

Boreal Partners in Flight Working Group

1999 Annual Report

compiled by:

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I hope you will find the information furnished in this report useful. Because of the lateness of our annual meeting and my tardiness in collating sections of the report, I have included information up through March. I apologize in advance if I have left out any important issues or have not given BPIF members proper credit. For any comments or questions about Boreal Partners in Flight contact: Brad A. Andres, U.S. Fish and Wildlife Service, Nongame Migratory Bird Management, 1011 East Tudor Road, Anchorage, AK 99503; ph: 907-786-3378; fax: 907-786-3641; e-mail: Brad_Andres@fws.gov

BOREAL PARTNERS IN FLIGHT WORKSHOP AGENDAS

28 February - 2 March 2000, Sitka, Alaska (in conjunction with 8th Alaska Bird Conference)

Monday, 28 February Boreal Partners in Flight Working Group
1:00 - 5:00 pm

- 1:00 Welcome and introductions - Brad Andres, Chair, Boreal PIF.
- 1:10 Updates on national, international, and western regional programs - Brad Andres, USFWS.
- 1:40 1999 Breeding Bird Survey in Alaska - Brad Andres.
- 1:50 1999 off-road point count program - Colleen Handel, USGS-BRD.
- 2:10 1999 banding efforts in Alaska - Anna-Marie Benson, ABO.
- 2:30 North American Migration Count; October World Bird Count - Brad Andres.
- 2:40 International Migratory Bird Day 2000 - Heather Johnson-Schultz, USFWS.
- 3:00 Break
- 3:20 Update on Boreal Partners in Flight website - Steve Matsuoka, USGS- BRD.
- 3:40 A sample allocation approach for east-central Alaska - Colleen Handel, Arctic NWR.
- 4:10 Development of evaluation questions for the MAPS program - Brad Andres.
- 5:10 Adjourn.

Tuesday, 29 February Boreal Partners in Flight Working Group
8:00 am - 12:00 pm

- 8:00 North American Bird Conservation Initiative (NABCI) and Bird Conservation Regions - Brad Andres.
- 8:20 PIF activities in British Columbia and Yukon - Wendy Nixon, CWS.
- 8:50 General discussion of Alaska Landbird Conservation Plan - Brad Andres.
- 9:10 Break into regional groups to discuss further needs and implements and implementation of conservation plans.
- 10:10 Break.
- 10:20 Discuss action items for regional groups to accomplish in 2000.
- 11:20 Adjourn.

Tuesday, 29 February Alaska Bird Conference - Landbird papers
12:00 - 7:30 pm (see attached abstracts for oral presentations and posters)

Wednesday, 1 March Alaska Bird Conference - Landbird papers
8:00 am - 9:00 pm (see attached abstracts for oral presentations and posters)

Thursday, 2 March Boreal Partners in Flight Outreach and Education Workshop
8:00 am - 12:00 pm

- 8:00 Welcome, introductions, overview - Heather Johnson-Schultz, USWFS.
- 8:20 Teaching materials available from the Alaska Bird Observatory - Andrea Swingley, ABO.
- 8:40 Project Migration Station: Bringing bird migration into the classroom - Carol McIntyre, Denali NPP, and Sonja Schmidt, TriVally School.
- 9:00 Shorebird Sister Schools Program - Cruise with us on the super shorebird flyway! - Heather Johnson-Schultz.
- 9:20 Public Radio: An excellent way to communicate in interior Alaska - Beverly Skinner, Innoko NWR.

- 9:40 Bird education/outreach at the Togiak National Wildlife Refuge - Rob MacDonald, Togiak NWR.
- 10:00 Break.
- 10:20 Catch the Migration Sensation! International Migratory Bird Day in Anchorage - Brad Andres (USFWS), Heather Johnson-Schultz, and John Schoen (Alaska Audubon Society).
- 10:40 Migratory Bird 4th Grade Bird Academy - Stan Senner, Alaska Audubon Society.
- 11:00 The ABC's of the Alaska Bird Camp - Andrea Swingley.
- 11:20 Seabirds and you education program - Heather Johnson-Schultz.
- 11:40 Discussion on gaps in migratory bird education/outreach in Alaska. Goals for this year - PIF Education/Outreach Working Group. Making connections/building partnerships - Heather Johnson-Schultz.
- 12:00 Adjourn.

Thursday, 2 March Natural History of the Wilson's Warbler in Alaska
 1:30 - 4:30 pm

- 1:30 Welcome - Brad Andres, USFWS
- 1:35 Regional abundance and distribution - Brian McCaffery, Christopher Harwood (Yukon Delta NWR), and Brad Andres
- 2:00 Habitat use by breeding birds - Kristine Sowl, Yukon Flats NWR.
- 2:30 Breeding chronology - Brian McCaffery.
- 2:50 Break.
- 3:10 Population dynamics - Susan Savage, Alaska Peninsula/Becharof NWR.
- 3:40 Patterns of migration - Anna-Marie Benson.
- 4:10 Non-breeding distribution and habitat use - Brad Andres.
- 4:30 Summary of workshop - Brain McCaffery.

RESEARCH

ABSTRACTS OF PAPERS AND POSTERS PRESENTED AT THE ALASKA BIRD CONFERENCE, MARCH 2000.

USE OF OLD GROWTH, COASTAL FORESTS BY LANDBIRDS

Andres, Brad A. (U. S. Fish and Wildlife Service, Migratory Bird Management, 1011 East Tudor Road, Anchorage, AK 99503)

Understanding the relationship between the structure and composition of coastal forests and bird abundance and productivity is the most important conservation issue facing landbirds in Alaska. To assess concordance in assessing the habitat affinities of forest-dwelling landbirds, I reviewed studies previously undertaken in the Tongass National Forest and included information collected in 1997 and 1998 on Research Natural Areas (RNA). I also compared occurrence of landbirds in RNAs to occurrence on Breeding Bird Survey routes (BBS) and found substantial differences in landbird composition; species that were most frequent or had the highest densities (birds/point) in low-elevation spruce-hemlock forests were more frequent in RNAs than on BBS routes. In general, results among breeding-season studies were concordant in finding that Brown Creepers, Golden-crowned Kinglets, and to a lesser extent, Red-breasted Sapsuckers, Chestnut-backed Chickadees, Varied Thrushes, Pacific-slope Flycatchers, and Townsend's Warblers reached their highest abundances in old-growth forests. Although breeding abundances of Winter Wrens were equitable among stand ages and types, old-growth forests provided important winter habitat for wrens. Golden-crowned Kinglets and Hairy Woodpeckers were also most abundant in old-growth forests in winter. Further work is needed to understand landscape-level effects of forest alteration on abundance and productivity of forest-dwelling land birds.

THE CHANGING FACE OF THE ALASKA BIRD CONFERENCE

Andres, Brad A. (U. S. Fish and Wildlife Service, Migratory Bird Management, 1011 East Tudor Road, Anchorage, AK 99503)

The first Alaska Bird Conference was held in 1982 for the purpose of sharing information that would "lead to new and better ideas for managing migratory birds and conserving their habitats". The scope of the conference gradually broadened to include all aspects of Alaskan ornithology. Through 1997, about 462 presentations were made at eight conferences. The conference was held three times each in Anchorage and Fairbanks and once each in Cordova and Juneau. On average, 65 presentations were made when the conference was held in either Anchorage or Fairbanks, and 36 presentations were made in Cordova and Juneau. Over all eight conferences, >60% of presenters were biologists with the U.S. Fish and Wildlife Service or the Alaska Biological Science Center. Contributions by biologists from the Alaska Department of Fish and

Game decreased (11% to 6%) between early years (1982-1989) and later years (1991-1997), whereas contributions by biologists from universities increased (12% to 21%) between the same periods. Presentations by women (as primary author) increased dramatically from 13% in 1982 to 50% in 1997. Since 1982, the taxonomic focus of presentations (%) remained steady for waterfowl (42%) and shorebirds (7%), decreased for raptors (20% to 11%) and seabirds (30% to 19%), and increased for landbirds (3% to 22%). The increases in the number of landbird presentations were a direct result of the Partners in Flight program. Overall, the Alaska Bird Conference meets its founding purpose of providing an forum for the exchange of information that will help manage and understand Alaska's migratory birds.

TIMING OF BREEDING RANGE OCCUPANCY AND PATTERNS OF FAT STORAGE AMONG HIGH LATITUDE PASSERINE MIGRANTS

Benson, Anna-Marie (Alaska Bird Observatory, P.O. Box 80505, Fairbanks AK, 99708) and Kevin Winker (University of Alaska Museum, 907 Yukon Drive, Fairbanks AK, 99775)

The brief subarctic summer limits the time available for birds to complete their reproductive activities, yet the temporal and energetic requirements of high-latitude passerine migrants are not well understood. Our analyses examined the timing of spring and autumn migration of 18 passerine species to obtain indirect estimates of the time they occupy their breeding ranges in northwestern North America. We also examined seasonal patterns of fat storage among passerine migrants. From 1992 to 1998, the Alaska Bird Observatory banded 31,698 individuals during the most intensive standardized mist-netting study ever conducted in subarctic North America. The estimated number of days that species were present in interior Alaska ranged from 48 days for Alder Flycatchers (*Empidonax alnorum*) to 129 days for American Robins (*Turdus migratorius*). The Alder Flycatcher spends approximately 13% of its annual cycle on its breeding range in Alaska, which is the shortest period yet documented for a population or species of migratory passerine. Adults departed significantly later than immatures and showed a significantly higher mean body condition index in many species we examined. Previous studies have indicated that passerines arrive on their breeding grounds with high fat stores to offset potentially adverse conditions; however, our results did not show this pattern for most species. Most species examined at our study site significantly increased fat stores prior to autumn migration and had significantly higher body condition indices in autumn compared with spring. Our results contribute a key data point for understanding continental patterns of fat deposition in North American passerine migrants.

