



Western Regional News

Western Bird Banding Association

Founded 1925

1988 WBBA Annual Meeting

A record number (115) of registrants attended the meeting, October 7-9 at the home of C.J. and Carol P. Ralph in Arcata, California. The Board of Directors met from 4 to 6 p.m. on Friday and then everyone enjoyed a potluck barbecue and social in the yard from 6 to 10 p.m.

Among the demonstrations on Saturday morning were the following:

Cloacal Lavage Techniques, W.B. Quay;
Using Droppings & Stomach Contents to Determine Diets of Small Birds, R.J. Cooper & C.P. Ralph;
Determination of Food Habits of Owls from Pellets, C. Ogan;
Methods of Autopsy in Birds, R.G. Botzler;
General Banding Techniques, C.J. Ralph & B. Lance;
Update & Methods of "Identification Guide to N.A. Passerines", D.F. DeSante & P. Pyle;
"The Bander", *Computer Software*, M. Rigney & R. Johnson;
Raptor Migration Methodology, A. Fish;
Methods in the Study of Home Range in the Spotted Owl, P.W.C. Paton.

The business meeting was called to order at 11:30 by president W.B. Quay who presented the report of the nominating committee. The officers listed on the inside front cover of this issue were elected. Alan Gubanich presented a summary of the WBBA Board meeting. Discussion of NABB followed with emphasis on how to obtain more manuscripts.

After a pleasant buffet lunch in the Ralph's yard, the following papers were presented on Saturday afternoon:

Land birds of the Lamphere-Christensen Dunes Preserve: an onshore island.

Susan Sferra, Dept of Wildlife, Humboldt State University.

Relative habitat use by edge-associated species and forest interior species is important in determining the value of small patches of forest to birds. I compared seasonal bird densities among the east edge, interior, and west edge of an isolated 127 ha beach pine forest in Humboldt County, California. Relative habitat use by 24 bird species was tested with analysis of variants on bird census densities in each season. Densities of 18 species either fluctuated inconsistently or did not differ between habitat types and seasons. Densities of 5 species were greatest along the edge. Only Red Crossbill (*Loxia curvirostra*) densities were greatest in the interior in all seasons. The absence of many forest obligate bird species from this beach pine forest may be related to floristics and structure, forest size and shape, maritime effects, isolation, forest age, and/or predation.

Banding Hummingbirds in northwest Montana.

Elinor G. Jones, Bigfork, Montana.

Age and sex characteristics, wing measurements, color variations, and daily weights were noted for hummingbirds in northwest Montana, as well as time of day, temperature, and weather conditions. The study indicates a general trend of increased weights during the last hour of feeding.

Migration of Rufous Hummingbirds in southern Arizona.

Ruth Ogden Russell and Stephen M. Russell, University of Arizona.

Many immature Rufous Hummingbirds (*Selasphorus rufus*) migrate through southeastern Arizona valleys and plains in late August and September. Banding data suggest migration on a broad front through areas that have only minimum levels of food. Bird weights indicate they have little stored energy and they do not linger in an area. Fewer than 5% of individuals banded remained at the banding site (where

an abundance of sugar water was available) for as long as five days. Spring migration is barely discernible.

Abundance and distribution of Harlequin Ducks in Grand Teton National Park, Wyoming.

Rick Wallen, Moose, Wyoming.

A study of the Harlequin Duck (*Histrionicus histrionicus*) was conducted during 1985 and 1986 to gather baseline data on abundance and distribution in Grand Teton National Park. Ninety-one birds were banded during the two summers; 38 adults were marked with nylon nasal discs. Twelve adults (52%) and one young of the year banded in 1985 returned in 1986. Fifteen broods were located. Most birds hatched between 20 July and 6 August, with brood sizes ranging from three to seven (mean 5.4). Sixty-two percent of all hens identified did not hatch a brood. Stream sections most suitable for harlequin breeding activities had gradients less than one degree and contained dense perennial shrubs lining the banks. An annual monitoring program was recommended at the conclusion of the study. The results of the 1987 and 1988 monitoring efforts are presented.

Wintering ground study of Aleutian Canada Geese in California.

Paul F. Springer, Humboldt State University.

