FOREIGN PERIODICAL LITERATURE

EDITED BY HERBERT W. KALE II

A NEW PERIODICAL

THE CRANES. Vol. 1, No. 1, 1973.—A journal dealing with world cranes—a supplement of "Cranes of the world" by L. H. Walkinshaw, edited and published by the author. This issue comprises 16 pages of data on distribution (maps) and egg records (histograms) for 14 species and 3 subspecies of cranes. No subscription price is indicated. Dr. Walkinshaw's address is 1145 Scenic Drive, Muskegon, Michigan 49445 or (in winter) R.R. 2, Box 204L, Timberlane, Lake Wales, Florida 33853.—H.W.K.

ANATOMY AND EMBRYOLOGY

AKESTER, A. R., D. E. POMEROY, AND M. D. PURTON. 1973. Subcutaneous air pouches in the Marabou Stork (Leptoptilos crumeniferus). J. Zool. 170: 493–499.—Inflation of the ventral pouch, used in dominance displays and courtship, is via a complex route that begins in the left orbit. Inflation of the dorsal pouch at the base of the neck indicates apprehension and is also used in courtship; it is probably accomplished via the lung and cervical air sac.—M.H.C.


HOLYOAK, D. T. 1974. High incidence of plumage abnormalities in London birds. Brit. Birds 67: 122–124.—Comparison of the incidence of melanistic or albinistic individuals in urban, suburban, and rural areas suggests that in the four species compared such abnormalities are higher in cities.—J.J.D.


tirostris is (p. 256) "primarily an adaptation of all ages and both sexes for effectively cutting leaves as food," and "secondarily an adaptation used by some adult males during early summer for gathering of larger whole leaves for stage-making, albeit inefficiently."—L.L.S.

**LEMON, R. E. 1973.** Nervous control of the syrinx in White-throated Sparrows (*Zonotrichia albicollis*). J. Zool. 171: 131-140.—Sectioning of the motor nerves confirms that most sound output comes from the left side of the syrinx, and that singing is controlled dynamically through the interaction of central and peripheral controls.—M.H.C.


**McKENDRY, W. G.** Rook with recurrent bill malformation. Brit. Birds 66: 228-230.—A *Corvus frugilegus* with elongated recurved lower mandible shed the deformity and then regrew it.—J.J.D.

**ORENSTEIN, R. I. 1973.** Colorful plumage in tropical birds. Avicult. Mag. 79: 119-122.—Most families show no tendency for the proportion of brightly colored birds to increase in the tropics. Exceptions include the Corvidae, Parulidae, and Icteridae.—I.L.B.

**BEHAVIOR**

**FRASER, W. 1974.** Feeding association between Little Egret and Reed Cormorant. Ostrich 45: 262.—*Egretta garzetta* associate with *Phalacrocorax africanus* and exploit the small fish the cormorants drive into shallow water.—R.B.P.

**GEROUDET, P. 1974.** Notes marocaines sur la parade nuptiale de l'Outarde houbara *Chlamydotis undulata*. Oiseau 44: 149-152.


**TOMLINSON, D. N. S. 1974.** Studies of the Purple Heron, Part 2: behaviour patterns. Ostrich 45: 209-223.—Describes and compares *Ardea purpurea* breeding displays to displays of other *Ardea* species. Purple Herons are apparently distinctive in having a throat puffing component in the aggressive upright display and in a bill clappering and a sudden neck retraction in the stretch display. Crest positions are associated with varying degrees of fear and aggression.—R.B.P.


**DISEASES AND PARASITES**

**BAKER, J. R. 1974.** Protozoan parasites of the blood of British wild birds and mammals. J. Zool. 172: 169-190.—Records parasites of several different types in 19 bird species, primarily passerines.—M.H.C.
BUETTICER, W., AND A. AESCHLIMANN. 1974. [The ectoparasites of Swiss birds.]
Ornithol. Beob. 71: 297–302. (In German.)