HAWK SCIENCE AND CONSERVATION AT THE HAWK MOUNTAIN SANCTUARY

Bildstein, Keith L. (Director of Research and Education, Hawk Mountain Sanctuary, Kempton, PA)

The Hawk Mountain Sanctuary is the world's first refuge for birds of prey and has used the public's fascination with raptor migration in its efforts to help protect populations of hawks, eagles, and falcons in northeastern North America for more than 60 years. Research at Hawk Mountain has examined: responses of Bald Eagle populations to organochlorine pesticides; how climate changes affects raptor migration timing; migratory habits of Sharp-shinned Hawks; and the ecology of American Kestrels. Hawk Mountain is exporting what it has learned over the years through (1) an International Internship Program, which has trained more than 150 interns from more than 30 countries on six continents, and (2) Hawks Aloft Worldwide, a global conservation initiative in which more than 800 international cooperators are helping the Sanctuary produce the first global atlas of raptor migration.

EPIDEMIC OF BILL DEFORMITIES IN BLACK-CAPPED CHICKADEES AND OTHER PASSERINES IN ALASKA

Handel, Colleen M. (USGS, Alaska Biological Science Center, 1011 E. Tudor Rd., Anchorage, AK 99503), Kimberly A. Trust (U.S. Fish and Wildlife Service, Ecological Services, Anchorage, AK 99501), and Steve M. Matsuoka (USGS, Alaska Biological Science Center, 1011 E. Tudor Rd., Anchorage, AK 99503).

Alarming high numbers of Black-capped Chickadees (*Poecile atricapillus*) with grossly deformed bills have recently been reported in Alaska. As of early January 2000, 340 reports had been received, which were estimated to represent a minimum of 262 individuals. New birds are continuing to be reported. In addition, 52 reports of 13 other species of passerines have been recorded. The bill deformities involve varying amounts of elongation, curvature, and crossing. Most of the chickadees have been observed at feeders in winter. Reports of bill deformities have been clustered in the Matanuska-Susitna Valley and the Hillside area of Anchorage, but regularly come from as far north as Talkeetna, south to Homer, and east to Valdez and the Matanuska Glacier. A small cluster has been recorded in the King Salmon/Dillingham area and deformed birds have been recorded in Fairbanks, Denali National Park and Preserve, Tok, Cordova, Yakutat, and Juneau/Douglas. Multi-disciplinary investigations are currently underway to determine the source of the deformities, which could involve disease, parasites, nutritional deficiencies, genetic defects, contaminants, or other factors.

DISTRIBUTION AND RELATIVE ABUNDANCE OF LANDBIRDS IN THE LOWER YUKON AND KUSKOKWIM RIVER WATERSHEDS, 1998-1999

Harwood, Christopher M. (Yukon Delta NWR, P.O. Box 346, Bethel, AK 99559)

Distribution and relative abundance of landbirds in shrub and forest habitats of the Lower Yukon and Kuskokwim rivers have been poorly documented. In 1998, Yukon Delta National Wildlife Refuge initiated a survey of the riparian corridors of the 2 watersheds. The primary objective was to evaluate the potential contribution of additional Breeding Bird Survey-type routes to

statewide and bioregional landbird monitoring efforts. In 1998, I conducted 18 surveys along sloughs and tributaries of the Lower Yukon River, between Holy Cross and Emmonak (some 425 kilometers). Among 865 count points, I documented 100 species. Northern Waterthrush was the most widely distributed species (90% of all stops; 100% of routes) and the third-most ‘‘abundant’’ (i.e., 2.4 individuals detected per stop). Bank Swallow was the most abundant (i.e., 4.5 individuals/stop), but 75% of all detections occurred at 2 enormous colonies. In 1999, I conducted 12 surveys in the Lower Kuskokwim River watershed, between Aniak and Napaskiak (some 250 kilometers). Among 590 count points, I documented 85 species. Northern Waterthrush was both the most widely distributed (96% of stops; 100% of routes) and most abundant (2.5 individuals detected per stop). Regular monitoring of these routes should allow us to determine population trends, down to the refuge level, for 4 of 7 passerines identified as conservation priority species in Western Alaska, including Gray-cheeked Thrush, Varied Thrush, Blackpoll Warbler, and Rusty Blackbird.

HABITAT USE BY NEOTROPICAL MIGRANTS IN A BOREAL FOREST FLOODPLAIN

Johnson, Ann (Institute of Arctic Biology, UAF, Fairbanks, AK, 99775).

Objectives for this study were to a) compare neotropical migrant density and species richness in three riparian habitat types, b) determine floristic and structural attributes associated with territory presence for each bird species, and c) provide information about habitat associations of migrant birds for use by land managers concerned with conservation of migrant species that breed in boreal forest floodplains in Alaska. Spot mapping data from 63 ha in the Tanana River Floodplain were used to determine what vegetation characteristics were associated with territory placement of neotropical migrants. Variables that represent the structural heterogeneity of the vegetation within subplots improved the explanatory power of logistic regression models for nine bird species. Management considerations for neotropical migrants in boreal forest floodplains are made based on this information concerning habitat associations and habitat distributions.

OUTREACH AND EDUCATION - IDEAS IN ADDRESSING MIGRATORY BIRD CONSERVATION ISSUES

Johnson-Schultz, Heather L. (Migratory Bird Management, U.S. Fish and Wildlife Service, 1011 East Tudor Rd., Anchorage, AK 99503).

Shade Grown Coffee, Keeping Your Cats Indoors, Protecting Wetlands Habitats - These are just a few of the conservation measures we can do to protect migratory birds. Viewing birds is a wonderful hobby and it can be very rewarding to see a rare bird and add it to our life list. However, it does nothing to protect the species. We need to take our love for birds, our love for "birding" to the next level and protect their habitats. Get your local communities involved in citizen action projects and educate families about the basic habitat needs of birds in their backyards.

DISTRIBUTION OF FOREST BIRDS AND VEGETATION RELATIVE TO FOREST DISTURBANCE BY SPRUCE BEETLES IN THE COPPER RIVER BASIN, ALASKA

Matsuoka, Steven M., Colleen M. Handel (U.S. Geological Survey, Alaska Biological Science Center, 1011 East Tudor Road, Anchorage, Alaska 99503), and Daniel R. Ruthrauff (Department of Wildlife, Humboldt State University, PO Box 4212 Arcata, California 95518).

From 1997-1998 we examined the distribution of boreal forest birds and vegetation relative to a massive infestation of spruce beetles in the Copper River Basin. We surveyed birds and vegetation in areas with varying levels of spruce (*Picea* sp.) mortality that resulted from a recent outbreak of spruce beetles. Higher levels of spruce mortality occurred in stands that had originally had high volumes of mature white spruce (*Picea glauca*). As a result, density of surviving overstory white spruce in each stand was not strongly related to level of tree mortality. Foliage density of understory vegetation, particularly alders (*Alnus* sp.), however, was high in areas with high levels of spruce mortality. Distribution of breeding birds mirrored these patterns in forest vegetation. Breeding densities of canopy-nesting birds varied little among levels of tree mortality although there was a marked decrease in the density of red squirrels (*Tamiasciurus hudsonicus*), a major nest predator. Ruby-crowned Kinglet (*Regulus calendula*) was the only canopy-nesting species that declined with increasing spruce mortality. Breeding densities of ground- and shrub-nesting birds, particularly Hermit Thrush (*Catharus guttatus*), Orange-crowned Warbler (*Vermivora celata*), Blackpoll Warbler (*Dendroica striata*), and Wilson's Warbler (*Wilsonia pusilla*) were higher on plots with higher levels of spruce mortality. Continued study of this boreal forest community would provide a rare opportunity to better understand the long-term successional responses of birds and vegetation to a large-scale natural disturbance.

REPRODUCTIVE SUCCESS OF GOLDEN EAGLES (*Aquila chrysaetos*) IN DENALI NATIONAL PARK AND PRESERVE, ALASKA, 1988 - 1999.

McIntyre, Carol L. (U.S. National Park Service, 201 1st. Ave., Fairbanks, Alaska 99701 USA and Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon 97331 USA).

An ecological study of golden eagles *Aquila chrysaetos* was initiated in Denali National Park, Alaska, in 1988. A major objective of this study is to document reproductive characteristics of golden eagles nesting at high latitudes. Reproductive success of golden eagles in temperate climates is strongly tied to food supplies that are available immediately before egg laying. Therefore, a secondary objective of this study is to measure golden eagle reproductive success in relation to natural changes in the abundance of their late winter and early spring food source, snowshoe hare *Lepus americanus* and willow ptarmigan *Lagopus lagopus*. From 1988 to 1999, 56 to 76 golden eagle nesting areas were surveyed by one or two experienced observers twice annually by helicopter, once immediately after egg laying and once immediately before the fledging of young. Territorial and laying pairs of eagles were identified, fledglings were counted,

and nesting success was documented. Indices of broad changes in the abundance of snowshoe hare and willow ptarmigan were calculated. Annual occupancy rates averaged 83% and did not vary significantly. Occupancy rates did not change in response to abundance of cyclic prey. Laying rates, success rates, and overall population productivity varied significantly over the study period in response to changes in abundance of cyclic snowshoe hare and willow ptarmigan populations.

RAVEN DEATHS IN SITKA AND ORGANOPHOSPHATE PESTICIDES APPLIED FOR CRANE FLY LARVAE CONTROL

Rudis, Deborah (U.S. Fish and Wildlife Service, 3000 Vintage Blvd. #201, Juneau, AK 99801), Robert Gorman (UAF Alaska Cooperative Extension, 2221 E. Northern Lights Blvd #118, Anchorage, AK 99508), Karen Laing and Philip Johnson (U.S. Fish and Wildlife Service, 1011 E. Tudor Road, Anchorage, AK 99503)

In early June 1999, the U.S. Fish and Wildlife Service received reports of a large number (>20) of dead and dying ravens in the Sitka area. Several carcasses were sent to the National Fish and Wildlife Forensics Lab in Ashland, Oregon where results confirmed that the ravens died from poisoning by the insecticide Diazinon. The ravens apparently foraged on lawns that had been treated with a granular form of Diazinon, applied to control European crane flies (Tipulidae), which are an introduced turf pest. The birds appear to have pulled up sections of grass and either ate granular Diazinon or consumed poisoned European crane fly larvae.

