- STEAD, E. F. 1932. The life histories of New Zealand birds. London, Search Publ. Co. Ltd.
- THORPE, W. H. 1963. Learning and instinct in animals. Cambridge, Massachusetts, Harvard Univ. Press.
- Trivers, R. L. 1971. The evolution of reciprocal altruism. Quart. Rev. Biol. 46: 35–57.
- VEHRENCAMP, S. L. 1979. The roles of individual, kin, and group selection in the evolution of sociality. Pp. 351–394 *in* Handbook of behavioral neurobiology 3: social behavior and communi-

- cation (P. Marler and J. G. Vandenbergh, Eds.). New York, Plenum.
- Waltz, E. C. In press. Resource characteristics and the evolution of information-centers. Amer. Natur.
- WARD, P. 1965. Feeding ecology of the Black-faced Dioch *Quelea quelea* in Nigeria. Ibis 107: 173–214.
- ——, & A. Zahavi. 1973. The importance of certain assemblages of birds as "information-centers" for food-finding. Ibis 115: 517–534.
- WITTENBERGER, J. F. 1981. Animal social behavior. Boston, Duxbury Press.

The Frank M. Chapman Memorial Fund of the American Museum of Natural History is administered by a committee that meets twice annually to review applications for grants and fellowships. While there is no restriction on who may apply, the Committee particularly welcomes applications from graduate students; management projects and projects by senior investigators are seldom funded. Applications should be submitted not later than 15 February and 15 September. Application forms may be obtained from the Frank M. Chapman Memorial Fund Committee, The American Museum of Natural History, Central Park West at 79th St., New York, New York 10024.

Chapman grants during 1981, totalling \$44,173 with a mean of \$485, were awarded to: Riley J. Atkins, Roost microclimate, huddling behavior, and hypothermia on the nocturnal energy budget of the Common Bushtit; Graeme Charles Backhurst, The Ngulia bird ringing project; Kenneth N. Baker, Distribution of bird species abundances and morphologies along elevational gradients in a southern Appalachian mountain range; Gregory Ball, Sexual partitioning of parental behavior in Barn Swallows; G. Thomas Bancroft, Energetics of postnatal growth in Boat-tailed Grackles relative to sex; Wylie C. Barrow, Jr., Comparative ecology of two sympatric *Empidonax* flycatchers coexisting in an eastern deciduous forest; Steven R. Beissinger, Mate desertion in the Everglade Kite (Rostrhamus sociabilis); L. David Beletsky, Variation and information content in the vocalizations of female Red-winged Blackbirds (Agelaius phoeniceus); Robert E. Bleiweiss, Taxonomy and systematics of Andean hummingbirds; David Edward Blockstein, Reproductive behavior and parental investment in the Mourning Dove (Zenaida macroura); Jerram L. Brown, Cooperation and competition in the Mexican Jay; Robert N. Buchsbaum, Effects of phenolic acids and nutrient inputs on the feeding ecology of geese in salt marshes; Terence A. Burke, Evolutionary genetics of the House Sparrow, Passer domesticus, in northern India; Gregory S. Butcher, Sexual dimorphism in the color and behavior of orioles (genus Icterus); William Carmen, Juvenile dispersal, flocking behavior, and habitat use in the California Scrub Jay (Aphelocoma coerulescens californica); John H. Carothers, Foraging and aggression in nectarivorous Maui Drepanidids; Michael D. Carter, Social organization and parasitic habits of breeding Bronzed Cowbirds (Molothrus aeneus); Martha Leah Chaiken, Starling colony on grounds of Stroud's water research center in Avondale, Pa.; Robert L. Curry, Evolution and ecology of communal breeding in Galapagos Mockingbirds; Veronique Delesalle, Mate choice and reproductive biology of the House Finch, Carpodacus mexicanus, with emphasis on the role of male plumage variability; Tod Robert DeLong, Nocturnal behavior of nesting Long-eared Owls (Asio otus); David F. DeSante, Stability and dynamics of a subalpine breeding bird community; Jennifer Shopland Dillon, Effect of mixed-species flocks on the foraging success and interspecific interactions of two species of territorial warblers (Parulidae); Stefan Dontchev, Geographical variation and subspecific status of Passeriformes from Bulgaria; Peter J. Dunne, Owl migration through Cape May Point, New Jersey; Bonita Eliason, Test of mating system theory in the Blackpoll Warbler, Dendroica striata; Richard Donald Elliot, Nesting dispersion and egg predation in the Lapwing Vanellus vanellus; David N. Ewert, Song variation of the Lincoln's Sparrow; Jon Fjeldså, Adaptations for ecological isolation in grebes; Robert C. Fleischer, Host specificity and egg mimicry in the Brown-headed Cowbird; Leonard A. Freed, Evolution of clutch size in a tropical passerine; Douglas C. Gayou, Social behavior of the Green Jay in Texas; Steven Michael Goodman, Systematics and distribution of Prinia gracilis in Egypt; Bradley M. Gottfried, Effect of egg sequence, clutch size, and breeding season on egg characteristics of House Sparrows (Passer domesticus); Gary R. Graves,

ROWAN, M. K. 1967. A study of the colies of southern Africa. Ostrich 38: 63–115.

