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Dr. John Richardson

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## Editor's Message

The highlight of the Ornithological year (apart from field work) was the joint meeting of the SCO and the AOU in Montreal in August. There was an interesting symposium on the history of Canadian Ornithology. The small but appreciative group of attendees confirmed for me the value of examining where we've been, not always where we're going. I'm trusting that all contributors to the Symposium will think of *Picoides* as a venue for a written presentation.

In this issue, Stuart Houston details some of the contributions to natural history in Canada made by Dr. John Richardson.

Ironically, although we know more today about Richardson's contributions than we did in the past, now his name is not commonly associated with a single species of bird. At one time, we spoke of Richardson's Owl, Wood Peewee and Merlin. Mammal watchers, note, however, that it's hard to pass a spring or summer day in Alberta without encountering a Richardson's Ground Squirrel.

The SCO recognizes Louise de Kiriline Lawrence, as the winner of the 1991 Speirs Award for contributions to Canadian Ornithology.

I would like to thank all contributors, those who provided information on their research and papers, and Steve Fisher and Michelle Campbell for their production assistance.

W. Bruce McGillivray

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## Membership Information

If you would like to be a member of the Society of Canadian Ornithologists, please send your name, address, phone number, and a cheque or money order for \$10.00 to:

Dr. Philip H.R. Stepney  
Provincial Museum  
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12845-102 Avenue  
Edmonton, Alberta  
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Si vous désirez devenir membre de la Société des Ornithologistes du Canada, faites parvenir vos coordonnées ainsi qu'un chèque ou mandat-poste au montant de 10,00\$ à l'adresse ci-haut.

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# BAILLIE AND TAVERNER AWARDS FOR 1991

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At the 1991 annual meeting of the Society of Canadian Ornithologists, the winners of this year's Baillie and Taverner awards were announced. The winner of the James L. Baillie award, a \$1000.00 research grant provided by the Long Point Bird Observatory and administered by the SCO, was Karen Wiebe, University of Saskatchewan. Her proposal was titled "**Hatching asynchrony in the American Kestrel: proximate mechanisms and adaptive value.**"

Karen writes:

"My goal is to provide a comprehensive analysis of hatching asynchrony by investigating not only its consequences for chick growth and parental provisioning, but also its control and the influence of proximate factors at the time of laying. My specific objectives are:

To use observational and experimental approaches to investigate food abundance, population density, and weather as proximate influences on hatching asynchrony and to test the brood reduction, sibling rivalry, and peak energy hypotheses for American Kestrels.

I hypothesize that females can control the degree of asynchrony and use food supply at the time of laying as an indication of the level of asynchrony that will be optimal during the period of chick rearing. I predict that: 1) synchronous broods will fledge more and heavier young when food is abundant but that asynchronous broods will do better when food is limited. 2) females supplemented with food prior to laying will reduce the asynchrony of their clutches.

If asynchrony is beneficial during times of food shortage because it reduces energetic costs (sibling rivalry/peak energy) or increases chick growth and survival (brood reduction), I predict that: 1) chicks in synchronous nests where food is limited will grow faster and have lower mortality than those in nests I make synchronous. 2) parents of asynchronous broods will provision less."

Karen's study area is:

"...in the boreal forest of northern Saskatchewan...Nest boxes, located at the

side of the highway or logging roads are easy to access so large numbers (>10/hr) can be inspected. About 170-200 pairs breed in boxes each year. Beginning in April when the birds arrive on territories, they will be captured using bal-chatri traps and color-banded...The breeding adults will be recaptured several times (usually in the nest box) to assess physical condition...

I will supplement 30 breeding pairs with 65g of mice/day from the time of their arrival on territories until the first egg is laid and compare the hatching asynchrony to 30 control pairs."

The winner of one Taverner award of \$500.00 was Dan Kozlovic, University of Toronto, for his proposal titled "**Host Selection in a Generalist Brood Parasite: Interactions Between the Brown-headed Cowbird and House Finch.**" Kozlovic points out that:

"The House Finch (*Carpodacus mexicanus*) is parasitized rarely in its native western range, but following its introduction and subsequent colonization of the east (Mundinger and Hope 1982) has become a very popular host of the cowbird there (Kozlovic unpubl. data, 1983-85, St. Catharines, Ontario). This result is of particular interest as the House Finch is an unsuitable host (Kozlovic *loc. cit.*). My proposed research will address the nature of cowbird-House Finch interactions in North America."

Through his work, Dan hoped:

"(1) To document the consequences of parasitism of both species, and answer a number of questions; 2) To determine the abundance of cowbirds, House Finches and other species of the avian community; (3) Are eastern cowbirds better adapted to parasitize House Finches than their western counterparts? (4) What behavioral or ecological characteristics of the House Finch make it unsuitable as a host for the cowbird? (5) How widespread is this phenomenon in the east, and to what extent do rates of parasitism differ geographically? (6) Given that the House Finch is an unsuitable host and if cowbirds select hosts in order to maximize their fitness, I predict that the rate

of parasitism in the east should decrease over time; (7) If a decrease in parasitism is observed does this indicate cowbird avoidance of the House Finch as a host?"

Dan's fieldwork will be undertaken at:

"...St. Catharines, Ontario (May-July), where House Finches are known to occur in large numbers. House Finch nests will be located and their positions in the support vegetation and dimensions measured. Nests will be monitored daily for presence of eggs, nestlings, and parasitic eggs. Dimensions of eggs, nestlings and fledging success will be used to compare reproductive performance in parasitized and non-parasitized nests. Because diet is an important factor in cowbird nestling survival (Rothstein 1976), food of House Finch nestlings will be assessed visually and by sampling crop and faecal material. Strip transect counts of birds (Verner 1985), conducted throughout the summer, will be used to determine if rate of parasitism is correlated with parasite abundance."

The second Taverner award of \$500.00 was won by Cathy Schuppli, of the University of Alberta for her proposal titled "**Reproductive Synchrony: the effect of food supply in Willow Ptarmigan.**" Schuppli notes that:

"The willow ptarmigan (*Lagopus lagopus*) is a holarctic grouse species that is territorial and exhibits synchrony in the timing of egg laying of first nests and of hatching (Hannon *et al.* 1988, Myrberget 1986). At the Chilkat Pass, where I propose to do my study, 88% of the hatching occurs within a 14 day period (Hannon 1984), in contrast to 60% for blue grouse on Vancouver Island (Zwickel 1977). In willow ptarmigan, various evidence supports the hypothesis that reproductive synchrony is a result of timing reproduction to correlate with the availability of high quality food."