The pesticides Diazinon and Dursban (Chlorpyrifos) are organophosphate pesticides. They are labeled by EPA to control larval stage insects that feed on grass roots and subsequently kill lawn grasses. In Sitka, as in many coastal communities in the western U.S. and Canada, the spring emerging European crane fly larvae sometimes are controlled with granular or liquid form Diazinon or Dursban. The mode of action of these pesticides is acetylcholinesterase inhibition. Without inhibition of the enzyme acetylcholinesterase, excessive nerve stimulation is followed by activity depression. This disruption of normal motor control results in death in acute poisoning incidents. Depending on dose, organophosphate poisoning can be very rapid following ingestion. Ravens and most birds are very sensitive to organophosphate poisoning. European crane flies can be controlled by maintaining healthy lawns. Alternative pest management strategies and groundcover options, which may reduce the need for pesticides, will be discussed.

THE FALL MIGRATION OF LANDBIRDS AT CAMPBELL TRACT IN ANCHORAGE, ALASKA: 1997 TO 1999

Seppi, Bruce E. (U. S. Bureau of Land Management, 6881 Abbott Loop, Anchorage, AK 99507).

The timing, intensity and demographics of landbird movements during fall migration was sampled using mist nets and banding at Campbell Tract, in Anchorage Alaska from 1997 through 1999. In 3 falls of sampling, 2195 individual birds of 32 species were captured in 61 days of netting with an accumulation of 2914 net hours (nh). The most abundant species were Slate-colored Junco, Yellow-rumped, Wilson's, Orange-crowned and Yellow Warbler, Ruby-crowned Kinglet, Black-capped Chickadee and Hermit Thrush. There was significant variation in capture rates between years: birds were most abundant in 1998 (112.4 birds/100 nh), and least abundant in 1997 (39.0 birds/100 nh). The capture rate in 1999 was 85.0 birds/100 nh. The percentage of hatch year (HY) birds captured in 1997, 1998 and 1999 was .83, .81 and .86 respectively. The lowest percentage of HY birds in the capture occurred in 1998, yet coincided with the highest capture rate among the 3 years, suggesting that the most abundant species of landbirds caught at the station experienced lower reproductive success in 1998. Long distant Neotropical migrants made up 89% of the individuals captures in 3 falls. Returns of banded birds included 4 local and 5 migrant birds in 1998 and 7 local and 7 migrants in 1999 from 4 species. Comparisons will be made between fall weather patterns and capture rates and annual rainfall and fall HY capture rates.

BREEDING ECOLOGY OF A SUBARCTIC POPULATION OF YELLOW WARBLERS

Sowl, Kristine M. (Yukon Flats NWR, 101 12th Ave, Room 264, Fairbanks, AK 99701-6293).

Yellow warbler nesting ecology was studied at Canvasback Lake on the Yukon Flats National Wildlife Refuge from 1997-1999. Nests were located and monitored, breeding adults were color-banded, and nest site characteristics were recorded. We found 221 nests during systematic searching of 2 11-ha study plots. Nests were found in 7 different habitat types, concentrated along habitat edges and usually within 150 m of a lake or pond. Most of the nests were built in willows, but 15% were placed in white spruce. Clutch initiation began in late May and spanned a 5-week period. Nesting density was moderately high compared to other published studies, and mean clutch size was greater than at lower latitudes. Nearly 40% of the nests fledged at least one young. Predation appeared to be the major cause of nest failure. Females would re-nest if a nesting attempt failed before the third week of June. Polygyny was documented on several occasions, and 22% of the color-banded individuals associated with nests returned to breed another year.

MONITORING, REOCCUPANCY, AND INTER-YEAR MOVEMENTS OF ADULT NORTHERN GOSHAWKS ON THE TONGASS NATIONAL FOREST

Titus, Kimberly, Richard E. Lowell, (Alaska Dep. Fish and Game, Box 240020, Douglas, AK 99824), and Craig J. Flatten, ADF&G, 2030 Sea Level Drive, Ketchikan, AK 99901)

ADF&G and the US Forest Service began cooperative studies of goshawks in 1991 to understand their ecology in an old-growth temperate forest ecosystem. As part of these efforts we have been monitoring goshawk nest sites and nest stands with the aid of radiotelemetry. We have captured 135 goshawks, and a total of 51 adults have been fitted with radiotags to track inter-year movements. Between 1992 and 1998, 9 adult female goshawks moved to different nesting territories (mean = 34km; range 3.2 – 152 km) a total of 11 times and nested with different mates. None of 26 adult male goshawks have moved to a new nesting territory. Results suggest that annual monitoring of nest stands and checking old nest sites for occupancy by goshawks can provide misleading information. Depending on how the monitoring is actually designed, one could conclude that a raptor nesting population is declining simply because of inter-year movements by nesting adults to sites that are unknown. This is especially true for studies in dense forests where complete censuses of all nesting pairs are impossible. Our results also indicate that some home ranges are occupied by non-nesting goshawks, and that some pairs move 2-3 km to different nests between years, while maintaining the same home range as previous years. Hence it would be improper to suggest that these territories are ‘unoccupied’, based simply on the documented activity status of known nests.

BREEDING BIRD RESPONSE TO A SPRUCE BARK BEETLE OUTBREAK AND SALVAGE-LOGGING IN MATURE BOREAL FORESTS ON THE KENAI PENINSULA, ALASKA

Trapp, Todd W. (University of Alaska Anchorage, Department of Biological Sciences, 3211 Providence Drive, Anchorage, AK 99508), William B. Collins (Alaska Department of Fish and Game, Wildlife Conservation Division, 1800 Glenn Highway, Suite 4, Palmer, AK 99645), and Brad A. Andres (US Fish and Wildlife Service, Migratory Bird Management, 1011 East Tudor Road, Anchorage, AK 99503).

We estimated densities of breeding forest birds to determine the consequences of a spruce bark beetle (*Dendroctonus rufipennis*) outbreak and salvage-logging occurring in mature boreal forests of the southern Kenai Peninsula, Alaska on bird abundance and community composition in relation to changes in stand structure and composition. Birds were surveyed in mixed birch (*Betula papyrifera*)/spruce (*Picea spp.*) and spruce forests during their respective breeding seasons from 1997-99. Three types of stands varying in amount of spruce mortality and a heavily infested salvage-logged stand type were examined within each forest type. Diurnal forest birds were surveyed using the variable circular-plot method, while road transects were utilized to survey nocturnal owls. Species varied dramatically in the strength and nature of the relationship

between abundance and spruce mortality. Species' abundances were generally greater in stands intermediate in intensity of beetle infestation and spruce mortality. Salvage-logged stands favored species of open forest, shrub, and meadow habitats. In the mixed forest, a significant canopy remained following logging maintaining high diversity, while logged spruce stands tended to resemble clear-cuts. Townsend's Warblers (*Dendroica townsendi*), Golden-crowned Kinglets (*Regulus satrapa*), and Northern Goshawks (*Accipiter gentilis*), species preferring mature live coniferous forests for suitable nesting habitat, were among the most negatively impacted by spruce mortality and salvage-logging.

A METHOD FOR SURVEYING NOCTURNAL FOREST OWLS IN ALASKA

Trapp, Todd W. (University of Alaska Anchorage, Department of Biological Sciences, 3211 Providence Drive, Anchorage, AK 99508), and William B. Collins (Alaska Department of Fish and Game, Wildlife Conservation Division, 1800 Glenn Highway, Suite 4, Palmer, AK 99645).

Road transects were utilized to survey nocturnal forest owls on the western Kenai Peninsula, Alaska traversing two forest types, mixed broadleaf/spruce (*Picea spp.*) and spruce, varying in levels of spruce mortality caused by a recent spruce bark beetle (*Dendroctonus rufipennis*) outbreak, and through stands subsequently salvage-logged. We conducted surveys during March and April, 1998 and 1999 encompassing the primary breeding seasons of Great Horned (*Bubo virginianus*), Great Gray (*Strix nebulosa*), Boreal (*Aegolius funereus*), and Northern Saw-whet (*Aegolius acadicus*) owls. Road transects consisted of 10 stops, spaced 805 m (0.5 miles) apart. Each stop was surveyed twice during an evening with an 8-minute listening period per visit. Surveys began at local sunset and took on average 4 to 5.5 hours to complete. Direction and estimated distance were recorded for each detection. Great Horned Owls were actively hooting by late February, while Boreal Owls did not begin singing until mid-March and Saw-whets until April. Only 3 Great Gray Owls were recorded during the two years of the study, in April 1999. Great Horned Owls began hooting at sunset, while Boreal and Saw-whet owls did not begin singing until later in the evening when Great Horned Owl singing activity had diminished. Owl activity and ability of the observer to detect them were related to weather as well as ambient noise conditions. An observation period of five minutes detected only 83% of individuals at a stop, and accuracy in estimating distance from a single point was poor.

OUTREACH AND EDUCATION

NATIONAL, INTERNATIONAL, AND REGIONAL NEWS

Heather Johnson-Schultz, Brad A. Andres, U. S. Fish and Wildlife Service

Sue Bonfield is our National Outreach/Education Chair for PIF. She can be reached at the Colorado Bird Observatory (303) 659-4348

The big project for her this year has been to coordinate the IMBD celebration, nationally, through the Colorado Bird Observatory.

This year, they will be highlighting 10 conservation issues, with 10 bird species representing those issues. Each issue/bird had a different person working on the booklet, and it was reviewed by several folks. The whole packet was also reviewed by educators. The packet is now available through ABA Sales for \$12.00 each or \$10.80 if you buy two or more. You can call 1-800-634-7736 to make a credit card order for the teacher packets or other IMBD materials. To receive a flyer on the materials/products available for IMBD this year, send an E-mail to Heather Johnson-Schultz at heather_johnson@fws.gov with your address.

The new Guide to Migratory Bird Education Resources is available through ABA Sales as well (see the 1-800 # above).

Kids For Saving the Earth, out of Minnesota, wants to be involved with PIF this year. They want to develop a packet that would be a “where is Waldo” kind of a scavenger hunt through different web pages on birds. It would include questions for each of the different web sites that has specific information about the goals, focus, etc. for that site. Tesa Hill at kseww@aol.com is in charge at Kids for Saving the Earth.