SCLATER, W. L. 1903. The birds of South Africa, Vol. 3. London, R. H. Porter. Verheyen, R. 1956. Note sur L'anatomie et la classification des Coliiformes. Inst. Roy. Sci. Natur. Belgique, Bull. 32(47): 1–7.

(continued from p. 30)

Altitudinal gradients in speciation of Andean forest birds; Susan Hannon, Female spacing behaviour in the Willow Ptarmigan and its relation to population regulation; Douglas B. Hay, Physiological and social ecology of roosting Pygmy Nuthatches (Sitta pygmaea); James L. Hayward, Reproductive strategies used by homosexual and heterosexual gulls; Linda Heald, Behavioral plasticity in a Tyrannid flycatcher: effects of environmental variability; Carlos M. Herrera, Ecology and evolution of avian frugivory in Spanish mediterranean habitats; Eve Sevier Hiatt, Annual cycle of plasma prolactin and folliclestimulating hormone in a free-living population of the White-crowned Sparrow, Zonotrichia leucophrys; Wendy L. Hill, Effect of resource productivity on the intraspecific variation in reproductive behavior of the American Coot (Fulica americana); Anne E. Houde, Effects of nest site choice on the survival of Common Tern chicks; Peter Houde, Paleognathous birds from the Lower Eocene London clay; Karen E. Innes, Behavioral ecology of the White-throated Magpie Jay (Calocitta formosa) of Santa Rosa National Park, Costa Rica; Joel F. Jerabek, Territories of Vesper, Savannah, and Grasshopper Sparrows on reclaimed surface mines; Alan Charles Kemp, Systematic investigation of hornbills (Bucerotidae) and birds of prey (Falconiformes); E. N. Kurochkin, Avian fossils from the tertiary of the USSR and Mongolia; Barbara E. Kus, Raptor predation on wintering shorebirds; Stewart T. Levinson, Bird/fruit interactions in northern Florida; Charles S. Luthin, Comparative morphologies of 4 subspecies of the Buff-necked Ibis, Theristieus caudatus; Timothy D. Manolis, Reproductive interactions between Shiny Cowbirds and actual and potential hosts in Trinidad and Tobago; Leslie F. Marcus, Ecomorphological analysis of birds from Mediterranean habitats in Chile, California, and France; Kenneth D. Meyer, Sexual differences in the behavioral ecology of the Sharp-shinned Hawk (Accipiter striatus); Bruce Wayne Miller, Revision of the bird family Pittidae; Michael T. Murphy, Variability in insect abundance, foraging ecology, and nestling growth in the Eastern Kingbird; Erica Nol, Reproductive strategies in two species of oystercatcher; Christopher J. Norment, Avian communities of the alpine tundra/subalpine forest ecotone, Beartooth Mts., Wyoming; Gary L. Nuechterlein, Reproductive isola-

