

Recent Literature

BANDING HISTORY AND BIOGRAPHIES

David Brewer distinguished ornithologist. B. Curry. 2011. *Ontario Birds* 28:157-162. 30-3115 New St., Burlington, ON L7N 3T6 (Brief biography to date of agricultural chemist Dr. A. David Brewer, 2011 recipient of Ontario Field Ornithologists' Distinguished Ornithologist Award. He started banding at the age of 14 in England and received a Master Ringer's permit at age 17. Since moving to Ontario in 1968, he has had up to 12 sub-permittees under his master permit at one time, banding primarily in the Mountsberg Conservation Area near Guelph, ON, but also at Ausable and Long Point Bird Observatories, and while traveling in several other countries. He has served on the boards of Long Point Bird Observatory, Ontario Bird Banding Association [including as President and journal editor], and the Ontario Bird Records Committee [including as chair]. His numerous publications include papers and notes in *American Birds*, *Birders' Journal*, *British Birds*, *Cotinga*, *Ontario Bird Banding*, *Ontario Birds*, as well as several newsletter articles, book reviews, book chapters and books, notably as co-author of all four volumes of an atlas of Canadian bird-banding.) MKM

Selwin George (Bill) Lane. Anonymous. 2011. *Corella* 36:1-2 Box A313, Sydney South, NSW 1235, Australia (Two color photos and brief introduction to memorial issue on 1992-2000 life of 1995 recipient of John Hobbs Medal, who initiated co-operative banding studies on Wedge-tailed Shearwaters and Silvereyes during a 50-year career of banding 60,000+ birds of 440 species, authoring 170+ publications and training 50+ banders. See also abstracts of longer biography by L. C. Llewellyn and account of North Ryde project by A. L. Leishman below.) MKM

A founder and father of the Bird Banders' Association of Australia, the late S. G. (Bill) Lane and his contribution to bird study in Australia. L.C. Llewellyn. 2011. *Corella* 36:3-11. Curlew Biol. Serv., Box 67, Pacific Palms, NSW,

2428, Australia (More detailed biography of Col. Lane, "one of the all time greats as an amateur ornithologist in the history of Australia." After starting bird study by breeding finches and returning from World War II, he joined the Royal Australian Ornithologists' Union in 1947, becoming a fellow in 1983 and receiving its John Hobbs Medal in 1995. He started banding seabirds in 1956 and was involved with founding the Bird Banders' Association of Australia as a New South Wales organization before it expanded nationally, serving as inaugural President [1962-1965], as well as two other Presidential terms [1983 and 1984]. He banded numerous Silvereyes, but was better known for banding seabirds during 556 visits to 151 Australian seabird islands, writing accounts of 36 of these islands, as one of the authors of 252 accounts of seabird islands that he edited. He was also involved in editing *The Australian Bird Bander* and its successor, *Corella*. Tables list his contributions published in *The Bird Bander/Australian Bird Bander/Corella*, as well as 7189 personal banding recoveries published in this journal. An appendix lists an additional 66 publications in *The Adjutant*, *Asian Seabird Group Newsletter*, *Australian Bird Life*, *Australian Bird Study Group Newsletter*, *Australian Bird Watcher*, *Australian Birds*, *The Bird Observer*, *Birds*, *Emu*, *Gould League Notes*, *The Stilt*, *Sunbird*, *Tasmanian Bird Report*, *The Tattler*, *Western Australian Naturalist*, *Wildlife in Australia* and a wildlife technical paper on the use of mist-nets.) MKM

Edgar T. Jones November 22, 1922 – September 28, 2011. B. Gehlert. 2012. *Parkland Naturalist* Jan.-March 2012:5. c/o Edmonton Nature Club, Box 1111, Edmonton, AB T5J 2M1 (Brief biography of nature photographer and conservationist, largely responsible for having all hawks and owls protected in Alberta. He was a founder of the Edmonton Bird Club and Alberta Wildlife Foundation and recipient of several provincial and national awards. He banded more than 117,000 birds without the help of sub-permittees or financial assistance, sometimes achieving the top number of individuals banded in WBBA's annual reports.) MKM