Sue Bonfield has a new activity packet for educators that would be great for this region. Teachers can choose to have one sent a month or have the whole packet at once. It has one on:
What is a bird.
What is in a name
What is habitat
Etc. in Both English and Spanish

Colorado Bird Observatory has the packet on Birds in Hand and Field and a new one on Bald Eagles. The Birds in Hand and Field will be revised this next year, so get comments to Sue Bonfield if you want anything changed. Call Sue Bonfield if you are interested (# listed above).

Birders Exchange - Paul Green from ABA has kindly offered to send packets of equipment to folks who are on their way to Latin America or Russia. The packets will include scopes, binoculars, etc. for the students at schools or through NGO's. See me if you have a contact down

there and plan to travel and we'll get you set up with some equipment.

There is a simple form that goes with it, and we'll have to do one for each separate trip.

ALASKA HAPPENINGS

A new shorebird kit has been developed for the ARLIS library. There are three kits which should make it easier for shorebird sister schools to access materials to compliment the curriculum.

The Song Bird Blues Trunk has been moved to ARLIS as well. It will still be available statewide. To borrow a kit from ARLIS, call (907) 272-7547.

The Shorebird Sister Schools Program curriculum is complete and available through Circumpolar Press, in Homer. Call 1-877-210-2665 if you would like to purchase a copy.

The shorebird satellite broadcast field trip video is available through the National Conservation and Training Center. It was done at BomBay Hook National Wildlife Refuge and is titled "Shorebirds Running on Empty". To find out more about this video, and other Fish and Wildlife Services videos, contact Sharon Howard at the National Conservation and Training Center, (304) 876-7494.

Poster - A new Alaska poster is being produced on neotropical migratory songbirds. Brad Andres is the contact on this and is currently working with the artist to finalize this product.

Web Pages - The Web page for Alaska Partners in Flight was done by BRD, USGS and is terrific (Thanks Steve M.!!) Access PIF at <http://absweb/wr.usgs.gov/research/bpif/index.html>. There is a link off the main page on education that highlights many of the good programs going on around Alaska.

The Alaska Bird Observatory has been very busy with many new excellent education resources and programs. The new CD-Rom of Alaska bird calls/songs will be available soon and is a great resource. A new teacher packet was developed called "Boreal Forest Songbirds of Alaska". It is a terrific resource for those of us doing classroom presentations, field trips, and other programs with students. To get a copy, call (907) 451-7059 or check out their web page at <http://www.ptialaska.net/~birds1>. Another wonderful outreach opportunity is a summer bird education camp they are teaching. Thanks to everyone at the Bird Observatory for all your wonderful hard work, innovative ideas, and super resources.

Within the education break-out group during the PIF meeting, the group decided not to develop any products this year. We have had many good ideas discussed, with lots of enthusiasm and no funds. Each year we get together and realize that no one was able to come up with the resources to develop the products suggested. What we concentrated on this year was developing International Migratory Bird Day Festivals and other smaller scale festivals or gatherings for

locals to learn and get excited about birds and their associated conservation issues. We discussed utilizing the resources already available more effectively. For next year, we discussed having individuals plan on putting in for grant opportunities or base funds to begin working on new products, programs or other resources. This way, when we meet to discuss ideas, everyone will have a better idea of how feasible each idea is.

Thanks to everyone for your hard work and great ideas. If anyone has ideas for pre or post outreach and education workshops during next years PIF meeting, contact me at (907) 786-3367 or by E-mail at heather_johnson@fws.gov.

BPIF WEBSITE IMPROVEMENTS

Several items were discussed at the Sitka meeting to improve the BPIF website. The address is: www.absc.usgs.gov/research/bpif/bpif.html. The contact for the website is Steve Matsuoka (Steve_Matsuoka@usgs.gov).

1. Update BPIF project directory
2. Add annual reports as pdf files
3. Make additional links to partners sites
4. Add a citation list of recent reports/papers
5. Update mailing list
6. Add landbird conservation plan

1999 NORTH AMERICAN MIGRATION COUNT

Between 8 May and 15 May, 130 individuals in 12 groups conducted counts. On these counts, 166 species were recorded. Following is a complete list of species and count participants. The Kachemak Bay count was far and away the leader with 114 species (highlights were Rufous-necked Stint, Bar-tailed Godwit, and Brambling), but Cape Peirce had the most individuals with 56,693 that included 28,181 King Eiders and 20,156 Common Murres.

Count Sites and Participants

Anchorage — 49 species

Brad Andres (compiler)
Diana Brann
Paul Cotter
Owen Hughes

Heather Johnson
Steve Matsuoka
George Matz

Bethel — 31 species

Chris Harwood (compiler)

21 participants

Cape Peirce — 32 species; Rob MacDonald (compiler)

Cordova — 71 species

Molly McCammon
Daniel Senner
Nathan Senner (compiler)
Pat Senner

Paul Senner
Stan Senner
Jackson Spivey
Tim Spivey

Denali National Park/Healy — 41 species

Michelle Ambrose
Nan Eagleson
Carol McIntyre
Ray Hander
Liz Hudson
Cassidy Owen

Madison Owen
Michael Owen
Pat Owen
Bob Ritchie
Jan St. Peters

Dillingham — 60 species

Andy Aderman
Katherine Carscallen
Patricia Carscallen
Vern Carscallen
Terry Elliot
Larry Heniker
Eric Holland
Rene Johnson
Rob MacDonald
Allen Miller

4 Miller Children
Connie Pearson
Dan Pearson
Debra Redpath
George Nelson
Joanne Nelson
Sharon VanValint
11 VanValint Students
Joyce Wojciehowski

Galena — 43 species

Jim Good (compiler)
Laurie Good
Joe Huhndorf
Rebecca Huhndorf

John Korta
Bob Rebarchik
Joanna Roberts

Glenallen Area — 63 species

Janissa Balcomb
Kari Barnard
Laurie DeWispelaere (compiler)
Barb Goozen
Bea Gray
Herman Gray
Brad Henspeter
Mark Henspeter
Althea Hughes

Ruth McHenry
Carl Mitchell
Chris Moroney
Lee Penwell
Kenneth Roberson
Vicki Rood
Vicki Snitzler
Stan Wallace

Kachemak Bay — 114 species

Nina Faust (compiler); Kachemak Bay Shorebird Festival Participants

King Salmon — 60 species

Bob Blush
Ken Convery
Laura Kirk
Audra Lamson

Suzanne Lamson
Martin Nargulies
Dick Russell
Susan Savage (compiler)

Tok — 69 species

Erica Burnham
Peter Burnham
Rubin Burnham
Ann Engstrom
Bud Johnson
Heather Johnson
Keith Larson
Carla McDermott
Amber Mensch

Herbert Paul
Kit Persson
Dawn Reetz
Janice Smoke
Bill Smoke
Alex Smoke
Hank Timm
Mary Timm
Jacob Timm

Wrangell Island — 51 species

Doug Clark
Bonnie Demarjian

Diane O'Brien
Peg Robertsen (compiler)

Species List (166 species + 1 exotic)

Red-throated Loon	Red-breasted Merganser
Pacific Loon	Osprey
Common Loon	Bald Eagle
Yellow-billed Loon	Northern Harrier
Horned Grebe	Sharp-shinned Hawk
Red-necked Grebe	Northern Goshawk
Double-crested Cormorant	Red-tailed Hawk
Red-faced Cormorant	Rough-legged Hawk
Pelagic Cormorant	Golden Eagle
Great Blue Heron	American Kestrel
Greater White-fronted Goose	Merlin
Emperor Goose	Peregrine Falcon
Snow Goose	Ring-necked Pheasant
Canada Goose	Ruffed Grouse
Brant	Spruce Grouse
Tundra Swan	Blue Grouse
Trumpeter Swan	Sharp-tailed Grouse
Gadwall	Sandhill Crane
Eurasian Wigeon	Black-bellied Plover
American Wigeon	American Golden-Plover
Mallard	Pacific Golden-Plover
Northern Shoveler	Semipalmated Plover
Northern Pintail	Killdeer
Green-winged Teal	Black Oystercatcher
Canvasback	Greater Yellowlegs
Redhead	Lesser Yellowlegs
Ring-necked Duck	Solitary Sandpiper
Greater Scaup	Spotted Sandpiper
Lesser Scaup	Whimbrel
Steller's Eider	Hudsonian Godwit
King Eider	Bar-tailed Godwit
Common Eider	Marbled Godwit
Harlequin Duck	Ruddy Turnstone
Oldsquaw	Black Turnstone
Surf Scoter	Surfbird
White-winged Scoter	Red Knot
Black Scoter	Sanderling
Common Goldeneye	Semipalmated Sandpiper
Barrow's Goldeneye	Western Sandpiper
Bufflehead	Red-necked Stint
Common Merganser	Least Sandpiper

Pectoral Sandpiper
Rock Sandpiper
Dunlin
Short-billed Dowitcher
Long-billed Dowitcher
Common Snipe
Red-necked Phalarope
Parasitic Jaeger
Long-tailed Jaeger
Bonaparte's Gull
Mew Gull
Herring Gull
Glaucous-winged Gull
Glaucous Gull
Black-legged Kittiwake
Arctic Tern
Common Murre
Black Guillemot
Pigeon Guillemot
Marbled Murrelet
Kittlitz's Murrelet
Tufted Puffin
Rock Dove
Great Horned Owl
Northern Hawk Owl
Short-eared Owl
Boreal Owl
Rufous Hummingbird
Belted Kingfisher
Red-breasted Sapsucker
Downy Woodpecker
Hairy Woodpecker
Three-toed Woodpecker
Northern Flicker
Northern Shrike
Gray Jay
Steller's Jay
Black-billed Magpie
Northwestern Crow
Common Raven
Horned Lark
Tree Swallow
Violet-green Swallow