**Distribution and Annotated Lists**

**BRaine, J. W. S.** 1974. Openbilled Storks breeding in South West Africa. Ostrich 45: 255.—Anastomus lamelligerus colony near Tsumeb appears to be first breeding record of the species in Namibia.—R.B.P.


**FIELD, G. D.** 1974. The distribution and behaviour of Apalis warblers in Sierra
Leone. Ostrich 45: 258–260.—Apalis nigriceps and A. flavida are each represented only by one relic population each on a mountain plateau 30 miles from the other. No other A. flavida populations are known within 1000 km. A. sharpii is widespread in lowland forests.—R.B.P.

—First comprehensive list of the birds of the Society Islands, represented by 65 species, of which 11 are introduced and 29 are marine. Their affinities suggest the endemic species originated from oriental and australasian regions. Of the endemic species, Ducula aurorae, Vini peruviana, Acrocephalus caffer longirostris, and Pomarea nigra nigra seem in real danger of extinction. (English summary.)—A.C.


—The avifauna is represented by 38 species of 16 families, mostly marine. Describes breeding and feeding ecology. (English summary.)—A.C.


—Annotated list of 83 species recorded during two short trips to Corsica in 1970.—A.C.

Nicolaou-Guillaumet, P. 1974. Recherches sur l'avi faune “terrestre” des îles du Ponant. Oiseau 44: 93–137.—Annotated lists of bird fauna of five islands off the coast of western France. Ouessant, the largest of these has been a banding station since 1955. Provides distributional maps of breeding species.—A.C.


Ecology and Population

—Information on nesting and feeding habits. Clutch size varies annually but probably not seasonally (n = 43 nests). Breeding success in the anthropogenic environment is associated with nest site. Because it needs bushes for nesting and grasses for foraging, this species is preadapted to extending its range in parklike habitats where it has already shown a marked increase.—R.K.F.
Cuisin, M. 1973. Note sur la répartition du Pic noir (Dryocopus martius (L.)) en France. Oiseau 43: 305–313.—From 1966 to 1972, the Black Woodpecker has been reported nesting in 8 more departments of France, totaling 19. It has been seen in 33 others without evidence of nesting. Its expansion in France is thought to be real and not just an artifact of increased interest by amateur ornithologists.

Dorst, J., and F. Roux. 1973. L'avifaune des forêts de Podocarpus de la province de l'Arussi, Éthiopie. Oiseau 43: 269–304.—Qualitative survey of the avifauna of eastern rim of the Rift Valley around Koffolé, Ethiopia (2550 m high). Habitat surveyed are Podocarpus forests, man-disturbed forests, dry and humid steppes. Frugivorous species account for the highest proportion of species in Podocarpus forests. Termites are preyed upon by a great number of birds, including raptors, especially during termite swarming. Podocarpus forests are richer than the Juniperus and Hagenia forests of higher altitudes but poorer than their southern East Africa counterparts. (English summary.)—A.C.


Fonaroff, L. S. 1974. Urbanization, birds and ecological change in Northwestern Trinidad. Biol. Conserv. 6: 258–262.—A superficial study suggesting that savanna rather than forest habitats provide most of the species that colonize urban habitats.—J.J.D.

Isenmann, P. 1974. Aire de répartition de la Sterne caugek Sterna sandvicensis en Méditerranée et données sur sa biologie en Camargue. Nos Oiseaux 31: 150–162.—The increasing Camargue colony of Sandwich Terns seems to be the largest one in the Mediterranean with 550 breeding pairs in 1971. The breeding sites are associated with those of Black-headed Gulls on small islands in the brackish-saltwater zone. Gives dates of laying, fledging, and departure from the colony. Sardina pilcharchus constitutes the main food resource. Mortality rate was a low 20%. Winter quarters extend along the Atlantic coast of Africa. (English summary.)—A.C.