EQUIPMENT AND TECHNIQUES

A video surveillance system to monitor nocturnal mist-net operations. E.A. Jacobs and J.A. Rothe. 2011. *Journal of Raptor Research* 45:367-369. Raptor Serv., LLC, 1601 Brown Deer Lane, Stevens Point, WI 54481 (Description of advanced super-8 movie equipment effective in monitoring mist-nets at night. Use of these cameras to monitor Northern Saw-whet Owl captures near Stevens Point, WI, reduced in-net predation from 33 owls per 53,936 owls/net-hr to zero losses in 5634.5 hours of trapping. Some behavioral aspects of nocturnal captures were also documented.) MKM

Venous blood gas and lactate values of Mourning Doves (*Zenaida macroura*), Boat-Tailed [sic: tailed] Grackles (*Quiscalus major*), and House Sparrows (*Passer domesticus*) after capture by mist net, banding and venipuncture. C.A. Harms and R.V. Harms. 2012. *Journal of Zoo and Wildlife Medicine* 43:77-84. Center for Marine Sci. & Tech. and Dept. of Clinical Sci., College of Vet. Medicine, North Carolina State Univ., 303 College Circle, Morehead City, NC 28557 (Immediate physiological impacts of mist-netting capture and handling and vein puncture were assessed on birds in North Carolina by measuring blood gas partial pressures, pH and bicarbonate and lactate concentrations in the basilic veins of Mourning Doves and jugular veins of Boat-tailed Grackles and House Sparrows captured in mist nets. These were the three most-captured of 14 species. Some of the doves were flushed into the nets. Handling data recorded included amount of time the bird spent in the net, degree of resisting in the net and disentanglement difficulty. Metabolic, respiratory and acid-base alterations were recorded in varying degrees among the three species, but in most cases were minor, though possibly additive with effects of other adverse sub-lethal conditions. Physiological effects of flushed Mourning Doves did not differ statistically from those of doves caught without being flushed. Mass [weights] and several physiological measurements are summarized in tables, with physiological data also graphed. Mourning Doves were less likely to

struggle in the nets and more easily disentangled than grackles or House Sparrows. Potential biases from differences in precise collection techniques, anatomical effects, and life history and ecological aspects of each species are discussed thoroughly with detailed reviews of the literature. Suggestions for further study are also included.) MKM

The role of banding in raptor conservation: proceedings of a special session at the 2010 RRF annual meeting, Fort Collins, Colorado. K.L. Bildstein. 2012. *Journal of Raptor Research* 46:1-2. Acopian Cent. for Conservation Learning, Hawk Mountain Sanctuary, 410 Summer Valley Rd., Orwigsburg, PA 17961 (Brief overview of the role of banding in documenting movements, changes of movement patterns and life history details of raptors, newer marking techniques and importance of banding techniques in conservation research on raptors, as an introduction to a special issue documenting the contributions presented at the symposium indicated in the title.) MKM

The future of banding in raptor science. K.L. Bildstein and B.G. Peterjohn. 2012. *Journal of Raptor Research* 46:3-11. Acopian Cent. for Conservation Learning, Hawk Mountain Sanctuary, 410 Summer Valley Rd., Orwigsburg, PA 17961 (Review of the use of bands in raptor studies since Mortensen began to attach numbered bands to Danish starlings in 1899 and others applied this technique to assess demographic statistics and track movements of raptors through the expansion of the technique to using harder metals, rivet, lock-on and color bands, wing-tags and electronic devices to expand the scope of these studies. The authors argue that conventional bird-banding continues to function prominently in long-term field studies of effects of climate changes on raptor demographics and movements on a broader scale than the more focused and time-limited studies undertaken with more sophisticated and expensive equipment, often with significant practical complications. Relative amounts of capture effort are reviewed per season, with recommendations for expanded effort generally and regionally, as well as proposals for expanded use of data in monitoring and management efforts, assessing migratory connectivity among populations, using population

indices and Monitoring Avian Productivity and Survivorship Program data in assessing mortality, especially with the welcome decline in shooting recoveries. They also emphasize that patterns of "leap-frog" vs. "chain" migration patterns need to be sorted out further, both among species and among populations of some species, the usefulness of banding data in assessing natal and breeding dispersal patterns and the need for standardization of protocols for measurements and tissue sampling of raptors.) MKM

