveys based on an analysis of habitat and documented territory size. Selected points were sampled for 30min each. Presence / no-detection status at a survey point was determined by Olive-side Flycatcher song. Thirteen OSFL locations were detected, a total of 163 point s were surveyed. FWA now has 89 documented locations for TFTA and YTA from which to sample if the multi-year study is funded.

TFTA Raptor Nest Species Use and Occupancy Surveys

The Tanana River Valley, particularly near the Fairbanks area, continues to exhibit an increase in human population with new housing, roads, and commercial development. Increased military training activity in the Tanana Flats Training Area (TFTA), a proposed railroad extension, and anticipated natural gas pipeline construction will also increase pressures on natural resources. Currently, there is no available information on the exact locations of the aforementioned constructions therefore mapping their locations is not possible. Cumulative effects from these projects may fragment raptor habitat and negatively affect raptor populations in the TFTA & Tanana River Valley as a whole.

This project proposed to collect baseline information identifying the presence of raptor nests in the Tanana Flats Training Area (TFTA), Alaska and delineating bald eagle nest constructions for the purpose of protection under the Bald and Golden Eagle Act (BGEPA). The primary goal of the project was to identify the location of eagle nests along with site-specific habitat characteristics such as tree species, location of nest in the tree, size of tree and surrounding habitat type. The objectives of this project were:

- Determine the location of raptor nests in TFTA, Alaska,
- Based on nest characteristics, determine which nests are bald eagle constructions,
- Document nest tree and surrounding habitat characteristics, and nest placement,
- Quantitatively analyze nest tree and habitat associations, and
- Provide ADFG with nest locations and nest tree and surrounding habitat characteristics.
- Provide nest location information for future study of occupancy and species use.

The primary issue that this project addressed was adding much needed baseline information to the TFTA database. The timely collection of this information will enable land managers to make appropriate decisions when responding to ongoing and future development of the training area.

The goal of the 2011 surveys was to revisit and document species use and occupancy of raptor nests located in 2010. The locations of raptor nest sites that are currently present in the Tanana Flats Training Area were based on historical information and 2010 data collected using a transect line survey approach. Bald eagle nests were delineated based on documented nest characteristics specific to this species as well as presence at the time of the survey. 2011 Surveys occurred on 9 May and 25 June. A total of 61 nest locations were surveyed in 2011, 24 nests were new sightings in 2011.

Cliff Swallow Nest Deterrent Study

The Cliff Swallow (*Petrochelidon pyrrhonota*) is an aerial foraging species that frequents Interior Alaska and Fort Wainwright annually. Cliff Swallows are gregarious and nest in colonies; building mud nests under the eaves of buildings and bridges. Cliff Swallows construct their nests close to sources of mud which include puddles and the banks of the Chena River. Mosquitoes and small areal insects are the preferred prey item of this species and Cliff Swallows prefer to nest near areas that have high and consistent sources of food. Fort Wainwright has ample amounts of food, nesting platforms and nesting material; drawing Cliff Swallows annually to business administrative areas and barracks.

Cliff Swallow nests are a source of frustration for Fort Wainwright. The focal issue of the irritation is that the nests are a source of fecal matter and parasites. Residents, employees and natural resource staff have long considered how best to resolve this annual issue within MBTA regulations. In the spring of 2009, the Master Planning office put forth a proposal for the placement of physical barriers on two barracks. Natural resource staff viewed this project as an opportunity to study the effectiveness of physical deterrents on prohibiting nesting by Cliff Swallows at Fort Wainwright. By 2011, twenty-two buildings were included in the study. We will continue monitoring in 2012.

U.S. Department of the Army - Fort Wainwright - Donnelly Training AREA (DTA)

Compiled by Jeff Mason and Elizabeth Neipert, Colorado State University PO Box 1291 Delta Junction, AK 99737; correspondence: jeffrey.mason@colostate.edu 907-873-1615 and elizabeth.s.neipert.ctr@mail.mil 907-873-1616

Monitoring

Breeding Bird Survey (BBS)

Donnelly Training Area (DTA) has participated in the BBS program since 2000. A total of 25 species, (445 individuals), were detected during the 2011 Donnelly Dome BBS. Coincidentally, four species were tied for most numerous this year and each accounted for 11% of detections including; White-crowned Sparrow, Dark-eyed Junco, Fox Sparrow and Orange Crowned Warbler. New species for the route this year included White-winged Crossbill and Violet-green Swallow.

