

## LITERATURE CITED

- ABBOTT, I. 1974. Numbers of plant, insect, and land-bird species on nineteen remote islands in the southern hemisphere. *Biol. J. Linn. Soc.* 6:143-152.
- ABBOTT, I., L. K. ABBOTT, AND P. R. GRANT. 1977. Comparative ecology of Galápagos ground finches (*Geospiza* Gould): evaluation of the importance of floristic diversity and interspecific competition. *Ecol. Monogr.* 47:151-184.
- ABLE, K. P., AND B. R. NOON. 1976. Avian community structure along elevational gradients in the northeastern United States. *Oecologia* 26:275-294.
- ADAMS, C. C. 1908. The ecological succession of birds. *Auk* 25:109-153.
- ALI, S., AND S. D. RIPLEY. 1969. Handbook of the birds of India and Pakistan, together with those of Nepal, Sikkim, Bhutan and Ceylon. Vol. 2. Megapodes to Crab Plover. Oxford Univ. Press, Bombay.
- ALI, S., AND S. D. RIPLEY. 1970. Handbook of the birds of India and Pakistan, together with those of Nepal, Sikkim, Bhutan and Ceylon. Vol. 3. Stone curlews to owls. Oxford Univ. Press, Bombay.
- ALI, S., AND S. D. RIPLEY. 1972. Handbook of the birds of India and Pakistan, together with those of Nepal, Sikkim, Bhutan and Ceylon. Vol. 5. Larks to Gray Hypocolius. Oxford Univ. Press, Bombay.
- AMADON, D. 1950. The Hawaiian honeycreepers (Aves, Drepaniidae). *Bull. Amer. Mus. Nat. Hist.* 95:151-262.
- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds. Sixth ed. Allen Press, Lawrence, Kansas.
- AMERICAN ORNITHOLOGISTS' UNION. 1985. Thirty-fifth supplement to the American Ornithologists' Union check-list of North American birds. *Auk* 102: 680-686.
- AMERSON, A. B., JR. 1971. The natural history of French Frigate Shoals, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 150.
- AMERSON, A. B., JR., R. B. CLAPP, AND W. O. WIRTZ II. 1974. The natural history of Pearl and Hermes Reef, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 174.
- ANDERSON, B. W., AND R. D. OHMART. 1981. Comparisons of avian census results using variable distance transect and variable circular plot techniques. Pp. 186-192 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- ANDERSON, B. W., R. D. OHMART, AND J. RICE. 1981. Seasonal changes in avian densities and diversities. Pp. 262-264 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- ANDERSON, S. H., AND H. H. SHUGART, JR. 1974. Habitat selection of breeding birds in an east Tennessee deciduous forest. *Ecology* 55:828-837.
- ANONYMOUS. 1961. Mockingbirds. 'Elepaio 21:81.
- ANONYMOUS. 1974. Honolulu Christmas counts 1964-1973. 'Elepaio 34:86-88.
- ASHMAN, P., AND P. PYLE. 1979. First records of Lavender Fire-Finch on Hawaii. 'Elepaio 40:12.
- ASHMAN, P. R., P. PYLE, AND J. JEFFREY. 1984. A second nest of the Small Kauai Thrush. 'Elepaio 45: 33-34.
- ATKINSON, I. A. E. 1973. Spread of the ship rat (*Rattus r. rattus* L.) in New Zealand. *J. Roy. Soc. N. Z.* 3:457-472.
- ATKINSON, I. A. E. 1977. A reassessment of factors, particularly *Rattus rattus* L., that influenced the decline of endemic forest birds in the Hawaiian Islands. *Pacific Sci.* 31:109-133.
- ATKINSON, I. A. E., AND B. D. BELL. 1973. Offshore and outlying islands. Pp. 372-392 in G. B. Williams (ed.). The natural history of New Zealand. A. H. and A. W. Reed, Wellington, N.Z.
- AU, S., AND G. SWEDBERG. 1966. A progress report on the introduction of the Barn Owl (*Tyto alba pratincola*) to the island of Kauai. 'Elepaio 26:58-60.
- BAKER, J. K. 1979. The feral pig in Hawaii Volcanoes National Park. Pp. 365-367 in R. M. Linn (ed.). Proceedings of the first conference on scientific research in the national parks, New Orleans. U.S. Natl. Park Serv., Trans. and Proc. Ser., No. 5.
- BAKER, J. K., AND D. W. REESER. 1972. Goat management problems in Hawaii Volcanoes National Park: a history, analysis, and management plan. U.S. Natl. Park Serv., Nat. Res. Rept. 2.
- BALDA, R. P. 1969. Foliage use by birds of the oak-juniper woodland and ponderosa pine forest in southeastern Arizona. *Condor* 71:399-412.
- BALDWIN, P. H. 1944. Birds of Hawaii National Park. *Audubon Mag.* 46:147-154.
- BALDWIN, P. H. 1945a. The Hawaiian Goose, its distribution and reduction in numbers. *Condor* 47:27-37.
- BALDWIN, P. H. 1945b. Fate of the Laysan Rail. *Audubon Mag.* 47:343-348.
- BALDWIN, P. H. 1947a. The life history of the Laysan Rail. *Condor* 49:14-21.
- BALDWIN, P. H. 1947b. Foods of the Hawaiian Goose. *Condor* 49:108-120.
- BALDWIN, P. H. 1953. Annual cycle, environment and evolution in the Hawaiian honeycreepers (Aves: Drepaniidae). *Univ. Calif. Publ. Zool.* 52:285-398.
- BALDWIN, P. H. 1969a. The Hawaiian Hawk from 1938 to 1949. 'Elepaio 29:95-98.
- BALDWIN, P. H. 1969b. The Alala (*Corvus tropicus*) of western Hawaii Island. 'Elepaio 30:41-45.
- BALDWIN, P. H., AND T. L. C. CASEY. 1983. A preliminary list of foods of the Po'o-uli. 'Elepaio 43: 53-56.
- BALDWIN, P. H., AND G. O. FAGERLUND. 1943. The effect of cattle grazing on koa reproduction in Hawaii National Park. *Ecology* 24:118-122.
- BALDWIN, P. H., C. W. SCHWARTZ, AND E. R. SCHWARTZ. 1952. Life history and economic status of the mungoose in Hawaii. *J. Mammal.* 33:335-356.
- BANKO, P. C. 1982. Productivity of wild and captive Nene populations. Pp. 12-32 in Proceedings: fourth conference in natural sciences Hawaii Volcanoes National Park. Coop. Natl. Park Res. Studies Unit, Univ. Hawaii, Honolulu.
- BANKO, P. C., AND W. E. BANKO. 1980. Historical trends of passerine populations in Hawaii Volcanoes National Park and vicinity. Pp. 108-125 in Proceedings of the second conference on scientific research in the national parks. Vol. 8. U.S. Natl. Park Serv., Washington, D.C.
- BANKO, P. C., AND D. A. MANUWAL. 1982. Life his-

- tory, ecology, and management of Nene (*Branta sandvicensis*) in Hawaii Volcanoes and Haleakala national parks. Tech. Rept. 82-3, Coop. Park Stud. Unit, Univ. Washington, Seattle.
- BANKO, W. E. 1968. Rediscovery of Maui Nukupuu, *Hemignathus lucidus affinis*, and sighting of Maui Parrotbill, *Pseudonestor xanthophrys*, Kipahulu Valley, Maui, Hawaii. *Condor* 70:265-266.
- BANKO, W. E. 1979. History of endemic Hawaiian birds specimens in museum collections. Avian History Report 2, Coop. Natl. Park Res. Studies Unit, Univ. Hawaii, Honolulu.