tion of Western Grebe color phases in Mexico; Sally Olson, Habitat selection, breeding biology, and density of the Mountain Plover on the Charles M. Russell National Wildlife Refuge; Paula Peters, Vocal communication system of the Santa Cruz Island Scrub Jay; Ted N. Pettit, Incubation strategies of tropical seabirds on Christmas Island; Nina Pierpont, Foraging behavior of woodcreepers (Dendrocolaptidae) in Amazonian Peru; Melinda Pruett-Jones, Vocal copying in Macgregor's Bowerbird (Amblyornis macgregoriae); Stephen Glen Pruett-Jones, Ecology and evolution of social organization in Parotia lawesii, Lawes Six-wired Bird of Paradise; James Scott Quinn, Pairbond integrity, mate fidelity, and parental investment in Caspian Terns (Sterna caspia); Terry Edwin Quinney, Relationship between food abundance and breeding performance in the Tree Swallow (Iridoprocne bicolor); Susan St. Clair Raye, Bobwhite Quail (Colinus virginianus) vocalizations: ontogeny and function in sibling recognition; Mark F. Riegner, Foraging ecology of the Yellow-crowned Night Heron; Diane E. Riska, Breeding biology and communication behavior of the Brown Noddy, Anous stolidus, Dry Tortugas, Fla.; Scott K. Robinson, Ecology and social behavior of the Yellow-rumped Cacique in southeastern Peru; Stephen R. Sabo, Ecology and behavior of the Maui Parrotbill; Lilian J. Saul, Ecology and behavior of Red-headed and Red-bellied Woodpeckers in south-central Florida; William A. Searcy, Female choice of mates and male singing behavior in Song Sparrows; Erik Skadhauge, Activation of salt-gland function and regulation of coprodeal transport in the ostrich; Martin Luther Stephens, Parental behavior and ecology of the polyandrous Northern Jacana; Henry M. Stevenson, Birds of Florida; F. G. Stiles, Handbook of Costa Rican birds; Theresa A. Thompson, Social organization within eastern Wild Turkey flocks; Diana F. Tomback, Role of visual cues in seed cache retrieval by Clark's Nutcracker; Wayne Trivelpiece, Etho-ecology of the Magnificent Frigatebird (Fregata magnificens); Robert F. Tintle, Influence of male multiple nest building on female mate choice in Long-billed Marsh Wrens (Telmatodytes palustris); Alan Tye, Food supply, feeding behaviour, and territorial behaviour of the Wheatear (Oenanthe oenanthe) in Africa; Evelyn H. Weinstein, Nest site selection in Arctic Terns (Sterna paradisaea)

- mortality of Kent Island Herring Gulls. Ecology 30: 146–166.
- Stout, J. F. 1975. Aggressive communication by *Larus glaucescens*. III. Description of displays related to territorial protection. Behaviour 55: 181–208.
- ——, C. WILCOX, & L. CREITZ. 1969. Aggressive communication by *Larus glaucescens*. I. Sound communication. Behaviour 34: 29–41.
- Tinbergen, N. 1956. On the functions of territory in gulls. Ibis 98: 401–411.
- -----. 1959. Comparative studies of the behaviour of gulls (Laridae): a progress report. Behaviour 15: 1–70.

- ——. 1960. The Herring Gull's world. New York, Basic Books, Inc.
- Verbeek, N. A. M. 1979. Some aspects of the breeding biology and behavior of the Great Blackbacked Gull. Wilson Bull. 91: 575–582.
- VERMEER, K. 1963. The breeding ecology of the Glaucous-Winged Gull (*Larus glaucescens*) on Mandarte Island. Brit. Colum. Occas. Pap. Brit. Colum. Prov. Mus. 13: 1–104.
- Weaver, D. K. 1970. Parental behavior of the Herring Gull (Larus argentatus smithsonianus) and its effect on reproductive success. Unpublished Ph.D. dissertation, Ann Arbor, Michigan, University of Michigan.

(continued from p. 57)

and Common Terns (S. hirundo); Mary J. Whitmore, Processes of socialization and the ontogeny of communal behaviour in Noisy Miners; Thomas C. Will, Behavioral ecology of species replacement—Bluewinged and Golden-winged warblers in Michigan; David Ward Winkler, Clutch size regulation in the California Gull (Larus californicus); Scott R. Winterstein, Ecology and sociobiology of the Black-throated Magpie-jay; Joseph M. Wunderle, Uncertainty and

the foraging behavior of Bananaquits (*Coereba flaveola*) on artificial flowers; Kimberley Ellen Young, Temporal and seasonal patterns of Common Loon (*Gavia immer*) vocalizations; Marie Zeh, Intraspecific variations in nest site selection and nest construction in the Verdin (*Auriparus flaviceps*)—the influence of interspecific competition for nest sites and the local plant association.

- ing biology of yearling Wood Ducks. J. Wildl. Mgmt. 39: 503-507.
- JOHNSGARD, P. A.. 1960. A quantitative study of sexual behavior of Mallards and Black Ducks. Wilson Bull. 72: 133–155.
- 1965. Handbook of waterfowl behavior. Ithaca, New York, Cornell Univ. Press.
- Korschgen, C. 1972. Behavior of the Wood Duck. Unpublished M.A. dissertation, Columbia, Missouri, Univ. of Missouri.
- ———, & L. H. FREDRICKSON. 1976. Comparative displays of yearling and adult male Wood Ducks. Auk 93: 793–807.
- KORTE, P. A., & L. H. FREDRICKSON. 1977. Loss of Missouri's lowland hardwood ecosystem. Trans. North Amer. Wildl. Nat. Res. Conf. 42: 31–41.
- LORENZ, K. Z. 1951–1953. Comparative studies on the behavior of the Anatinae. Avic. Mag. 57, 58, 59.
- McKinney, F. 1970. Displays of four species of blue-winged ducks. Living Bird 9: 29-64.
- ORIANS, G. H. 1969. On the evolution of mating