Bank Swallow
Black-capped Chickadee
Chestnut-backed Chickadee
Boreal Chickadee
Red-breasted Nuthatch
Winter Wren
American Dipper
Golden-crowned Kinglet
Ruby-crowned Kinglet
Townsend's Solitaire
Swainson's Thrush
Hermit Thrush
American Robin
Varied Thrush
American Pipit
Bohemian Waxwing
Orange-crowned Warbler
Yellow Warbler
Yellow-rumped Warbler
Townsend's Warbler
Blackpoll Warbler
Northern Waterthrush
American Tree Sparrow
Savannah Sparrow
Fox Sparrow
Song Sparrow
Lincoln's Sparrow
White-crowned Sparrow
Golden-crowned Sparrow
Dark-eyed Junco
Lapland Longspur
Snow Bunting
Rusty Blackbird
Brambling
Gray-crowned Rosy-Finch
Pine Grosbeak
Red Crossbill
White-winged Crossbill
Common Redpoll
Hoary Redpoll
Pine Siskin

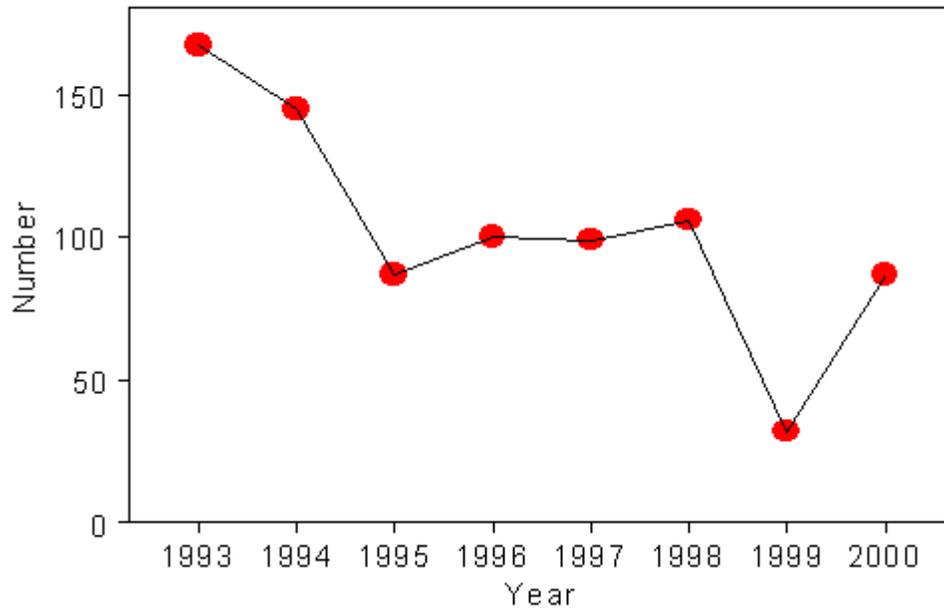
INVENTORY AND MONITORING

BREEDING BIRD SURVEY

Brad A. Andres, U. S. Fish and Wildlife Service

Breeding Bird Survey coverage was down somewhat from 1998. However, coverage increased in Western Alaska; 13 routes were surveyed there (excluding Cold Bay). Below I present the a summary of BBS data (2000) for some high and moderate priority species from Western Alaska. Routes were distributed as: King Salmon (1), Togiak NWR (4), Yukon Delta NWR (2), Unalakleet (2), and Seward Peninsula (4). Following is also presented information on the trend in numbers of Arctic Warblers recorded on 3 routes at Nome. These data indicate that this species might be undergoing some decline, at least local, in population size. Further analysis and careful scrutiny of future count data is probably warranted.

	Average number of birds/route (SE)	Average frequency of stops	No. of routes where detected ($n = 13$)
Olive-sided Flycatcher	1.46 (0.81)	0.03	3
Northern Shrike	0.00	0.00	0
Yellow Wagtail	4.00 (1.30)	0.07	7
Arctic Warbler	13.15 (4.53)	0.19	10
Gray-cheeked Thrush	21.31 (3.92)	0.34	13
Varied Thrush	7.92 (2.73)	0.12	8
Blackpoll Warbler	12.92 (3.48)	0.21	11
Golden-crowned Sparrow	27.23 (6.88)	0.36	9
Rusty Blackbird	0.77 (0.50)	0.01	3



Changes in the number of Arctic Warblers on 3 Nome area BBS routes that were run by the same observer (Andres), in all years, from 1993 to 2000. Routes are done the same time each year (about 20-25 June).

MIST-NETTING AND BANDING

Anna-Marie Benson, Alaska Bird Observatory

Following is a summary of mist-netting and banding activities conducted in Alaska during 1999. The table is arranged by Bird Conservation Region and by netting methods (MAPS or fall migration).

Bird Conservation Region:	Western Alaska									Northern Pacific Rainforests										
	Mother Goose Lake			Izembek NWR			Koyukuk/Nowitna NWR			Hoonah			Mendenhall Valley			Yakutat				
Site name	S. Savage, USFWS			M. Roy, USFWS			K. Lehmkuhl, USFWS			D. Youkey, USFS			D. Youkey, USFS			D. Youkey, USFS				
Contact/Affiliation:	MAPS (3 sites)			MAPS			MAPS			MAPS			MAPS			MAPS				
Type of banding:	27			9			6			9			8			7				
No. days banding:	12 June -2 Aug			14 June -27 July			16 June -30 July			8 June-9 August			1 June-4 August			5 June-5 August				
Range of dates:	1,065			343			213			420			420			375				
No. net-hours:	Species	AHY	HY	TOT	AHY	HY	TOT	AHY	HY	TOT	AHY	HY	U	TOT	AHY	HY	TOT	AHY	HY	TOT
Sharp-shinned Hawk																				
Lesser Yellowlegs								1		1										
Solitary Sandpiper																				
Common Snipe																				
Red-breasted Sapsucker											6	2		8						
Downy Woodpecker																				
Three-toed Woodpecker											2			2						
Olive-sided Flycatcher								1		1										
Western Wood-Pewee																				
Alder Flycatcher	7		7					30	2	32										
Hammond's Flycatcher																				
Pacific-slope Flycatcher											10			10	1		1			
Tree Swallow	2	1	3								1			1						
Gray Jay								1		1										
Steller's Jay												3		3				1		1
Black-billed Magpie																				
Black-capped Chickadee	4	2	6	1		1		9	2	11										
Boreal Chickadee																				
Chestnut-backed Chickadee											9	12	1	22						
Red-breasted Nuthatch																				
Brown Creeper											1	5		6		1	1	1	1	2
Winter Wren											3	5		8					1	1
Arctic Warbler																				
Golden-crowned Kinglet												5		5		1	1			
Ruby-crowned Kinglet								3	3	6	8	6		14	9	6	15			
Gray-cheeked Thrush	14	2	16																	

Site name:	Mother Goose Lake			Izembek NWR			Koyukuk/Nowitna NWR			Hoonah				Mendenhall Valley			Yakutat		
Species	AHY	HY	TOT	AHY	HY	TOT	AHY	HY	TOT	AHY	HY	U	TOT	AHY	HY	TOT	AHY	HY	TOT
Swainson's Thrush							23	10	33	5			5						
Hermit Thrush	31	26	57	23	6	29				16	9		25	9	3	12	22	2	24
American Robin	25	1	26				1		1	1				2	1	3	4		4
Varied Thrush										5	2		7	1	2	3	3	1	4
Bohemian Waxwing																			
Orange-crowned Warbler	69	17	86				18	11	29	12	1		13	10	2	12	32	8	40
Yellow Warbler	59		59	45	1	46	10	3	13		3		3	1	1	2	2		2
Myrtle Warbler							11	4	15					4	1	5			
Townsend's Warbler										1			1	1	1	2			
Blackpoll Warbler							10	6	16										
Northern Waterthrush							23	3	26										
MacGillivray's Warbler														2		2			
Wilson's Warbler	320	66	386	12	1	13				21	8		29	2		2	34	4	38
American Tree Sparrow	1	1	2				1		1										
Chipping Sparrow																			
Savannah Sparrow	7	2	9	1	1	2													
Fox Sparrow	9	11	20	27	9	36											5	2	7
Song Sparrow															2	2			
Lincoln's Sparrow							20	5	25	5	3		8	1	1	2	6	10	16
Golden-crowned Sparrow	27	2	29	12	3	15								1		1	1		1
White-crowned Sparrow	2	2	4				1		1										
Slate-colored Junco							12	12	24										
Oregon Junco										9	2		11	4	6	10	1		1
Rusty Blackbird																			
Pine Grosbeak	6		6	1		1	4		4	1			1						
Red Crossbill																	10	6	16
White-winged Crossbill																	7	3	10
Common Redpoll	70	7	77	8	3	11	1	1	2										
Pine Siskin										12	2		14		1	1		4	4
Total of all species	653	140	793	130	24	154	180	62	242	128	68	1	196	48	29	77	129	42	171
Individuals/100 nh	61.3	13.1	74.5	37.9	6.9	44.8	84.5	29.1	113.6	30.5	16.2	0.2	46.7	11.4	6.9	18.3	34.4	11.2	45.6

* net hours from King Salmon are estimates.