Jablonski, B. 1972. The phenological interchange of bird communities in agricultural biotopes in the eastern part of the Masovian lowland region. Acta Ornithol. 13: 281–321.—An attempt to relate bird community structure and structural complexity of the habitats. Habitat classification is purely descriptive, while censuses provide quantification of birds. Special emphasis on comparison among field habitats and between field and other habitats.—R.K.F.

Luniak, M. 1972. Distribution of Rook, Corvus frugilegus L., colonies in Śędzice district (Voivodeship of Warszawa). Acta Ornithol. 13: 425–449.—Nest density seems correlated positively with the proportion of meadows and pastures in a given area. Individual colonies are larger in areas of high nest density compared to those of low density. Nests are placed without preference for particular tree species. Human interference is greatest in the largest colonies. (In Polish; with English abstract and summary.)—R.K.F.
MOREL, M.-Y., AND G. MOREL. 1973. Éléments de comparaison du comportement reproducteur colonial de trois espèces de Ploceïdes: *Passer luteus*, *Ploceus cucullatus* et *Quelea quelea*, en zone semi-ardide de l'Ouest-africain. Oiseau 43: 314–329.—Nesting of three colonial ploceid species were studied around Richard-Toll, Senegal. *Ploceus cucullatus* is polygamous, the other two species are monogamous. *Passer luteus* may also breed during dry seasons. *Quelea quelea* has synchronized breeding activities that reduce predation and increase success; its feeding grounds are up to 20 km away from the nest; hence its young are infrequently fed and only by regurgitation. Discusses releasing factors of reproduction. An exceptionally late rainy season in October 1969 seems to have permitted continuous breeding the whole year (1969–70). (English summary.)—A.C.

MRUGASIEWICZ, A. 1972. White Stork, *Ciconia ciconia* (L.) over the district of Milicz in the years 1959–1968. Acta Ornithol. 13: 243–278.—A breeding population study in an area of 994 sq km. The density of nesting pairs has been stable since 1934 in contrast to the steady decline of the populations in western Europe. Compared to other populations, the clutch size is small, yet the number of fledging young is relatively high. This is thought to be due to a peculiar seasonal pattern of food availability. Includes information on banding returns. (In Polish; with English summary.)—R.K.F.

**EVOLUTION AND GENETICS**


CLARK, A. 1974. Hybrid *Dendrocygna viduata* × *Dendrocygna bicolor*. Ostrich 45: 255.—Sight observation.—R.B.P.


FORD, J. 1974. Speciation in Australian birds adapted to arid habitats. Emu 74: 161–168.—An important, though brief treatment updating works of A. Keast and others, with maps depicting 18 situations.—L.L.S.


HAFFER, J. 1974. Pleistozäne Differenzierung der amazonischen Vogelsfauna. Bonn. Zool. Beitr. 25: 87–117.—Differentiation of the Amazonian avifauna is considered to have resulted from repeated climatic changes during the Pleistocene, which alternately increased and reduced the areas of lowland humid forest. This variously caused full speciation, parapatric distribution, and zones of secondary hybridization. Maps the humid forest refugia, considered as speciation centers in tropical South and Middle America. As examples of the different effects of ecological fluctuations on different groups, includes well-illustrated discussions of hybrid zones in the *Ramphastos* toucans, distribution in the jacamars (considered members of the superspecies *Galbula galbula*), and in the trumpeters *Psophia*. (English summary.)—E.E.

KEAST, A. 1974. Avian speciation in Africa and Australia: some comparisons. Emu 74: 261–269.—After brief discussion of the relation between habitat specialization and avian speciation, and a very brief comparison of avian habitats in Africa and Australia, this special “essay review” treats six major speciation patterns on each continent using one example of each, and then compares specia-
tion on these continents. Most speciation in Africa involved wide-ranging isolates, whereas Australian speciation primarily occurred in small refugia. All major habitats have been effective in African speciation. Chiefly woodland habitats expanded and contracted peripherally to affect speciation in Australia, the more arid environments having shifted in the center of the continent, thus not in the main being split or disrupted. Australia is comparable to Africa in available avian habitats, as indicated by the number of species per unit area on these continents. As a factor of its smaller size, Australia has fewer species (33%) belonging to superspecies than does Africa (51%).—L.L.S.