The Aleutian Canada Goose (*Branta canadensis leucopareia*) is a federally listed endangered species. Formerly it bred from the Aleutian Islands to the Commander and Kurile Islands and wintered in California and Japan. Arctic foxes (*Alopex lagopus*), introduced from the 1930's and hunting throughout the bird's range, eradicated the geese on all but a few islands where the foxes were not released. Hunter recoveries of geese banded in the Aleutian Islands starting in 1974 provided information on the bird's principal migration and wintering areas in California. A recovery program was instituted consisting of establishment of Canada Goose hunting closure zones, acquisition and management of key goose use areas, eradication of foxes on former goose nesting islands, and reestablishment of breeding populations from wild and captive reared geese transplanted to these islands. This has increased the population from 790 in the spring of 1975 to 5400 in the fall of 1987. Since 1976, additional geese have been banded in northern coastal California. Data from resightings and hunter recoveries of banded geese have provided information on specific areas used by individual birds, length of stay, resighting rates of transplanted versus non-transplanted geese, survival rates and longevity.

Polygamy and the age and sex ratios in a Least Bell's Vireo population.

James M. Greaves, Santa Barbara California.

Annual estimated male:female sex ratio in a Least Bell's Vireo population increased from 1982 to 1987, and varied from 50.5:49.5 in 1980 to 62:38 in 1988. While the population in Santa Barbara County, California, declined, the male:female ration remained high; among first year birds it was 25:23 (3:4 to 8:5) from 1979 to 1983, and 7:3 in 1988. Overall, 68% of adults and 15% of fledglings returned as potential breeders; 32% of returning banded adults were first year birds. Banding of adults helped to increase the accuracy of sex ratio estimates and to determine mate fidelity patterns. While mate switching accounted for about 10% of pairings, it did not appear to increase male fecundity, but did increase breeding opportunities and success among females. Adverse (wet or dry) weather effected population size and may have altered the sex ratio. From 1980 to 1988, Brown-headed Cowbirds continued to have a moderate impact on the vireos, possibly contributing to an overall decline in the population from about 50 to less than 22 pairs.

Estimating survival rates for some Maryland winter residents.

M. Kathleen Kleimkiewicz, U.S. F&WS Bird Banding Laboratory.

Banding as a tool to discover double-brooding in Wrentits.

Geoffry R. Geupel, Point Reyes Bird Observatory.

Wrentits (*Chamaea fasciata*) have been considered to be unusual among permanent resident passerines in that they were reported to raise only one brood per year. Nesting data collected on a color-marked, known-age population of Wrentits in central coastal California revealed that 22% of all breeding pairs during the four years 1982-85 attempted a second brood after successfully fledging a first brood. We found that pairs will attempt a second brood only if they fledge a first brood before 5 June. Double-brooding was achieved by reducing the amount of parental care during the post-fledging period of the first brood, rather than extending the length of the breeding season. Double-brooded individuals tended to be older, to have better nest survivorship, and fledge significantly more young per season than single brooded individuals. Age has an important effect also, nests of young males had significantly lower survivorship than older males, and young females began

nesting significantly earlier than older males. these factors may explain the low incidence of double-brooding in young birds.

Banding permits for wildlife rehabilitation centers.

Crystal Norris, Bird Intercounty Rescue Development Sanctuary.

The International Wildlife Rehabilitation Council and board members question the U. S. Fish and Wildlife Service's reluctance to issue banding permits to rehabilitation centers. In this young field, data is accumulating rapidly, and is being constantly assimilated, into the general body of rehabilitation knowledge. Rehabilitators today consider many factors in the treatment of their patients. These include, but are not limited to, determining the medical care, dietary care, and prerelease conditioning that each patient requires. By tracking released birds we can better determine population trends as well as the success of the rehabilitation treatment. Successful rehabilitation treatment means that the bird passes from the wild to captivity to the wild again with minimal interference. Tracking will also indicate which rehab methods work best, how territories established by released birds affect the existing wild population, and whether bonding and mating take place. Without the knowledge that banding can help provide rehab growth and success is unnecessarily stunted. If we are not successfully releasing at a reasonable level we need to understand why and how we can improve our performance.

Sexing Pacific Coast Cooper's Hawks.

Buzz Hull and Allen Fish, Golden Gate Raptor Observatory.

We have developed a key for sexing Cooper's Hawks (*Accipiter cooperii*) intended for local use. This key is based on measurement of over 300 Cooper's Hawks trapped during the fall migration at the Golden Gate from 1986 to the present. The key uses wing cord length as the primary discriminating character. We use other physical measurements to confirm the segregation based on cord length. Wing cord length of this popula-

tion averages approximately 20 mm shorter than the reported averages in several studies of more eastern Cooper's Hawks. Limited measurements of museum specimens indicate that coastal Cooper's Hawks all fall into the smaller size class and that specimens from east of the Sierra Nevada range belong to the larger size class.