ALMS Plots

Two ALMS plots were established in 2006, one at DTA and one at Gerstle River Training Area (GRTA). Both have been surveyed biennially. In 2011, the GRTA route was completed. A total of 25 species (218 detections with 245 individuals) were detected. Swainson's Thrush (17%), Dark-eyed Junco (16%), and Yellow-rumped Warbler (9%) made up the most numerous detections. Other species of interest include Olive-sided Flycatcher and Blackpoll Warbler.

Cavity Nesting Ducks

In 2000, a duck nest box project was initiated on DTA. The purpose of the project was to encourage cavity nesting waterfowl to take residence on local lakes, and provide educational and aesthetic value to boaters and outdoor enthusiasts on military lands. The waterfowl species targeted by this project are Common Goldeneye and Bufflehead. Currently, there are 25 boxes on 8 lakes in

DTA that are checked in March or April for signs of use from the previous summer. Eighteen boxes were utilized by waterfowl in 2010 as evidenced by eggs, eggshell fragments, and down. One box was utilized by a pair of Boreal Owls.

Ruffed Grouse Drumming Surveys

A Ruffed Grouse drumming survey was initiated along Meadows Road on DTA in 2003. A second survey route was added at GRTA in 2009. Methods are consistent with state and national survey techniques. Each route was run the recommended four times in 2011. Grouse were heard at eight points along the DTA route and at four points along the GRTA route. This was an increase in detections for both routes from previous year. Data was compiled and incorporated into ADF&G's Upland Game Report submitted annually by W. Taylor. All bird species heard during the survey are also recorded.

Sharp-tailed Grouse Lek Surveys

Surveys for Sharp-tailed Grouse congregating at lek sites have been conducted on DTA since 2001. Data is contributed to ADF&G's small game survey database and disseminated in an Upland Game Report submitted annually by W. Taylor. In 2011, 4 to 17 grouse were seen at 10 different leks. Birds were observed at all known leks. Previous years had seen absence at a number of "minor" leks. Overall, there appeared to be a slight decrease in the number of birds seen at "major" leks and a slight increase in the number of birds at the "minor" leks. Similar observations were also noted at other leks in the Delta Junction area by State biologists.

Willow Ptarmigan Surveys

A Willow Ptarmigan survey route was set up on DTA in 2009. Methods are consistent with ADF&G survey methods. This route was completed four times. Willow Ptarmigan were recorded at three different points during the survey. Data was compiled and incorporated into the Willow Ptarmigan population status in Interior Alaska as part of ADF&G's Upland Game Report submitted annually by W. Taylor.

Osprey Nest Management

An Osprey nest was discovered on a power pole by Doyon Utilities in 2009. In an effort to mitigate hazards to both the birds and power, a nesting platform was installed adjacent to the power pole with the active nest in the fall of 2010. Anti-nesting devices were also attached to nearby power poles to discourage nesting. The pair returned in May 2011 and nested on the artificial platform and successfully fledged one young.

Sandhill Crane Migration Monitoring

Sandhill Cranes migrate through the Delta Junction area, including DTA, each spring and fall. Numbers have been estimated at 150,000 – 200,000. Breeding has not been documented in the area. Cranes often roost on gravel bars of the broad and braided glacial rivers in the area. A portion of the Delta River is an impact area used by the US Army and US Air Force. Monitoring efforts began in 2010 to determine numbers of Sandhill Cranes using the Delta River, location of roost sites, and timing of use to interpret the potential for conflict with military operations.

In 2011 no cranes were observed on 6 spring surveys. However, ten fall surveys documented over 10,000 cranes using the Delta River. Data will contribute to developing management guidelines for military operations in the area.

