

- —. 1988b. Interactions between gulls and otariid pinnipeds: competition, commensalism, and cooperation. Pp. 213–239 in *Seabirds and other marine vertebrates* (J. Burger, Ed.). New York, Columbia Univ. Press.
- PORTER, J. M., & S. G. SEALY. 1982. Dynamics of multispecies feeding flocks: age-related feeding behaviour. *Behaviour* 81: 91–109.
- PRINCE, P. A., & M. D. FRANCIS. 1984. Activity budgets of foraging Gray-headed Albatrosses *Diomedea chrysostoma*. *Condor* 86: 297–300.
- RYDER, R. A. 1957. Avian-pinniped feeding associations. *Condor* 59: 68–69.
- SEALY, S. G. 1973. Interspecific feeding assemblages of marine birds off British Columbia. *Auk* 90: 796–802.
- TICKELL, W. L. N. 1984. Behaviour of Black-browed and Grey-headed albatrosses at Bird Island, South Georgia. *Ostrich* 55: 64–85.
- UPDEGRAFF, G. E., & G. L. HUNT JR. 1985. Field use of microcomputers for the collection of seabird data. *Pacific Seabird Group Bull.* 12: 19.
- WEIMERSKIRCH, H., P. JOUVENTIN, & J. C. STAHL. 1986. Comparative ecology of six albatross species breeding on the Crozet Islands. *Ibis* 128: 195–213.

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The Frank M. Chapman Memorial Fund gives grants in aid of ornithological research and also postdoctoral fellowships. While there is no restriction on who may apply, the committee particularly welcomes and favors applications from graduate students; projects in game management and the medical sciences are seldom funded. Applications are reviewed once a year and must be submitted no later than 15 January, with all supporting material. Application forms may be obtained from the Frank M. Chapman Memorial Fund Committee, Department of Ornithology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192 USA.

Two postdoctoral fellowships were awarded for the 1990 year: C. Craig Farquhar, Systematics, biogeography and ecology of *Buteo polyosoma* and *B. poecilochrous*; and Jeffrey G. Groth, Reproductive isolation and genetic relationships in the North American Crossbill (*Loxia curvirostra*).

Four collection study grants for the 1990–1991 year were awarded to: Robert Chesser, for work on austral migrants; Jeff Groth, for work on morphological diversification in the avian genus *Loxia*; Brad Livezey, for studies of the Anseriformes and avian flightlessness; and Jim Wiley, for studies of Red-shouldered Hawk eggs.

Chapman grants for 1991, totaling \$37,158, with a mean of \$700, were awarded to: Elizabeth Ammon, Cowbirds in montane and subalpine bird communities; James R. Beltoft, Hormonal correlates of reversed sexual dominance in House Finches; Robert B. Brua, The effect of hatch order on dominance hierarchies and parental allocation in Eared Grebes; Robb T. Brumfield, Genetic differentiation in birds of the Chocó area of endemism of South America; Richard Buchholz, Do turkey snoods signal male parasite load?; Kristi Burnell, Genetic and cultural diversity in Belding's Savannah Sparrows; John F. Cavitt II, The effect of food supplementation on adult House Wrens; Ray C. Chandler, The effect of testosterone on space use in male Dark-eyed Juncos; Robert T. Chesser, The austral migration system of South America; Luis M. Chiappe, Cretaceous enantiornithine birds from northern Argentina; Daniel A. Cristol, A test of the arrival-time hypothesis of differential migration; Linda S. DeLay, Paternal investment of the cooperatively polyandrous *Buteo galapagoensis*; Randall P. Dettmers, The influence of male and territory quality on mate choice by female Hooded Warbler; Curt R. Dimmick, Life history and the development of cache-recovery behavior in Clark's Nutcrackers; Keith L. Dixon, Further investigations of the Crested Titmouse hybrid zone in Texas; Laurie S. Eberhardt, The functions of drumming in male Yellow-bellied Sapsuckers; Roger C. Fotso, The dynamics of the bird population in damaged forest; Gene S. Fowler, Hormonal basis of long-term pair bonds; Mary C. Garvin, Influence of blood parasites on the stopover biology of trans-gulf migrant passerines; Nathan M. Gichuki, Reproductive and foraging behavior of Crowned Crane *Balearica regulorum*; Thomas P. Good, Diet analysis and reproductive output of synchronously breeding gulls; Lynn M. Gordon, Roles of endogenous and exogenous factors in settlement patterns of juvenile Western Sandpipers (*Calidris mauri*); Carole S. Griffiths,