In her study, carried out at the Chilkat Pass, Cathy has established the following objectives:

"i) What are the diets of hens and chicks over the breeding and brood rearing seasons? (ii) Are there seasonal peaks in the quality of plants and abundance on insects? (iii) Does weather affect the timing of reproduction? (iv) Does improving food quality or increasing food availability affect the degree of reproductive synchrony? (v) Are egg laying

and hatching timed according to the egg formation and/or the optimal chick growth hypotheses?"

All three winners are to be congratulated.

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## SCO Annual Meeting, Montreal 1991

Highlights of the 1991 meeting included the recognition that the Society has 289 individual members from coast to coast. This was the first joint meeting of the SCO with the AOU in Canada. Two travel awards of \$300.00 each assisting a student to attend the meeting were won by Marc André Vilard, Carleton University for an abstract titled *Spatio-temporal dynamics of forest-bird species in agricultural landscapes of eastern Ontario*, and Kelley Brock, Queen's University for an abstract titled *Relatedness studies of Hispaniolan and Puerto Rican parrots using DNA fingerprints and pedigree analyses*.

The Doris Huestis Speirs Awards was presented to Dr. Louise de Kiriline Lawrence (see full tribute on page 5).

J. Bruce Falls assumed the title of president after this meeting. Henri Ouellet was elected vice-president (president-elect). New councillors for the next two years are Tony Erskine, Stuart Houston, Laurene Ratcliffe, Jim Rising and Jean-Pierre Savard. Phil Stepney will continue in his dual role of Treasurer/Membership Secretary. Bruce McGillivray continues as Editor of *Picoides* and André Cyr will serve as Recording Secretary.

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### A Bibliography of Alberta Ornithology

(2nd edition). 1991, by David M. Ealey and Martin K. McNicholl. 751 pp. ISBN 0-7732-0599-3. Available from Publications Secretary, Friends of the Provincial Museum of Alberta, 12845 - 102 Ave., Edmonton, Alberta, T5N 0M6. for \$19.95 plus GST (for Canadian residents) plus \$3.00 shipping and handling

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## Doris Huestis Speirs Award For Contributions to Canadian Ornithology Louise de Kiriline Lawrence - 1991

Louise de Kiriline Lawrence, winner of the 1991 Doris Huestis Speirs Award for contributions to Canadian Ornithology. The following tribute was read at the SCO annual meeting in Montreal, August 1991, by Jon C. Barlow, president:

The person we honour with the Doris Huestis Speirs Award for 1991 has made special contributions to Canadian Ornithology as a writer for popular articles and books about birds and natural history, as well as through several long term studies of specific species published in scientific journals. Praise for the quality and uniqueness of the demonstrated style of natural history writing and a concomitant ascension to a prominent place among our gifted natural history writers is made all the more remarkable by the fact that the recipient began intensive studies of birds in mid-life after leaving a Red-Cross based nursing career of international renown.

Born in Sweden in the late 19th century, she came to Canada in 1927 continuing here her dedicated nursing career begun in western and central Europe after 1914. Her first award came in 1934 when she was given the Jubilee Medal by King George V for her vital work, in conjunction with Dr. A.R. Dafoe, in nursing the Dionne quintuplets through their first year of life. In 1935 came the mid-career change mentioned above; she moved to a wilderness site at Pimisi Bay near North Bay, Ontario, and gained skills as a careful field observer that were partly self-taught. At Pimisi Bay she experienced a reawakening of an interest in nature first nurtured by her father, a university trained naturalist - Sixten Flach - 30 years before in her native Sweden. This personal renaissance also occurred partly through the encouragement of her husband Len Lawrence, cherished correspondence with P.A. Taverner - at the time Curator of birds in Ottawa, correspondence and frequent personal encounters with naturalists Murray and Doris

Speirs of Toronto, and her friendship with the late Margaret Morse Nice. These colleagues gave her fresh impetus to achieve greater literary and scientific heights realized through the publication of seven books, more than dozen scientific papers, and countless articles and reviews in a variety of media, but especially in *Audubon* magazine. The editor of *Audubon*, Les Line, characterized her as perhaps the



Louise de Kiriline Lawrence

“greatest and perhaps the last of a cadre of nature writers fast disappearing from the North American scene.”

Her literary skill clearly favouring a popular style, but one nonetheless redolent of a special scientifically underpinned understanding of nature, resulted in the receipt in 1969 of the John

Burroughs Medal for distinguished writing in natural history for her book "The Lovely and the Wild." Similarly her monograph on woodpecker behaviour, a long term study of a kind so dear to us today, entitled "A comparative life-history study of four species of woodpeckers" (Ornithological Monographs No. 5), published in 1967, was one of several such studies that also included investigating Red-eyed Vireo mating behaviour, reverse migration in Snow Geese, hoarding behaviour in Grey Jays, and comparative nesting behaviour of Chestnut-sided and Nashville warblers. Her scientifically oriented career was acknowledged in 1954 when she became the first Canadian woman to become an elective member of the AOU. Recognition of her literary output as a whole came in the 1970s in the form of an honorary doctorate from Laurentian University, Sudbury, Ontario. Also about this time she received the coveted Sir Charles Roberts Award from the Canadian Authors Association as a further tribute to her powerful literary skills. The most remarkable feature of her career maybe the fact that her major publishing activities began after age 50 culminating in her mid-80s with the release of *Mar*, an extended tale about a Yellow-bellied Sapsucker.

I am pleased to announce the 1991 recipient of the Doris Huestis Speirs Award from the Society of Canadian Ornithologists is **DR. LOUISE DE KIRILINE LAWRENCE** of North Bay, Ontario, a devoted Canadian, a devoted inhabitant of the Northland, and a devoted and painstakingly accurate observer of the passage of nature.

*Jon C. Barlow*

## **DORIES HUESTIS SPEIRS AWARD Call for Nominations**

The Speirs Award is presented to an individual who has made outstanding contributions to Canadian Ornithology. If you wish to nominate someone, please inform

Dr. Bruce Falls,  
Dept. of Zoology,  
University of Toronto,  
Toronto, Ontario M5S 1A1,

## **RESEARCH AWARDS FOR 1992 Call for Applications**

Applications are sought for 2 Taverner Awards (up to \$500 each) and 1 Baillie Award (\$1,000) for 1992.