- BANKO, W. E. 1980-1984. History of endemic Hawaiian birds. Part 1. Population histories—species accounts. Avian History Reports 4-8, Coop. Natl. Park Res. Stud. Unit, Univ. Hawaii, Honolulu.
- BANKO, W. E., AND P. C. BANKO. 1976. Role of food depletion by foreign organisms in historical decline of Hawaiian forest birds. Pp. 29-34 in C. W. Smith (ed.). Proceedings of the first conference in natural sciences in Hawaii. Coop. Natl. Park Res. Studies Unit, Univ. Hawaii, Honolulu.
- BARBOUR, M. G., J. H. BURK, AND W. D. PITTS. 1980. Terrestrial plant ecology. Benjamin/Cummings, Menlo Park, Calif.
- BARRAU, J. 1961. Subsistence agriculture in Polynesia and Micronesia. B. P. Bishop Mus. Bull. 223.
- BARROWS, C. W. 1981. Roost selection by Spotted Owls: an adaptation to heat stress. *Condor* 83:302-309.
- BEAL, F. E. L., W. L. MCATEE, AND E. R. KALMBACH. 1916. Common birds of southeastern United States in relation to agriculture. U.S. Dept. Agr., Farmers' Bull. 755.
- BEALS, E. 1960. Forest bird communities in the Apostle Islands of Wisconsin. *Wilson Bull.* 72:156-181.
- BENT, A. C. 1932. Life histories of North American gallinaceous birds. U.S. Natl. Mus. Bull. 162.
- BENT, A. C. 1938. Life histories of North American birds of prey (part 2). U.S. Natl. Mus. Bull. 170.
- BENT, A. C. 1968. Life histories of North American cardinals, grosbeaks, buntings, towhees, finches, sparrows and others. U.S. Natl. Mus. Bull. 237.
- BERGER, A. J. 1969a. The breeding season of the Hawaiian Amakihi. Occ. Pap. B. P. Bishop Mus. 24: 1-8.
- BERGER, A. J. 1969b. The nest, eggs, and young of the Elepaio. *Wilson Bull.* 81:333-335.
- BERGER, A. J. 1969c. Discovery of the nest of the Hawaiian Thrush. *Living Bird* 8:243-250.
- BERGER, A. J. 1970. The eggs and young of the Palila, an endangered species. *Condor* 72:238-240.
- BERGER, A. J. 1972. Hawaiian birdlife. Univ. Press of Hawaii, Honolulu.
- BERGER, A. J. 1975a. History of exotic birds in Hawaii. 'Elepaio 35:72-80.
- BERGER, A. J. 1975b. The 1929 and 1936 "buy-a-bird" campaigns on Hawaii. 'Elepaio 36:40-44.
- BERGER, A. J. 1977. Nesting of the Yellow-fronted Canary on O'ahu. 'Elepaio 37:128.
- BERGER, A. J. 1981. Hawaiian birdlife. Second ed. Univ. Press of Hawaii, Honolulu.
- BERGER, A. J., C. R. EDDINGER, AND S. C. FRINGS. 1969. The nest and eggs of the Anianiau. *Auk* 86: 183-187.
- BERGER, A. J., E. KOSAKA, J. M. SCOTT, P. SCOWCROFT, C. WAKIDA, D. WOODSIDE, AND C. VAN RIPER III. 1977. Palila recovery plan. U.S. Fish and Wildlife Service, Portland, Oregon.
- BICE, C. M. 1933. Fowl pox (sorehead) control by vaccination. *Hawaii Agr. Exp. Sta. Circ.* 8.
- BLEM, C. R. 1973. Geographic variation in the bioenergetics of the House sparrow. Pp. 96-121 in S. C. Kendeigh (chmn.). A symposium on the House Sparrow (*Passer domesticus*) and European Tree Sparrow (*P. montanus*) in North America. *Ornithol. Monogr.* 14.
- BLUMENSTOCK, D. I., AND S. PRICE. 1967. Climates of the states: Hawaii. *Climatology of the United States* 60-51. U.S. Dept. Commerce, Washington, D.C.
- BOCK, W. J. 1970. Microevolutionary sequences as a fundamental concept in macroevolutionary models. *Evolution* 24:704-722.
- BOHL, W. H. 1971. The Chukar and Great Partridges. Bureau of Sport Fisheries and Wildlife. U.S. Government Printing Office, Washington, D.C.
- BOHL, W. H. 1972. The Erckel's Francolins. Bureau of Sport Fisheries and Wildlife. U.S. Government Printing Office, Washington, D.C.
- BOND, R. R. 1957. Ecological distribution of breeding birds in the upland forest of southern Wisconsin. *Ecol. Monogr.* 27:351-384.
- BOWMAN, R. I. 1961. Morphological differentiation in the Galapagos finches. *Univ. Calif. Publ. Zool.* 58.
- BOYD, M. F. 1949. An introduction to malarology. W. B. Saunders, Philadelphia, Pa.
- BRADLEY, J. V. 1968. Distribution-free statistical tests. Prentice-Hall, Englewood Cliffs, N.J.
- BRAUN-BLANQUET, J. 1932. Plant sociology: the study of plant communities. G. O. Fuller and H. S. Conrad, trans. McGraw-Hill, New York.
- BRIGHAM, W. T. 1899. Hawaiian feather work. Mem. B. P. Bishop Mus. 1(1):1-81.
- BRYAN, E. H., JR. 1940. A summary of the Hawaiian birds. *Proc. Sixth Pacific Sci. Congr.* 4:185-189.
- BRYAN, L. W. 1937. Wild sheep in Hawaii. *Paradise of the Pacific* 49(3):19, 31.
- BRYAN, W. A. 1905. Notes on the birds of the Waianae Mountains. Occ. Pap. B. P. Bishop Mus. 2:229-241.
- BRYAN, W. A. 1908. Some birds of Molokai. Occ. Pap. B. P. Bishop Mus. 4:133-176.
- BRYAN, W. A., AND A. SEALE. 1901. Notes on the birds of Kauai. Occ. Pap. B. P. Bishop Mus. 1:129-137.
- BUMP, G. 1970. The Gray Francolins. Fisheries and Wildlife. U.S. Govt. Printing Office, Washington, D.C.
- BURNHAM, K. P., AND D. R. ANDERSON. 1976. Mathematical models for nonparametric influences from line transect data. *Biometrics* 32:325-336.
- BURNHAM, K. P., D. R. ANDERSON, AND J. L. LAAKE. 1981. Line transect estimation of bird population density using a Fourier series. Pp. 466-482 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- BURR, T. A. 1984. 'Alala restoration plan. Hawaii Dept. Land and Nat. Res., Honolulu.

- BURR, T., P. Q. TOMICH, E. KOSAKA, W. KRAMER, J. M. SCOTT, E. KRIDLER, J. GIFFIN, D. WOODSIDE, AND R. BACHMAN. 1982. Alala recovery plan. U.S. Fish and Wildlife Service, Portland, Ore.
- BYRD, G. V., AND T. C. TELFER. 1980. Barn owl prey on birds in Hawaii. 'Elepaio 41:35-36.
- CARLQUIST, S. 1970. Hawaii: a natural history. Natural History Press, Garden City, N.Y.
- CARLQUIST, S. 1974. Island biology. Columbia Univ. Press, New York.
- CAROTHERS, J. H. 1982. Effects of trophic morphology and behavior on foraging rates of three Hawaiian honeycreepers. *Oecologia* 55:157-159.
- CAROTHERS, J. H., AND R. B. HANSEN. 1982. The occurrence of the Japanese Bush-Warbler on Maui. 'Elepaio 43:17-18.
- CAROTHERS, J. H., S. R. SABO, AND R. B. HANSEN. 1983. Ecological observations on an endangered species: the Maui Parrotbill, *Pseudonestor xanthophrys*. *Amer. Birds* 37:820-821.