O'DONALD, P., N. S. WEDD, AND J. W. F. DAVIS. 1974. Mating preferences and sexual selection in the Arctic Skua. Heredity 33: 1-16.—Sexual selection occurs among dark, intermediate, and pale-phased males of the Arctic Skua (Parasitic Jaeger, Stercorarius parasiticus) on Fair Isle in the Shetland Islands. Proposes four models of mating preferences that were tested by computer analysis to describe the sexual selection. Despite 14 years of data gathering at this colony, still more data are required to permit a choice between two of the models.—L.L.S.

ROBBINS, C. S. 1974. Probable interbreeding of Common and Roseate Terns. Brit. Birds 67: 168-170.—Three mixed pairs of Sterna hirundo and S. dougallii each fledged one young, the young resembling Common Tern young. Two of the pairs were seen copulating but the possibility exists that this was not a case in interbreeding.—J.J.D.

GENERAL BIOLOGY


DOW, D. D. 1973. Flight moult of the Australian Honeyeater Myzanthra melanopephala (Latham). Australian J. Zool. 21: 519-532.—Molt occurs between late September and mid-March, beginning later in adult females than in adult males. An average period of 153 days is required to complete primary feather molt and 174 days for all flight feathers (n = 368). Primary molt of immatures begins with primary 3, 4, or 5, not with primary 1 as in adult. Period of molt is longer than in other Australian passerines examined. This species shows no cryptic behavior during molt, and some continue to breed.—O.P.Y.

EVERY, B. 1974. Abnormal clutch size for the Blackwinged Stilt. Ostrich 45: 260.—One nest of Himantopus himantopus had 7 eggs.—R.B.P.

HELM, P. J. 1974. [Egg-laying, clutch size, and period of incubation in the Lapwing Vanellus vanellus.] Ornithol. Beob. 71: 283–288.—Departures from the normal 24-h egg-laying interval are rare: a few 2- and 3-day intervals occur during cold spells and during rainy periods. In one case the 2-day intervals seem attributable to the particular female’s old age. Of 558 clutches, 494 contained four eggs; 8, 10, 44, and 2 clutches contained one, two, three, and five eggs respectively. Clutches with one or two eggs seem caused by unfavorable weather, they are virtually never brooded. The incubation period of 22 closely watched nests ranged from 26 to 28 days, and was not correlated with ambient temperature. (In German; with French summary.)—R.K.F.


KEMP, A., AND M. KEMP. 1974. Observations on the Buffalo Weaver. Bokmakierie 26: 55–58.—Bubalornis albirostris builds huge nests of masses of sticks. A nest mass made by one male may contain three or four separate chambers. Males display at the nests but copulate well away from the nest. Notes describe nest building and the development of the young.—R.B.P.


RACZYNSKI, J., AND A. L. RUPRECHT. 1974. The effect of digestion on the osteological composition of owl pellets. Acta Ornithol. 14: 25–38.—The pelvic girdle is most often missing in pellets (up to 80%). Predator-species specific differences in the proportion of missing skeletal elements (51% for the Tawny Owl, Strix aluco; 46% for the Long-eared Owl, Asio otus; and 34% for the Barn Owl, Tyto alba) result in corresponding losses in the number of identified prey individuals (16%, 21%, and 8% respectively). The losses decline with increasing age of both prey and predator. Discusses the findings in an attempt to explain the observed differences. Methodological implications: (1) The Barn Owl is the most suitable species for general studies of the owls’ effect on their prey. (2) Each pellet should be analyzed as a separate unit because rarely are bones of one individual found in two different pellets. (3) It is not possible to use a constant correction factor to arrive at the true number of prey eaten.—R.K.F.

