



Western Regional News

Western Bird Banding Association

Founded 1925

**The 69th Annual Meeting of the
Western Bird Banding Association
16-18 September 1994 Ashland, Oregon**

A banding demonstration at Denman Wildlife Area got the meeting off to a good start.

***A complete, portable kit for quick set up
and operation of a remote banding station***

Kimberly Hollinger and Susan Sniado,

Redwood Sciences Laboratory, Arcata, CA

A portable kit that is currently being used to set up mist nets at remote banding stations will be demonstrated. This method will allow putting up mist nets in only two minutes per net. This is a time-saving method that can be used at MAPS or constant effort monitoring stations.

The morning netting produced an interesting selection of birds for discussion of ageing and sexing criteria and techniques.

A concurrent field trip for non-banders, led by Vince Zausky and Ray Skibby, checked the varied habitats in the area for migrants as well as residents.

After lunch, the annual meeting of the membership of WBBA was held in the Student Union at Southern Oregon State College. The following officers were elected:

President: Barbara A. Carlson

1st Vice-President: Thomas H. Pogson

2nd Vice President: Dennis P. Vroman

Treasurer: Kenneth M. Burton

Secretary: Kay Loughman

Directors-at-large:

Catherine I. Sandell Stephanie Jones

Geoffrey R. Geupel becomes Immediate

Past President

Afterwards, the following papers were presented.

***CCRS study documenting bird use in
a re-created riparian plot***

Maryann Danielson and Rita Colwell, Coyote Creek Riparian Station, Alviso, CA

In the winter of 1986-87, Coyote Creek Riparian Station began a 10 year monitoring program to assess the wildlife use of an existing section of riparian habitat and a newly created riparian plot. One of main goals of the mitigation program was to re-create a wildlife habitat capable of supporting a complement of species equivalent to that which existed in the area before implementation of the flood control project.

Seven years after the original planting, habitat sampling indicates that canopy closure in the revegetation plot is approaching that of the existing riparian section but canopy height is still below that in the established corridor. Constant effort mist-netting shows an increasing use of the reveg area by both resident and migrating species. The distribution of bird feeding guilds in the reveg plot now mirrors that in the riparian corridor. Also, species diversity and species richness is similar in both plots. Habitat usage by bird species is revealed in long-term capture data and will be illustrated for selected species.

Length of first prebasic molt in Orange-crowned Warblers (*lutescens* race)

Barbara A. Carlson, Motte Rimrock Reserve, University of California, Riverside, CA

The timing and sequence of the first prebasic molt in juvenile Orange-crowned Warblers (OCWA) (*Vermivora celata lutescens*) was quantified in a southern California population in the San Bernardino Mountains during 1994. Data were ob-

tained while operating two MAPS stations in montane meadows, one at 7400 and one at 7600 feet elevation.

All OCWA in the sample were aged by the amount of skull ossification. Molt on juveniles was first observed 14 June (50 percent of sample captured for that 10 day period, n=16) and the first birds that had completed their molt were observed on 20 July. By 4 August 61.8 percent of the sample captured for that 10 day period (n=89) had completed their molt. Total time for first prebasic molt on an individual is approximately 35 to 40 days, 30 to 35 days less that determined by Mercedes Foster in her work on museum skins (*Condor* 1967:169-200). However, OCWA with full juvenal plumage that had not started to molt were observed on 5 August, which would extend the molting period into September.

The sequence of molt begins first centrally on the spinal tract (back), followed quickly by the ventral tracts (breast, belly, sides), and alar region (upper wing coverts excluding greater primary coverts which appear not to molt at this time). The molt spreads anteriorly, posteriorly and laterally on the spinal and ventral areas. Next the humeral area, crural (legs), upper and lower tail coverts begin their molt, and finally the capital tract (head). Last to complete is usually the ventral area. This sequence is consistent with what Foster (1967) found.