- CARPENTER, F. L. 1976. Plant-pollinator interactions in Hawaii: pollination energetics of *Metrosideros collina* (Myrtaceae). *Ecology* 57:1125-1144.
- CARPENTER, F. L., AND R. E. MACMILLEN. 1976. Threshold model of feeding territoriality and test with a Hawaiian honeycreeper. *Science* 194:639-642.
- CARPENTER, J. W., AND S. R. DERRICKSON. 1981. The role of captive propagation in preserving endangered species. Pp. 109-113 in R. R. Odom and J. W. Guthrie (eds.). Proceedings of the nongame and endangered wildlife symposium. Tech Bull. WL5, Georgia Dept. Nat. Res., Atlanta.
- CASEY, T. L. C. 1973. Preliminary report on the bird life in Waihoi Valley, Maui. 'Elepaio 34:46-50.
- CASEY, T. L. C., AND J. D. JACOBI. 1974. A new genus and species of bird from the island of Maui, Hawaii (Passeriformes: Drepanididae). *Occ. Pap. B. P. Bishop Mus.* 24 (12):215-226.
- CASSIN, J. 1858. United States exploring expedition. Mammalogy and Ornithology. Vol. 8. C. Sherman, Philadelphia.
- CAUM, E. L. 1933. The exotic birds of Hawaii. *Occ. Pap. B. P. Bishop Mus.* 10:1-55.
- CAVILL, J. P. 1982. Viral diseases. Pp. 515-527 in Nil Petrak (ed.). Diseases of cage and aviary birds. Lea and Febiger, Philadelphia.
- CLAPP, R. B. 1972. The natural history of Gardner Pinnacles, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 163.
- CLAPP, R. B., AND E. KRIDLER. 1977. The natural history of Necker Island, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 206.
- CLAPP, R. B., E. KRIDLER, AND R. R. FLETT. 1977. The natural history of Nihoa Island, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 207.
- CLAPP, R. B., AND W. O. WIRTZ II. 1975. The natural history of Lisianski Island, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 186.
- CLAPP, R. B., AND P. W. WOODWARD. 1968. New records of birds from the Hawaiian Islands. *Proc. U.S. Natl. Mus.* 124:1-39.
- CLARKE, B., J. MURRAY, AND M. S. JOHNSON. 1984. The extinction of endemic species by a program of biological control. *Pacific Sci.* 38:97-104.
- CODY, M. L. 1974. Competition and the structure of bird communities. Princeton Univ. Press, Princeton, N.J.
- COLLINS, M. S. 1984. Observations on the nesting of the Hawaii 'Akepa. 'Elepaio 45:1-2.
- CONANT, P. 1980. Japanese Bush-Warbler on Lanai. 'Elepaio 40:169.
- CONANT, S. 1975. Spatial distribution of bird species on the east flank of Mauna Loa. Tech Rept. 74, Island Ecos. Intl. Res. Pgm., U.S. Intl. Biol. Pgm., Univ. Hawaii, Honolulu.
- CONANT, S. 1977. The breeding biology of the Oahu 'Elepaio. *Wilson Bull.* 89:193-210.
- CONANT, S. 1980. Birds of the Kalapana Extension. Tech. Rept. 36, Coop. Natl. Park Res. Stud. Unit, Univ. Hawaii, Honolulu.
- CONANT, S. 1981. Recent observations of endangered birds in Hawaii's national parks. 'Elepaio 41:55-61.
- CONANT, S. 1983. Kaho'olawe birds—including first Warbling Silverbill record. 'Elepaio 44:63-65.
- CONANT, S. 1984. First O'ahu record of the Warbling Silverbill. 'Elepaio 45:116.
- CONWAY, W. C. 1980. An overview of captive propagation. Pp. 199-208 in M. E. Soulé and B. A. Wilcox (eds.). Conservation biology: an evolutionary-ecological perspective. Sinauer, Sunderland, Mass.
- CROWELL, K. L., AND S. L. PIMM. 1976. Competition and niche shifts of mice introduced onto small islands. *Oikos* 27:251-258.
- DAWSON, W. R., AND A. F. BENNETT. 1973. Roles of metabolic level and temperature regulation in the adjustment of Western Plumbed Pigeons (*Lophophaps ferruginea*) to desert conditions. *Comp. Biochem. Physiol.* 44A:249-266.
- DESANTE, D. F. 1981. A field test of the variable circular-plot censusing techniques in a California coastal scrub breeding community. Pp. 177-185 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- DESGRANGES, J. L. 1980. Avian community structure of six forest stands in La Mauricie National Park, Quebec. *Can. Wildl. Serv., Occ. Pap.* 41.
- DEVICK, W. S. 1981a. Status of the Nene population on the island of Hawaii between 1975 and 1980. Hawaii Dept. Land and Nat. Res., Honolulu.
- DEVICK, W. S. 1981b. Status of the Nene population on the island of Maui between 1975 and 1980. Hawaii Dept. Land and Nat. Res., Honolulu.
- DIAMOND, J. M. 1972. Avifauna of the eastern highlands of New Guinea. *Publ. Nuttall Ornithol. Club* 12.
- DIAMOND, J. M. 1973. Distributional ecology of New Guinea birds. *Science* 179:759-769.
- DIAMOND, J. M. 1975. Assembly of species communities. Pp. 342-444 in M. L. Cody and J. M. Diamond (eds.). Ecology and evolution of communities. Belknap Press, Cambridge, Mass.
- DIAMOND, J. M. 1978. Niche shifts and the rediscovery of interspecific competition. *Amer. Sci.* 66: 322-331.
- DIAMOND, J. M. 1984. Back from the brink of extinction. *Nature* 309:308.
- DIAMOND, J. M., AND E. MAYR. 1976. Species-area relation for birds of the Solomon archipelago. *Proc. Natl. Acad. Sci.* 73:262-266.
- DIAMOND, J. M., AND C. R. VEITCH. 1981. Extinct-

- tions and introductions in the New Zealand avifauna: cause and effect? *Science* 211:499-501.
- DILL, H. R., AND W. A. BRYAN. 1912. Report of an expedition to Laysan Island in 1911. U.S. Dept. Agr., Biol. Surv. Bull. 42.
- DIXON, W. J., AND M. B. BROWN. 1979. BMDP-79. Biomedical computer programs P-series. Univ. Calif. Press, Berkeley.
- DOLE, S. B. 1869. A synopsis of the birds hitherto described from the Hawaiian Islands. *Proc. Boston Soc. Nat. Hist.* 12:294-309.
- DOLE, S. B. 1879. List of birds of the Hawaiian Islands. Pp. 41-58 in T. G. Thrum (comp.). *Hawaiian almanac and annual for 1879*. Honolulu.
- DONAGHHO, W. 1941. A report of ornithological observations made on Kauai. *'Elepaio* 2:52.
- DONAGHHO, W. R. 1951. Journal of ornithological work during the summer of 1937 (continued). *'Elepaio* 11:56-58.
- DOW, D. D. 1968. Home range and habitat of the Cardinal in peripheral and central populations. *Can. J. Zool.* 47:103-114.
- DRAPER, N. R., I. GUTTMAN, AND H. KANEMASU. 1971. The distribution of certain regression statistics. *Biometrika* 58:295-298.
- DRAPER, N. R., AND H. SMITH. 1981. Applied regression analysis. Second ed. J. Wiley, N.Y.
- DUNCAN, O. D. 1966. Path analysis: sociological examples. *Amer. J. Sociol.* 72:1-16.
- DUNMIRE, W. W. 1961. Birds of the national parks in Hawaii. *Hawaii Natural History Assoc.*, Honolulu.