Upland Sandpiper Breeding Surveys

Upland Sandpipers are a relatively common breeder on DTA and occupy a wide range of habitats from regenerating burns and subalpine low scrub to mowed fields. Opportunistic observations of breeding activity (displaying and/or broody adults) have been recorded since 2000. In 2011, dedicated surveys turned up 6 displaying birds in May. One opportunistic detection of a broody adult was confirmed in July.

Other Point Counts

Miscellaneous point counts were conducted this year in under-sampled habitats and regions. Points on DTA targeted Species-of-Concern and contributed to the general knowledge of bird distribution and habitat use on the installation. Highlights include several new detections of Olive-sided Flycatcher, the first breeding record for Golden-crowned Sparrow on DTA, and several Chipping Sparrows (a locally uncommon breeder). Point counts were also initiated at Black Rapids Training Area (BRTA) which lies 39 miles south of DTA on the east side of the Richardson Highway. BRTA is approximately 3,000 acres but rises sharply into the Alaska Range. Survey points focused on alpine habitat that in not found on DTA. Breeding birds observed included Horned Lark, Blackpoll Warbler, and Upland Sandpiper. Surveys will continue opportunistically in 2012.

Whimbrel Nesting Investigations

A colony of Whimbrels has been observed in the vicinity of Donnelly Dome since 2000. Weekly surveys have been conducted since 2009. In previous years, birds arrived in early May and no birds were observed after early July. However surveys are conducted until there have been two consecutive weeks of no detections. In 2011, surveys were necessary until the later part of July. No nesting activity was observed. Surveys will continue in 2012.

Waterfowl Surveys

Waterfowl surveys were conducted weekly from early May through late October. Surveys documented spring and fall migration, species composition, and broods on road accessible lakes on DTA. Data collected will be used to identify an ideal survey period for both breeding and non-breeding waterfowl, and for broods; identify critical waterfowl habitat used for migration, nesting, brood-rearing, and molting. Surveys will continue in 2012.

A Raptor Nest Inventory for Donnelly Training Area

A raptor nest inventory project began on DTA in 2010. The primary goal was to identify and determine occupancy of eagle nests for protection under the Bald and Golden Eagle Protection Act (BGEPA). The secondary goal was to locate, determine occupancy, and species use of other raptor nests for compliance with the Migratory Bird Treaty Act (MBTA). The project consisted of two phases. The first was to use fixed-wing aircraft to identify nest structures in early spring prior to snow melt and leaf-out. The second was to return to the nest sites later in the summer, either by rotary aircraft or on foot, to determine occupancy and species.

Phase I was completed in 2010 and data for Phase II was opportunistically collected. The objectives for 2011 were to revisit the nests identified in 2010 to document use, identify species, confirm habitat, and update database. A secondary objective was to identify new nests while focusing on suitable habitat.

Fifteen nests were documented in 2010 including one Bald Eagle nest and one Peregrine Falcon nest. Both species are considered Priority Management Species by the Fort Wainwright Ecosystem Management Team and are addressed in the US Army's Integrated Natural Resource Management Plan (2007). In 2011, eight new nests were detected, five were occupied, of which two were Peregrine Falcon nests. Nest locations were added to DTA's nest database and will be monitored annually. Results including nest locations were also sent to USFWS.

Pilot Study of Non-agricultural Habitat Use by Sharp-tailed Grouse in Eastern Interior Alaska

A cooperative 1-year pilot project was initiated in spring 2010 between the Alaska Department of Fish and Game and US Army Alaska to determine nesting and brood rearing habitat use by Alaska Sharp-tailed Grouse (*Tympanuchus phasianellus caurus*). See BPIF 2010 annual update for details. In 2011, the last of the habitat data was collected and ADF&G completed data analysis. A final report from this project will be available soon on the ADF&G website at: http://www.adfg.alaska.gov/index.cfm?adfg=librarycollections.wildliferesearch.

BIRD CONSERVATION REGION 5 – NORTHERN PACIFIC RAINFOREST

Project: Annual Summary of Land Bird Projects, USFS, Seward Ranger District, 2012
Investigator: Mary Ann Benoit, Chugach National Forest, Seward Ranger District, mbenoit@fs.fed.us

Monitoring

Breeding Bird Survey (BBS)

USFS, Seward Ranger District - participated in the Breeding Bird Survey (BBS), completing the Hope BBS route.