Bird Conservation Region:	Cook Inlet								Northwestern Interior Forests								Total All Stations				
Site name:	Campbell Tract				Prospect Heights				Yukon Flats NWR				Tetlin NWR					Denali National Park			
Contact/Affiliation:	S. Matsuoka, USGS				S. Matsuoka, USGS				Kristine Sowl, USFWS				B. Johnson, USFWS					D. Froelich IBP			
Type of banding:	MAPS				MAPS				MAPS				MAPS					MAPS (6 sites)			
No. days banding:	7				7				6				6								
Range of dates:									11 June - 31 July				10 June - 30 July					9 June - 4 August			
No. net-hours:	632				621				360				396					<i>not available</i>			
Species	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	All				
Sharp-shinned Hawk							1		1									1			
Lesser Yellowlegs																		1			
Solitary Sandpiper											1		1					1			
Common Snipe										1			1					1			
Red-breasted Sapsucker																		8			
Downy Woodpecker	1	1		2														2			
Three-toed Woodpecker					1			1										3			
Olive-sided Flycatcher																		1			
Western Wood-Pewee									17			17						17			
Alder Flycatcher	11	2		13	14	3	1	18	1			1	4	1	5		8	84			
Hammond's Flycatcher													1	1	2		2	4			
Pacific-slope Flycatcher																		11			
Tree Swallow																		4			
Gray Jay													1		1		7	9			
Steller's Jay																		4			
Black-billed Magpie	10	20		30														30			
Black-capped Chickadee					1	1		2					1	3	4		5	29			
Boreal Chickadee					2			2			5		5	1		1	9	17			
Chestnut-backed Chickadee																		22			
Red-breasted Nuthatch							1	1										1			
Brown Creeper	2	1		3														12			
Winter Wren																		9			
Arctic Warbler																	16	16			
Golden-crowned Kinglet	1	1		2			3	3										11			
Ruby-crowned Kinglet	1	4		5	1	5		6	1	5		6		1	1			53			
Gray-cheeked Thrush									2			2						8	26		

Site name:	Campbell Tract				Prospect Heights				Yukon Flats NWR				Tetlin NWR			Denali National Park	All
Species	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	TOT	Total	Sites
Swainson's Thrush	13	2		15	5	1		6	15	10		25	6	5	11	22	117
Hermit Thrush	9			9	10			10					1	1	2	1	169
American Robin		1		1					19	6		25	1		1	5	66
Varied Thrush																3	17
Bohemian Waxwing									3			3				1	4
Orange-crowned Warbler	3	2		5	9	2		11	5	2		7	9	1	10	57	270
Yellow Warbler									38	56		94				10	229
Myrtle Warbler	5	4		9	1	1		2	30	14		44	3	11	14	16	105
Townsend's Warbler	6	1		7	7			7									17
Blackpoll Warbler										3	1	4				2	22
Northern Waterthrush	1	1		2					6	6		12				3	43
MacGillivray's Warbler																	2
Wilson's Warbler	3			3	2	1		3					3		3	199	676
American Tree Sparrow									3	8		11				50	64
Chipping Sparrow									1			1	1		1		2
Savannah Sparrow									1	18		19				21	51
Fox Sparrow										4		4	1	3	4	21	92
Song Sparrow																	2
Lincoln's Sparrow	3	1	1	5	3	1		4	8	10	1	19		1	1		80
Golden-crowned Sparrow																1	47
White-crowned Sparrow									7	8		15				90	110
Slate-colored Junco	5	6		11	8	7		15	5	7		12	7	10	17	38	117
Oregon Junco																	22
Rusty Blackbird										2		2					2
Pine Grosbeak																	12
Red Crossbill																	16
White-winged Crossbill						1		1								10	21
Common Redpoll	1	2		3					4	3		7				126	226
Pine Siskin		2		2													21
Total of all species	75	51	1	127	64	28	1	93	167	168	2	337	40	38	78	731	2999
Individuals/100nh	11.9	8.1	0.2	20.1	10.3	4.5	0.2	15.0	46.4	46.7	0.6	93.6	10.1	9.6	19.7		

Bird Conservation Region:	Northwestern Interior Forests												Western Alaska						N. Pacific Rainforests				All
Site name:	Creamer's Field			Denali Institute			Tetlin NWR			Yukon Delta NWR			Mother Goose Lake			Yakutat				Sites			
Contact/affiliation:	AM Benson, ABO			AM Benson, ABO			B. Johnson, USFWS			C. Harwood, USFWS			S. Savage, USFWS			B. Andres, USFWS							
Type of banding:	Fall Migration			Fall Migration			Fall Migration			Fall Migration			Fall Migration			Fall Migration							
No. days banding:	61			43			31			47			32			54							
Range of dates:	15 July-30 Sept			18 July-10 Sept			29 July - 27 Sept			20 July - 11 Sept			5 Aug - 13 Sept			1 Aug - 4 Oct							
No. net-hours:	13,394			2,361			6,180			1,300			1,546			4,642							
Species	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	Total		
Sharp-shinned Hawk	2	3		5					2	4	1	7										12	
Common Snipe													1	2		3	1				1	4	
Rufous Hummingbird																				2	2	2	
Belted Kingfisher					1			1														1	
Downy Woodpecker	2			2					1			1									1	4	
Hairy Woodpecker	1	1		2	1			1														3	
Three-toed Woodpecker	1	1		2		1		1		1	1	2										5	
Northern Flicker	1	1		2					1	1		2										4	
Yellow-bellied Flycatcher									1	1		2										2	
Alder Flycatcher	20	36		56		7		7	10	16		26	22	5		27		1	1		1	118	
Hammond's Flycatcher	4	25		29		3		3	1	3		4										36	
Gray Jay					6	5		11	2	1		3										14	
Black-capped Chickadee	2	39		41	4	30		34	2	8		10	2	14	1	17	9	2	11		4	117	
Boreal Chickadee					1	18	2	21	3	58		61		2		2						84	
Chestnut-backed Chickadee																		5	41			46	
Brown Creeper										1		1						1	3			5	
Winter Wren																		2	13			15	
Arctic Warbler		4		4	0	4		4						1		1						9	
Golden-crowned Kinglet																		8	43			51	
Ruby-crowned Kinglet	5	59		64	0	29	2	31	29	147		176						11	95	1	107	378	
Gray-cheeked Thrush	5	44		49	7	27	1	35	3	11		14	8	49		57	3	33	36			191	
Swainson's Thrush	9	121		130	20	35		55	26	118		144									1	330	
Hermit Thrush	1	18		19	0	5		5	3	13		16		7	137	144	70	268	3	341	525		
American Robin	4	29		33	2	3		5		16		16	3	18		21	4	9	13		1	89	
Varied Thrush		3		3	3	7		10	8	6		14		3		3				4	16	50	
Northern Shrike		4		4	0	6		6		1		1		2		2		1	1			14	

Site Name:	Creamer's Field				Denali Institute				Tetlin NWR				Yukon Delta NWR				Mother Goose Lake			Yakutat				All Sites	
Species	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	U	TOT	AHY	HY	TOT	AHY	HY	U	TOT	Sites	
Warbling Vireo																					1			1	1
Orange-crowned Warbler	105	617		722	14	39		53	31	82		113	9	33		42	42	240	282	169	304	3	476	1,688	
Yellow Warbler	20	181		201		6		6	67	3		70	77	195	2	274	25	242	267	48	72		120	938	
Myrtle Warbler	75	670	2	747	7	33		40	28	114		142		5		5				6	13		19	953	
Townsend's Warbler		3		3					1			1									1		1	5	
Blackpoll Warbler	7	174		181		20		20	2	3		5	6	10		16				1			1	223	
Northern Waterthrush	6	45		51	4	12		16	6	9		15	13	90	3	106								188	
MacGillivray's Warbler																									
Common Yellowthroat																						2		2	2
Wilson's Warbler	3	125		128	34	289	9	332	65	90		155	3	50	1	54	42	2,572	2,614	26	194	3	223	3,506	
American Tree Sparrow	103	675	1	779	1	36	2	39	10	13		23	63	198	2	263	5	89	94		1		1	1,199	
Savannah Sparrow	7	198		205	2	6		8	3	7		10	8	83	4	95		66	66	48	89		137	521	
Fox Sparrow	21	48	1	70	2	15		17	16	69		85	1	31	4	36	5	124	129	73	264		337	674	
Song Sparrow																					5	5		10	10
Lincoln's Sparrow	10	144	1	155		9	1	10		3		3	2	9		11				43	294	5	342	521	
Golden-crowned Sparrow	2	2		4		3		3						1		1	14	111	125	55	104	1	160	293	
White-crowned Sparrow	10	22		32	70	75		145	1	7		8	5	26		31	1	23	24		22		22	262	
Slate-colored Junco	48	404	3	455	26	41	2	69	74	265		339		2		2		1	1					866	
Oregon Junco																				3	34		37	37	
Dark-eyed Junco																					3		3	3	
Rusty Blackbird		1		1	1	0		1					7	1		8					1		1	11	
Pine Grosbeak																	1	1						1	
Common Redpoll	11	34		45	1	5		6					83	43		126	40	82	122	9	66		75	374	
Hoary Redpoll													37	22		59	1		1					60	
Redpoll spp.									4	11		15												15	
Pine Siskin																	5	5			2		2	7	
Total of All Species	485	3,731	8	4,224	207	769	19	995	400	1,082	2	1,484	350	895	17	1,262	199	3,739	3,938	587	1,958	19	2,564	14,467	
Individuals/100 nh	3.6	28		31	8.8	33		42	6.5	17.5		24	27	69		97	13	242	255	13	42		55	505	

MAPS

Brad A. Andres, U. S. Fish and Wildlife Service

A recent recommendation by the Institute for Bird Populations regarding MAPS was that a single station is inadequate to obtain reasonable estimates of survivorship and that stations should be clustered. At the annual meeting, we began a discussion about the size of these clusters. In general, stations need to be close enough so that spatial variation in estimates of survival is minimized. These might lie in the 10-km range. It also appears now that MAPS is best suited for deriving estimates of survival, although some information on productivity could be garnered from the method. We discussed several approaches to evaluate the MAPS program in Alaska. One approach would be to contract IBP or someone else to evaluate within site (i.e. a cluster of stations) and among site variability in survival rates. A more immediate evaluation is to determine which species are being captured at current MAPS stations and how precise are estimates of survival. Are we capturing high priority species? Lastly, we concurred that current MAPS stations should be continued through 2003.

We assessed captures at MAPS stations by calculating the average, annual number of new captures and first returns of AHY birds at a station. Below are listed species, by site (i.e. a cluster of stations), that averaged >4.5 first captures per year per station. Station data were provided by Carol McIntyre, Buddy Johnson, Kristine Sowl, Wendy Nixon, Susan Savage, and Linda Ziemba. For stations that did not provide information, I reviewed captures from 1998 and 1999 and indicated if, on average, >5 birds were caught annually at the station.

From this cursory analysis, it is obvious that priority species are not being adequately sampled by our current MAPS stations. Secondly, relatively few species are covered across Alaska BCRs. Only 33% of the included species ($n = 24$ species) are sampled in reasonable numbers at ≥ 4 sites. At least one of these species, the hermit thrush, is represented by two subspecies. Clearly, more attention is needed to more effectively and efficiently allocate our MAPS effort.

