Western Regional News

Western Bird Banding Association **Founded 1925**

66th WBBA ANNUAL MEETING

Boise, Idaho - 11-13 October 1991

Co-Chairmen: Alfred G. Larson & Carl D. Barrentine

Hosted by Golden Eagle Audubon Chapter

The first event on Friday was a tour of the World Center for Birds of Prey, an internationally recognized center for research and captive breeding of endangered raptors. In the evening members enjoyed an informal social evening.

Saturday morning the following papers were presented:

9:00 **TRAPPING, BANDING, AND RADIO-TAGGING OF OSPREYS AT CASCADE RESERVOIR, IDAHO** - PHELPS III, J.M. and M.J. BECHARD. Raptor Research Center, Biology Dept., Boise State University, Boise ID 83725

This report discusses the trapping, banding, and radio-tagging of Ospreys (*Pandion haliaetus*) as part of a research project on the foraging ecology of nesting Ospreys at the Cascade Reservoir, Idaho. The primary focus of this study is to describe the foraging habits of male Ospreys during the nesting season. Male Ospreys were trapped during the incubation period using a modified bal-chatri trap. Birds were equipped with tail-mounted radio transmitters and marked with colored leg bands. Radio-tagged males were monitored throughout the nesting season to determine home range,foraging sites, and foraging behavior. We will discuss the details of trapping and radio-tagging, and report on the numbers of males, females, and fledglings banded, and band return occurrences.

9:20 **THE USE OF MIST NETS TO MONITOR WRENTIT PRODUCTIVITY AND POTENTIAL RECRUITMENT** - GEUPEL, G.R., N. NUR and D.F. DESANTE. Point Reyes Bird Observatory, 4990 Shoreline Hwy., Stinson Beach CA 94970

Annual variations in Wrentit (*Chamaea fasciata*) reproductive success, determined from direct nest observation and recruitment the following year, were compared with annual capture rates of locally fledged juveniles (locals) and non-local juveniles from a daily mist netting regime over a ten year period. The number of locals captured between 10 May and 18 August was highly correlated with the total number of nestlings fledged each year. However, the total number of juveniles captured (whether or not local) was independent of the number of locals captured, nestlings fledged, or other measures of local nesting success. The ratio of juveniles to adults was significantly correlated with the proportion of one year olds breeding the following year. Our results suggest that data from standardized mist netting is an effective measure of local productivity but does not measure productivity elsewhere. Furthermore, mist net data may also be a better indicator of future recruitment than data from nest monitoring.

9:40 **FERRUGINOUS HAWK TRAPPING AND HANDLING TECHNIQUES** - GOSSETT, D.N. Raptor Research Center, Biology Department, Boise State University, Boise ID 83725.

Twenty-three adult Ferruginous Hawks (*Buteo regalis*) were trapped and banded as part of a morphometric study during the 1991 nesting season in Alberta and Idaho. Birds were trapped using dho-gaza or modified dho-gaza nets placed near the nest sites. Lure birds were used. Lure birds included both live and stuffed Great Horned Owls (*Bubo virginianus*) and a Red-tailed Hawk (*Buteo jamaicensis*). Eleven of the hawks trapped were males and twelve were females. Males were usually not caught unless the female was defensive and calling. In only one case were both adults at a nest site trapped. Trapping was more successful at nests where nestlings were less than 24 days old. Adults were caught at nest sites where the young had fledged. Trapping success was not correlated with the time of day; however, increasing temperatures

and wind did decrease trapping success. Trapping success was improved by modifying trapping techniques. My presentation describes successful methods for trapping and handling Ferruginous Hawks.

10:00 **INTRUDERS ON YELLOW-EYED JUNCO TERRITORIES** - LEARY, J. Biology Department, Utah State University, Logan UT 84322-5305

During mist netting attempts to capture territorial male and female Yellow-eyed Juncos (*Junco phaeonotus*), 47 intruders were also captured. These intruders can be assigned to one of four categories: (1) territory owners, (2) intruding neighbors, (3) intruding local residents, or (4) wandering birds. The majority of intruders were male. Use of playback resulted in increased intruder capture rates both at nest sites and away from nest sites. Yellow-eyed Juncos may intrude for a variety of reasons related to their sex, territorial status, and mating status.