Taverner Awards are offered by the Society of Canadian Ornithologists to honor and further Percy A. Taverner's accomplishments in increasing knowledge of Canadian birds through research, conservation and public education. The award is aimed at people with limited or no access to major funding, regardless of professional status, who are undertaking ornithological work in Canada.

The James L. Baillie Student Research Award is open to any student conducting ornithological research at a Canadian University. It honors the memory of James L. Baillie and will support field research on Canadian birds. The James L. Baillie Student Research Award is funded by Long Point Bird Observatory from proceeds of the Baillie Birdathon, and is administered by the Society of Canadian Ornithologists.

A single application may be made for both awards, but only one award can be won by an applicant in a given year. Taverner Awards are only given once for the same project; Baillie Awards only once to the same person - but past winners of either award may apply for the other. Funds are not awarded for stipends.

To apply, submit a resumé, two letters of reference and a proposal (maximum 3 pages) which should include the purpose of the study, methods to be used, and a budget outlining total costs and other sources of funding received or applied for.

Applications should reach the following address before February 1, 1992: Society of Canadian Ornithologists Research Awards.

c/o Dr. Jon C. Barlow  
Department of Ornithology  
Royal Ontario Museum  
100 Queen's Park Crescent  
Toronto, Ontario M5S 2C6.

Awards will be announced by April 1, 1992.

## JOHN RICHARDSON: THE FOREMOST SURGEON-NATURALIST



Three recent books on bird names (Choate 1973, Terres 1980, Leahy 1982) give appropriate space to John Franklin, who led the two Arctic expeditions on which John Richardson was surgeon and naturalist. All three fail to mention John Richardson, who spent nearly eight years in what is now Canada and made major contributions to its natural history. Why does Richardson's name no longer merit mention?

Richardson's bird specimens from the first Franklin expedition in 1819-22 were described by Joseph Sabine, who thereby received credit for three new taxa (Sabine 1823). After the second Franklin expedition (1825-27), Richardson wrote a fine 32-page introduction to and almost every useful sentence in the species accounts of *Fauna Boreali-Americana*, Volume 2, The Birds, but he allowed the name of William Swainson, his artist, to be placed in front of his as senior author (Swainson and Richardson 1832). A full account of this miscarriage of justice has been published (Houston 1988).

The Royal Navy, when it explored and claimed new territory for the empire, made certain that a naturalist was along who had the botanical training to assess the arability of the land. Next of importance was a knowledge of geology, as precious minerals or coal might be present. The naturalist also collected and identified mammals, especially those of value for food or furs.

Since professional naturalists were scarce, except for those who taught botany and zoology at

medical colleges, the usual recruit was a medical doctor who had impressed his teachers with his knowledge of botany and zoology. Such a man could double as surgeon for the expedition. Doctors needed such knowledge because of the importance of herbal remedies. For example dropsy could not be treated unless doctors were able to recognize and make an infusion from the leaves of the foxglove, *Digitalis purpurea*. Zoology training, particularly comparative anatomy, was important for prospective surgeons. With few exceptions, only doctors had access to zoology and botany courses. Other countries, especially France, Germany and the United States, emulated Britain in appointing a surgeon-naturalist to most of their exploring parties.

The "most distinguished" of all the British surgeon-naturalists, according to Lloyd and Coulter's *Medicine and the Navy, 1200-1900*, was "undoubtedly John Richardson." Richardson has been the subject to two full-length biographies (McIlraith 1868 and Johnson 1976) but his importance as a naturalist was overlooked for the greater part of a century.

My own interest in Richardson was kindled by Farley Mowat. After his discharge from the army, Farley came to my home town of Yorkton, Saskatchewan, in the summer of 1946. His aim was



"Richardson's" Merlin

Photo E.T. Jones, courtesy Provincial Museum of Alberta

to prepare a definitive scientific study of the birds of Saskatchewan, with his expenses paid by the Royal Ontario Museum. Farley, a character even then, told me about the natural history observations along the Saskatchewan River in the 1820s, and the resulting five large volumes of *Fauna Boreali-Americana* and *Flora Boreali-Americana*. Although these books described many new species collected in Saskatchewan in the 1820s, they were unknown to ornithologists in Saskatchewan. Hedley H. Mitchell's in the *Birds of Saskatchewan* (1924) said that "the first knowledge we have of the ornithology of Saskatchewan was furnished by Captain Blakiston..." with the Palliser expedition of 1858-59. It was Mowat's plan to correct this oversight by assessing the historical importance of Richardson's observations and by comparing the changes in the bird life that had taken place in the years since.

Farley was diverted from science when his gifted pen made him one of Canada's most successful authors. But Richardson's name stuck in my mind. Nine years later, when I saw *Fauna Boreali-Americana*, *The Birds*, advertised in a second-hand dealer's catalogue, I purchased it — though the price was equivalent to two weeks of my salary as an intern. Following numerous visits to Carlton and Cumberland House I published my book in time for the 1959 AOU meeting in Regina (Houston 1959). A later series of unlikely chance events led me to the original, unpublished diaries of the three officers of the first Franklin expedition, Robert Hood (published in 1974), John Richardson (1984) and George Back (slated for 1992 or 1993). A highlight in our research was our 1979 visit to Bathurst Inlet Lodge, accompanied by H. Albert Hochbaum, the first director of the Delta Waterfowl Research Station in Manitoba. We were in Bathurst Inlet for the same ten days of August that Franklin and Richardson were there in birchbark canoes in 1821. The calendars for the two years were identical and even the weather was the same. Al made the sketches used in the subsequent book.

John Richardson was born at Dumfries, Scotland on 5 November 1787, the first of twelve children of brewer Gabriel Richardson and his wife,

née Anne Mundell. A precocious boy, John learned to read at four years of age and was apprenticed to his surgeon uncle at the age of thirteen. For six winters during his apprenticeship he studied at Edinburgh, obtaining his LRCS from the Royal College of Surgeons in 1807. He was then appointed assistant surgeon with the Royal Navy, where he served through a good part of the Napoleonic wars.

He was surgeon with the Royal marines in actions against the United States in the War of 1812-14, visiting Halifax, Montreal, St. Jean and Quebec City and occupying an island near the Georgia-Florida boundary. On returning to Edinburgh, he completed a thesis on yellow fever for his advanced MD degree, and studied natural history under Professor Robert Jamieson. He practised in Leith, the port of Edinburgh, for two years until his appointment with Franklin.

