Recent Literature

BANDING EQUIPMENT AND TECHNIQUES

The *dho-gaza* with Great Horned Owl lure: an analysis of its effectiveness in capturing raptors. P.H. Bloom, J.C. Henckel, E.H. Henckel, J.K. Schmutz, B. Woodbridge, J.R. Bryan, R.L. Anderson, P.J. Detrich, T.C. Maechtler, J.O. McKinley, M.D. McCrary, I. Titus, and P.F. Schempf. 1992. *Journ. Raptor Res.* 26:167-178. West. Found. of Vert. Zool., 439 Calle San Pablo, Camarillo, CA 93010. (Review of trap effectiveness in capturing eight hawk species, three falcon species, and three owl species, and of the effects on trappability of age of young, brood size, food in nest, and time of day. Care of the lure owl, use of other lures, winter trapping, and improving trapping success are also discussed.) MKM

Fat scores: a statistical observation. J.J.D. Greenwood. 1992. *Ring. & Migr.* 13:59-60. BTO, Thetford, Norfolk IP24 2PU, United Kingdom. (The maximum of fat score scales may produce statistical abnormalities.) RCT

A new method for estimating individual speed of molt. S. Bensch and M. Grahn. 1993. *Condor* 95:305-315. Dept. Animal Ecol., Univ. Lund, S-223 62 Lund, Sweden. (The method uses a "Residual Raggedness Value.") RCT

Specimen shrinkage in Tennessee Warblers and "Traill's" Flycatchers. K. Winker. 1993. *Journ. Field Ornithol.* 64:331-336. Natl. Zoo, Conservation & Res. Ctr., Front Royal, VA 22630. (Shrinkage can be as much as 4% and varies with species and body part. Ageing and sexing criteria based on museum specimens should, therefore, be corrected before use on life birds.) RCT

IDENTIFICATION, MOLTS, PLUMAGES, WEIGHTS AND MEASUREMENTS

Determining sex of Eastern Screech-Owls using discriminant function analysis. D.G. Smith and S.N. Wiemeyer. 1992. *Journ. Raptor Res.* 26:24-26. Biol. Dept., South Conn. State Univ., New Haven, CT 06515. (In a captive colony, females were significantly larger than males in weight, total length, total length of tail, wing, and bill, but overlap in each measurement was too great to permit sex determination by any one character. A discriminant function analysis based on several characters gave correct sex in 88% of 77 birds.) MKM

Molt of flight feathers in Ferruginous and Swainson's Hawks. J.K. Schmutz. 1992. *Journ. Raptor Res.* 26:124-125. Dept. of Biol., Univ. of Saskatchewan, Saskatoon, Sask. S7N 0W0. (Primary molt in 137 breeding Ferruginous and 316 breeding Swainson's Hawks in Alberta preceeded secondary and rectrix molt. Considerable variation was found in pattern and timing of molt between wings of individuals, between years in the same individual, between parents and offspring, and in relation to reproductive chronology.) MKM

Eye color of Cooper's Hawks breeding in Wisconsin. J. Bielefeldt and K.R. Nolte. 1992. *Journ. Raptor Res.* 26:189-191. Dept. of Biol., Univ. of Wisconsin, Stevens Point, WI 54481. (Eye color was classed as yellow, light orange, orange, dark orange, or red on 377 captures of 253 breeding Cooper's Hawks. Males tend to have darker eyes than females in the same age group, while eye color darkens with age in both sexes.) MKM

Age determination, wing-feather colour and wing-length change in Snow Buntings *Plectrophenax nivalis.* R.D. Smith. 1992. *Ring.* & *Migr.* 13:43-51. 36 Dubford Cresc., Bridge of Don, Aberdeen, Scotland AB2 8FT. (Feather wear and wing color were the most reliable criteria.) RCT

NORTH AMERICAN BANDING RESULTS

Nest site and prey of a pair of Sharp-shinned Hawks in Alberta. M.S. Quinn. 1991. *Journ. Raptor Res.* 25:18-19. 43 Nordale Cresc., North York, Ont. M6M 2Z9. (Color bands from fledgling House Wrens studied by the author were found in regurgitated pellets of the hawks.) MKM