Variation in percent abnormal sperm in resident passerines.

W. B. Quay, Bio-Research Laboratory.

Cloacal lavage of male passerine birds during netting and banding operations in the breeding season not only reveals timing and numbers of sperm released, but also sperm quality. Although sperm quality, or probable capability for fertilizing, has many components (motility, survivability, etc.), structural normality, or lack of major abnormalities, is one that is permanently preserved in cloacal lavage slide specimens.

The majority of male passerines lavaged show percentages of abnormal sperm (PAS) ranging from less than 5% to over 90%. Based tentatively on comparable results from human fertility clinics, the surmise can be made that PAS of over 15-20% may signify functionally important reductions in male fertility, even if total sperm numbers are normal. Some migratory passerine species in some localities show a progressive annual increase in PAS. However among passerines in general, there is great individual variation in PAS in at least many species and localities. In the evaluation of possible causal factors (pesticides, herbicides, genetic characteristics, etc.) in PAS, resident non-migratory species may be better subjects than migrants for study. So far, research using such populations still shows great individual variability in PAS. Nevertheless, some trends are becoming evident in samples of some of the common species.

Avian productivity, a cooperative venture for banders.

David F. DeSante, Institute for Bird Populations.

Proposed methodology is presented for using avian productivity to monitor terrestrial ecosystems, using

ATTEND THE 1989 ANNUAL MEETING IN RENO, NEVADA, IN OCTOBER.

Submit papers to, and request information from:

Dr. Alan A. Gubanich
Department of Biology
University of Nevada
Reno, Nevada 89557.

constant effort capture in one site during the breeding season and determining ratios of young birds banded to adults. The methodology has been developed and tested over a 13-year period at Point Reyes Bird Observatory. Banders are invited to participate in this program.

Assay of methods to determine food habits of birds.

Robert J. Cooper, Humboldt State University.

A review of the approaches and techniques of sampling and analyzing bird diets is provided, concentrating on methods applicable to birds captured during banding studies. The most complete and least fragmented samples may be obtained from sacrificed birds, but sacrificing birds may be unacceptable for various reasons. For species that can be captured alive, a variety of alternative methods is available for obtaining partial gut samples. Flushing the digestive tract or forcing regurgitation with warm water is recommended over use of emetics. Fecal samples and pellets may be collected in large numbers and although more difficult to analyze, provide accurate estimates of diet. Biases associated with post-mortem digestion and differential persistence of prey are discussed. I conclude that evidence for serious limitations of gut analysis is equivocal or weak. Aids for the identification of fragmented food samples are discussed, including the use of reference collections, collaboration with specialists, and the conversion of arthropod fragment sizes to total prey length, weight, and energy content.

Cooperative roles in land bird monitoring at PRBO and CCRS.

L. R. Mewaldt and G. R. Geupel.

How useful are data collected simultaneously at Palomarin (PRBO) and at Coyote Creek (CCRS) to our understanding of the demography of migratory land bird populations of western North America? Preliminary findings suggest these two stations are monitoring different portions of the flight flow patterns of what we perceive to be broad front migrants. Is there a way to get a better grasp on continental land bird populations by mist-net monitoring of these populations in migration? Can we use those data to learn more about the effects of harvesting of northern forests and tropical forests, acid rain, agricultural monocultures, and urbanization on land bird populations?

Report from U.S. F&WS Bird-banding Laboratory.

M. Kathleen Kleimkeiwicz, Bird-banding Laboratory.

After dinner at the Samoa Cookhouse, Ron LeValley took the registrants on a photographic tour of the Galapagos Islands.

Sunday morning attenders chose between a pelagic trip to Eel River Canyon, a wetlands and headlands trip, and a hike in the coastal dunes.



FINANCIAL SUMMARY 8/1/87 to 7/31/88

RECEIPTS		EXPENDITURES	
Member dues	\$5259	NABB Publication	\$3299*
Contributions	235	Annual Report	229
Interest	834	Officers exp. & supp.	469
Sales	326	Sales costs	110
NABB advert	65	Research award	250
Meeting surplus	44	Surplus	2406
TOTAL	6763		6763

*Includes only 3 issues of NABB

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