On 24 April 1819, Richardson wrote from London to his father: "My duty will be to collect minerals, plants and animals. The country has never been visited by a naturalist, and presents a rich harvest. My knowledge of these subjects is very limited, but I am endeavouring to extend it by the opportunities afforded me here, and if I succeed in making a good collection, I have no doubt of my promotion on my return."

From the first Franklin expedition, Richardson collected three new taxa of ground squirrel, named by Sabine for Franklin, Richardson and Hood. He also collected the new North American subspecies of the Black-billed Magpie, *Pica pica hudsonia*, and two new species, the Wilson's Phalarope (*Phalaropus tricolor*) and Franklin's Gull (*Larus pipixcan*), named by Sabine. At the winter quarters at Fort Enterprise, he collected and described carefully the first-ever specimen of the Yellow-billed Loon, but failed to publish this in his *Fauna Boreali-Americana*. Meanwhile, his assistant and one of the expedition's two artists, Robert Hood, painted the magpie and four full species not yet described to science, the Black-backed Woodpecker (*Picoides arcticus*), Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*), Hoary Redpoll (*Carduelis hornemanni*), and Evening Grosbeak (*Hesperiphona vespertina*).

During the second Franklin expedition in 1825-27, Richardson and his assistant, Thomas Drummond, collected and named six new bird



"Richardson's" Owl

Photo E.T. Jones, courtesy Provincial Museum of Alberta

species, the Trumpeter Swan (*Cygnus buccinator*), White-tailed Ptarmigan (*Lagopus leucurus*), Forster's Tern (*Sterna forsteri*), Clay-colored Sparrow (*Spizella pallida*), and Smith's Longspur (*Calcarius pictus*), together with description of seven forms now recognized as subspecies.

Richardson was much ahead of his time, a "lumper" rather than a "splitter." When he described minor differences from a similar species in Europe, he purposely did not ascribe a new Latin name to the form. An excellent example is what we now know as Swainson's Hawk (*Buteo swainsoni*), which he considered conspecific with *Buteo vulgaris*, in Europe. Some of these were given Richardson's name by later authorities, as exemplified by Richardson's Owl and Richardson's Merlin. Subsequent taxonomists have since relegated these

taxa back to the subspecies level and they have thus forfeited the eponym, "Richardson's". Richardson's Wood Pewee was named by Spencer Fullerton Baird in 1858, but it was not until 1955 that Phillips and Parkes pointed out Baird's error, changing the species name from *richardsonii* to the next available name, *sordidulus*. Delay in publication due to Swainson's delays in

trying to force all species in to his misguided quinarian system lost the priority that would otherwise have been accorded Richardson's naming of the Double-crested Cormorant (*Phalacrocorax auritus*).

Richardson edited zoological appendices for the voyages of Parry, Ross, Back, Beechey, Kellett and Belcher. A noted ichthyologist, he described 43 still-accepted genera and over 200 new species of fish. He was also a key member of the Strickland Committee which composed the authoritative and lasting "Series of Propositions for Rendering the Nomenclature of Zoology Uniform and Permanent," known as the "Rules of the British Association." As Paul Farber has said, this "reform of nomenclature gave zoology, and ornithology in particular, a common language...and removed much unnecessary confusion." These rules of zoological nomenclature and priority are still followed today.

In his medical vocation, Richardson became the chief medical officer of Haslar Hospital, then the largest hospital in the world and the largest brick

building in the British empire. He raised the quality of nursing care in the navy, improved the treatment of mental disease in sailors and introduced general anaesthesia into naval surgery.

Richardson was knighted in 1846, made companion of the Bath in 1850, received the Royal Medal of the Royal Society of London in 1856, and the degree of LL.D. from Trinity College, Dublin, in 1857.

Dr. David Alexander Stewart, before the combined annual meetings of the British and Canadian Medical Associations in Winnipeg in 1930, paid one of the finest tributes to Richardson:

"Here is one who traversed our country in three laborious expeditions, lived nearly eight years in it, and spent a lifetime in working over its natural history. Plants of Western Canada named by and for

Richardson would make a garden of respectable size; and birds and animals named by and for him, a considerable zoo. He had in his life many of the conventional honours, and some special marks of distinction as well. His was, perhaps, a life of industry more than a life of genius, but it was a full, good life, and in many ways a great life. It is not every

day that we meet in one person — surgeon, physician, sailor, soldier, administrator, explorer, naturalist, author and scholar, who has been eminent in some roles and commendable in all."

C. Stuart Houston  
University of Saskatchewan

#### LITERATURE CITED

- CHOATE, E.A. 1973. The dictionary of American bird names. Boston: Gambit.
- FARBER, P.L. 1982. The emergence of ornithology as a scientific discipline, 1760-1850. Dordrecht: D. Reidel.
- HOOKE, W.J. 1840. Flora Boreali-Americana. London: Henry G. Bohn.



Richardson's Ground Squirrel Photo E.T. Jones, courtesy Provincial Museum of Alberta