- DUNMIRE, W. W. 1962. Bird populations in Hawaii Volcanoes National Park. *'Elepaio* 22:65-70.
- DYER, D. P. 1978. An analysis of species dissimilarity using multiple environmental variables. *Ecology* 59:117-125.
- ECKHARDT, R. C. 1979. The adaptive syndromes of two guilds of insectivorous birds in the Colorado Rocky Mountains. *Ecol. Monogr.* 49:129-149.
- EDDINGER, C. R. 1969. Experiences with hand-raising passerine birds in Hawaii. *Avicult. Mag.* 75:12-14.
- EDDINGER, C. R. 1970. A study of the breeding behavior of four species of Hawaiian honeycreeper (Drepanididae). Ph.D. thesis, Univ. Hawaii, Honolulu.
- EDDINGER, C. R. 1972. Discovery of the nest of the Kauai Akepa. *Wilson Bull.* 84:95-97.
- EDINGTON, J. M., AND M. A. EDINGTON. 1972. Spatial patterns and habitat partitioning in the breeding birds of an upland wood. *J. Anim. Ecol.* 41:331-357.
- EDWARDS, D. K., G. L. DORSEY, AND J. A. CRAWFORD. 1981. A comparison of three avian census methods. Pp. 170-176 in C. J. Ralph and J. M. Scott (eds.). *Estimating numbers of terrestrial birds*. *Stud. Avian Biol.* 6.
- EGLER, F. E. 1942. Indigene vs. alien in the development of arid Hawaiian vegetation. *Ecology* 23:14-23.
- EISENBERG, J. F. 1980. The density and biomass of tropical mammals. Pp. 35-55 in M. E. Soulé and B. A. Wilcox (eds.). *Conservation biology: an evolutionary-ecological perspective*. Sinauer, Sunderland, Mass.
- ELDER, W. H., AND D. H. WOODSIDE. 1958. Biology and management of the Hawaiian Goose. *Trans. N. Amer. Wildl. Conf.* 23:198-215.
- ELLIS, W. 1827. Narrative of a tour through Hawaii, or, Owyhee; with observations on the natural history of the Sandwich Islands, and remarks on the manners, customs, traditions, history, and language of their inhabitants. H. Fisher and P. Jackson, London.
- ELY, C. A., AND R. B. CLAPP. 1973. The natural history of Laysan Island, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 171.
- EMLEN, J. T. 1971. Population densities of birds derived from transect counts. *Auk* 88:323-342.
- EMLEN, J. T. 1981. Divergence in the foraging responses of birds in two Bahama islands. *Ecology* 62:289-295.
- EMLEN, J. T., AND M. J. DEJONG. 1981. The application of song detection threshold distance to census operations. Pp. 346-352 in C. J. Ralph and J. M. Scott (eds.). *Estimating numbers of terrestrial birds*. *Stud. Avian Biol.* 6.
- ÉTCHÉCOPAR, R. D., AND F. HÜE. 1983. *Les oiseaux de Chine, de Mongolie et de Corée: passereaux*. Société Nouvelle des Editions Boubée, Paris.
- FISHER, H. I., AND P. H. BALDWIN. 1947. Notes on the Red-billed Leiothrix in Hawaii. *Pacific Sci.* 1:45-51.
- FISHER, W. K. 1906. Birds of Laysan and the Leeward Islands, Hawaiian group. *Bull. U.S. Fish. Comm.* 23:769-807.
- FLACK, J. A. D. 1978. Interisland transfers of New Zealand Black Robins. Pp. 365-372 in S.A. Temple (ed.). *Endangered birds: management techniques for preserving threatened species*. Univ. Wisconsin Press, Madison.
- FLEET, R. R. 1974. The Red-tailed Tropicbird on Kure Atoll. *Ornithol. Monogr.* 16.
- FOLSE, L. J., JR. 1982. An analysis of avifauna-resource relationships on the Serengeti Plains. *Ecol. Monogr.* 52:111-127.
- FRANZREB, K. E., AND R. D. OHMART. 1978. The effects of timber harvesting on breeding birds in a mixed-coniferous forest. *Condor* 80:431-441.
- GAGNÉ, W. C. 1979. Canopy-associated arthropods in *Acacia koa* and *Metrosideros* tree communities along an altitudinal gradient on Hawaii Island. *Pacific Insects* 21:56-82.
- GAUCH, H. G., JR. 1982. *Multivariate analysis in community ecology*. Cambridge Univ. Press, New York.
- GEORGE, W. G. 1974. Domestic cats as predators and factors in winter shortages of raptor prey. *Wilson Bull.* 86:384-396.
- GIFFIN, J. 1976. Ecology of the feral sheep on Mauna Kea. Pittman-Robertson Proj. W-15-5, Study XI. Hawaii Dept. Land Nat. Res., Honolulu.
- GIFFIN, J. 1978. Ecology of the feral pig on the island of Hawaii. Pittman-Robertson Proj. W-15-3, Study II. Hawaii Dept. Land Nat. Res., Honolulu.
- GIFFIN, J. 1982. Ecology of the mouflon sheep on Mauna Kea. Pittman-Robertson Proj. W-17-R, Study R-III. Hawaii Dept. Land Nat. Res., Honolulu.
- GIFFIN, J. G. 1983. 'Alalā investigation final report. Pittman-Robertson Proj. W-18-R, Study R-II B. Hawaii Dept. Land Nat. Res., Honolulu.

- GILES, R. H., JR. 1978. Wildlife management. W. H. Freeman, San Francisco, Calif.
- GILLIES, M. T. 1972. Some aspects of mosquito behaviour in relation to the transmission of parasites. *Zool. J. Linn. Soc.* 51, Suppl. 1:69-81.
- GLEASON, H. A. 1926. The individualistic concept of the plant association. *Bull. Torrey Bot. Club* 53:7-26.
- GLEASON, H. A. 1939. The individualistic concept of the plant association. *Amer. Midland Nat.* 21:92-110.
- GLENN-LEWIN, D. C. 1976. Species diversity in North American temperate forests. *Vegetatio* 33:153-162.
- GEOWACINSKI, Z., AND J. WEINER. 1977. Energetics of bird communities in successional series of a deciduous forest. *Polish Ecol. Stud.* 3(4):147-175.
- GOFF, M. L., AND C. VAN RIPER, III. 1980. Distribution of mosquitoes (Diptera: Culicidae) on the east flank of Mauna Loa volcano, Hawaii. *Pacific Insects* 22:178-188.
- GOODWIN, D. 1970. Pigeons and doves of the world. Second ed. Cornell Univ. Press, Ithaca, N.Y.
- GOODWIN, D. 1982. Estrildid finches of the world. Cornell Univ. Press, Ithaca, N.Y.
- GREEN, R. H. 1971. A multivariate statistical approach to the Hutchinsonian niche: bivalve molluscs of central Canada. *Ecology* 52:543-546.
- GREENSLADE, P. J. M. 1968. Island patterns in the Solomon Islands bird fauna. *Evolution* 22:751-761.
- GREENWAY, J. C., JR. 1958. Extinct and vanishing birds of the world. Special Publ. 13, American Committee for International Wild Life Protection, New York.
- GRESSITT, J. L., AND G. A. SAMUELSON. 1981. Cerambycid tree borers. Pp. 288-290 in D. Mueller-Dombois, K. W. Bridges, and H. L. Carson (eds.). *Island ecosystems: biological organization in selected Hawaiian communities*. Hutchinson Ross, Stroudsburg, Pa.
- GRIFFIN, C. R. 1984. Hawaiian Hawk recovery plan. U.S. Fish and Wildlife Service, Portland, Ore.
- GRINNELL, J., AND A. H. MILLER. 1944. The distribution of the birds of California. *Pacific Coast Avif.* 27.