10:20 **THE MONITORING AVIAN PRODUCTIVITY AND SURVIVORSHIP (MAPS) PROGRAM — A 1991 UPDATE** - DESANTE, D.F. and O. WILLIAMS. The Institute for Bird Populations, P.O. Box 554, Inverness CA 94937

The Monitoring Avian Productivity and Survivorship (MAPS) Program is a cooperative effort among North American bird banders to establish a continent-wide network of constant effort mist netting and banding stations, operated during the breeding season, for the long-term monitoring of post-fledging productivity, recruitment, and adult survivorship of landbirds. These critical data, especially recruitment and survivorship, are not currently available from any other avian biomonitoring program in North America, and are crucial for the rigorous testing of competing hypotheses regarding the causes of recent decreasing population trends in landbirds. The MAPS program has expanded considerably from 17 stations in 1989, to 38 stations in 1990, and to as many as 68 stations in 1991. The results of the first two years of the MAPS Program indicate that post-fledging productivity in 1990, as determined by the number of young birds captured, decreased significantly ($P<0.02$) from 1989 by an average of 32.8% at the ten stations operated in both years. The long-term goal for the MAPS program is the establishment and operation of approximately 240 stations in North America, including a series of stations to be operated in national parks, in Research Natural Areas of National Forests, and in other protected public lands. Because recruitment and survivorship can only be determined from capture/recapture analyses of marked (banded) birds, an invitation is extended to all WBBA banders to join in this important cooperative endeavor.

10:40 **ANNUAL REPORT FROM THE BIRD BANDING LABORATORY** - TAUTIN, J., Chief, Office of Migratory Bird Management, USFWS, Laurel MD 20708

At the WBBA business meeting, all eligible officers were re-elected and Michael Rigney was elected director.

In the afternoon the following papers were presented:

1:20 **DISPERSAL AND MIGRATION OF RAPTORS FROM SOUTHWESTERN IDAHO** - STEENHOF, K. and M.N. KOCHERT. Raptor Res. & Tech. Assist. Cntr., BLM, 3940 Development Ave., Boise ID 83705.

Nestling Golden Eagles (*Aquila chrysaetos*), Prairie Falcons (*Falco mexicanus*), and Red-tailed Hawks (*Buteo jamaicensis*) have been banded in and near the Snake River Canyon in southwestern Idaho since 1966. We have received more than 320 recoveries and sightings of individuals that had left their natal territories. Red-tailed Hawks traveled the farthest, with six winter recoveries in Mexico and Guatemala. Prairie Falcons left the southwestern Idaho study area immediately after nesting and moved eastward up to 2170 km. With few exceptions, Golden Eagles were year-round residents in southwestern Idaho. All three species showed a tendency to return to breed in the general area where hatched. Management of the southwestern Idaho nesting populations must consider habitat requirements in areas that are used in the non-nesting season.

1:40 **THE EFFECTS OF ECTOPARASITES AND ENDOPARASITES ON MARSH WREN NESTLINGS** - WARREN, Y. Biology Department, Utah State University, Logan UT 84332-5305

The potential effects of ectoparasites on nestling growth, development, and fledgling success were documented for a population of Marsh Wrens (*Cistothorus palustris*). In 1991, active nests were found and assigned as control or experimental (fumigated with 0.21% pyrethrin spray) at the time the first nestling hatched. Nestling weights and tarsi measurements were recorded daily. Visible ectoparasites were identified and counted when possible. Hematocrits and geimsa-stained blood smears were obtained from randomly selected nestlings at randomly chosen days. Nestlings were observed for one week after fledging to determine post-fledge success.

2:00 **INFLUENCE OF LOGGERHEAD SHRIKES ON OCCURRENCE OF OTHER BIRDS IN A SAGEBRUSH COMMUNITY** - WOODS, C. Raptor Research Center, Biology Department, Boise State University, Boise ID 83725

Fixed point counts (d=50 m) in similar 48 ha and 68 ha sagebrush (*Artemisia tridentata*) stands in southwest Idaho

suggest passerine population differences may be related to presence of Loggerhead Shrikes (*Lanius ludovicianus*). The smaller stand contained 10 shrike pairs and significantly fewer passerines per count (0.44; n=72) than the larger stand, which yielded no known breeding shrikes and a greater number of passerines per count (1.34, n=88). Passerine diversity was similarly skewed, with 5 species recorded in the shrike stand, and 12 in the shrikeless stand. Separately, significantly fewer Sage Thrashers (*Oreoscoptes montanus*), Sage Sparrows (*Amphispiza belli*), and Brewer's Sparrows (*Spizella breweri*) were recorded in the shrike stand. Though both stands were dominated by similarly sized sagebrush, the shrike stand had significantly steeper slopes, and also contained prominent, taller bitterbrush (*Purshia tridentata*), both factors which may contribute to its desirability as shrike nesting and foraging habitat. Limited passerine prey remains were found on the shrike stand, coupled with no successful passerine attacks, of all attacks observed throughout southwest Idaho (n=102), suggest the low number of passerines in the shrike stand may be primarily the result of avoidance by passerines rather than shrike predation.