- HOUSTON, C.S., ed. 1974. To the arctic by canoe, 1819-1821: the journal and paintings of Robert Hood, midshipman with Franklin. Montreal: McGill-Queen's University Press.
- HOUSTON, C.S., ed. 1984. Arctic ordeal: the journal of John Richardson, surgeon-naturalist with Franklin, 1820-1822. Montreal: McGill-Queen's University Press.
- HOUSTON, C.S. 1988. John Richardson: deserving of greater recognition. Canadian Field-Naturalist 102:558-563.
- HOUSTON, C.S., and M.G. STREET. 1959. Birds of the Saskatchewan River, Carlton to Cumberland. Regina: Saskatchewan Natural History Society.
- JOHNSON, R.E. 1976. Sir John Richardson: arctic explorer, natural historian, naval surgeon. London: Taylor and Francis.
- KIRBY, W. 1837. Fauna Boreali-Americana. Volume 4, the insects. Norwich: Josiah Fletcher.
- LEAHY, C. 1982. The birdwatcher's companion, an encyclopedic handbook of North American wildlife. New York: Hill and Wang.
- LLOYD, C., and J.L.S. COULTER. 1963. Medicine and the navy. Volume IV, 1815-1900. Edinburgh: E. & S. Livingstone.
- McILRAITH, J. 1868. The life of Sir John Richardson. London: Longmans, Green.
- MITCHELL, H.H. 1924. Birds of Saskatchewan. Canadian Field-Naturalist 38:101-120.
- PHILLIPS, A.R., and K.C. PARKES. 1955. Taxonomic comments on the Western Wood Pewee. Condor 57:244-246.
- RICHARDSON, J. 1825. Account of the quadrupeds and birds. *in*: W.E. Parry, Journal of a second voyage for the discovery of a north-west passage. London: John Murray.
- RICHARDSON, J. 1829. Fauna Boreali-Americana. Part First: the Mammals. London: John Murray.
- RICHARDSON, J. 1836. Fauna Boreali-Americana. Part Third: the fish. London: Richard Bentley.
- RICHARDSON, J. 1836. Zoological remarks, appendix 1, *in*: G. Back, Narrative of the arctic land expedition to the mouth of the Great Fish River, and along the shores of the arctic ocean, in the years, 1833, 1834, 1835. London: John Murray.
- RICHARDSON, J. 1839. Mammalia, *in*: F.W. Beechey, the zoology of Captain Beechey's voyage. London: Henry G. Bohn.
- RICHARDSON, J. 1844. Ichthyology, *in*: R.B. Hinds, the zoology of the voyage of H.M. S. Sulphur, under the command of Sir Edward Belcher, during the years 1836-42. London: Smith Elder.
- RICHARDSON, J. 1844-1875. The zoology of the voyage of H.M.S. Erebus & Terror, under the command of Sir James Clark Ross during the years 1839 to 1843. London: E.W. Janson.
- RICHARDSON, J. 1848. Fishes, *in*: A. Adams, the zoology of the voyage of H.M.S. Samarang, under the command of Captain Sir Edward Belcher, during the years 1843-1846. London: Reeve, Benham, and Reeve.
- RICHARDSON, J. 1854. Vertebrates, including fossil mammals, *in*: E. Forbes, the zoology of the voyage of H.M.S. Herald, under the command of Captain Henry Kellett during the years 1845-51. London: Lovell Reeve.
- SABINE, J. 1823. Zoological appendix, V, Birds, Pp. 669-703 *in*: J. Franklin, Narrative of a journey to the shores of the polar sea in the years 1819, 20, 21 and 22. London: John Murray.
- STEWART, D.A. 1931. Sir John Richardson: surgeon, physician, sailor, explorer, naturalist, scholar. British Medical Journal 1:110-112.
- STRICKLAND, H.E. 1845. *in*: Report of the 14th meeting of the British Association for the Advancement of Science.
- SWAINSON, W., and J. RICHARDSON. 1832. Fauna boreali-americana. Volume 2, the birds. London: John Murray.
- TERRES, J. K. 1980. The Audubon Society encyclopedia of North American birds. New York: Alfred A. Knopf.

## NEWS SHORTS

The Animal Behavior Society will hold its 29th Annual meeting at Queen's University, Kingston, Canada from 13-18 June 1992. Address inquiries to L. Ratcliffe or K. Wynne-Edwards, Dept. of Biology, Queen's University, Kingston, Ontario K7L 3N6.

### POLISH ORNITHOLOGISTS ASK FOR SUPPORT.

Many of you have received a flyer from the North-Podlasie Society for Bird Protection, in Poland. For those who have not, here is a summary of their message.

The Society is starting a new English journal, "For Bird Protection," an East European inter-regional journal for ornithology and bird protection, and will soon be producing "Ornithologists of Europe 1991," a listing of about 5000 names and addresses also giving research interests. The directory, in particular, may be of interest to Canadian ornithologists. To receive the inaugural 100-page journal issue or the directory, send your name and address to: Zenon Lewartowski, The Editor, "For Bird Protection", Park Dyrekcyjny 4, 17-230 BLOLOWIEZA, Polska-Poland. After mailing the item(s) requested, they will bill you (about U.S. \$7.50 for the journal and \$15.00 for the directory).

To raise funds for these publications and other ventures, the Society is also selling "The Birds of Poland" and six Polish stamps featuring owls. "The Birds of Poland," by L. Tomialojc (464 pp., 64 maps) has species descriptions and population estimates, and an extensive English summary. The stamps feature *Athene noctua*, *Strix aluco* (red and grey), *Asio flammeus*, *Asio otus*, and *Tyto alba*. To order, send your name, address and payment (U.S. \$20.00 for the book or \$5.00 for the stamps) to the address given above.

## IN PRESS

### Current and In Press Articles in Canadian Ornithology

#### DELTA WATERFOWL & WETLANDS RESEARCH STATION

**BLUHM, C.K.** Environmental and Endocrine Control of Waterfowl Reproduction. In "The Ecology and Management of Breeding Waterfowl" (B.D.J. Batt, ed.). University of Minnesota Press, Minneapolis, Minnesota, *in press*.

**BLUHM, C.K., H. SCHWABL, I. SCHWABL, A. PERERA, B.K. FOLLETT, A.R. GOLDSMITH, and E. GWIMMER.** 1991. Variation in hypothalamic gonadotrophin - releasing hormone content, plasma and pituitary LH, and in-vitro testosterone release in a long-distance migratory bird, the garden warbler (*Sylvia borin*), under constant photoperiods. *Journal of Endocrinology* 128, 339-345.

#### GUELPH UNIVERSITY

**BARNES, G.G., and T.D. NUDDS.** 1991. Salt tolerance in American Black Ducks and Mallards and their F1 hybrids. *Auk* 108:89-98.

**CLARK, R.G., and T.D. NUDDS.** 1991. Habitat patch size and duck nesting success: the crucial experiments have not been performed. *Wild. Soc. Bull.* 19 *in press*.

**MIDDLETON, A.L.A.** 1991. Failure of Brown-headed Cowbird parasitism in nests of the American Goldfinch. *J. Field Ornithol.* 62:200-203.

**NUDDS, T.D., and R.W. COLE.** 1991. Changes in population sizes and breeding success of boreal forest ducks. *J. Wildlife Management* 55:569-573.

**VICKERY, W.L., and T.D. NUDDS.**

1991. Testing for density - dependent effects in sequential censuses. *Oecologia* 85:419-423.

#### MCGILL UNIVERSITY, MACDONALD COLLEGE

**ANDERSON, M.G., and R.D. TITMAN.** 1991. Spacing in Breeding Waterfowl; Ecology and Behavior; Chapter 8, B.D.J. Batt in The Ecology and Management of Breeding Waterfowl. University of Minnesota Press, Minneapolis, Minnesota, *in press*.