RUGE, K. 1974. [On the biology of the Three-toed Woodpecker, Picoides tridactylus. 4. Swiss data on breeding biology and breeding ecology.] Ornithol. Beob. 71: 303–311.—Occurs only in open coniferous forests and nests only in newly built holes. Twelve clutches consisted of three to four eggs (average = 3.4). Lost clutches are apparently not replaced. Average fledging success is 1.7 young/pair (n = 16 nests). Nest sites range from 984 m (once) to 1920 m above sea level (average = 1650 m). Altitude of the nest site and start of incubation are positively correlated. (In German; English summary.)—R.K.F.


breeding cycle are adaptations for opportunistic breeding and raising young when food is scarce.—J.J.D.


WOINARSKI, J. C. Z. 1974. A comparison of the ground-nesting of two species of pardalote. Emu 74: 219–222.—Results of study of 58 nests of Pardalotus ornatus and P. punctatus show differences in location of nesting burrows, ornatus favoring the subsoil and hence requiring larger banks, and punctatus burrowing into topsoil, hence using banks of all sizes. The nests of punctatus are nearer the top of the bank and the entrance usually is shaded by overhanging plants, whereas ornatus nests are lower down, the entrance being exposed to sunlight. Overheating is critical and nest entrances, particularly of ornatus, tend to face away from the sun.—L.L.S.

MANAGEMENT AND CONSERVATION

RECHER, H. F., AND S. S. CLARK. 1974. A biological survey of Lord Howe Island with recommendations for the conservation of the island’s wildlife. Biol. Conserv. 6: 263–273.—An up-to-date account of the island’s habitats and vertebrates. Lord Howe already has lost nine endemic birds including four endemic species and now at least one more, the Woodhen (Tricholimnas sylvestris) is threatened. As means of saving the remnants of this unique fauna, the authors recommend preserving the native vegetation, controlling the exotics, and careful planning before development of a proposed tourist industry.—J.J.D.

SNOW, C. 1974. Habitat management series for unique or endangered species. Rept. No. 8: Prairie Falcon, Falco mexicanus. U.S. Dept. Interior Bur. Land Mgmt. Tech. Note. 18 pp.—A literature review and summary of current knowledge on the Prairie Falcon. Reviews description, distribution, status and population trend, life history, habitat requirements, protective measures instituted, and management techniques for the species. Also lists ongoing research projects, authorities on the falcon, governmental and private organizations currently involved with this bird, and a selected bibliography.—W.D.C.

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techniques for the species. Also lists ongoing research projects, authorities on the Gyrfalcon, governmental and private organizations involved with this bird, and a selected bibliography.—W.D.C.

MIGRATION AND ORIENTATION


BROEKHUYSEN, G. J. 1974. Third report on migration in southern Africa. Ostrich 45: 235–250.—Summarizes number of sight records and nestings of rollers, bee-eaters, swallows, warblers, flycatchers, wagtails, and shrikes from 1953 through 1966. Summaries are in the form of tables of numbers of field-record cards by month and province.—R.B.P.

BUSSE, P. 1972. Autumn migration of the Redstart, Phoenicurus phoenicurus (L.) along the Polish coast of the Baltic. Acta Ornithol. 13: 193–241.—Populations from four different places of origin can be distinguished by biometrical data and partly by differences in direction of migration. Dropping night temperatures over the breeding areas induce birds to start migrating, while rising temperatures delay the departure. Discusses various meteorological influences. Males migrate earlier than females, and adults leave before the juveniles.—R.K.F.

CLARK, A. 1974. Plumage changes in the male Maccoa Duck. Ostrich 45: 251–253.—Oxyura maccoa field counts, by sex and month, suggest different patterns of migration in male and female.—R.B.P.