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- MONTGOMERIE, R. D., & B. E. LYON. 1986. Does longevity influence the evolution of delayed plumage maturation in passerine birds? *Am. Nat.* 128: 930-936.
- PROCTER-GRAY, E., & R. T. HOLMES. 1981. Adaptive significance of delayed attainment of plumage in male American Redstarts: tests of two hypotheses. *Evolution* 35: 742-751.
- ROHWER, S. 1978. Passerine subadult plumages and the deceptive acquisition of resources: test of a critical assumption. *Condor* 80: 173-179.
- . 1983. Testing the female mimicry hypothesis of delayed plumage maturation: a comment on Procter-Gray and Holmes. *Evolution* 37: 421-423.
- , & G. S. BUTCHER. 1988. Winter versus summer explanations of delayed plumage maturation in temperate passerine birds. *Am. Nat.* 131: 556-572.
- , S. D. FRETWELL, & D. M. NILES. 1980. Delayed maturation in passerine plumages and the deceptive acquisition of resources. *Am. Nat.* 115: 400-437.
- , W. P. KLEIN JR., & S. HEARD. 1983. Delayed plumage maturation and the presumed prealternate molt in American Redstarts. *Wilson Bull.* 95: 199-208.
- , & D. M. NILES. 1979. The subadult plumage of male Purple Martins: variability, female mimicry and recent evolution. *Z. Tierpsychol.* 51: 282-300.
- SELANDER, R. K. 1965. On mating systems and sexual selection. *Am. Nat.* 99: 129-141.
- SOKAL, R. R., & F. J. ROHLF. 1969. *Biometry*. San Francisco, W. H. Freeman & Co.
- STUDD, M. V., & R. J. ROBERTSON. 1985a. Evidence for reliable badges of status in territorial Yellow Warblers (*Dendroica petechia*). *Anim. Behav.* 33: 1102-1113.
- , & ———. 1985b. Life span, competition, and delayed plumage maturation in male passerines: the breeding threshold hypothesis. *Am. Nat.* 126: 101-115.

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(Continued from p. 810)

Systematics of the order Falconiformes; Fritz Hertel, Morphological analysis of vultures through time; Andrew W. Kratter, Bamboo specialization in Neotropical birds; Mark S. LaBarr, Site fidelity and postbreeding dispersal of Common Terns on L. Champlain; Curtis A. Marantz, Song variation in the genus *Dendrocolaptes* (Dendrocolaptidae); Robert A. Mauck, Age-specific and sex-specific reproductive effort in a long-lived seabird; Clinton K. Miller, Responses of nesting Savannah Sparrows to fluctuations in grasshopper densities in interior Alaska; David C. Moyer, Foraging ecology and habitat use of forest birds in the Uzungwa Mts.; Neal D. Niemuth, Density-dependent predation of Sage Grouse nests; Christopher Norment, Comparative breeding biology of the Harris' Sparrow and White-crowned Sparrow; Adrian O'Loughlen, Vocal ontogeny and the maintenance of dialects in the Brown-headed Cowbird; Jay Pitochelli, Character variation in seabirds of the Atlantic and Pacific oceans; Kerry Sanders, Ecology of the Kakerori (*Pomarea dimidiata*); Terrence S. Sillett, The contribution of epiphytes to the species diversity of Neotropical insectivorous birds; Miles R. Silman, Foraging ecology of a guild of Neotropical, bird-eating raptors; Jeffrey A. Smallwood, Factors determining guild composition in foliage insectivorous birds along an elevational gradient; Dr. Eugeny Sokolov, Analysis of the structure of the subgenus *Phylloscopus*; Eric Stone, Age-specific habitat selection in Black-billed Magpies; Philip C. Stouffer, Feather growth of Neotropical understory birds in forest fragments; Sheryl L. Swartz, Realized reproductive success in monogamous and polygynous House Wrens; Bernie R. Tershy, The adaptive function of conspicuous male plumage in a monogamous seabird; Hazell S. Thompson, Ecology and conservation of the White-necked Picathartes *P. gymnocephalus* in Sierra Leone; Pepper W. Trail, Brood parasitism rates by Brown-headed Cowbirds: a comprehensive database; Cheryl L. Trine, Wood Thrush population dynamics in a fragmented landscape; Horace P. Webb, Ecological distribution of the birds of Santa Isabel Island, Solomon Islands; Daniel G. Wenny, Seed dispersal by Black Guans; David A. Westcott, Female distribution, movements and the evolution of leks; Christopher J. Whelan, Artificial nests as assays of nest predation: an experimental analysis; Karen Wiebe, Hatching asynchrony and growth in the American Kestrel; Bethany L. Woodworth, Brood parasitism on two native vireos in Puerto Rico; and Reuven Yosef, Evaluation of a technique for reversing the population decline of the Loggerhead Shrike.