**CARRIÉ, S.** 1991. Habitat selection by sympatric black ducks and mallards in Abitibi, Quebec. M.Sc. Thesis, 91 pp.

**GABOR, T.S.** 1991. Nutrient addition experiments in the Interlake Region of Manitoba: Effect of single pulse additions in spring. M.Sc. Thesis, 86 pp.

**IGNATIUK, J.B.** 1991. Breeding biology and nest selection of American crows in Saskatchewan parkland habitat. M.Sc. Thesis, McGill University, 78 pp.

**IGNATIUK, J.B., and R.G. CLARK.** 1991. Breeding biology of American crows in Saskatchewan parkland habitat. *Can. J. Zool.* 69:168-175.

#### SASKATCHEWAN MUSEUM OF NATURAL HISTORY

**CLARK, R.G., P.C. JAMES, and G. MORAIRY.** 1991. Sexing American Crows by discriminant function analysis. *J. Field. Ornithol.* 62:132-138.

**FOX, G.A., and P.C. JAMES.** 1991. Impact of grasshopper sprays on Burrowing Owls in Saskatchewan. Pp.229-230 in

Proceedings of the second endangered species and prairie conservation workshop (Holroyd *et al.* eds.) Natural History Occasional Paper No. 15, Provincial Museum of Alberta, Edmonton.

**JAMES, P.C.** A comment on incubating male Falcons. Blue Jay, *in press*.

**JAMES, P.C., and K.N. RONEY.** 1991. New Double-crested Cormorant colonies in Saskatchewan. Blue Jay 49:27.

**JAMES, P.C., G.A. FOX, T.J. ETHIER, and M. TODD.** 1991. New aspects of Burrowing Owl biology. Pp.226-227 in Proceedings of the second endangered species and prairie conservation workshop (Holroyd *et al.* eds.) Natural History Occasional Paper No. 15, Provincial Museum of Alberta, Edmonton.

**JAMES, P.C., R. KREBA, and A.R. SMITH.** 1991. Commentary: Bird records in Saskatchewan and the Blue Jay. Blue Jay 49:99-100.

**SODHI, N.S., P.C. JAMES, I.G. WARKENTIN, and L.W. OLIPHANT.** Effect of radio-tagging on breeding Merlins. *Journal of Wildlife Management, in press*.

**WARKENTIN, I.G., P.C. JAMES, and L.W. OLIPHANT.** 1991. Influence of site fidelity on mate switching in Merlins. *Auk* 108:294-302.

#### UNIVERSITY OF REGINA

**ALDRIDGE, H.D.J.N., and R.M. BRIGHAM.** 1991. Factors influencing foraging time in two aerial insectivores; the bird, *Chordeiles minor* and the

bat, *Eptesicus fuscus*. Can. J. Zool. 69:62-69.

**BRIGHAM, R.M.** Apparent drinking by the common poorwill (*Phalaenoptilus nuttallii*). Northwest. Nat. 72:, *in press*.

**BRIGHAM, R.M.** Daily torpor in a free-ranging goatsucker, the common poorwill (*Phalaenoptilus nuttallii*). Physiol. Zool. 65:, *in press*.

**BRIGHAM, R.M., and M.B. FENTON.** 1991. Convergence in foraging strategies by two morphologically and phylogenetically distinct nocturnal aerial insectivores. J. Zool. (London) 223:475-489.

#### UNIVERSITY OF WESTERN ONTARIO

**AFTON, A.D., and C.D. ANKNEY.** 1991. Nutrient-reserve dynamics of breeding Lesser Scaup: A test of competing hypotheses. Condor 93:89-97.

**ANKNEY, C.D., A.D. AFTON, and R.T. ALISAUSKAS.** 1991. The role of nutrient reserves in limiting waterfowl reproduction. Condor 93: *in press*.

**ANKNEY, C.D., and R.T. ALISAUSKAS.** 1991. Nutrient-reserve dynamics and diet of breeding Gadwalls. Condor 93: *in press*.

**ANKNEY, C.D., and R.T. ALISAUSKAS.** 1991. The use of nutrient-reserves by breeding waterfowl. Proc. Twentieth Int. Ornith. Cong., Auckland, New Zealand: *in press*.

**ALISAUSKAS, R.T., and C.D. ANKNEY.** 1991. Spring habitat use of diets of mid-continent Snow Geese. J. Wildl. Manage. 55: *in press*

**ARNOLD, T.W., R.T. ALISAUSKAS, and C.D. ANKNEY.** 1991. Egg composition of American Coots in relation to habitat

year, laying date, clutch size, and supplemental feeding. Auk 108:532-547.

**AUSTEN, M., and P. HANDFORD.** 1991. Variation in the songs of Gambel's White-crowned Sparrows, Churchill, Manitoba. Condor 93: 147-152.

**GILLILAND, S.G., and C.D. ANKNEY.** 1991. Aging young birds with multivariate measures of body size. Auk 108: *in press*.

**HAMILTON, D.J., and M.J. LECHOWICZ.** 1991. Host effects on the development and fecundity of gypsy moth, *Lymantria dispar*, reared under field conditions. Can. J. Zool. 69: *in press*.

**HANDFORD, P., and S. LOUGHEED.** 1991. Variation in duration of frequency characters in the song of the Rufous-collared Sparrow, *Zonotrichia capensis* with respect to habitat, trill dialects and body size. Condor 93: 644-658.

**HOYSAK, D.J., and P.J. WEATHERHEAD.** 1991. Sampling blood from birds: a technique and an assessment of its effect. Condor 93: 746-752.

**LEAFLOOR, J.O., and C.D. ANKNEY.** 1991. Factors affecting wing molt chronology of female Mallards. Can. J. Zool. 69:924-928.

**LOUGHEED, S., T. ARNOLD, and R. BAILEY.** 1991. Measurement error of external and skeletal variables in birds and its effect on principal components. Auk 108: 432-436.

**MERENDINO, T.** Mallard harvest data: Index of wetland quality for breeding waterfowl. Wildl. Soc. Bull. *in press*.

**MERENDINO, T.** 1991. Influence of drawdown date and relood depth on wetland vegetation establishment. Wildl. Soc. Bull. 19:143-150.

**METZ, K.J., and C.D. ANKNEY.** 1991. Are brightly colored male ducks more vulnerable to hunting? Can. J. Zool. 69:279-282.