The status of the Common Black-headed Gull in Newfoundland. W.A. Montevecchi, D.K. Cairns, A.E. Burger, R.D. Elliot, and J. Wells. 1987. *Am. Birds* 41:197-203. Psychol. Dept. & Nfld. Inst. for Cold Ocean Sci., Memorial Univ., St. John's, Nfld. A1B 3X9. (A chick banded in the Netherlands in 1932 was recovered in Labrador in 1933. Six gulls banded at three sites in Iceland have been recovered at six sites in insular Newfoundland.) MKM

Hunting techniques and success rates of urban Merlins (Falco columbarius). N.S. Sodhi, I.G. Warkentin and L.W. Oliphant. 1991. Journ. Raptor Res. 25:127-131. Dept. of Biol., Univ. of Saskatchewan, Saskatoon, Sask. S7N 0W0. (Observations of radio-tagged Merlins in Saskatoon, Saskatchewan and of untagged birds in Seattle, Washington, show attacks from perches to be the most common foraging technique, especially in winter, and that hunting success of breeding birds is higher than that of wintering birds.) MKM

Observations on the behavior of surplus adults in a Red-shouldered Hawk population. M.D. McCrary, P.H. Bloom and M.J. Gibson. 1992. *Journ. Raptor Res.* 26:10-12. Dept. of Biol., California State Univ., Long Beach, CA 90840. (Based on radio tracking.) MKM

Home range, habitat use and behavior of Prairie Falcons wintering in east-central Colorado. G. Beauvais, J.H. Enderson and A.J. Magro. 1992. *Journ. Raptor Res.* 26:13-18. Dept. of Biol., Colorado College, College Springs, CO 80903. (Transmitters were fitted on 17 male and one female Prairie Falcon in the winters of 1988-89 and 1989-90. Some of the transmitters were subsequently caught on barbed-wire fences. Radio-tagging gave data on home range, habitat use, and diurnal patterns. Data on prey and interactions with other species are also included.) MKM Northward post-fledging migration of California Bald Eagles. W.G. Hunt, R.E. Jackman, J.M. Jenkins, C.G. Thelander, and R.N. Lehman. 1992. *Journ. Raptor Res.* 26:19-22. Biosystems Analysis, Inc., 303 Potrero St., 29-203, Santa Cruz, CA 95060. (Movements of nestlings radio-tagged in California were followed into British Columbia and Alaska.) MKM

Northern Great Lakes Common Loon monitor-Ing program. D.C. Evers. 1992. Loon Call Winter 1992:3-5. HC 48 Box 120, Paradise, MI 49768. (Team work involving boats, high-power lights and hoop nets resulted in the banding of 176 loons in 1990 and 1991 in Michigan and Wisconsin, with a capture rate of 85% for adults and 95% for chicks. Recoveries have come from the Atlantic and Gulf coasts of Florida and from Ohio. Weight can be used to determine sex of 94% of adults, but not to determine age of juveniles. Color bands have been useful in determining share of chick duties and territorial fidelity.) MKM

Carrying capacity for Bald Eagles wintering along a northwestern river. W.G. Hunt, B.G. Johnson, and R.E. Jackman. 1992. *Journ. Raptor. Res*.26:49-60. Biosystems Analysis, Inc., 303 Potrero St., 29-203, Stanta Cruz, CA 95060. (Movements of 25 Bald Eagles radio-tagged along the Skagit River, Washington, were related to availability of salmon carcasses. Most radio-tagged eagles remained in northern Washington and nearby parts of British Columbia, but others were recorded as far north as Alaska and as far south as California.) MKM

A Northern Goshawk nest in the tundra biome. T. Swem and A. Macgill. 1992. *Journ. Raptor Res.* 26:102. U.S. Fish & Wildl. Serv., 1412 Airport Way, Fairbanks, AK 99701. (A color-banded pair of Peregrine Falcons that nested in a small bluff on Alaska's north slope annually from 1980 to 1984 moved to another site 2 km. away in 1985, when Northern Goshawks nested nearby.) MKM

Behavior of migrating raptors: differences between spring and fall. H.C. Mueller and D.D. Berger. 1992. *Journ. Raptor Res.* 26:136-145. Dept. of Biol. and Curriculum in Ecol., Univ. of North Carolina, Chapel HIII, NC 275499-3280. (Northern Harriers, Cooper's Hawks, and American Kestrels attacked lures at Cedar Grove, Wisconsin, more often in spring than in fall.) MKM

Raptor predation on Rock Ptarmigan (Lagopus mutus) in the central Canadian Arctic. R.C. Cotter, D.A. Boag and C.C. Shank. 1992. Journ. Raptor Res. 26:146-151. 8506d 169 St., Edmonton, Alta, T5R 2W9. (Mortality and survival rates and other population dynamics of ptarmigan, based on color-banded and radio-tagged birds.) MKM