BCR:	N. Pacific Rainforest	Cook Inlet	Alaska Range	Interior Lowlands		Yukon Flats	Interior Highlands?	Alaska Peninsula Mountains	
Site:	Juneau +	Anchorage	Denali NPP ¹	Tetlin NWR	Koyukuk NWR	Yukon Flats NWR	Shadow Lake Yukon	Alaska Peninsula NWR	Izembek NWR
Number of stations:	3	2	6	1	1	1	1	3	1
Number of years:	?	?	8	7	?	5	7	6	5
Western Wood-Pewee²						12.6			
Alder Flycatcher		X		8.3	X				
Black-capped Chickadee					X			10.2	
Ruby-crowned Kinglet	X								
Arctic Warbler³			* ⁴						
Gray-cheeked Thrush						4.8		10.7	
Swainson's Thrush		X	*	12.4	X	25.8	5.6		
Hermit Thrush	X	X						31.8	19.4
American Robin				4.7		27.0			
Orange-crowned Warbler	X	X	*	17.9	X			39.1	
Yellow Warbler					X	85.6		21.9	39.6
Yellow-rumped Warbler		X	*		X	33.2	7.0		
Blackpoll Warbler					X				
Northern Waterthrush					X	4.6			
Wilson's Warbler	X	X	*					203.5	19.8
American Tree Sparrow			*						

BCR:	N. Pacific Rainforest	Cook Inlet	Alaska Range	Interior Lowlands		Yukon Flats	Interior Highlands?	Alaska Peninsula Mountains	
Site:	Juneau +	Anchorage	Denali NPP¹	Tetlin NWR	Koyukuk NWR	Yukon Flats NWR	Shadow Lake Yukon	Alaska Peninsula NWR	Izembek NWR
Number of stations:	3	2	6	1	1	1	1	3	1
Number of years:	?	?	8	7	?	5	7	6	5
Chipping Sparrow				6.4					
Savannah Sparrow								7.5	4.6
Fox Sparrow								10.6	28.6
Lincoln's Sparrow	X				X	8.6	11.1		
White-crowned Sparrow			*						
Golden-crowned Sparrow								17.1	16.8
Dark-eyed Junco		X	*	17.9	X	6.8	4.9		
Common Redpoll						12.0		20.1	19.2

¹ bolded sites have provided data.

² bolded species are priority species in some part of the state.

³ of interest because of endemic subspecies

⁴ * indicates that with 8 years of data, estimates of adult survival probabilities using a transient model could be obtained for these species. Eight years of data notably improved precision of estimates (CV = 24% when $n = 8$) over using <8 years of data.

BIOREGIONAL REPORTS

WESTERN/SOUTHWESTERN ALASKA

Brian J. McCaffery, Yukon Delta NWR

On Tuesday, 29 February 2000, Boreal Partners in Flight members broke into regional groups to discuss implementation of the Landbird Conservation Plan for Alaska Biogeographic Regions, Version 1.0 (LCPABR-V1.0). The Western/Southwestern Region discussion was attended by Corey Adler (Alaska Peninsula/Becharof NWR), Vem Byrd (Alaska Maritime NWR), Chris Harwood (Yukon Delta NWR), Rob MacDonald (Togiak NWR), Brian McCaffery (Yukon Delta NWR), Christine McCaffery (Yukon Delta NWR), Susan Savage (Alaska Peninsula/Becharof NWR), Bruce Seppi (BLM--Anchorage) and Linda Ziemba (Izembek NWR).

Given the limited time, BPIF coordinator Brad Andres suggested that we concentrate our discussion on 1) determining the appropriate sampling frame(s) (i.e., geographic areas) for long-term monitoring within the bioregion, 2) assessing interest and potential for participation in a statewide owl monitoring program, and 3) conservation actions for the upcoming year.

Appropriate Sampling Frames:

Andres suggested that local subregions within western/southwestern Alaska could be identified as suitable sampling frames if ~30 landbird monitoring routes were (or could be) situated within the subregion. A map of Alaskan ecoregions was used to identify potential subregions for consideration. We concluded that:

- 1) it was realistic to expect that 25-30 routes could be run in the Bristol Bay region (including Togiak and AP/Becharof NWRs; ecoregions 111, 112, and possibly 113);
- 2) 25-30 routes will be run in the Yukon-Kuskokwim Delta region; primarily ecoregion 109 (Yukon Delta NWR and western Alaska BLM lands);
- 3) we need further discussion/evaluation of how to assign Kodiak Island and Seward Peninsula routes to specific sampling frames;
- 4) because the Aleutian Islands and outer Alaska Peninsula (i.e., Izembek NWR) generally lack the shrub and forest/shrub habitats that we are targeting for monitoring elsewhere in western/southwestern Alaska, we need to discuss landbird conservation priority activities in these subregions (e.g., monitoring Aleutian Island endemic races, evaluating reproductive and demographic parameters of shrub species at the edge of their range, etc.).

We also discussed the need to consider options for re-allocating effort in landbird conservation activities, to consider: 1) where feasible, re-locating routes to sample priority species and habitats; and 2) moving to a biennial monitoring program in order to accommodate additional route monitoring, additional site inventories (e.g., area searches), and/or other landbird conservation activities or refuge priorities.

Specific Action Items:

1) Check with the Alaska Biological Science Center to determine the best way to incorporate non-standard monitoring routes (e.g., BBS-type routes w/ <50 points; ORPC routes w/ <12 points) into the state-wide monitoring protocol.

2) Because a critical value for assessing the effectiveness of a monitoring plan is not the absolute number of routes but, rather, the number of routes with detections of species of concern/interest, we will generate a matrix of species and BBS/ORPC routes in W/SW Alaska. The units of interest will be the mean number of individuals detected/route and the proportion of years in which the species has been detected along that route (presence/absence may not be adequate for species with only 1-2 detections/route; if these rarer species are not detected in all years [i.e., some years have a value of 0], the resulting variances may preclude effective monitoring]). Once completed, we will evaluate the potential for long-term monitoring of specific taxa within the sampling frames provisionally identified above. Chris Harwood will take the lead on soliciting data for, and developing, the matrix. He will be in touch with all participants, but will probably request that data be provided on a year-by-year basis (i.e., please don't calculate means; just send your annual BBS/ORPC route totals).

3) Continue monitoring routes (particularly BBS routes) already in place in 2000.

Owl Monitoring:

During both the general BPIF meeting and the Raptor Working Group meeting, BPIF members were introduced to a variety of owl monitoring programs. Phil Schempf and Brad Andres encouraged members to become involved in the development of standardized owl monitoring protocols in Alaska to be modeled after recently developed Canadian protocols. Within the western/southwestern regions, potential for owl monitoring was identified for, and interest in such monitoring was expressed by personnel in, King Salmon, Dillingham, the Y-K Delta, and Unalakleet.

Specific Action Item:

Interested parties will independently explore options for planning and/or implementing owl monitoring.

Other Conservation Action Topics

A) The LCPABR-V1.0 identifies the determination of the population status of McKay's Bunting as one of the two top priority action items for the Western/Southwestern Alaska bioregion. The McKay's Bunting is Alaska's only endemic passerine species, and has the highest ranking conservation priority among Alaska's landbirds. To make progress on this species in 2000, we identified 2 action items:

Specific Action Items:

- 1) Work with personnel at Alaska Maritime NWR (Vern Byrd, Art Sowls, and/or Heather Moore) to extract and summarize McKay's Bunting natural history information from field notes taken at St. Matthew Island by refuge personnel. Brad Andres will initiate coordination of this effort with AMNWR Supervisory Biologist Vern Byrd.
- 2) Prioritize objectives and design study/survey options for possible work on St. Matthew in 2001. Brad Andres will take the lead on considering options for such work with the assistance of Vern Byrd; discussions with UAF Museum personnel regarding their interest in participation will be initiated as well.

B) Although demonstrated threats to important landbird habitats in western and southwestern Alaska are minimal at the present time, land managers in this region are concerned about the potential for the sale and development of private lands within riparian corridors. Recent efforts have included the exploration of partnerships for executing major land purchases within riparian areas. We identified two actions items for addressing these developments.

Specific Action Items:

- 1) On the Yukon-Kuskokwim Delta, generate maps depicting the relationship between riparian landbird habitats and land ownership patterns. Brian McCaffery and Chris Harwood will be responsible for this action.
- 2) As a group, we should determine to what extent our current and anticipated data sets can be used to evaluate the importance of riparian habitats for landbirds in western and southwestern Alaska. If land purchases are being considered within these habitats in the coming decade, can we contribute our expertise on landbirds to help guide the prioritization of land acquisitions, and how can we best accomplish this? We have yet to identify a person to take the lead on this topic (nominations are welcome!).

C) Where possible, usually in conjunction with other field work, we should make efforts to obtain natural history information concerning both our priority species and those species of particular regional interest (e.g., paleotropical migrants; see LCPABR-V1.0). Several efforts in 2000 address this need.

Specific Action Items:

- 1) As part of cliff-nesting raptor surveys on Yukon Delta NWR and Togiak NWR in 2000, determine Gyrfalcon nest occupancy and productivity at several sites.
- 2) Continue breeding biology studies of Golden-crowned Sparrows at Mother Goose Lake (AP/B NWR) and Cape Romanzof (YDNWR/USAF).
- 3) Initiate breeding biology study of Hoary Redpoll at Cape Romanzof.
- 4) Complete site-specific inventory of nesting Northern Wheatears at Cape Romanzof.
- 5) Continue to collect information on Wilson's Warbler throughout the bioregion for incorporation into potential synthesis of Alaskan Wilson's Warbler natural history.