Determining passerine land use: Home range design and analysis

Nicolle Mode, Department of Biostatistics,
University of California, Los Angeles, CA

The expansion of urban areas is placing an increasing strain on the lives of many animals. Determining how much land an animal needs to live and breed is crucial for conservation biologists, land use managers, government officials and others. Preserving expanses of suitable habitat has now become the focus for many conservation groups trying to save declining species. These groups face the question of how much land is enough. For many bird species this question may be answered. Uniquely color banded birds offer researchers the opportunity to reliably identify individuals. Observations of color banded individuals can be used to estimate their land use for a set time period. The area a bird uses during some

time period is often called its home range or territory. It is important to have a research question before beginning a study of home ranges, and to design an appropriate sampling strategy. I will provide basic guidelines for the design and analysis involved in conducting a study of land use by passerines. A data set from the Motte Rimrock Reserve in Riverside, California, will be used to compare results from different home range methods.

The use of systematic mist netting and banding to study landbird populations in Alaska and Yukon Territory in 1993

Tom Pogson, Alaska Bird Observatory,
Fairbanks, AK

In 1993 systematic mist netting and banding were used to study landbird populations at 29 sites in Alaska and Yukon Territory, Canada. These banding stations were operated by George West (Homer, AK), the Alaska Bird Observatory (Fairbanks, AK), Canadian Wildlife Service (Whitehorse, YT), Institute for Bird Populations and National Park Service (Denali National Park, AK), National Biological Survey (Anchorage, AK), U.S. Fish and Wildlife Service (Kotzebue and Cold Bay, AK), and U.S. Forest Service (Portage, Juneau and Ketchikan). The 1993 projects included three spring and eight fall migration studies, and nine studies conducted during the breeding season, including 8 stations that participated in the Monitoring Avian Productivity and Survivorship (MAPS) program. A total of 8,816 birds of 66 taxa were banded in 1993. The ten most abundant taxa included: Wilson's (n=1,144) and Orange-crowned (1,116) warblers, Slate-colored (Dark-eyed) Junco (n=786), American Tree Sparrow (n=512), Myrtle Warbler (n=469), Ruby-crowned Kinglet (n=427), Yellow Warbler (n=411), Hermit (n=402) and Swainson's (n=401) thrushes, and Lincoln's Sparrow (n=344), and these species comprised 55 percent of the total. The results of the 1993 field season represent a surge in the use of systematic netting and banding to study landbirds in northwestern North America. In 1991 systematic netting was conducted at only 5 sites in two biogeographic regions of Alaska (Central and South coastal), and in 1992, 12 sites were sampled in the same two bio-regions. In 1993 there was at least one netting station in each of Alaska's bio-regions except the North Slope. The 1993 effort represents a 142 percent increase in the number of stations over

1992. In 1994 systematic netting and banding were conducted at a minimum of 30 sites, including at least 18 of the sites operated in 1993. I will summarize the systematic netting activities of banders in Alaska and Yukon in 1993 and speculate on the future of systematic netting and banding in northwestern North America.

Landbird population levels and productivity in the northwest from 1989 to 1993: An overview of the first five years of results from the MAPS program

Kenneth M. Burton and David F. DeSante,
Institute for Bird Populations,
Point Reyes Station, CA

Constant-effort mist-netting data from MAPS stations in the Northwest Region were analyzed to monitor year-to-year changes in adult population size and productivity between 1989 and 1993. Changes in adult population size (measured by the capture rate of adults) and productivity (capture rate of young and proportion of young in the catch) are presented for 1989-90 through 1992-93 for twelve target species and for all species pooled. Changes from 1992-93 also are presented for additional species. Results indicate no significant year-to-year changes in capture rate of adults of all species pooled from 1989 to 1992. Capture rate of young was much more variable, with a significant decrease from 1989 to 1990 and a significant increase from 1991-1992. Proportion of young also increased significantly from 1991 to 1992. The high productivity of 1992 likely was due to the mild winter and light snowpack of 1991-92 that allowed birds to initiate breeding much earlier than usual, and warm weather with ample but not excessive rainfall during the 1992 breeding season. Preliminary results suggest that adult population sizes were down somewhat in 1993 compared to 1992 despite the high productivity of 1992; this may have been due to low recruitment resulting from heavy snowfall during the winter of 1992-93 leading to suppressed territory establishment in 1993. Both capture rate and proportion of young appeared to be down substantially in 1993 compared to 1992.