The effect of man-made platforms on Osprey reproduction at Loon Lake, Saskatchewan. C.S. Houston and F. Scott. 1992. *Journ. Raptor Res.* 26:152-158. 863 University Dr., Saskatoon, Sask. S7N 0J8. (Banding of 277 nestlings between 1975 and 1992 helped sort out reproductive success. One nestling banded at Loon Lake was returned there, while six adults have returned in subsequent years. Data are also given on recoveries of Saskatchewan-banded Ospreys elsewhere in Saskatchewan, two U.S. states, one Mexican state, two other Central American countries, and two South American countries.) MKM

A 24-year study of Bald Eagles on Besnard Lake, Saskatchewan. J.M. Gerrard, P.N. Gerrard, P.N. Gerrard, G.R. Bartolotti and E.H. Dzus. 1992. *Journ. Raptor Res.* 26:159-166. Man. Inst. Cell Biol., 100 Olivia St., Winnipeg, Man. R3E 0V9. (Color marking contributed to details on site tenacity, mate tenacity, age of breeding, population age structure and adult mortality rates.) MKM

Northward migration of an adult Northern Harrier (*Circus cyaneus*). M.A. Pavelka, J.K. Konecny, K.L. Preston, and M.A. Grishaver. 1992. *Journ. Raptor Res.* 26:196. Ogden Environ. & Energy Serv., 5510 Morehouse Dr., San Diego, CA 92121. (Nesting male banded in San Diego was found dead near Klamath Falls, Oregon, a straight line distance of 1175 km.) MKM

Home range and activity of a pair of Bald Eagles breeding in northern Saskatchewan. J.M. Gerrard, A.R. Harmata and P.N. Gerrard. 1992. *Journ. Raptor Res.* 26:229-234. Man. Inst. of Cell Biol., 100 Olivia St., Winnipeg, Man. R3E 0V9. (Relative roles and activities of the pair as determined by radiotelemetry.) MKM

Foraging ecology of Bald Eagles on a regulated river. W.G. Hunt, C.G. Thelander and A.T. Gerstell. 1992. *Journ. Raptor Res.* 26:243-256. BioSystems Analysis, Inc., 303 Potrero St., No. 203, Santa Cruz, CA 95060. (Telemetry was important in documenting habitat use and foraging behavior.) MKM

Partial migration in a population of Greater Prairie-Chickens in northeastern Colorado. M.A. Schroeder and C.E. Braun. 1993. *Auk* 110:21-28. Washington Dept. Wildl., Box 1077, Bridgeport, WA 98813. (243 *Tympanuchus cupido* were trapped with either walk-in traps or cannon nets, and banded with aluminum bands and distinguishing combinations of colored plastic bands. Battery- and solar-powered radio transmitters were attached to 145 using poncho-type markers. All birds observed exhibited site fidelity to both breeding and wintering sites, but only some showed variable-timed migration (up to 40 km.). They appear to be partial migrants "with both obligatory and facultative components.") JJM

Use and importance of feathers as nest lining in Tree Swallows (*Tachycineta bicolor*). D.W. Winkler. 1993. *Auk* 110:29-36. Sect. of Ecol. & System., Div. of Biol. Sci., Cornell Univ., Ithaca, NY 14853. (Controlled field experiment, removing <u>all</u> nest feathers daily, lowered growth rates significantly and increased mite and lice parasitism of chicks. A possible unstated implication for banders: beware of major nest feather loss during your work.) JJM

Differential migration of Blue Grouse in Colorado. B.S. Cade and R.W. Hoffman. 1993. *Auk* 110:70-77. Dept. Fish & Wildl. Biol., Colorado State Univ., Fort Collins, CO 80523. (Using either recorded calls, pointing dogs, or ground search, 204 *Dendragapus obscurus* were banded with unique combinations of color bands. Solor capacitor-assisted or battery-powered radio transmitters were attached to 67 birds of both sexes, using backpack harnesses or poncho collars. Differences in elevation and directional movements produced partial segregation of sexes during the winter, but same-sex winter flocks were not formed. Both sexes showed winter site-fidelity and were fairly sedentary [median movement was 135 m.] in winter areas.) JJM