- GRISCOM, L. 1937. A monographic study of the Red Crossbill. *Proc. Boston Soc. Nat. Hist.* 41:77-210.
- GUEST, S. 1973. A reproductive biology and natural history of the Japanese White-eye (*Zosterops japonica japonica*) in urban Oahu. Tech. Rept. 29, Island Ecos. Intl. Res. Pgm., U.S. Intl. Biol. Pgm., Univ. Hawaii, Honolulu.
- HAAPANEN, A. 1965. Bird fauna of the Finnish forests in relation to succession. I. *Ann. Zool. Fenn.* 2:153-196.
- HAAPANEN, A. 1966. Bird fauna of the Finnish forests in relation to forest succession. II. *Ann. Zool. Fenn.* 3:176-200.
- HAFFER, J. 1974. Avian speciation in tropical South America: with a systematic survey of the toucans (Ramphastidae) and jacamars (Galbulidae). *Publ. Nuttall Ornithol. Club* 14.
- HAGAR, D. C. 1960. The interrelation of logging, birds and timber regeneration in the Douglas-fir region of northwestern California. *Ecology* 41:116-125.
- HALLETT, J. G., AND S. L. PIMM. 1979. Direct estimation of competition. *Amer. Nat.* 113:593-600.
- HAMILTON, T. H., AND I. RUBINOFF. 1964. On models predicting abundance of species and endemics for the Darwin's finches in the Galapagos archipelago. *Evolution* 18:339-342.
- HARDY, D. E. 1960. *Insects of Hawaii*. Vol. 10. Univ. Hawaii Press, Honolulu.
- HARPHAM, P. 1953. Tantalus bird notes: the Shama Thrush. *'Elepaio* 13:74-76.
- HARRIS, M. P. 1970. The biology of an endangered species, the Dark-rumped Petrel (*Pterodroma phaeopygia*), in the Galapagos Islands. *Condor* 72:76-84.
- HARRIS, M. P. 1973. The Galapagos avifauna. *Condor* 75:265-278.
- HARTT, C. E., AND M. C. NEAL. 1940. The plant ecology of Mauna Kea, Hawaii. *Ecology* 21:237-266.
- HATHEWAY, W. G. 1952. Composition of certain native dry forests: Mokuleia, Oahu, T. H. *Ecol. Monogr.* 22:153-168.
- HENSHAW, H. W. 1902. Birds of the Hawaiian Islands, being a complete list of the birds of the Hawaiian possessions with notes on their habits. T. G. Thrum, Honolulu.
- HERMAN, C. M. 1968. Blood protozoa of free-living birds. *Symp. Zool. Soc. London* 24:177-195.
- HEWITT, O. H. (ED.). 1967. *The Wild Turkey and its management*. The Wildlife Society, Washington, D.C.
- HIRAI, L. T. 1978. Native birds of Lanai, Hawaii. *Western Birds* 9:71-77.
- HIRAI, L. T. 1980. First record of the Warbling Silverbill on Lanai. *'Elepaio* 40:119-120.
- HODEL, D. R. 1985. A new *Pritchardia* from South Kona, Hawaii. *Principes* 29:31-34.
- HOLMES, R. T., C. P. BLACK, AND T. W. SHERRY. 1979. Comparative population bioenergetics of three insectivorous passerines in a deciduous forest. *Condor* 81:9-20.
- HOLMES, R. T., R. E. BONNEY, JR., AND S. W. PACALA. 1979. Guild structure of the Hubbard Brook bird community: a multivariate approach. *Ecology* 60:512-520.
- HOLMES, R. T., AND S. K. ROBINSON. 1981. Tree species preferences of foraging insectivorous birds in a northern hardwood forest. *Oecologia* 48:31-35.
- HOLMES, R. T., AND R. H. SAWYER. 1975. Oxygen consumption in relation to ambient temperatures in five species of forest-dwelling thrushes (*Hylocichla* and *Catharus*). *Comp. Biochem. Physiol.* 50A:527-531.
- HOPKINS, G. H. E. 1941. The range of flight of anopheline mosquitoes. *E. Afr. Med. J.* 18:175-183.
- HOWARTH, F. G. 1985. The impacts of alien land arthropods and molluscs on native plants and animals. Pp. 149-179 in C. P. Stone and J. M. Scott (eds.). *Symposium on protection and management of terrestrial Hawaiian ecosystems*. Univ. of Hawaii Press, Honolulu.
- HUBER, L. N. 1966. Field notes. Alakai Swamp, Kauai; March 1965. Observation of Akiakoa. *'Elepaio* 26:71.
- HUTCHINSON, G. E. 1958. Concluding remarks. *Cold Spring Harbor Symp. Quant. Biol.* 22:415-427.
- JACOBI, J. D. 1978. Vegetation map of the Kau Forest

- Reserve and adjacent lands of Hawaii. U.S. Forest Serv., Res. Bull. PSW-16.
- JACOBI, J. D. 1983. *Metrosideros* dieback in Hawai'i: a comparison of adjacent dieback and non-dieback rain forest stands. *N. Z. J. Ecol.* 6:79-97.
- JAMES, F. C. 1971. Ordinations of habitat relations among breeding birds. *Wilson Bull.* 83:215-236.
- JAMES, F. C., AND N. O. WAMER. 1982. Relationships between temperate forest bird communities and vegetation structure. *Ecology* 63:159-171.
- JAMES, H. F., AND S. L. OLSON. 1983. Flightless birds. *Nat. Hist.* 92(9):30-40.
- JOHNSGAARD, P. A. 1973. Grouse and quails of North America. Univ. Nebraska Press, Lincoln, Neb.
- JOHNSON, D. H. 1981. The use and misuse of statistics in wildlife habitat studies. Pp. 11-19 in D. E. Capen (ed.). *The use of multivariate statistics in studies of wildlife habitat.* U.S. Forest Serv., Gen. Tech. Rept. RM-87.
- JOHNSTON, D. W., AND E. P. ODUM. 1956. Breeding bird population in relation to plant succession on the Piedmont of Georgia. *Ecology* 37:50-62.
- JUDD, C. S. 1927. The story of the forests of Hawaii. *Paradise of the Pacific* 40(10):9-18.
- JUVIK, J. O., AND A. P. AUSTRING. 1979. The Hawaiian avifauna: biogeographic theory in evolutionary time. *J. Biogeogr.* 6:205-224.
- KARR, J. R. 1976a. Seasonality, resource availability, and community diversity in tropical bird communities. *Amer. Nat.* 110:973-994.
- KARR, J. R. 1976b. Within- and between-habitat avian diversity in African and neotropical lowland habitats. *Ecol. Monogr.* 46:457-481.
- KARR, J. R. 1980. Geographical variation in the avifaunas of tropical forest undergrowth. *Auk* 97:283-298.
- KARR, J. R., AND K. E. FREEMARK. 1983. Habitat selection and environmental gradients: dynamics in the "stable" tropics. *Ecology* 64:1481-1494.
- KARR, J. R., AND R. R. ROTH. 1971. Vegetation structure and avian diversity in several new world areas. *Amer. Nat.* 105:423-435.
- KARSTAD, L. 1971. Arboviruses. Pp. 17-21 in J. W. Davis, R. C. Anderson, L. Karstad, and D. O. Trainer (eds.). *Infectious and parasitic diseases of wild birds.* Iowa State Univ. Press, Ames.
- KATAHIRA, L. 1978. Volcano, Hawaii Christmas Count. *'Elepaio* 39:119-121.
- KAY, E. A. (ed.). 1972. A natural history of the Hawaiian Islands: selected readings. Univ. Press of Hawaii, Honolulu.
- KEAR, J. 1975. Returning the Hawaiian Goose to the wild. Pp. 115-123 in R. D. Martin (ed.). *Breeding endangered species in captivity.* Academic Press, London.