ALMs Plots

USFS, Seward Ranger District - completed the East Creek ALMS survey.

Outreach/Education

Bird Academy

USFS, Seward Ranger District - conducted presentations for 54 students in the Seward Elementary 4th grade class on mist netting and bird banding and bird haikus.

Research

Kenai Fjords National Park and Preserve

Bald Eagle Nest Survey in Kenai Fjords National Park, Alaska

Leslie A. Witter and Laura M. Phillips, National Park Service Kenai Fjords National Park; correspondence: laura_phillips@nps.gov. 907-422-0540

Nest occupancy and reproductive success of breeding populations of bald eagles (*Haliaeetus leucocephalus*) within parks in the Southwest Alaska Network (SWAN), including Kenai Fjords (KEFJ), have been selected as a "vital sign" for monitoring as they are indicative of the health of freshwater and marine ecosystems. Records of nesting activity were collected annually in KEFJ beginning in 1986, but lapsed in 2003. Aerial surveys were reinitiated in 2009 using dual-frame sampling with a double-observer component to correct for biases in nest sightability. We completed an initial survey in May 2011 to determine nest occupancy, and a follow-up survey in late July to assess productivity. Objectives were to (1) build on baseline knowledge of bald eagle population status in KEFJ, (2) provide data for use in evaluating the dual-frame estimator, and (3) review current methodology and identify barriers to implementation within other SWAN parks. We found 63 nests during the occupancy survey; 30 (47%) had incubating adults present. When revisited in July, 18 were successful (60%), with 0.83 ± 0.14 SE chicks per incubating nest and 1.39 ± 0.12 SE chicks per successful nest. Continued work is needed to standardize nest occupancy classification, attribute data, computerized data collection applications, and data analysis methods between SWAN parks.

Peregrine Falcon Use of the Kenai Fjords Coast during the Breeding Season

[1]John Shoo, [2] Laura Phillips, and [1]Robert Ritchie

[1] ABR, Inc., Fairbanks, AK; [2] National Park Service, Kenai Fjords National Park; correspondence: laura_phillips@nps.gov, 907-422-0540

Peale's Peregrine Falcons (*F. p. pealei*), the marine-oriented subspecies and the least migratory of the three subspecies found in Alaska, have been found to nest on cliffs in the Kenai Fjords region. Compared to the other races of Peregrine Falcons in Alaska, little is known about Peale's Peregrine Falcons; however, they are known to specialize in preying on some of the smaller seabirds including alcids and studies have found that their populations have declined in correlation with declines in seabird populations. In 1985, the U.S. Fish and Wildlife Service conducted an inventory of Peregrine Falcons along the Kenai Fjords coast, and discovered a relatively dense population of Peale's Peregrines. A partial aerial survey was performed in 1990 by Fish and Game and except for incidental observations made during the 1989 Exxon Valdez Oil Spill, no additional surveys have occurred in nearly 25 years. In 2010–2011, we conducted surveys of the Kenai Fjords coastline to determine the current distribution, abundance, and reproductive status of Peregrine Falcons. We recorded Peregrine Falcons at 18 locations in the KEFJ study area in 2010 and determined that at least 12 of these locations were occupied territories. Pairs recorded during our investigations were generally occupying the same cliff areas reported in 1985 and 1990. As has been suggested for Peale's Peregrine Falcons elsewhere in their range, this apparent stability may reflect a carrying capacity closely tied to the number and distribution of seabird colonies in the region.

Project: Annual Summary of Land Bird Projects, USFS, Tongass National Forest, 2012

Gwen Baluss[1] Melissa Cady [2]

[1]Juneau Ranger District, Tongass National Forest, 8510 Mendenhall Loop Road, Juneau, AK 99801
[2]Craig Ranger District, Tongass National Forest, PO Box 500, Craig, Alaska, 99921.