2:20 **COMPARISON OF MIST NET CAPTURE RATES OF ADULTS WITH BREEDING BIRD DENSITIES IN A COASTAL SCRUB AVIFAUNA** - SILKEY, M., G.R. GEUPEL,, S.J. DOUGILL and N. NUR. Point Reyes Bird Observ., 4990 Shoreline Hwy., Stinson Beach CA 94970

We investigated whether mist net capture rates of adults during the breeding season may serve as a relative measure of breeding bird density of the following five resident species: Wrentit *(Chamaea fasciata)* ; Rufous-sided Towhee (*Pipilo erythrotphthalmus*); Song Sparrow (*Melospiza melodia*); Bewick's Wren (*Thryomanes bewickii*); and Nuttall's White-crowned Sparrow (*Zonotrichia leucophrys*). The annual capture rates of adults at the Palomarin Field Station were compared with known breeding densities over 15 years. Breeding density was determined by spot mapping of color-banded individuals. The number of adults captured in April-June, inclusive, was significantly correlated with local breeding densities of Wrentits and Rufous-sided Towhees. While the individuals sampled were not necessarily territory holders, the total number of adults caught in the nets may be an index of the number of breeding adults in a given area for these two species. Correlations for Song Sparrow and Bewick's Wren were positive but not significant. No correlation was found for Nuttall's White-crowned Sparrow. There were significant differences among species with respect to the degree of correlation of capture rates with breeding bird densities. Standardized mist netting may be a useful method to determine the breeding densities of some species.

2:40 **EFFECTS OF RADIO TRANSMITTERS ON BREEDING PRAIRIE FALCONS** - VEKASY, M., J. MARZLUFF and M. MCFADZEN. Greenfalk Consultants, 8210 Gantz, Boise ID 83709

We examined the effects of backpack radio transmitters on 26 Prairie Falcons (*Falco mexicanus*) nesting in the Idaho Snake River Canyon during 1991. One member of each pair was fitted with a 13g radio and pair productivity was compared to 43 control pairs. Instrumented (I) and control (C) pairs did not differ significantly in productivity (% occupied sites successful: I=73, C=79; fledglings per pair: I=2.7, C=3.0; weight [g] of male nestlings: I=600, C=558; weight [g] of female nestlings: I=839, C=830). Birds wearing radios did not deliver prey items at significantly different rates than birds not wearing radios (prey delivery rate [items/h] of males: I=0.27, C=0.15; prey delivery rate of females: I=0.15, C=0.24).

3:30 **BANDING BLUEBIRDS IN SOUTHWEST IDAHO** - LARSON, A. 3015 Silver St., Boise ID 83703

Bluebird nestbox trails have been established for both Western Bluebirds (*Sialia mexicana*) and Mountain Bluebirds (*S. currucoides*) in southwest Idaho. The first trail was started in 1978 with 25 boxes. Currently, there are five nestbox trails and approximately 300 boxes. Two hundred and thirty-nine active boxes were monitored at 7-10 day intervals during 1991. A total of 7430 bluebirds, mostly nestlings and brooding females, have been banded since 1980. Some birds have been recaptured, this includes banded birds found dead, but none of these birds has been found outside the banding area. I urge researchers who reside in bluebird wintering areas to make a concerted effort to trap and band bluebirds.

3:50 **BAND RETURN RATE AND DISPERSAL DISTANCES OF AMERICAN KESTRELS IN SOUTHERN IDAHO** - BECHARD, M.J. and J.M. BECHARD. Raptor Research Center, Biology Dept., Boise State Univ., Boise ID 83725

A study of the dispersal, migration, and reproduction of American Kestrels (*Falco sparverius*) was begun in southern Idaho in 1986. Sixty nest boxes spaced at 0.8 km intervals were uniformly placed within a 75km^2 study area. Over the five succeeding breeding seasons, occupancy of boxes by kestrels has averaged over 80% and fledgling success has been between 3 and 4 young per occupied box. To date, 792 adult and nestling kestrels have been banded. None of these bands has been recovered but 40 banded birds have been recaptured in boxes during subsequent breeding seasons for a return rate of nearly 7.5%. Birds returning to boxes have ranged in age from 1

to 4 years but most have been 1- and 2- year olds. Returns indicate natal dispersal in this population to average 8 km but subsequent movements after the first breeding season are shorter averaging only approximately 6 km. Implications of these results as well as future goals of this long-term study will be discussed.

4:10 **BANDING AS A TOOL IN THE STUDY OF WILDLIFE HABITAT MITIGATION** - RIGNEY, M.D., C.D. OTAHAL, B.J. KATANO and S.B. TERRILL. Coyote Creek Riparian Station. P.O. Box 1027, Alviso, CA 95002 and H.T Harvey and Associates, Inc., P.O. Box 847, Alviso, CA 95002.