- KEAR, J., AND A. J. BERGER. 1980. The Hawaiian Goose: An experiment in conservation. Buteo Books, Vermillion, S.D.
- KENDEIGH, S. C., AND C. R. BLEM. 1974. Metabolic adaptation to local climate in birds. *Comp. Biochem. Physiol.* 48A:175-187.
- KENDEIGH, S. C., AND B. J. FAWVER. 1981. Breeding bird populations in the Great Smoky Mountains, Tennessee and North Carolina. *Wilson Bull.* 93:218-242.
- KENNEDY, C. R. 1975. *Ecological animal parasitology.* J. Wiley, New York.
- KEPLER, A. K. 1984. Hawaiian heritage plants. Oriental Press, Taipei, Taiwan.
- KEPLER, C. B. 1967. Polynesian rat predation on nesting Laysan Albatrosses and other Pacific seabirds. *Auk* 84:426-430.
- KEPLER, C. B. 1969. Breeding biology of the blue-faced Booby, *Sula dactylatra personata*, on Green Island, Kure Atoll. *Publ. Nuttall Ornithol. Club.* 8.
- KEPLER, C. B., T. BURR, C. B. COOPER, D. DUNATCHIK, J. MEDEIROS, J. M. SCOTT, M. UEOKA, AND W. WONG. 1984. Maui-Molokai forest bird recovery plan. U.S. Fish and Wildlife Service, Portland, Ore.
- KEPLER, C. B., AND A. K. KEPLER. 1970. Preliminary comparison of bird species diversity and density in Luquillo and Guanica forests. Pp. E183-E186 in H. T. Odum (ed.). *A tropical rain forest: a study of irradiation and ecology at El Verde, Puerto Rico.* Div. Tech. Info., U.S. Atomic Energy Comm., Oak Ridge, Tenn.
- KEPLER, C. B., AND A. K. KEPLER. 1983. A first record of the nest and chicks of the Small Kauai Thrush. *Condor* 85:497-499.
- KEPLER, C. B., AND J. M. SCOTT. 1981. Reducing count variability by training observers. Pp. 366-371 in C. J. Ralph and J. M. Scott (eds.). *Estimating numbers of terrestrial birds.* Stud. Avian Biol. 6.
- KEPLER, C. B., AND J. M. SCOTT. 1985. Conservation of island ecosystems. Pp. 255-271 in P. J. Moors (ed.). *Conservation of island birds: case studies for the management of threatened island species.* Tech. Publ. 3, Intl. Council Bird Preservn.
- KILGORE, B. M. 1971. Response of breeding bird populations to habitat changes in a giant sequoia forest. *Amer. Midland Nat.* 85:135-152.
- KILHAM, L. 1964. The relation of breeding Yellow-bellied Sapsuckers to wounded birches and other trees. *Auk* 81:520-527.
- KILHAM, L. 1970. Feeding behavior of Downy Woodpecker. I. Preference for paper birches and sexual differences. *Auk* 87:544-556.
- KIMBALL, J. W., E. L. KOZICKY, AND B. A. NELSON. 1956. Pheasants of the plains and prairies. Pp. 204-263 in D. L. Allen (ed.). *Pheasants in North America.* Stackpole, Harrisburg, Pa.
- KING, W. B. (comp.) 1977. Red data book. Vol. 2: Birds. International Union for Conservation of Nature and Natural Resources, Morges, Switzerland.
- KING, W. B. 1978. Endangered birds of the world and current efforts toward managing them. Pp. 9-17 in S. A. Temple (ed.). *Endangered birds: management techniques for preserving threatened species.* Univ. Wisconsin Press, Madison.
- KING, W. B., AND P. J. GOULD. 1967. The status of Newell's race of the Manx Shearwater. *Living Bird* 6:163-186.
- KIRCH, P. 1982. The impact of the prehistoric Polynesians on the Hawaiian ecosystem. *Pacific Sci.* 36: 1-14.
- KIYOSU, Y. 1965. *The birds of Japan.* 3 vol. Kodansha, Tokyo.
- KLOPFER, P. 1963. Behavioral aspects of habitat selection: the role of early experience. *Wilson Bull.* 75: 15-22.

- KOSAKA, E., E. KRIDLER, J. MEDEIROS, D. REESER, AND D. H. WOODSIDE. 1983. Nene recovery plan (Hawaiian Goose). U.S. Fish and Wildlife Service, Portland, Ore.
- KRAMER, R. J. 1971. Hawaiian land mammals. C. E. Tuttle, Rutland, Vt.
- LACK, D. 1954. The natural regulation of animal numbers. Clarendon Press, Oxford, U.K.
- LACK, D. 1969. Subspeciation and sympatry in Darwin's finches. *Evolution* 23:252-263.
- LACK, D. 1976. Island biology illustrated by the land birds of Jamaica. Univ. Calif. Press, Berkeley.
- LAIRD, M. (ed.). 1984. Commerce and the spread of disease and pest vectors. Praeger, New York.
- LAIRD, M., AND C. VAN RIPER, III. 1981. Questionable reports of *Plasmodium* from birds in Hawaii, with recognition of *P. relictum* ssp. *capistranoae* (Russell, 1932) as the avian malaria parasite there. Pp. 159-165 in E. V. Canning (ed.). Parasitological topics. Soc. Protozool., Spec. Publ. 1.
- LANDRES, P. B., AND J. A. MACMAHON. 1983. Community organization of arboreal birds in some oak woodlands of western North America. *Ecol. Monogr.* 53:183-208.
- LA ROSA, A. M. 1984. The biology and ecology of *Passiflora mollissima* in Hawaii. Tech. Rept. 50, Coop. Nat. Res. Stud. Unit, Univ. Hawaii, Honolulu.
- LEOPOLD, A. 1933. Game management. Charles Scribner's Sons, New York.
- LEOPOLD, A. S. 1977. The California Quail. Univ. California Press, Berkeley.
- LEVIN, S. A. 1974. Dispersion and population interactions. *Amer. Nat.* 108:207-228.
- LEWIN, V. 1971. Exotic game birds of the Puu Waawaa Ranch, Hawaii. *J. Wildl. Manage.* 35:141-155.
- LEWIN, V., AND G. LEWIN. 1984. The Kalij Pheasant, a newly established game bird on the island of Hawaii. *Wilson Bull.* 96:634-646.
- LIETH, H. 1973. Primary production: terrestrial ecosystems. *Human Ecology* 1:303-332.
- LIGON, J. 1978. Reproductive interdependence of Piñon Jays and piñon pines. *Ecol. Monogr.* 48:111-126.
- LITTLE, H. P. 1984. The Nature Conservancy of Hawaii's endangered forest and bird project. Pp. 355-358 in J. A. McNeely and K. R. Miller (eds.). National parks, conservation, and development: the role of protected areas in sustaining society. Smithsonian Institution Press, Washington, D.C.
- LOCKE, L. N., W. O. WERTZ II, AND E. E. BROWN. 1965. Pox infection and a secondary cutaneous mycosis in a Red-tailed Tropicbird (*Phaethon rubricauda*). *Bull. Wildl. Disease Assn.* 1:60.
- LONG, J. L. 1981. Introduced birds of the world. A. H. and A. W. Reed, Sydney, Australia.
- LOVEJOY, T. E. 1974. Bird diversity and abundance in Amazon forest communities. *Living Bird* 13:127-191.
- MACARTHUR, R. H. 1964. Environmental factors affecting species diversity. *Amer. Nat.* 98:387-397.
- MACARTHUR, R. H. 1972. Geographical ecology: patterns in the distribution of species. Harper and Row, New York.