California Gnatcatcher breeding biology at Motte Rimrock Reserve, Riverside Co., CA
Matthew L. Schreiner, Motte Rimrock Reserve,
University of California, Riverside, CA

This is the second year of the California Gnatcatcher Project conducted at the Motte Rimrock Reserve. The project was funded by the Metropolitan Water District in conjunction with the U.S. Fish and Wildlife Service. The project included: locating, color banding, nest-searching, and mapping California Gnatcatcher (CAGN) on the Reserve. A total of 25 CAGNs were banded in 1993; 7 males, 8 females and 10 young. Of those 25 banded 9 were resighted during the 1994 breeding season, 3 males and 6 females. None of the juveniles from 1993 were resighted. In 1994 an additional 26 CAGNs were banded, 10 males, 8 females, and 8 young. Eight pair of CAGNs were monitored in 1993 and eleven and one half pair (one unmated male) in 1994. The average number of eggs and nesting attempts for the 1993 and 1994 seasons varied only slightly. In 1993, 46.43 percent of CAGN nests were parasitized by Brown-headed Cowbirds (BHCO). Consequently, in 1994 BHCO trapping and removal was instituted and the parasitism dropped to 8.57 percent. A dramatic change in nest shrub type in the 1994 breeding season was observed. In 1993 nesting shrubs consisted of 33.3 percent for each of black sage and brittle bush whereas in 1994, 64.5 percent of nesting shrubs were black sage. Changes in nesting territories did occur between the 1993 and 1994 breeding seasons, which may contribute to nest shrub changes. Special thanks to U.S. Fish and Wildlife Service, Metropolitan Water District, Motte Rimrock Reserve and all those in connection with the project.

The use of mist nets to discover a migratory population of the Willow Flycatcher in Northwestern California

C. John Ralph, Kimberly Hollinger and Susan Sniado, USDA Forest Service,
Redwood Sciences Laboratory and Department
of Wildlife, Humboldt State University,
Arcata, CA

Empidonax traillii was thought to be a rare migrant and a very rare breeder in northwestern California. Our censuses over the region detected it only a very few times. However, we discovered a large transient population by capturing more than 100 birds each year in six constant effort mist net sites, putting it among the most common landbirds. We will contrast the behavior and movements of its various age and sex classes with the more com-

mon breeding Western Flycatcher (*E. difficilis*) in the core constant effort stations, as well as another 14 stations over the entire region. Although the Willow is a very rare breeder, we found that the riparian zones in the region play an important role in its life history.

Monitoring bird populations in Latin America: Training and Implementation

Borja Mila, C. John Ralph and Andrea Cruz
USDA Forest Service, Redwood Sciences
Laboratory, Arcata, CA, and Point Reyes Bird
Observatory (PRBO), Stinson Beach, CA

A cooperative venture has resulted in six courses in monitoring methods for landbirds in Latin America in the past year. These have been conducted with funds and personnel from both the Forest Service and PRBO, under the direction and cooperation of Latin American universities, government agencies, and non-governmental organizations. It is expected that these will promote the use of monitoring methods in a network of stations throughout Latin America. Two such stations are being established this fall.

A network of banding stations in the Klamath Mountains

Kimberly Hollinger and C. John Ralph, USDA
Forest Service, Redwood Sciences Laboratory,
and the Humboldt Bay Bird Observatory,
Arcata, CA

A network of 30 cooperating and communicating constant effort mist net banding stations in northwestern California and southern Oregon has been established. This is probably the densest population of banding stations in North America. The stations are operated by us and the Point Reyes Bird Observatory, National Park Service, Pacific Lumber Company, National Forest System, Bureau of Land Management, and individuals. We have had meetings of the group and a newsletter to communicate items of interest. We have also assisted stations to keep in operation when needed by providing bird identification material, ageing and sexing criteria, equipment, personnel, and help with data input and compilation.

An update from the Bird Banding Laboratory

Mary Gustafson, National Biological Service,
Bird Banding Laboratory, Laurel, MD
Ms. Gustafson reported that a new Schedule Gen-

erator Program should be ready soon. She reminded banders to be sure they used the most current ageing and sexing criteria. New knowledge has made some published criteria obsolete, even some methods published in Volume 2 of the Banding Manual.

A banding alternative: using molecular techniques as a tool for monitoring bird populations.