Strict environmental regulations in California require accountability for projects involving wildlife mitigation (through habitat restoration). Criteria for the determination of success or failure of such projects generally include only plant survival and habitat structure characteristics. Little attention has been paid to how wildlife species respond to these mitigation efforts. The Coyote Creek Riparian Station has been monitoring bird use of a Central Coast riparian restoration project for the past 4-1/2 years. Using both point counts and mist net transects, bird populations have been monitored in both an existing riparian corridor and an adjacent riparian revegetation area. Preliminary results of weekly mist net transect operations are presented and the importance of capture/recapture techniques (such as bird banding) in assessing project success are discussed.

4:30 **COMMUNAL ROOSTS OF VAGRANT RAVENS ARE MOBILE INFORMATION CENTERS** - MARZLUFF, J., B. HEINRICH and C. MARZLUFF. Greenfalk Consultants, 8210 Gantz, Boise ID 83709 and Zoology Department, University of Vermont, Burlington VT 05405

Vagrant Common Ravens (*Corvus corax*) in western Maine roost communally and accumulate into groups of 40 or more at food bonanzas during the winter. Three observations on free ranging birds confirm that communal roosts are information centers. (1) Ravens arrive at roosts from a variety of directions, but leave as a group in one or two directions the next morning. (2) Birds, naive of a bonanza's location and experimentally implanted into a roost follow their roost mates to food, but naive birds not released into a roost, rarely located the bonanza. (3) Significantly more ravens arrive at bonanzas the morning after discovery than can be accounted for by independent discovery and/or local enhancement. Conspicuous social soaring displays facilitate information transfer among members of ephemeral roosts.

4:50 **THROAT PATTERNS OF FEMALE RUFOUS HUMMINGBIRDS** - JONES, E. Swan Lake Route, Bigfork MT 59911

Throat patterns in female Rufous Hummingbirds (*Selasphorus rufus*) are unique; yet they may vary on an annual basis in some individuals. I will report on annual changes in throat pattern for 120 female Rufous Hummingbirds, showing how the number of red throat feathers changes over time. Are old female Rufous Hummingbirds sometimes mistaken for Ruby-throated Hummingbirds (*Archilochus colubris*)?

5:10 **THE USE OF CAPTURE/RECAPTURE DATA AS AN INDICATOR OF THE IMPORTANCE OF MIGRATORY STOP-OVERS** - OTAHAL, C.D., M.D. RIGNEY and S.B. TERRILL. Coyote Creek Riparian Station, P.O. Box 1027, Alviso CA 95002 and H.T. Harvey and Associates, Inc., P.O. Box 847, Alviso CA 95002

As urban development has progressed in the San Francisco Bay Area, a great deal of wildlife habitat fragmentation has occurred. Riparian corridors, in particular, have been considerably fragmented by this development. This study presents data that support the importance of these fragments as migratory stop-over locations for a common neotropical migrant--the Swainson's Thrush (*Catharus ustulatus*). Spring (1987-1990) mist netting information gathered at the Coyote Creek Riparian Station was examined to analyze the use pattern of fragmented riparian corridor by Swainson's Thrushes. Capture/recapture data indicate that the birds stay a median of 3 days (range 1-23 days) at the site during spring migration. Most birds have little or no fat deposits on arrival. However, the majority of the birds deposit substantial amounts of fat (reflected by weight gains) during their stay. This indicates that the habitat is used as an important "refueling" site for this species.

The evening banquet speaker was **Dr. Leon R. Powers** who discussed the "Great Gray Owls of Southwestern Idaho."

On Sunday, the meeting concluded with a field trip to the Snake River Birds of Prey Area.

PLAN TO ATTEND THE 1992 WBBA MEETING
Riverside, California on October 23-25

Anyone wanting more information or to give a demonstration or paper should contact BARBARA CARLSON, Dept. of Biology, Univ. of California, Riverside, CA 92521 (714-657-3111).

WBBA RESEARCH GRANT

Awarded by: The Western Bird Banding Association
Amount: to $250.00
Deadline: 15 March 1992
Announced: mid-April

This research grant is offered in aid of research by a student or non-professional using banding techniques or bird banding data. Applicants should submit two copies of a description of the project (three pages or less), a project budget, a CV with mention of banding and/or ornithological experience, and a letter of recommendation from a major professor or other person familiar with the applicant's work and/or project to the address below. No formal application forms are available.

Address: Geoffrey R. Geupel
Point Reyes Bird Observatory
4990 Shoreline Highway
Stinson Beach, CA 94970

Banders' Marketplace