HOOG, P. 1974. Trans-Saharan migration through Sarir, 1969–70. Ibis 116: 466–476.—Based on observations made at the British Petroleum/Bunker Hunt Oil Production site prior to nationalization.—R.W.S.

MISCELLANEOUS


JOSEFÍK, M. 1972. Laboratory tests of electrorepellents for protecting orchards, airports and other objects against birds. Acta Ornithol. 13: 323–341.—Proposes the use of multipoint electrodes to shock the birds; props (red glass balls) should
warn the birds that the area has been outfitted with the device. Widespread use of the device should improve its efficiency by frequent reinforcement. Aviary experiments (mainly with starlings) using harmless high voltage pulses, showed excellent learning results. (In Polish; detailed English summary.)—R.K.F.


PESTICIDES AND POLLUTION


BLUS, L. J., A. A. BELISLE, AND R. M. PROUTY. 1974. Relations of the Brown Pelican to certain environmental pollutants. Pesticide Monit. J. 7: 181–194.—DDE is primarily responsible for eggshell thinning in Pelecanus occidentalis although dieldrin and mercury residues may also be decreasing reproductive success. Discusses population decline in South Carolina, where eggshells have thinned 17%.—J.J.M.


DIETER, M. P. 1974. Plasma enzyme activities in Coturnix Quail fed graded doses of DDE, polychlorinated biphenyl, malathion and mercuric chloride. Toxicol. Appl. Pharmacol. 27: 86-98.—Changes in activity of five enzymes was proportional to the log dose of the pollutant. Suggests multiple plasma enzyme tests as an assay for environmental contamination. DDE showed biological magnification but PCB and mercury did not.—J.J.M.


HEATH, R. G., AND S. A. HILL. 1974. Nationwide organochlorine and mercury residues in wings of adult Mallards and Black Ducks during the 1969-70 hunting season. Pesticide Monit. J. 7: 153-164.—Residues in order of prevalence are DDE, PCB, mercury, DDT, dieldrin, DDD, and heptachlor epoxide. Residues have not decreased since a similar national survey in 1966. DDE residues have increased in 18 of 21 Atlantic and Mississippi Flyway states.—J.J.M.

HEINZ, G. 1974. Effects of low dietary levels of methyl mercury on Mallard reproduction. Bull. Environ. Contam. Toxicol. 11: 386-392.—At 3 ppm, but not 0.5 ppm, reproductive success was impaired, primarily through the death of young ducklings. Eggshell thickness was not affected.—J.J.M.

IVIE, G. W., H. W. DOROUGH, AND H. E. BRYANT. 1974. Fate of mirex-14C in Japanese Quail. Bull. Environ. Contam. Toxicol. 11: 129-135.—Rapid absorption found in both sexes with slow elimination (over half the dose remaining after 84 days) from males. Females eliminated 85% of dose in eggs. No breakdown of mirex was found in either sex.—J.J.M.

JEFFERIES, D. J. 1973. The effects of organochlorine insecticides and their metabolites on breeding birds. J. Reprod. Fert., Suppl. 19: 337-352.—A review of sublethal effects on behavior, several egg parameters, posthatching mortality and growth, hormone imbalances, and calcium metabolism. Concludes that DDT or DDE action on the thyroid could explain most of the observed effects.—J.J.M.

JEFFERIES, D. J., B. STAINSBY, AND M. C. FRENCH. 1973. The ecology of small mammals in arable fields drilled with winter wheat and the increase in their dieldrin and mercury residues. J. Zool. 171: 513-539.—Although Britain bans the use of dieldrin in spring to protect raptors, its continued use on winter wheat seed is equally dangerous because it becomes concentrated in prey mammals.—M.H.C.