Monitoring Boreal Owl populations with nest boxes: sample size and cost. G.D. Hayward, R.K. Horst and P.H. Hayward. 1992. *Journ. Wildl. Manage*. 56:777-785. U.S. Fish & Wildl. Serv. Res. Labs, 222 N. 22nd St., Laramie, WY 82070. (Female and nestling owls were banded as part of an extensive study.) RCT

Scheduling differences of molt and migration for Baltimore and Bullock's orioles persist in a common environment. S. Rohwer and M.S. Johnson. 1992. *Condor* 94:992-994. Burke Mus. DB-10, Univ. of Washington, Seattle, WA 98195. (These two "subspecies" have dramatically different molt and migration schedules.) RCT

Male-blased breeding site fidelity in a population of Northern Shrikes. R. Yosef. 1992. *Condor* 94:1025-1027. Dept. of Zool., Ohio State Univ., Columbus, OH 43210. (Study done using colorbanded birds.) RCT

An experimental test of the contrasting color hypothesis of red-band effects in Red-winged Blackbirds. K.J. Metz and P.J. Weatherhead. 1993. *Condor* 95:395-400. Dept. of Biol., Carleton Univ., Ottawa, Ont. K1S 5B6. (Another study question still unresolved.) RCT

Natal dispersal and recruitment of juvenile White-tailed Ptarmigan in Colorado. K.M. Giesen and C.E. Braun. 1993. *Journ. Wildl. Manage.* 57:72-77. Colorado Div. of Wildl., 317 W. Prospect Rd., Ft. Collins, CO 80526. (Study done using 1437 birds color banded as juveniles.) RCT

Movement and philopatry of Band-tailed Pigeons captured in Colorado. M.A. Schroeder and C.E. Braun. 1993. *Journ. Wildl. Manage.* 57:103-112. Colorado Div. of Wildl., 317 W. Prospect Rd., Ft. Collins, CO 80526. (Study done using 26,480 banded pigeons.) RCT

Red-shouldered Hawk home range and habitat use in southern California. P.H. Bloom, M.D.

McCrary, and M.J. Gibson. 1993. *Journ. Wildl. Manage.* 57:335-345. Natl. Audubon Soc., 13611 Hewes Ave., Santa Ana, CA 92705. (Home range size was determined using radio telemetry.) RCT

Habitat use and management of Pileated Woodpeckers in northeastern Oregon. E.L. Bull and R.S. Holthausen. 1993. *Journ. Wildl. Manage.* 57:335-345. U.S. Dept. Agric., FS, PNRS, 1401 Gekeler Lane, LaGrand, OR 97850. (Woodpeckers with transmitters were followed for 5-10 months. Mated pairs used 407 ha.) RCT

Factors affecting which male Red-winged Blackbirds acquire territories. L.D. Buletsky and G.H. Orians. 1993. *Condor* 95:282-291. Dept. of Zool., NJ-15, Univ. of Washington, Seattle, WA 98195. (A 14-year study of marked birds.) RCT

Nesting fidelity of Sage Grouse in southeastern Idaho. R.A. Fischer, A.D. Apa, W.L. Wakkinen, K.P. Reese and J.W. Connelly. 1993. *Condor* 95:1038-1041. Dept. of Fish & Wildl. Resources, Univ. of Idaho, Moscow, ID 83843. (Females were radio marked; another paper by the same authors on renesting falcons, pp. 1041-1043.) RCT

Mate and nest-site fidelity in a resident population of Baid Eagles. J.M. Jenkins and R.E. Jackman. 1993. *Condor* 95:1053-1056. Biosystems Analysis, Box 776, Fall River Mills, CA 96028. (Birds were banded or color marked.) RCT

Survival rate of female Mallards wintering In the playa lakes region. J.B. Bergan and L.M. Smith. 1993. *Journ. Wildl. Manage.* 57:570-577. Dept. of Range & Wildl. Manage., Texas Tech. Univ., Lubbock, TX 79409. (Birds were radio tagged.) RCT

Overwintering distribution of Northern Pintail populations in North America; survival of Northern Pintalls banded during winter in 1950-88. J.B. Hestbeck. 1993. *Journ. Wildl. Manage.* 52:582-589; 590-597. Patuxent Wildl. Res. Center, U.S. Fish & Wildl. Serv., Laurel, MD 20708. (Study based on banding recoveries.) RCT

Northern Spotted Owl pair successfully renests. J.C. Lewis and B.C. Wales. 1993. *Journ. Field Ornithol.* 64:323-325. (Wales:) U.S. Fish &