IDENTIFICATION, MOLTS, PLUMAGES, WEIGHTS AND MEASUREMENTS

Nikon photo quiz. W. D'Anna. 2012. *OFO* [Ontario Field Ornithologists] *News* 30(1):15-16. c/o Box 455, Stn. R, Toronto, ON M4G 4E1 (Photo of HY Northern Harrier in flight at awkward visual angle, with reviews of features distinguishing it from other species and age classes occurring in ON). MKM

NORTH AMERICAN BIRD BANDING

Female American Kestrel survives double amputation. B.R. Skipper and C.W. Boal. 2011. *Journal of Raptor Research* 45:374-375. Dept. Nat. Resources Manage., Texas Tech Univ., Lubbock, TX 79409 (Both feet of a kestrel caught in a bal-chatri trap in Dec in TX had been amputated, apparently at least a month earlier. Although the bird had survived this long during a season when feeding by a mate was unlikely, she was emaciated, and weighed about 60% of normal at that time of year.) MKM

A study on the behaviour of Ring-billed Gulls (*Larus delawarensis*) in Montreal. M. Patenaude-Monette and J.-F. Giroux. 2012. *Picoides* 25(1):7. Dept. des Sciences Biol., Univ. du Quebec a Montreal, Box 8888, Stn. Centre-Ville, Montreal, QC H3C 3P8 (Over 5500 gulls nesting on Deslauriers Is. near Montreal, QC, have been banded and color-banded since 2009, with nearly 2000 sightings to date. GPS loggers are used to study foraging movements during the breeding season and Argos PTT are tracking post-breeding

and migration patterns. Results to date indicate that some birds stay in the Montreal area until starting southward migration, some dispersing to stop-over sites en route to wintering areas, and others dispersing to areas outside the migration route before going to wintering areas.) MKM

First observation of polyterritorial polygyny in Pine Warbler (*Setophaga pinus*). M.A. Conboy. 2011. *Ontario Birds* 29:163-167. Queen's Univ. Biol. Stn., 280 Queen's Univ. Rd., Elgin, ON K0G 1E0 (During a study of territories of 12 color-banded male territories near Elgin, ON, song playbacks and a GPS map unit allowed territories to be defined with about 50 waypoints, usually in two to three hours of active singing. One male, however, required about five hours to define his primary territory, because of prolonged absences. He was eventually found 398 m away from the primary territory. Observations the next day showed him to be singing and delivering food to another nesting female in a secondary, smaller territory, which he defended less vigorously and in which he spent less time than the primary territory.) MKM

Snow Buntings. C. Cartwright. 2012. *OFO* [Ontario Field Ornithologists] *News* 30(1):1-2. c/o Box 116, Stn. F, Toronto, ON M4Y 2L4 (Since 2007, the Canadian Snow Bunting Network have color banded over 1000 buntings on East Bay Island, Nunavut, and fitted 90 with geolocators, with additions birds being banded on wintering areas in Ontario, to better document sex/age structure of wintering flocks, movement patterns, feeding strategies and habitat use.) MKM

Modelling parental provisioning by Red-winged Blackbirds in North Dakota. G.M. Linz, R.S. Sawin, M.W. Lutman, and W.J. Bleier. 2011. *Prairie Naturalist* 43:92-99. U.S. Dept. Agriculture, Wildl. Serv., Natl. Wildl. Res. Cent., Suite B, 2110 Miriam Circle, Bismarck, ND 58501 (Males were shot or captured and removed from 30 territories and their replacements color-banded. The provisioning rates of these males were compared with those of 34 nests in other [control]

territories, where males had been banded previously, their territories mapped and the number of their mates determined. Video cameras at each nest documented higher provisioning rates by original males, showed that they fed older chicks, were more likely to feed chicks in nests with more chicks and fed chicks later in the breeding season.) MKM

Survivor. P. Christie. 2012. *Ontario Nature* 52(1):24. Suite 612, 214 King St. West, Toronto, ON M5H 3S6 (Satellite transmitters placed on 19 Whimbrels in Virginia have shown that they fly regularly between northern Canadian breeding grounds, such as Coats Island, Hudson Bay, to Caribbean wintering grounds, such as Bahamas and Virgin Islands with only about four stop-overs and that only one of seven that encountered tropical storms died while in transit through the storm.) MKM