KREITZER, J. F., AND G. H. HEINZ. 1974. The effect of sublethal dosages of five pesticides and a polychlorinated biphenyl on the avoidance response of Coturnix Quail chicks. Environ. Pollution 6: 21-29.—Avoidance response to a moving silhouette was significantly depressed by chlordane, dieldrin, endrin, Ceresan M (3.2% metallic mercury), and Arochlor 1254. DDE had no detectable effect.—J.J.M.


LUDKE, J. L. 1974. Interaction of dieldrin and DDE residues in Japanese Quail (Coturnix coturnix japonica). Bull. Environ. Contam. Toxicol. 11: 297-302.—DDE residues were higher in birds ingesting both pesticides than in those receiving DDE alone.—J.J.M.


PARSLOW, J. L. F. 1973. Mercury in waders from the Wash. Environ. Pollution 5: 295-304.—Residues in three Arctic breeding estuarine species (Knot, Durlin, and Redshank) increased consistently from fall arrival into the winter on The Wash—a lightly polluted English estuary. Freshwater Snipe residues remained low throughout the winter.—J.J.M.

PARSLOW, J. L. F., AND D. J. JEFFERIES. 1973. Relationship between organochlorine residues in livers and whole bodies of Guillemots. Environ. Pollution 5: 87-101.—Further data reverses two earlier findings. It is now believed that total body burden (of DDE, PCB, and usually dieldrin) can be predicted from liver residues in Uria aalge and that "PCB (together with natural stress factors) was implicated in the mortality" of this species in the large Irish Sea wreck of 1969.—J.J.M.

PEPPERELL, J. G. 1972. Effects of p,p'-DDT on the domestic hen. Australian J. Zool. 20: 301-313.—Significant decreases in fertility of eggs, hatchability of fertile eggs, and hatchability of eggs containing live embryos 3 days prior to hatching occurred in the group of hens receiving the highest dose (150 mg DDT every
second day). No changes occurred in mortality of adults, rate of egg production, survival of young, or thickness of eggshells.—O.P.Y.


**Stoewsand, G. S., C. A. Bache, and D. J. Lisk.** 1974. Dietary selenium protection of methylmercury intoxication of Japanese Quail. Bull. Environ. Contam. Toxicol. 11: 152–156.—Mercury toxicosis was eliminated while tissue residues were increased by 5 ppm selenium.—J.J.M.

**Physiology**


**O'Donnell, I. J.** 1973. A search for a simple keratin—fractionation and peptide mapping of proteins from feather keratins. Australian J. Biol. Sci. 26: 401–413.—Protein mixture from feathers is simpler than is wool keratin and prekeratins of epidermis. Emu and Silver Gull calamus proteins are simpler in acrylamide-gel pattern than those from fowl or goose feather calamus. Rachis and calamus proteins, which are probably identical, form one class of proteins while the Barb and medullary proteins (not identical) form another class.—O.P.Y.

**Taxonomy and Paleontology**


**Brooke, R.** 1974. Recognizing the races of the Whimbrel. Bokmakierie 26: 37.—Photograph of flock of flying Whimbrel at Durban with sight identifications of three wintering subspecies.—R.B.P.

except those of northwestern Mexico and those of the Mexican Plateau with stripeless females (gubernator). *A. p. matudae* Brodkorb, 1940, and *A. p. brevirostris* Monroe, 1963 are synonymized with *A. p. richmondi* Nelson, 1897. *A. p. costaricensis* van Rossem, 1930 is synonymized with *A. p. grinnelli* Howell, 1917. The population of Peten, Guatemala is newly described as *A. p. arthuralleni*. The revision is notable for the excellence of the material used, being based almost entirely on good samples of unworn females.—K.C.P.

**ELZANOWSKI, A. 1974.** Preliminary note on the palaeognathous bird from the Upper Cretaceous of Mongolia. Results of the Polish-Mongolian palaeontological expeditions—Part 5. Palaeontol. Polonica No. 30: 103–109.—Describes *Gobipteryx minuta* n. gen., n. sp. from a partial skull and lower mandible.—H.H.