- systems in birds and mammals. Amer. Natur. 103: 589–603.
- Scherpelz, J. A. 1979. Chronology of pair formation and breeding biology in the Wood Duck. Unpublished M.S. dissertation, Columbia, Missouri, Univ. of Missouri.
- SOKAL, R. R., & F. J. ROHLF. 1973. Introduction to biostatistics. San Francisco, W. H. Freeman and Co.
- SOUTIERE, E. C., H. S. MYRICK, & E. G. BOLEN. 1972. Chronology and behavior of American Widgeon wintering in Texas. J. Wildl. Mgmt. 36: 752–758.
- Storts, V. 1958. The time of pair formation in Black Ducks. Trans. North Amer. Wildl. Conf. 23: 192–
- WEIER, R. W. 1966. A survey of Wood Duck nest sites on Mingo National Wildlife Refuge in southeast Missouri. Unpublished M.S. dissertation, Columbia, Missouri, Univ. of Missouri.
- Weller, M. W. 1965. Chronology of pair formation in some nearctic Aythya (Anatidae). Auk 82: 227–235.

On page 711 of J. Cracraft, 1981, Toward a phylogenetic classification of the recent birds of the world (Class Aves) (Auk 98: 681–714), the following references were inadvertently eliminated by the printer between the production of page proofs and the final published version:

DEBEER, G. 1956. The evolution of ratites. Bull. Brit. Mus. Nat. Hist. (Zool.) 4: 57-70.

DEBOER, L. E. M. 1980. Do the chromosomes of the kiwis provide evidence for a monophyletic origin of the ratites. Nature 287: 84–85.

A new edition of the "International registry of poultry genetic stocks; a directory of specialized lines and strains, mutations, breeds and varieties of chickens, Japanese Quail, and turkeys" has recently been published. It describes and gives sources for specialized lines and strains, mutations, and breeds and varieties of these species, presents a listing of the known genetic traits and their gene symbols, provides chromosome linkage maps, gives a description of chicken plumage colors grouped according to the *E* locus, and lists the addresses of breeders and suppliers. Copies may be obtained for \$3.00 (postpaid) from Ralph G. Somes, Jr., Department of Nutritional Sciences, University of Connecticut, Storrs, Connecticut 06268.

1978. The reproductive biology of passerine birds breeding on reclaimed surface mines in northern West Virginia. Pp. 333–344 *in* Proc. Symp. Surface Mining and Fish/Wildlife Needs in the Eastern United States (D. E. Samuel, J. R.

Stauffer, C. H. Hocutt, and W. T. Mason, Eds.). USFWS FWS/OBS-78/81.

——, & R. C. Whitmore. 1979. Effects of vegetation on nesting success of Vesper Sparrows. Auk 96: 802–805.

The AOU Student Awards Committee issues the following reminders to all students interested in competing for the AOU Student Paper Award and the two Nellie Johnson Baroody Student Paper Awards at the 1982 AOU meetings: (1) To qualify for the competition, each student must submit an expanded abstract of the paper directly to the chairperson of the AOU Student Awards Committee (**Douglas Mock**, **Department of Zoology**, **University of Oklahoma**, **Norman**, **Oklahoma** 73069) by the "Call for Papers" deadline in the meeting announcement. (2) Appropriate applications with expanded abstracts must be submitted separately for the student paper awards and for the Marcia Brady Tucker travel awards. (3) A student is ineligible for student paper awards if she/he shares authorship of a paper, i.e. the student must be the exclusive author.

The American Ornithologists' Union solicits applications for research grants from its Josselyn Van Tyne and Alexander Wetmore Memorial Funds. The Van Tyne awards will consider any aspect of avian biology; the Wetmore awards are limited to taxonomy/systematics. Grants are usually in amounts of a few hundred dollars. Preference is given to students and other persons without other sources of funds. Application forms may be obtained from Dr. Erica H. Dunn, A.O.U. Committee on Research Awards, Long Point Bird Observatory, P.O. Box 160, Port Rowan, Ontario, Canada NOE 1M0. Applications must be mailed before 1 March 1982.

The American Ornithologists' Union will hold its annual meeting in Chicago, Illinois from 10–14 October 1982. A formal call for papers will be distributed with the April 1982 issue of *The Auk*, with a deadline for submission of abstracts for papers and poster sessions of 20 May 1982. For further information on the scientific program, contact James R. Karr, Program Chairman, Department of Ecology, Ethology, and Evolution, University of Illinois, 606 E. Healey, Champaign, Illinois 61820 USA.