Disponibilit et utilisation d'information sociale sur les sources de nourriture dans une colonie de Go lands a bec cercl  (Larus delawarensis). F. Racine. 2011. M.Sc. thesis, Universit  du Qu bec a Montr al, Montreal, QC, abstracted in *Picoides* 25(1):8-9, 2012. Dept. de Sciences Biol., Univ. de Qu bec a Montreal, Box 8888, Stn. Centre-Ville, Montr al, QC H3C 3P8 (Abstract of thesis on one aspect of Ring-billed Gull study program outlined in second North American abstract, above. Data from foraging flights of gulls of neighboring nests fitted with GPS data loggers showed no relationship between timing or flight directions of neighbors, suggesting that at least some birds in this nesting colony do not rely on neighbors as information sources for the food that they bring to their nests.) MKM

Loggerhead Shrike from Carden Alvar in Virginia. J. Iron and R. Pittaway. 2012. *OFO* [Ontario Field Ornithologists] *News* 30:5. 9 Lichen Pl., Toronto, ON M3A 1X3 (A color-banded shrike wintering at Virginia Beach, VA, in Nov 2011 was banded on the Carden Alvar, ON, as a SY in 2011 and was believed to be a shrike that wintered as an unbanded immature the previous year, the first to

winter there since 1978. Another Loggerhead Shrike, banded as HY at Hampstead, QC, in Aug 1945 was shot at Blind Point, VA, in Feb 1946.) MKM

The Whimbrels are coming! P. Christie. 2012. *ON Nature* 52(1):22-25 & 34. Suite 612, 214 King St. West, Toronto, ON M5H 3S6 (A geolocator attached to a Whimbrel in Virginia showed that it travelled 5,057 km in slightly more than 143 hours, averaging more than 35 kph in migration. Geolocators and solar-powered satellite transmitters are providing precise times and routes of migration, such as the migration of one bird from Virginia to the Mackenzie Delta and that a high proportion of Virginia-staging birds [10 of 25] fly within five km of a Toronto, ON, transmitter tower. Two of 19 Virginia-marked birds were shot in Sep 2011 in Gaudeloupe.) MKM

Brood parasitism, reproductive success, and survival in Yellow Warblers. C. Rock. 2011. M.Sc. thesis, Simon Fraser University, [Burnaby, BC] xi +96 pp. 212-2150 East Hastings St., Vancouver, BC V5L 0A5 (Observations of 215 Yellow Warblers caught in mist-nets, often with the aid of playbacks of songs and color-banded at three sites in the Revelstoke Reach of the Kootenay region of British Columbia helped show that older female warblers had higher breeding performance than yearlings, but were as likely to be parasitized, with parasitism rates varying more among years than between age categories. Cumulative effects of cowbird parasitism reduced annual productivity of older females from 2.7 to 1.7 fledglings and that of yearling females from 2.0 to 0.3 fledglings. Color bands helped show that individual females laid one to four clutches per year and occasionally fledged two broods. Clutch sizes were slightly smaller in parasitized nests than in those that were not parasitized, with some indication that egg size reduction decreased with age, but clutch sizes also varied among years and with seasonal progress. Observations of color-banded warblers over seven breeding seasons in these populations indicated that survival of yearlings was 26% lower than that of older birds, but was not influenced by either

brood parasitism or gender. Blood samples of eight known-sex adults aided in sex determination of nestlings.) MKM

Coastal waterbird population trends in the Strait of Georgia 1999-2011: results from the first 12 years of the British Columbia Coastal Waterbird Survey. T. Crewe, K. Barry, P. Davidson and D. Lepage. 2012. *British Columbia Birds* 22:8-35. Bird Studies Canada, Box 160, Port Rowan, ON N0E 1M0 (Barrow's Goldeneyes fitted with satellite transmitters along the south coast of BC have shown that the birds return to the same stretch of coastline in subsequent years and that they nested in the Cariboo region of the province.) MKM