- MACARTHUR, R. H., AND J. MACARTHUR. 1961. On bird species diversity. *Ecology* 42:594-598.
- MACARTHUR, R. H., H. RECHER, AND M. L. CODY. 1966. On the relation between habitat selection and bird species diversity. *Amer. Nat.* 100:319-332.
- MACARTHUR, R. H., AND E. O. WILSON. 1967. The theory of island biogeography. Princeton Univ. Press, Princeton, N.J.
- MACDONALD, G. A., A. T. ABBOT, AND F. L. PETERSON. 1983. Volcanoes in the sea: the geology of Hawaii. Second ed. Univ. Hawaii Press, Honolulu.
- MACWORTH-PRAED, C. W., AND C. H. B. GRANT. 1957. African handbook of birds. Series 1. Birds of eastern and northeastern Africa. Vol. 1. Longman, London.
- MACMILLEN, R. E. 1974. Bioenergetics of Hawaiian honeycreepers: the Amakihi (*Loxops virens*) and the Anianiau (*L. parva*). *Condor* 76:62-69.
- MACMILLEN, R. E. 1981. Non-conformance of standard metabolic rate with body mass in Hawaiian honeycreepers. *Oecologia* 49:340-343.
- MACMILLEN, R. E., AND F. L. CARPENTER. 1980. Evening roosting flights of the honeycreepers *Himatione sanguinea* and *Vestiaria coccinea* on Hawaii. *Auk* 97:28-37.
- MARGALEF, R. 1963. On certain unifying principles in ecology. *Amer. Nat.* 97:357-374.
- MARQUES, A. 1905. Goats in Hawaii. Pp. 48-55 in Hawaiian annual for 1906. Thrum, Honolulu.
- MAY, P. G. 1982. Secondary succession and breeding bird community structure: patterns of resource utilization. *Oecologia* 55:208-216.
- MAYR, E., AND J. M. DIAMOND. 1976. Birds on islands in the sky: origin of the montane avifauna of northern Melanesia. *Proc. Natl. Acad. Sci.* 73:1765-1769.
- MCATEE, W. L. 1908. Food habits of the grosbeaks. *U.S. Biol. Surv., Bull.* 32.
- MEDEIROS, A. C., JR., L. L. LOOPE, AND R. A. HOLT. 1984. Status of native flowering plant species on the south slope of Haleakala, East Maui. Mimeograph, Haleakala Natl. Park, Makawao, H. I.
- MEDWAY, D. G. 1981. The contribution of Cook's third voyage to the ornithology of the Hawaiian Islands. *Pacific Sci.* 35:105-175.
- MEENTS, J. K., B. W. ANDERSON, AND R. D. OHMART. 1982. Vegetation relationships and food of Sage Sparrows wintering in honey mesquite habitat. *Wilson Bull.* 94:129-138.
- MEENTS, J. K., J. RICE, B. W. ANDERSON, AND R. D. OHMART. 1983. Nonlinear relationships between birds and vegetation. *Ecology* 64:1022-1027.
- MERTON, D. V. 1966. Transfer of Saddleback from Hen Island to Middle Chicken Island, January, 1964. *Notornis* 12:213-222.
- MERTON, D. V. 1975. Success in reestablishing a threatened species: the Saddleback—its status and conservation. *Bull. Intl. Council Bird Preservn.* 12: 150-158.
- MERTON, D. V., R. B. MORRIS, AND I. A. E. ATKINSON. 1984. Lek behavior in a parrot: the Kakapo *Strigops habroptilus* of New Zealand. *Ibis* 126:277-283.
- MEYER DE SCHAUENSEE, R. 1976. A guide to the birds of South America. Livingston, Wynnewood, Pa.
- MEYER DE SCHAUENSEE, R., AND W. H. PHELPS, JR.

1978. A guide to the birds of Venezuela. Princeton Univ. Press, Princeton, N.J.
- MILLER, A. H. 1937. Structural modifications in the Hawaiian Goose (*Nesochen sandvicensis*): a study in adaptive evolution. Univ. Calif. Publ. Zool. 42:1-80.
- MILLER, A. H. 1951. An analysis of the distribution of the birds of California. Univ. Calif. Publ. Zool. 50:531-644.
- MOORE, J. J., P. FITZSIMMONS, E. LAMBE, AND J. WHITE. 1970. A comparison and evaluation of some phytosociological techniques. Vegetatio 20:1-20.
- MOREAU, R. E. 1966. The bird faunas of Africa and its islands. Academic Press, New York.
- MORRISON, G. T. 1969. Hawaiian Hawk. 'Elepaio 29: 75-78.
- MORSE, D. H. 1976. Variables affecting the density and territory size of breeding spruce-woods warblers. Ecology 57:290-301.
- MOULTON, M. P., AND S. L. PIMM. 1983. The introduced Hawaiian avifauna: biogeographic evidence for competition. Amer. Nat. 121:669-690.
- MOUNTAINSPRING, S., AND J. M. SCOTT. 1985. Interspecific competition among Hawaiian forest birds. Ecol. Monogr. 55:219-239.
- MUELLER-DOMBOIS, D. 1980. The 'ohi'a dieback phenomenon in the Hawaiian rain forest. Pp. 153-161 in J. Cairns, Jr. (ed.). The recovery process in damaged ecosystems. Ann Arbor Sci. Publ., Ann Arbor, Mich.
- MUELLER-DOMBOIS, D. 1981. Understanding Hawaiian forest ecosystems: the key to biological conservation. Pp. 502-520 in D. Mueller-Dombois, K. W. Bridges, and H. L. Carson (eds.). Island ecosystems: biological organization in selected Hawaiian communities. Hutchinson Ross, Stroudsburg, Pa.
- MUELLER-DOMBOIS, D. 1982. Canopy dieback in indigenous forests of Pacific islands. Hawn. Botan. Soc. Newsl. 20:2-6.
- MUELLER-DUMBOIS, D. (ed.). 1983a. Canopy dieback and dynamic processes in Pacific forests. Pacific Sci. 37:313-489.
- MUELLER-DOMBOIS, D. 1983b. Population death in Hawaiian plant communities: causal theory and its successional significance. Tuexenia 3:117-130.
- MUELLER-DOMBOIS, D., K. W. BRIDGES, AND H. L. CARSON (eds.). 1981. Island ecosystems: biological organization in selected Hawaiian communities. Hutchinson Ross, Stroudsburg, Pa.
- MUELLER-DOMBOIS, D., AND H. ELLENBERG. 1974. Aims and methods of vegetation ecology. John Wiley, New York.
- MUELLER-DOMBOIS, D., AND V. J. KRAJINA. 1968. Comparison of east flank vegetation on Mauna Loa and Mauna Kea, Hawai'i. Recent Advances Tropic. Ecol. 2:508-520.
- MUELLER-DOMBOIS, D., AND C. H. LAMOUREUX. 1967. Soil-vegetation relationships in Hawaiian kipukas. Pacific Sci. 21:286-299.
- MULL, W. P., AND M. E. MULL. 1971. Sighting of 'O'u on Kauai trip. 'Elepaio 32:51-54.
- MUNRO, G. C. 1944. Birds of Hawaii. Tongg, Honolulu.
- MURDOCK, G. P. 1963. Human influences on the ecosystems of high islands of the tropical Pacific. Pp. 145-152 in F. R. Fosberg (ed.). Man's place in the island ecosystem. Bishop Museum Press, Honolulu.
- MYERS, J. G. 1923. The present position of the endemic birds of New Zealand. N. Z. J. Sci. Tech. 6: 65-99.
- NEWMAN, T. S. 1969. Cultural adaptations to the island of Hawaii ecosystem: the theory behind the 1968 Lapakahi project. Asian Pacific Archaeol. Ser. 3:3-14.