**SCOTT, DAVID M.** The time of day of egg-laying by the Brown-headed Cowbird and other icterines. Can. J. Zool., *in press*.

**SHUTLER, D., and R.D. TITMAN.** Post-fire breeding bird communities in coastal New Brunswick. Can. J. Zool., *in press*.

**SHUTLER, D., and P.J. WEATHERHEAD.** Surplus territory contenders in the Red-winged Blackbird: where are the desperados? Behav. Eco. Sociobiol, *in press*.

**SHUTLER, D., and P.J. WEATHERHEAD.** 1991. Basal song rate variation in Red-winged Blackbirds: sound and fury signifying nothing? Behav. Ecol. 2:133-142.

**SHUTLER, D., and P.J. WEATHERHEAD.** 1991. Owner and floater Red-winged Blackbirds: determinants of status. Behav. Ecol. Sociobiol. 28:235-241.

**WEATHERHEAD, P.J., G.F. BENNETT, and D. SHUTLER.** 1991. Sexual selection and parasites in wood warblers. Auk 108:147-152.

**WEATHERHEAD, P.J., D.J. HOYSAK, K.J. METZ, and C.G. ECKERT.** A retrospective analysis of red-band effects on Red-winged Blackbirds. Condor, *in press*.

# Canadian Ornithologists and their Research

## CANADIAN MUSEUM OF NATURE

**HENRI OUELLET** - Evolution and systematics of the genus *Sporophila* and closely related genera. - Taxonomic status and distribution of Bicknell's Thrush.

**RICHARD R. SNELL** - Post-doctoral Fellow - Study of pattern variation and evolution of selected species of gulls. - Study of altitudinal variation in Horned Larks.

**PASCAL VILLARD** - Post-doctoral Fellow - Comparative ecology and behaviour of selected Holarctic woodpeckers.

**W. EARL GODFREY** - Geographic variation in the Swamp Sparrow *Melospiza georgiana*. - Taxonomic affinities of Holarctic gulls.

## DELTA WATERFOWL AND WETLANDS RESEARCH STATION

**JIM FISHER** - M.Sc. (Richard Baydack, University of Manitoba) - Research Interests: Impacts of Zero-tillage agriculture on upland nesting ducks.

**C.K. BLUHM** - Mate choice, pair formation, and breeding success of Mallards.

## GUELPH UNIVERSITY

**E.D. BAILEY** - Development and function of avian non-verbal auditory communication.

**HARRY VOGEL** - (Bailey) - Communication in the Common Loon, *Gavia immer*.

**A.L.A. MIDDLETON** - Research - Population studies of the American Goldfinch, *Carduelis tristis*. - Host

parasite relationships between the Chipping Sparrow, *Spizella passerina*, and Brown-headed Cowbird, *Molothrus ater*.

**GEORGE WALLACE** - (Middleton) - Delayed plumage maturation in the Ruby-crowned Kinglet, *Regulus calendula*.

**GRAEME GISSING** - (Middleton) - Paternity in the polyandrous mating system of the American Goldfinch, *Carduelis tristis*.

**T.D. NUDDS** - Experimental community ecology; microhabitat use in dabbling ducks.

**JOHN BALL** - (Nudds) - Optimal foraging and underwater feeding behaviour of Canvasbacks.

**WENDY BEAUCHAMP** - (Nudds) - An historical analysis of changes in nest success of prairie nesting dabbling ducks.

**KEN MOTT** - (Nudds) - Microhabitat use and adaptive radiation of bill morphology in dabbling ducks.

**MARK PORTER** - (Nudds) - Black Duck - Mallard competition: are food resources in boreal wetlands limiting.

**THEA SILVER** - (Nudds) - Effects of cadmium and calcium interaction on reproduction by American Black Duck.

**CALVIN TOLKAMP** - (Nudds) - Microhabitat use and adaptive radiation of bill morphology in dabbling ducks.

**RICHARD WIACEK** - (Nudds) - An experimental analysis of parental investment by Canada Geese.

**V.G. THOMAS** - Wildlife management and policy; leadshot and waterfowl.

## LAKEHEAD UNIVERSITY

**JOHN RYDER** - Population ecology of Ring-billed Gulls

**JOHN FOSTER** - M.Sc. (Ryder) - 100 yr. history of ornithology in Thunder Bay

**TOM BAXTER** - M.Sc. (Ryder) - Effect of forest birds on Spruce Bud Worm and Shoot Growth in White Pine.

## MCGILL UNIVERSITY, MacDONALD COLLEGE

**DAVID M. BIRD** - Research Interests: Biology and conservation of birds of prey, urban wildlife, endangered species.

**AMY CHABOT** - Ph.D. candidate (Bird and Titman) - Habitat selection and conservation of eastern Loggerhead Shrikes.

**LAIRD SHUTT** - Ph.D. candidate (Bird) - The impact of fluoride ingestion on the reproductive performance of the American Kestrel and Japanese Quail.

**MELONI DITTO** - Ph.D. candidate (Bird) - Role of lutenizing hormone and photoperiod in the sexual maturity and reproductive performance of captive kestrels.

**DERIN HENDERSON** - M.Sc. candidate (Bird) - Effect of *Trichinella pseudospiralis* infection on mate choice and competitive fitness of American Kestrels.

**JEE YAN CHU** - M.Sc. candidate (Bird) - Effects of aluminum on fluoride assimilation in American Kestrels.

**MANON BOMBARDIER** - M.Sc. candidate (Bird) - Predatory behaviour of American Kestrels and effects of *Trichinella pseudospiralis* infection.

**KELLY MACLELLAN** - M.Sc. candidate (Bird) - Second generation poisoning by Dicofof in captive American Kestrels.

**CRISTIAN PALMA** - M.Sc. candidate (Bird) - Tarsalography in kestrels and other birds.

**HEATHER CUNNINGHAM** - M.Sc. candidate (Bird) - Calibration of inbreeding coefficients in captive kestrels using DNA fingerprinting.

**RODGER D. TITMAN** - Research Interests: Behavioural ecology of ducks, wetland ecology, conservation of endangered species.

**STACY HEWITSON** - M.Sc. candidate (Titman) - Pair formation and breeding habitat selection by Black Ducks at Antigonish, Nova Scotia.

**JEAN RODRIGUE** - M.Sc. candidate (Titman) - The use of Pekin Ducks as a bioindicator of pollution in contaminated wetlands.