Peg Wade, Tom Smith, Cristian Orrego, and Jim
Steele, San Francisco State University's
Conservation Genetics Lab.,
San Francisco, CA

It is becoming increasingly apparent that many Neotropical migrants are experiencing dramatic population declines. Conservation efforts of these species have been hampered because little is known about their population structure and migratory habits. If individuals on their breeding grounds can be related to specific regions where they winter, the causation of the declining populations might be better understood. This has long been a major goal of banding studies, which have been largely unsuccessful in this respect. New molecular genetic techniques may offer ornithologists a tool to decipher migratory pathways and infer geographic relationships of populations. This paper will examine the usefulness and applicability of such genetic studies.

Operation of three banding stations on the Klamath National Forest (KNF)

John Alexander, Sam Cuenca and C. John
Ralph, USDA Forest Service, Klamath National
Forest, Klamath River, CA, and Redwood
Sciences Laboratory, Arcata, CA

For the past three field seasons the Forest Service's Region 5 has developed a pilot Forest-wide Neotropical Migrant Bird Monitoring Program on the Klamath National Forest in Northern California. In 1993 the Forest Service joined with the Klamath Mountains Bird Monitoring Group and the Monitoring Avian Productivity and Survivorship (MAPS) constant effort mist-netting program by running a constant effort site on the Klamath River in Seiad Valley, Siskiyou County, California. Also, several hundred census points were established and operated throughout the forest. In 1994 the KNF added two additional constant effort stations in Siskiyou County: one on Humbug Creek near

the Klamath River; the other on the east side of the Forest at the head waters of Antelope Creek, south of Tennant. We will discuss the results from the effort, and insights into site selection in the coniferous forest of California.

Migration monitoring using consistent effort mist-netting at the Palomarin Field Station. Population trends from 1980-1992 and an evaluation of netting effort.

Geoffrey R. Geupel, Nadav Nur, Grant Ballard and Len Thomas

Point Reyes Bird Observatory,
Stinson Beach CA 94970.

Landbird monitoring using constant effort mist netting has been conducted daily during the fall (18 August-26 November), weather permitting, since the 1970s at the Palomarin Field Station in central coastal California. From 1980 to 1992, 38 species of both resident and migrant birds were captured in sufficient numbers (an average of at least 5 captures per year) to examine trends. Six of the 21 species (29%) of long distance migrants, 7 (54%) of 13 species of residents, and all 4 short distance migrant species, showed significant declines ($P < 0.05$). Another 6 species exhibited negative trends ($0.05 < P < 0.10$), while no species showed a significant increase. Comparisons of Palomarin declines to population trends from the USFWS's Breeding Bird Survey (BBS) for the past 13 years revealed a significant association with California and the entire Western Region. The power to detect a 50% change in populations over 25 years was calculated using the 38 species monitored at Palomarin. The number of species with power of 80% or greater was 15 for nets run every day, 10 for nets run 50% of the time, and 1 for nets run once every 10 days. In general sampling error was negligible if nets were run 50% or more of the total number of fall days. We conclude that migration monitoring using mist nets is a good tool for detecting trends if nets are run frequently. In most species examined the year to year variation in capture rates was low, allowing a high statistical power to detect trends. In contrast, results from BBS data in the West were much less likely to detect a trend in part due to high year to year variability. More fall mist netting stations are needed through the west to validate these results and to assess the extent of these numerous negative trends.

After an excellent dinner, Professor Steve Cross presented a fascinating overview of the other flying denizens of the night: BATS.

Sunday morning many banders visited a MAPS site operated by Mario Mamone of the Rogue River National Forest, USFS.

For others, Professor Stewart Janes provided an excellent introduction to the ecology of the Rogue River Valley which is more like California's Central Valley than the rest of Oregon.

Western Bird Banding Association thanks Dennis P. Vroman, his committee, field trip leaders and the housing and dining staff of Southern Oregon State College for their efforts in hosting the 1994 meeting.

1994 WBBA Research Award

Sara Morris of Geneva NY received the award to support her project entitled: "Seasonal food availability, competition and stopover patterns of Neotropical migrants". Congratulations.

1995 Western Bird Banding Association Meeting

The meeting will be held in Albuquerque New Mexico, September 22-24 at the Rio Grande Nature Center. For further information contact: Catherine I. Sandell, 8101 N. Main, Las Cruces NM 88012. Papers for presentation should be sent to: Thomas Pogson, Alaska Bird Observatory, PO Box 80505, Fairbanks AK 99708.