Monitoring

Breeding Bird Surveys (BBS)

BBS routes were completed at 10 sites

ALMS Plots

This was the ninth year of implementing this protocol. The USFS continues to be a leader in this statewide effort. Ten ALMS surveys were planned this year on the Tongass NF . Of these, seven were successfully counted with visits to nearly all accessible points (Yakutat West Fork Situk River, Chichagof Island Sitkoh Lake, Tuxekan Island, Kupreanof Island Tunehean Creek, Admiralty Island Mansfield Peninsula, Juneau Mainland Windfall Lake). The weather prohibited completing surveys on two blocks (Zarembo and Kosciusko Islands), and stopped a visit entirely to a third block (Ford's Terror). Personnel from five Ranger Districts contributed. All blocks are within Bird Conservation Region 5. Three sites were visited on the Chugach National Forest as well, Kayak Island, Bettles Bay, and East Creek. Data were compiled and sent to the USGS Alaska Science Center for future analysis.

The Tongass National Forest continues to survey for goshawks areas prior to planned projects. Survey information forest-wide has been entered into a national database, and can be requested by researchers.

Education/Outreach

International Migratory Bird Day- Juneau

Songbird banding demonstration at Juneau Community Garden and an event at Mendenhall Glacier Visitor Center to welcome Arctic Terns and other long-distance migrants back to the North. Worked in partnership with Juneau Audubon Society who offers bird walks and wildlife cruises throughout the spring and summer season.

Aleutian Tern Festival – Yakutat

Bird walks, lectures, native culture and art exhibits and community based tourism were part of a successful first annual event. Local attendees welcomed visitors from throughout Alaska and even the lower 48. A second festival is planned for 2012.

Angoon School District program

Environmental education days included bird walks for every student in Angoon. Materials were provided to interested teachers to include bird life in the curricula.

Crystal Lake Day Camp - Juneau,

A summer nature camp for school-aged kids features bird identification activities.

Bioblitz

Two Bioblitz events were held in 2011, one on the Chugach and one on the Tongass National Forest. These events include surveys led by taxon experts during one 24-hour period that provides both occurrence data and outreach and educational opportunities for the public. Both events included bird surveys.

Copper River Delta Shorebird Festival – Cordova

In 2011, the Copper River Delta Shorebird Festival was scheduled on May 6-8 in Cordova, Alaska. This event was attended by over 500 people from around the globe. This year's keynote speaker and art workshop presenter was renowned Canadian wildlife artist, Robert Bateman. The 2011 festival included native Alaska cultural presentations, two art shows, bird viewing field trips, and children and adult workshops. Additionally, video segments were taped at Hartney Bay for the USFS sponsored "Get to Know" program featuring Robert Bateman. This program is a collaborative project between the USFS, Cordova Chamber of Commerce and the Prince William Sound Science Center.

Stikine River Birding Festival – Wrangell

The 3rd annual Stikine River Birding Festival was held from April 28 through May 1 in Wrangell, Alaska. An estimated 500+ people were reached through festival events. Many people and Cooperators contributed to the Festival's success. Highlights include artist Linda Infante Lyons, naturalist Bob Armstong, eagle presentation from the Sitka Raptor Center, local birder Bonnie Demerjian, and author John Hudson.

Ketchikan Hummingbird Festival

Festival included bird walks, a juried art show, and a wide variety of events and talks about birds in life and art.

GENERAL TOPICS

Towards the development of an Alaskan Node for the Avian Knowledge Network

Tracey Gotthardt[1], Kelly Walton[1] and David Tessler[2]

[1]Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, AK 99501. antg@uaa.alaska.edu
[2]Wildlife Diversity Program, Alaska Department of Fish and Game, 333 Raspberry Rd, Anchorage, AK 99518.

The Avian Knowledge Network (AKN; www.avianknowledge.net) is an international organization of government and non-government institutions focused on understanding patterns and dynamics of

bird populations across the Western Hemisphere. The heart of the AKN is an endowed database at Cornell University housing bird observation data from bird-monitoring, bird-banding, and citizen science-based programs. The goals of the AKN are to make data available for scientific research, develop exploratory analysis techniques for studying bird populations, provide interactive decision-making tools for resource managers, and to educate the public on the dynamics of bird populations. The strength of the AKN lies in its varied and widely diverse bird datasets - from the observations of backyard birders (*eBird*) to rigorous scientific datasets gathered by seasoned field biologists. The Alaska Department of Fish and Game Wildlife Diversity Program and the Alaska Natural Heritage Program (AKNHP) have embarked on a multi-year cooperative data management program that includes the development of an Alaskan Node to house and upload avian data from Alaska to the AKN.