**CAROL TISDALL** - M.Sc. candidate (Titman) - Interspecific territoriality between Mallards and Black Ducks.

#### SASKATCHEWAN MUSEUM OF NATURAL HISTORY

**PAUL C. JAMES** - Long-term studies of Merlins and Burrowing Owls.

#### UNIVERSITY OF REGINA

**R. MARK BRIGHAM** - Physiological and behavioural ecology of goatsuckers. Specifically, convergence in the use of torpor and foraging strategies between these birds and insectivorous bats.

**RYAN D. CSADA** - M.Sc. student - Use of torpor by breeding Common Poorwills in the Cypress Hills of Saskatchewan.

#### UNIVERSITY OF WESTERN ONTARIO

**C. DAVID ANKNEY** - Bioenergetics of waterfowl.

**DIANA HAMILTON** - M.Sc. student (Ankney) - Predator-prey relationship between diving ducks and the zebra mussel in western Lake Erie.

**DREW HOYSACK** - M.Sc. student (Ankney) - The proximate causes of male dominance in both American Black Ducks and Mallards.

**TODD MERENDIO** - Ph.D. (Ankney) - Habitat use by sympatric breeding Mallards and American Black Ducks in Ontario.

**DAVE SHUTLER** - post-doctoral fellow (Ankney) - Resistance of Mallards to the blood-parasite *Leucocytozoan* as a consequence of hybridization of Mallards and Black Ducks.

**PAUL HANFORD** - Geographic variation and micro-evolution. The characterization and interpretation of patterns of behavioural (mainly song), morphological and genetic variation among individuals, among populations or among species. We work primarily on passerine birds, and recent or current studies include: an ecomorphological study of the North American parulid radiation, an analysis of growth and selective mortality in morphological changes in House Sparrow populations, a study of covariation in morphological, allozyme, mtDNA and song characteristics in the South American Sparrow, *Zonotrichia capensis*, and an ecomorphological study of the Neotropical furnariid radiation.

**STEPHEN LOUGHEED** - (recent graduate currently at Brock University) Research - Geographic variation and micro-evolution. Covariation

of song, morphological and allozyme frequency characters in the Rufous-collared Sparrow, *Zonotrichia capensis*. Ph.D. thesis.

**L.A. LOZANO** - Intrasexual competition and delayed plumage maturation in female Tree Swallows, *Tachycineta bicolor*. M.Sc. thesis.

**DAVID M. SCOTT** - Ecology of Brown-headed Cowbirds.

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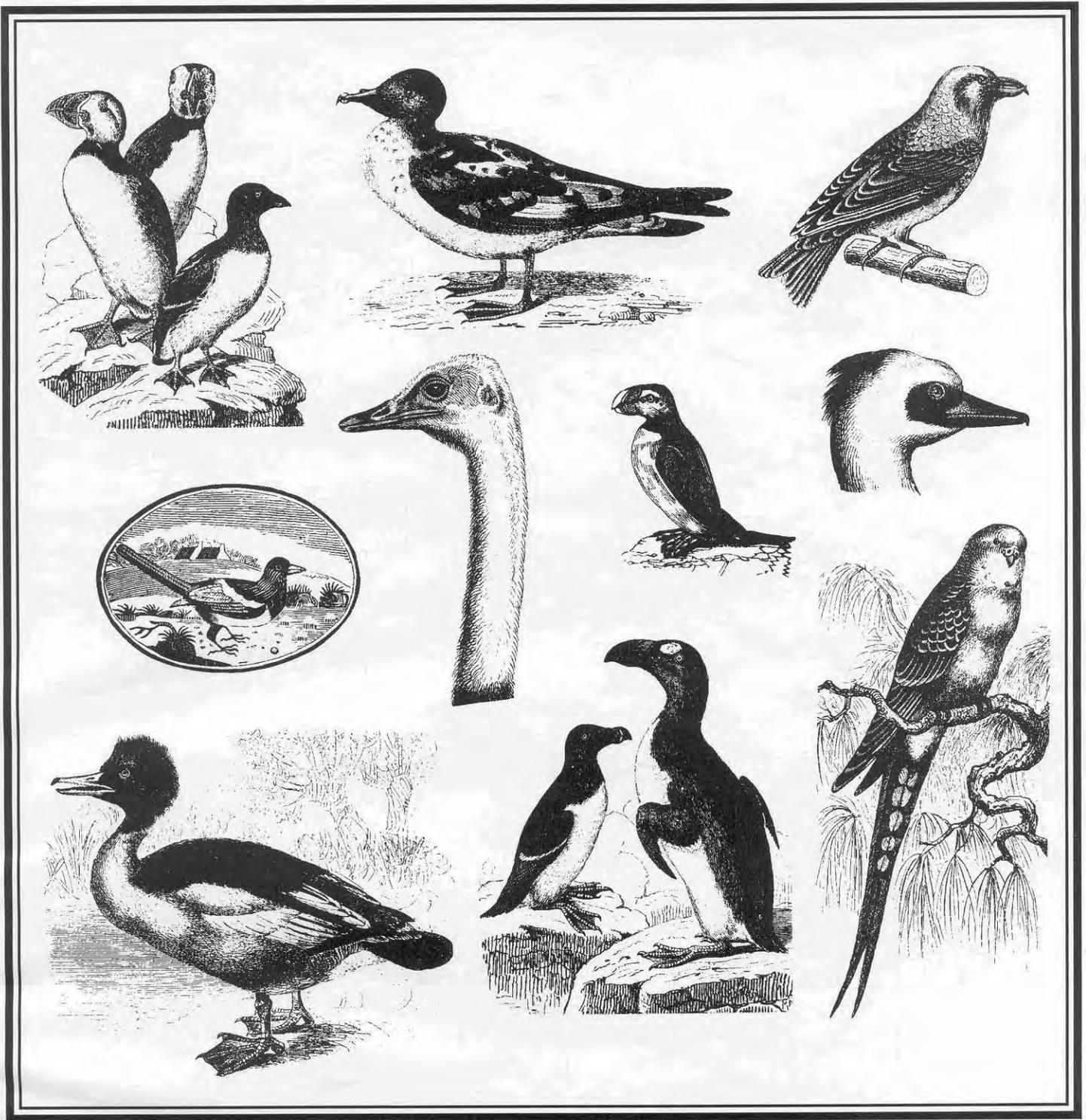
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