Page 22

North American Bird Bander

Vol.19 No.1

Wildl. Serv., Box 58, Ukiah, OR 97880. (Colormarked owls.) RCT

Differential mortality of Barn Owls during fledging from marsh and off-shore nests. P.R. Bendel and G.D. Therres. 1993. *Journ. Field Ornithol.* 64:326-330. Maryland Dept. of Nat. Resources, Box 68, Wye Mills, MD 21679. (Most radio-tagged owls from off-shore nests did not survive their first flight.) RCT

The influence of spring snow depth on Whitetailed Ptarmigan breeding success in the Sierra Nevada. J.A. Clarke and R.E. Johnson. 1992. *Condor* 94:622-627. Dept. of Biol. Sci., Univ. North. Colorado, Greeley, Co 80639. (Colorbanded birds.) RCT

Winter territories and night roosts of Northern Shrikes in Idaho. E.C. Atkinson. 1993. *Condor* 95:515-527. 4980 E. Baseline Rd., Belgrade, MT 59714. (Study done with color-marked and radiotagged birds; also succeeding paper 95:528-535 on winter foraging and diet composition.) RCT

NON-NORTH AMERICAN BANDING RESULTS*

Peregrine Falcons and Merlins in Sinaloa, Mexico, In winter. J. H. Enderson, C. Flatten and J.P. Jenny. 1991. *Journ. Raptor Res.* 25:123-126. Dept. of Biol., Colorado College, College Springs, CO 80903. (The authors observed banded Peregrines several times, and one captured in 1989 had been banded in Wyoming in 1982. The hunting ranges of three female Peregrines were determined by equipping them with radio tags and following their movements for 14-24 days. One of the birds radio tagged in Mexico in 1990 was observed in Alaska in 1991.) MKM **Fidelity to nesting territory among European Sparrowhawks in three areas.** I. Newton and I. Wyllie. 1992. *Journ. Raptor Res.* 26:108-114. Monks Wood Exper. Stn., Abbots Ripton, Huntingdon, England PE17 2LS. (About 70% of Sparrowhawks banded at study sites in Scotland and England returned to the same nest site from year to year, site tenacity increasing with age. Within each age group, shifts in territories are more likely to occur following nesting failure, when changes in mates are also more likely.) MKM

The influence of gender and hatching order on growth in Hen Harriers (*Circus cyaneus cyaneus*). W.C. Scharf. 1992. *Journ. Raptor Res.* 26:192-194. School of Biol. Sci., Univ. of Nebraska, Lincoln, NE 68588. (Growth in mass and primary length was measured in 144 harriers nesting in the Orkney Islands of Scotland. Females showed faster growth in mass than males, but males fledged earlier and their primaries grew faster. Differences in growth rate with order of hatching were not statistically significant.) MKM

Kleptoparasitism and cannibalism in a colony of Lesser Kestrels (*Falco naumanni*). J.J. Negro, J.A. Donazar and F. Hiraldo. 1992. *Journ. Raptor Res.* 26:225-228. Estacion Biol. de Donana, CSIC, Apdo, 1056, 41080, Seville, Spain. (Although kleptoparasitism is rare in falcons, numerous observations showed it to occur frequently in a population of Lesser Kestrels during a period of apparant food shortage. Banding showed that most kleptoparasitic attacks (62%) were performed by one female, one of two birds also involved in even rarer cannibalistic behavior.) MKM

The breeding biology of an endangered Hawaiian honeycreeper, the Laysan Finch. M.P. Morin. 1992. *Condor* 94:646-667. Dept. of Zool., Univ. of Hawaii-Manoa, Honolulu, HI 96822. (Banded birds.) RCT

Editor's Note We are pleased to welcome Joseph J. Mahoney to our group of abstractors. Dr. Mahoney is reviewing *Auk, Ecological Applications* and *Records of New Jersey Birds.* MKM

JJM = Joseph J. Mahoney RCT = Robert C. Tweit MKM = Martin K. McNIcholl

^{*} I have changed this title from the long-used Foreign Banding Results, as Hawaiian studies do not biologically fit under North America, but are not foreign to U.S. readers, whereas studies from St. Pierre and Miquelon are biologically in North America, but foreign (politically) to readers from the two main North American countries, since these islands, off southern Newfoundland, are politically part of France. Furthermore, U.S. studies are politically foreign to Canadian readers, and Canadian studies foreign to U.S. readers. MKM