In 2010, the AKNHP initiated an effort to enter historical records from the Southwest Alaska Network (SWAN) of the National Park Service (NPS) into AKN and its sister database, *eBird*. We summarized 8,704 incidental observations for 183 bird species from 82 unique data sources, spanning the time period 1919 to 2004. The majority of these records were from field camp journals and trip reports, of which 69% were entered into AKN and 31% were uploaded into *eBird*. In 2011, we continued the effort of archiving bird datasets from SWAN parks into the AKN by including data from 16 standardized surveys in both the terrestrial and marine environments conducted between 2006 and 2010. During this phase of the project, we uploaded 29,575 unique observations for 173 species. These included1,215 observations from Aniakchak National Monument and Preserve, 10,837 from Katmai National Park and Preserve (4,732 from montane bird inventory and 6,105 from marine bird surveys), 12,468 from Kenai Fjords National Park (4,725 from breeding bird inventory and 7,743 from marine bird surveys), and 5,055 from Lake Clark National Park and Preserve (4,810 from montane bird inventory and 245 from marine bird survey). We worked directly with NPS staff and database administrators to bring the data into the AKN, and produced a user's manual to provide Park Service personnel with instructions on how to access the newly archived information. Here, we wish to discuss the current mechanism for data delivery to the AKN and whether or not the development of an Alaska AKN node is warranted.

A NOTE FROM THE COMPILER

Thank you to all who submitted project abstracts. Thanks to all BPIF participants for your hard work and continued contributions to the conservation and understanding of Alaskan birds and their habitat. *Matt Kirchhoff and Michelle Michaud, 2011 BPIF Co-Chairs*

APPENDIX A

Willow Ptarmigan Pilot Study, Alaska Peninsula, May 2011

Susan E. Savage, Kevin J. Payne and Robert T. Finer

LITERATURE CITED

Hannon, S.J. Gruys, R.C., Schieck, J.O. 2003. Differential seasonal mortality of the sexes in willow ptarmigan *Lagopus lagopus* in northern British Columbia, Canada. Wildlife Biology. 9:317-326).

Hik, D.S., Hannon, S.J., Martin, K. 1986. Northern Harrier Predation on willow ptarmigan. Wilson Bull. 98: 597-600.

Klausen, K.B., Pedersen, A.O., Yoccoz, N.G., Ims, R.A. 2010. Prevalence of nest predators in a sub-Arctic ecosystem. Eur. J. Wildl. Res. 56: 221-232.

O'Reilly P., Hannon S.J. 1989. Predation of simulated willow ptarmigan nests: the influence of density and cover on spatial and temporal patterns of predation. Canadian J. Zool. 67: 1263-1267.

Pedersen H.C., Fossoy F., Kalas J.A., Lierhagen S. 2006. Accumulation of heavy metals in circumpolar willow ptarmigan (*Lagopus l. lagopus*) populations. Science of the Total Environment. 371:176-189.

Taylor W. 1999. Game Management Unit 13 Ptarmigan Population Studies. Alaska Department of Fish and Game, Juneau, Alaska.

Taylor W. 2000. Game Management Unit 13 Ptarmigan Population Studies. Alaska Department of Fish and Game, Juneau, Alaska.

The Peregrine Fund. 2011. Gyrfalcons and Ptarmigan in a Changing World. Conference Abstracts at: http://www.peregrinefund.org/gyr_conference/index.html

Weeden R.G. 1965. Grouse and ptarmigan in Alaska: their ecology and management. Alaska Dept. Fish and Game, Juneau, Alaska.

West G.C., Meng M.S. 1966. Nutrition of willow ptarmigan in Northern Alaska. Auk. 83: 603-615.

West G.C., Weeden R.B., Irving L., Peyton L.J. 1970. Geographic Variation in Body Size and Weight of willow ptarmigan. Arctic. 23: 240-253.