Inbreeding of Illinois Peregrine Falcons. M. Hennen. 2011. *Meadowlark* 20:84. Ill. Ornithol. Soc., Box 931, Lake Forest, IL 60045 (The majority of Peregrine Falcons in the re-established Midwest population are banded with unique color band combinations along with U.S. Fish and Wildl. Serv. bands. This allows researchers to identify individuals in breeding pairs and to document rare instances of inbreeding. In 2005, an adult female [Magnolia-band code: blk22R] mated with her son [band code: b/g S/T] from 2000. The pair incubated four eggs until the gutter nest was washed out. In 2011, an adult [Zoom b/r *4/H] nested with her son from 2005 [Stan b/g 98/K]. This pair fledged two young successfully. Ongoing monitoring and banding of individuals in the region will gather additional data to assess the ramifications of any inbreeding in the future.) GLG

Anna's Hummingbird: Illinois' first record. V. Kleen. 2011. *Meadowlark* 20:82. 1825 Clearview Dr., Springfield, IL 62704 (Hummingbirds visiting feeders in November in Illinois are usually late migrating Ruby-throated or Rufous. A bird visiting a feeder in Peoria County was trapped, banded with number L27034 and identified as an immature male Anna's Hummingbird. As a previous record from 1990 was based on a photograph and was ruled hypothetical due to the difficulty of identification, this banded bird is Illinois' first confirmed record of Anna's Hummingbird.) GLG

Summary of raptor banding records at the bird banding lab. D. Bystrak, E. Nakash and J.O. Lutmerding. 2012. *Journal of Raptor Research* 46:12-16. Patuxent Wildl. Res. Cent., 12100 Beech Forest Rd., Laurel, MD 20708 (More than 70,000,000 North American banding records are on file in the U.S.G.S. Bird Banding Lab., 61,000,000 of which are stored electronically. Of those stored electronically, 1.86 million are of raptors banded in 1960 or later, with Sharp-shinned Hawks, American Kestrels and Red-tailed Hawks the most commonly banded diurnal raptors and Northern Saw-whet Owls leading the nocturnal species. Migration monitoring stations account for the largest number of raptors banded, with banding of nestlings also significant. Numbers of raptors banded grew substantially in the 1970s, peaking in the 1980s. Major centers of human populations and raptor migration concentration sites provide a predominance of records. Nestlings account for 96.3% of Ferruginous Hawk bandings, but only 0.3% of Sharp-shinned Hawk bandings. Numbers of rehabilitated raptors are graphed by decade since the 1960s, with a table listing the ten most commonly banded species. Uses of raptor banding data are also summarized.) MKM

Summary of raptor encounter records at the bird banding lab. J.A. Lutmerding, M. Rogosky, B. Peterjohn, J. McNicoll and D. Bystrak. 2012. *Journal of Raptor Research* 46:17-26. Patuxent Wildl. Res. Cent., 12100 Beech Forest Rd., Laurel, MD 20708 (Summary of 54,000 encounter reports of 52 banded raptor species from the beginning of the North American banding program to 2008, excluding local recaptures and band-only reports. The first such encounter was of a 1916-banded American Kestrel banded in 1917, with fewer than 400 encounters per year until 1972, after which the numbers per year rose to 1500 since 1999. Approximately 2.9% of raptors banded between 1960 and 2008 have been encountered subsequently, with Bald Eagles [14%], Golden Eagles [8.3%], Great Horned Owl [8.0%], Snowy Owl [7.6%] and Peregrine Falcon [7.1%] exhibiting the highest encounter rates. From 1958-2008, about 76% of marked raptor encounters were of "diurnal"

raptors, 24% of owls. Recoveries resulting from shooting have declined over time, while those resulting from vehicle collisions have increased. Other reporting trends are tabulated and discussed. The oldest North American raptor age documented to date is a 32 year, 10 month Bald Eagle, with examples of Golden Eagle and Great Horned Owl also reaching 28 years or more, in contrast to the average 2.35 years between banding and subsequent encounters. Age at encounter of raptors caught and released as part of normal banding operations is comparable to that of rehabilitated and released raptors. Most encounters of North American-marked raptors outside North America are in South America, led by Osprey, Peregrine Falcon and Swainson's Hawk. An appendix lists banding and recovery years and locations of five North American-banded Peregrine Falcons, one Gyrfalcon and one Snowy Owl banded in North America and recovered in Asia or Europe. Encounter records are predominantly around dense human populations and coasts. Although encounters are predominately of dead or injured raptors, the proportion of encounters of living individuals is increasing with advances in marking techniques. Progress is outlined on computerization of data and in quality control measures.) MKM