D) In order to 1) evaluate the effectiveness of standardized mist-netting for monitoring populations, survival, and/or productivity, 2) better understand geographic patterns and timing of landbird migration within Alaska, and 3) learn the routes and/or destinations of landbirds as they migrate out of southwest Alaska, it is important to maintain the existing long-term standardized mist-net stations on the Alaska Peninsula. In 1999, migration banding at Bible Camp in the Alaska Peninsula/Becharof NWR complex was discontinued because of budgetary constraints. Bible Camp had been operated for three seasons and resulted in banding 6,357 individuals of 29 species (see previous BPIF annual reports for details). To date, Bible Camp banding activities have resulted in four foreign recoveries (Yellow Warbler at Yakutat, AK, four days after banding at Bible Camp; Yellow Warbler in California; Wilson's Warbler in Colorado; and an American Tree Sparrow banded in Colorado and recovered at Bible Camp).

Specific Action Item:

With the loss of the Bible Camp station, it is even more important that the long-term continuity of the Mother Goose Lake station be maintained. As a group, we formally recommend the maintenance of this station, and encourage the Service to explore options for guaranteed long-term support of this work.

CENTRAL/NORTHERN

Anna-Marie Benson, Alaska Bird Observatory

I. Highest Priority Habitat/Threat: Riparian White Spruce, Logging

The Alaska Division of Forestry in cooperation with ADFG Wildlife staff are conducting an experimental project in the Tok River area. Following logging of riparian white spruce, a variety of treatments will be used and plant growth monitored. The Tetlin National Wildlife Refuge and Alaska Bird Observatory are developing a bird study in conjunction with this project. Buddy Johnson, Tetlin NWR, received a Challenge Cost-Share Grant to help fund the bird study. Anna-Marie Benson, Alaska Bird Observatory, is principal investigator.

II. Monitoring

The number of Breeding Bird Survey and Off-road Point Counts conducted in the Central Region are adequate for detecting trends. All participants must be vigilant to maintain existing counts. We discussed coordination by NWR and NP units, such as Tetlin and Yukon Flats NWR and Yukon-Charlie NP, so that sub-regional areas could establish and maintain sufficient sampling effort to detect trends on a finer scale. Barbara Boyle, Arctic NWR, has completed a unique numbering scheme for all townships in the state and has been working on using townships as a basis for selecting a monitoring sample.

Migration counts at Creamer's (ABO and ADFG, Fairbanks) and Tok (Tetlin NWR) are planned to continue into the foreseeable future.

The status of MAPS stations is less certain. Tetlin NWR will likely discontinue theirs this season, while Denali NP, Yukon Flats NWR and CWS Yukon Territory will keep theirs active.

III. High Ranking Species

Owl surveys following the Canadian protocol will be initiated this March under the coordination of the Alaska Bird Observatory. Additional monitoring using nest boxes for Boreal Owls is being considered. More than 200 nest boxes have been put up in the Fairbanks area in the last 12 years by local residents in cooperation with ADFG, but owl use of the boxes has not been followed closely.

Some information on White-tailed Ptarmigan might be gathered through hunter surveys. This will be looked into with ADFG.

Bohemian Waxwings are regularly counted on Christmas Bird Counts, but specific winter counts for waxwings in Fairbanks would provide better information. ABO and ADFG will follow up on this.

No specific plans at this point to address other priority species such as Smith's Longspur, American Dipper, Black-backed Woodpecker, and Northern Shrike.

SOUTHEASTERN

Brad A. Andres, U. S. Fish and Wildlife Service

1. Sitka Discussion

- a. Much of our time was spent discussing the feasibility of initiating an forest owl survey. Several participants were eager to test ideas in the Southeast.
- b. We discussed the need to encourage the Forest Service to write up point count data collected in the Stikine River area.
- c. We recognized the need to maintain off-road point counts and BBS routes in the Southeast. There may also be a need to increase coverage of non-forested habitats.
- d. The expansion of the Pacific Coast Joint Venture into Alaska might provide some new partnership opportunities.

2. Riparian Habitats

Deciduous, riverine forests on the mainland of Southeastern Alaska support a unique and diverse assemblage of breeding birds that includes several high priority species for conservation action. Few riparian corridors have a protected land use status and are often sites of present, and future, roadways. The importance of deciduous riparian habitats to all stages of the avian annual cycle has been well documented throughout much of North America, including Alaska, and conservation of deciduous, riparian corridors is a major issue throughout the western United States. Anthropogenic activities such as settlement, mining, recreation/tourism, and road-building can greatly alter these riverine habitats. Therefore, Nongame Migratory Bird Management, U. S. Fish and Wildlife Service, initiated a study in 2000 to 1) describe relative abundance, diversity (species richness), and breeding behavior of landbirds using deciduous riparian habitats; 2) describe vegetation characteristics relative to avian use, and 3) formulate a GIS-based, multi-scale model of avian use of deciduous riparian habitats of Southeastern Alaska. This project will be completed in 2002.

3. Frequency of forest birds in remote Research Natural Areas and along BBS routes

As part of a study to document abundance of breeding birds on Research Natural Areas (RNAs) in the Tongass National Forest, I determined the occurrence of birds (proportion of points where a species was detected) on RNAs (during the first 3 minutes of unlimited-distance counts) and of birds on Breeding Bird Survey routes. Eliminating BBS routes that lie primarily in river

corridors and the high-elevational Warm Pass RNA, I compared 11 BBS routes to 10 RNAs that overlapped in geographic coverage. I included small species of forest birds that were detected on ≥ 5 points in RNAs or 10% of BBS points.

At the landscape scale, species composition differed between remote RNAs and roadside BBS routes (see table below). Species that were previously reported as most abundant in old-growth hemlock-spruce forest types were encountered more frequently on RNA point-count surveys than along BBS routes (particularly for the Pacific-slope flycatcher, brown creeper, golden-crowned kinglet, and Townsend's warbler but not for the red-breasted sapsucker). Edge species dominated species composition on BBS routes. Low detection rates of hairy woodpeckers and detection of varied thrushes across long distances likely obscured differences in these species.

Species	% of RNA points (<i>n</i> = 11 sites; 165 points)	% of BBS points (<i>n</i> = 11 routes; 550 points)
More frequent on BBS routes		
Rufous Hummingbird	5.5	10.9
Red-breasted Sapsucker	3.6	12.7
Steller's Jay	6.7	14.8
Northwestern Crow	5.5	15.5
Common Raven	6.1	14.8
Winter Wren	46.7	60.2
Swainson's Thrush	12.7	45.5
American Robin	6.1	40.0
Varied Thrush	44.2	59.2
Orange-crowned Warbler	11.5	45.1
Fox Sparrow	0.6	12.9
Lincoln's Sparrow	3.0	11.0
Dark-eyed Junco	12.1	39.1
Equal frequency		
Hairy Woodpecker	3.0	3.6
Chestnut-backed Chickadee	25.5	22.8
Ruby-crowned Kinglet	11.5	15.7
Hermit Thrush	50.3	58.2
Red Crossbill	12.7	11.8
More frequent on RNAs		
Pacific-slope Flycatcher	83.0	40.2
Brown Creeper	12.7	0.9
Golden-crowned Kinglet	28.5	12.5
Townsend's Warbler	46.1	28.2

INTERNATIONAL

Brad A. Andres, U. S. Fish and Wildlife Service

I attended the Neotropical Ornithological Congress in Monterrey, Neuvo Leon, Mexico, last October. In addition to the scientific papers, the Western Working Group of PIF met with Latin Americans and discussed ways to aid the newly formed MesoAmerica PIF. One action was to provide some ornithological reference books to biologists in Latin American. I am pleased to announce that we were able to provide 11 titles to Costa Ricans. Those who contributed included: Susan Savage, Debbie Nigro, Nathan/Stam Senner, Kristine Sowl, Beverly Skinner, Carol McIntyre, Terry Schick, Ruth Gronquist, Dave Yokel, Jon Bart, John Pearce, Rob MacDonald, and the U. S. Fish and Wildlife Service.

I am also continuing my collaboration with Pronatura Veracruz in their Alvarado Wetlands project. Recent successes include the awarding of a NAWCA grant to continue work in Alvarado and the securing of a Master banding permit for Pronatura. I had the opportunity to spend part of January in Alvarado and we conducted a series of point counts in mangroves and in upland scrub. Like much of the Caribbean Basin, the mangroves had a greater diversity of migrant warblers and had higher abundance of several species. We hope to write up a short article on this work.

This summer, I hosted one of the technicians from the Alvarado project, and he was able to participate in several field projects on the North Slope, at Yakutat, and on the Copper River Delta. Thanks to Tom Fondell and the Dusky Canada Goose crew for hosting James at their field camp.

Lastly, I met with Canadian PIF folks in British Columbia to discuss the formation of the BC/Yukon Pif group and to discuss potential joint projects in BC and SE Alaska. Extension of the Pacific Coast Joint Venture into Alaska may provide further opportunities for collaborative projects.

PRESIDENT SIGNS NEOTROPICAL MIGRATORY BIRD BILL INTO LAW

National Audubon Society Press Release

Washington, DC July 21, 2000-In a major victory for birds, President Clinton signed into law the Neotropical Migratory Bird Conservation Act, the only bill in this Congress directed at helping songbirds. The National Audubon Society praised Senator Abraham (R-MI) for his tireless leadership in the passage of this law.

"This law addresses the critical need of protecting and enhancing the winter homes of hundreds of bird species that spend spring and summer in the United States," said Daniel P. Beard, Senior

Vice President for Public Policy. "The habitat of migratory songbirds is being threatened and destroyed in Latin America and the Caribbean."

"Senator Abraham is to be commended in ushering this important law for birds through Congress," said Beard. "With the bill's recent overwhelming passage in the House and the president's approval, conservation efforts can begin. We hope the projects resulting from this law will help increase songbird populations in the United States."

The law allows federal dollars to match or leverage non-federal dollars to fund partnership programs among businesses, non-governmental organizations and foreign nations that will conserve bird habitat. As the preeminent bird conservation organization, the National Audubon Society looks forward to facilitating the partnership process by identifying need areas, sources of private funding, and local groups potentially able to manage and conserve habitat.

Habitat destruction is a primary cause of songbird species decline. The law authorizes \$5 million per year for five years to be spent on bird habitat conservation efforts both here and abroad. At least 75 percent of these funds must be spent on projects outside the United States, in areas where Neotropical migratory birds spend their winters and gain strength for their flights back to the United States.