**FORD, J. 1974.** Concepts of subspecies and hybrid zones, and their application in Australian ornithology. *Emu* 74: 113–123.—Broad-ranging discussion, stressing study and description of geographic variation, rather than formal naming of every conceivable variant population.—L.L.S.

**FORD, J., AND S. A. PARKER. 1974.** Distribution and taxonomy of some birds from south-western Queensland. *Emu* 74: 177–194.—Details concerning 29 species or genera, based on new observations by the authors, two of the leading younger Australian ornithologists. Presents taxonomic information for many of the species, especially *Amytornis striatus*.—L.L.S.


**JOHNSTONE, G. W. 1974.** Field characters and behaviour at sea of giant petrels in relation to their oceanic distribution. *Emu* 74: 209–218.—Discusses the sibling species *Macronectes giganteus* and *M. halli*.—L.L.S.


**Renzoni, A., AND P. A. Watters. 1972.** Comparative observations on the pineal body of some Australian parrots. *Australian J. Zool.* 20: 1–15.—Examines 19 species from 5 families and 13 genera, recognizes three morphological types, and gives three interpretations of possible evolutionary relationships.—O.P.Y.

VAURIÉ, C. 1974. *Pseudocolaptes* monotypique et ses variations de plumage. *Oiseau* 44: 145-148.—Describes two immature plumages of *Pseudocolaptes boissonneautii* (the two “species” recognized by Zimmer in 1936) and concludes that the genus is monotypic.—A.C.


**OBITUARIES**

HANS CHRISTIAN JOHANSEN, elected a Corresponding Fellow of the A.O.U. in 1955, died on December 18, 1973, in Lingby, Denmark. He was born in Riga, Latvia, on December 2, 1897, the third of five children of Danish parents. His interest in natural science was evident in childhood.

Hans lived in difficult times and places—an understatement. Before he was ten years old, he had watched from a window workers shot at by Cossacks and wagonloads of dead passing by. He was uprooted, dispossessed, and changed location and occupation frequently. But he was self-sufficient to a remarkable degree and pursued his major interest, birds, in the face of adversity.

Hans worked at many tasks: as a student (of zoology, medicine, and zoogeography), teacher (notably at the university at Tomsk), as a herder of Mongolian yaks, at tending horses, as a carpenter, bookkeeper, field collector, all-around expedition man, co-founder of a museum at Bisk on the upper Ob River, overseer of fisheries investigations (his assistants did the work while Hans pursued birds), in charge of the fur company on the Commander Islands, museum worker in various capacities, and author of technical papers.

There is not room here even to outline his life, but some highlights may be mentioned. In 1928 he went to the Commander Islands and stayed three years. While there, he got the tomb of Vitus Bering (another Dane) renovated and a new cross erected. He returned to a teaching post at Tomsk in August, 1931. In 1937 he was ordered to leave the U.S.S.R within ten days, being a foreigner. He left his bird collection in Leningrad, but it finally reached Copenhagen in 1948. He had moved to a Copenhagen suburb the previous year and was in charge of birdbanding at the University Zoological Museum. He also continued working on his interrupted serial paper on west Siberian birds. In 1949 he injured his back while on a trip to Spitzbergen. Later he was in an automobile accident. In 1956 he was a popular figure among old friends from Tomsk at the first U.S.S.R. ornithological congress. Part of 1960 was spent in New York City, part in Canada, and also at about that time he was getting settled on property he had purchased on the island of Laesø in the Kattegat, which he later gave to the university in Copenhagen. He quit zoological work at the museum in the 1960's to study waders in the Southern Hemisphere. In Chile, at age 66, he fell from a ledge and was badly hurt, yet he managed to get afield in Tierra del Fuego. He was awarded a Danish Royal medal in 1961. A notably happy event in his career was attending the U.S.S.R. ornithological congress in Alma-Ata, Kazakh S.S.R., in early September 1965. By then he had become a living legend and,