What banding tells us about the movement ecology of raptors. L.J. Goodrich, C.J. Farmer, D. R. Barber and K.L. Bildstein. 2012. *Journal of Raptor Research*. 46:27-35. Hawk Mtn. Sanctuary, Acopian Cent. for Conservation Learning, 410 Summer Valley Rd., Orwigsburg, PA 17961 (Banding recovery data from 1920-2006 encounters were examined for age and gender patterns in movements of Cooper's and Sharp-shinned hawks and American Kestrels banded in summer or autumn migration and recovered in winter. Female American Kestrels migrated greater distances than males. Travel distances of kestrels did not vary with age, but encounter distances did decline by year. In general, all three species showed a chain migration pattern, but female American Kestrels from northern latitudes exhibited a leap-frog pattern of migrating farther south than those nesting at mid-latitudes. Female Cooper's Hawks and American

Kestrels moved farther than males, whereas both genders of Sharp-shinned Hawks moved the same distances. Hatch-year accipiters moved greater distances than after-hatch-year individuals, but distances did not differ significantly by age in kestrels. Northern-latitude birds of all three species moved farther than mid- to low-latitude individuals, with many low-latitude individuals apparently resident. Distances moved by both accipiters also varied by flyway and movements of some coastal populations differed from those of nearby inland populations. Details of this array of patterns are outlined in the text for each species, tabulated and graphed.) MKM

Autumn raptor banding at Hawk Ridge, Duluth, Minnesota U.S.A., 1972-2009: an overview. D.L. Evans, G.J. Niemi and M.A. Etterson. 2012. *Journal of Raptor Research* 46:36-49. 2928 Greysolon Rd., Duluth, MN 55805 (Summary of autumn banding of 99,505 raptors of 23 species, with six of the seven lowest numbers captured in the most recent years, primarily because of a drop in Sharp-shinned Hawks. The majority of birds banded over the 36-year period were Sharp-shinned Hawks [60,147] and Northern Saw-whet Owls [20,676]. Numbers of Northern Goshawks banded correlated with both numbers actually observed and numbers adjusted for observer effort in a given autumn and numbers of Sharp-shinned Hawks with observer-adjusted numbers observed. Highest numbers of subsequent encounters of banded raptors were recorded for Northern Saw-whet Owls, Sharp-shinned Hawks and Northern Goshawks. Age ratios of Sharp-shinned Hawks, Northern Goshawks and Northern Saw-whet Owls were highly variable, but ratios of hatch-year to after-hatch-year bird were correlated negatively with numbers of goshawks banded. In peak goshawk years, adults predominated, while hatch-year birds predominated in years of lower goshawk numbers. The history of banding at Hawk Ridge is summarized in the perspective of the longer hawk watch history there and capture methods are summarized. Tables, graphs, text discussion and an appendix provide considerably more detail on catch

effort and success over time and among years, as well as more details on each species captured.) MKM

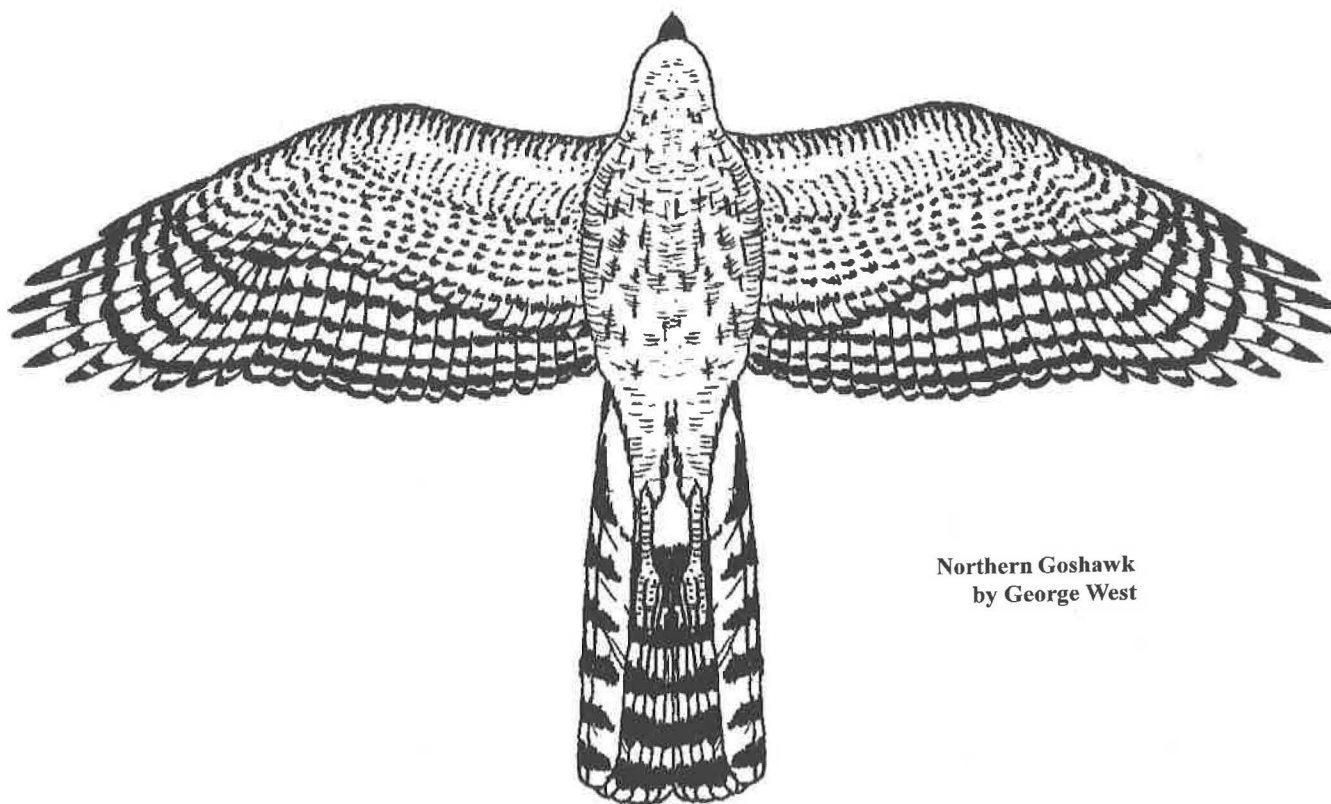
NON-NORTH AMERICAN BANDING RESULTS

Results from the long-term mistnetting project at North Ryde, commenced by the late S.G. (Bill) Lane in 1969. A.J. Leishman. 2012. *Corella* 36:12-16. 4/101 Centaur St., Revesby Heights NSW 2212, Australia (Shortly after mistnets were introduced to Australia in 1958-1959, Lane started a co-operative project to study movements of Silvereyes, later expanding the study to include longevity and other life history aspects of Silvereyes, and later other bush bird species. The study continued until 1982, when developments reduced appropriate habitat. Numbers of mistnets and amount of netting varied considerably among years. A table lists numbers captured at North Ryde

of about 11,000 birds of 65 species, with 80.5% consisting of Silvereyes or honeyeaters, as well as data on recapture rates, distances moved, and longevity, with additional data summarized in the text on the amount of time after a fire before some returned to the area and some details on Little Wattlebirds, Rufous and Golden whistlers, Grey Shrike-thrushes, and especially Silvereyes, including three long distance recoveries [one to Tasmania and two in Victoria]. A list of five papers on data resulting from the project, and a list of banders involved in the project at other sites are also included, but data from the other sites have not yet been published.) MKM

Note: Thanks to Craig A. Harms for sending a copy of his manuscript on physiological effects of netting, banding and venipuncture to WBBA Editor Walter H. Sakai, to Walter Sakai for the Harms' paper, and to Christine Rock for sending a copy of her thesis.

GLG = Glenn L. Gabanski
MKM = Martin K. McNicholl



Northern Goshawk
by George West