- NIE, N. H., C. H. HULL, J. G. JENKINS, K. STEINBRENNER, AND D. H. BENT. 1975. SPSS: statistical package for the social sciences. Second ed. McGraw-Hill, New York.
- NOON, B. R. 1981. The distribution of an avian guild along a temperate elevational gradient: the importance and expression of competition. Ecol. Monogr. 51:105-124.
- ODUM, E. P. 1950. Bird populations of the highlands (North Carolina) plateau in relation to plant succession and avian invasion. Ecology 31:587-605.
- OKIMOTO, B. F. 1975. Parasites of the Pacific Golden Plover and their use as biological markers. M.S. thesis, University of Hawaii, Honolulu.
- OLIVER, W. R. B. 1955. New Zealand birds. Second ed. A. H. and A. W. Reed, Wellington, N.Z.
- OLSON, S. L., AND H. F. JAMES. 1982a. Fossil birds from the Hawaiian Islands: evidence for wholesale extinction by man before western contact. Science 217:633-635.
- OLSON, S. L., AND H. F. JAMES. 1982b. Prodrum of the fossil avifauna of the Hawaiian Islands. Smithsonian Contrib. Zool. 365.
- ORIANI, G. H. 1969. The number of bird species in some tropical forests. Ecology 50:783-801.
- OVERTON, W. S., AND O. FLORSCHUTZ. 1962. A note on the use of path analysis and interpreting observational data, with reference to the analysis of goose kill around Lake Mattamuskeet, North Carolina, 1960-1961. Proc. Ann. Conf. Southeastern Assoc. Game and Fish Comm. 16:76-85.
- PATON, P. W. C. 1981. Yellow-fronted Canary extends range into 'ohi'a forest on the Big Island. 'Elepaio 42:11-12.
- PEALE, T. R. 1848. United States exploring expedition, 1838-42. Mammalia and Ornithology, Vol. 8. C. Sherman, Philadelphia, Penn.
- PEARSON, D. L. 1975. The relation of foliage complexity to ecological diversity of three Amazonian bird communities. Condor 77:453-466.
- PEARSON, D. L. 1977. A pantropical comparison of bird community structure on six lowland forest sites. Condor 79:232-244.
- PEARSON, O. P., AND C. P. RALPH. 1978. The diversity and abundance of vertebrates along an altitudinal gradient in Peru. Mem. Mus. Hist. Nat. "Javier Prado" 18.
- PEET, R. K. 1974. The measurement of species diversity. Ann. Rev. Ecol. Syst. 5:285-307.
- PEKELO, N., JR. 1963a. Some notes from Molokai. 'Elepaio 23:64.
- PEKELO, N., JR. 1963b. Nature notes from Molokai. 'Elepaio 24:17-18.
- PEKELO, N., JR. 1967. Letter regarding status of Molokai birds. 'Elepaio 27:90-91.



- PERKINS, R. C. L. 1893. Notes on collecting in Kona, Hawaii. *Ibis*, Ser. 6, 5:101-114.
- PERKINS, R. C. L. 1903. Vertebrata. Pp. 365-466 in D. Sharp (ed.). *Fauna Hawaiiensis*. Vol. 1, part IV. The University Press, Cambridge, England.
- PETTEYS, E. Q. P., R. E. BURGAN, AND R. E. NELSON. 1975. Ohia forest decline: its spread and severity in Hawaii. U.S. Forest Serv., Res. Paper PSW-105.
- PHILLIPS, A., J. MARSHALL, AND G. MONSON. 1964. The birds of Arizona. Univ. Arizona Press, Tucson.
- PIMM, S. L., AND J. W. PIMM. 1982. Resource use, competition, and resource availability in Hawaiian honeycreepers. *Ecology* 63:1468-1480.
- POPE, P. T., AND J. T. WEBSTER. 1972. The use of an *F*-statistic in stepwise regression procedures. *Technometrics* 14:327-340.
- PORTER, J. R. 1973. The growth and phenology of *Metrosideros* in Hawaii. Tech Rept. 27, Island Ecos. Intl. Res. Pgm., U.S. Intl. Biol. Pgm., Univ. Hawaii, Honolulu.
- POWER, D. M. 1972. Numbers of bird species on the California islands. *Evolution* 26:451-463.
- POWER, D. M. 1975. Similarity among avifaunas of the Galapagos Islands. *Ecology* 56:616-626.
- POUGH, R. H. 1949. Audubon land bird guide. Doubleday, Garden City, N.Y.
- PRATT, H. D. 1979. A systematic analysis of the endemic avifauna of the Hawaiian Islands. Ph.D. thesis, Louisiana State Univ., Baton Rouge.
- PRATT, H. D. 1980. Intra-island variation in the 'Elepaio on the island of Hawaii. *Condor* 82:449-458.
- PRATT, H. D. 1982. Relationships and speciation of the Hawaiian thrushes. *Living Bird* 19:73-90.
- PRATT, T. 1974. Plant communities and bird distribution in east Molokai. 'Elepaio 33:66-70.
- PYLE, L. 1979. Japanese Bushwarbler and Northern Cardinal on Molokai. 'Elepaio 40:27.
- PYLE, R. L., AND C. J. RALPH. 1982. Hawaiian Islands region. *Amer. Birds* 36:221-223.
- RAFFAELE, H. A. 1977. Comments on the extinction of *Loxigilla portoricensis grandis* in St. Kitts, Lesser Antilles. *Condor* 79:389-390.
- RAIKOW, R. J. 1975. Pelvic appendage myology of the Hawaiian honeycreepers (Drepanididae). *Auk* 93:774-792.
- RAIKOW, R. J. 1976. The origin and evolution of the Hawaiian honeycreepers (Drepanididae). *Living Bird* 15:95-117.
- RAIKOW, R. J. 1977. Pectoral appendage myology of the Hawaiian honeycreepers (Drepanididae). *Auk* 94:331-342.
- RALPH, C. J. 1981. An investigation of the effect of seasonal activity levels on avian censusing. Pp. 265-270 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- RALPH, C. J., AND B. D. MAXWELL. 1984. Relative effects of human and feral hog disturbance on a wet forest in Hawaii. *Biol. Conserv.* 30:291-303.
- RALPH, C. J., A. P. PEARSON, AND D. C. PHILLIPS. 1980. Observations on the life history of the endangered Hawaiian vetch (*Vicia menziesii*) (Fabaceae) and its use by birds. *Pacific Sci.* 34:83-92.
- RAMENSKY, L. G. 1924. Die Grundgesetzmässigkeiten im aufbau der Vegetationsdecke. *Věstnik Op-ýtneho děla Stredne-Chernoz. Obl., Voronezh*, pp. 37-73.
- RAMENSKY, L. G. 1983. Basic regularities of vegetation cover and their study. R. P. McIntosh, trans. *Bull. Ecol. Soc. Amer.* 64:8-12.
- RAMSEY, F. L. 1979. Parametric models for line transect surveys. *Biometrika* 66:505-512.
- RAMSEY, F. L., AND J. M. SCOTT. 1978. Use of circular plot surveys in estimating the density of a population with Poisson scattering. *Tech. Rept.* 60, Dept. Statistics, Oregon State Univ., Corvallis.
- RAMSEY, F. L., AND J. M. SCOTT. 1979. Estimating population densities from variable circular plot surveys. Pp. 155-181 in R. M. Cormack, G. P. Patil, and D. S. Robson (eds.). Sampling biological populations. *Stat. Ecol. Ser.*, Vol. 5. Int. Co-op. Publ. House, Fairland, Md.
- RAMSEY, F. L., AND J. M. SCOTT. 1981a. Analysis of bird survey data using a modification of Emlen's method. Pp. 483-487 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- RAMSEY, F. L., AND J. M. SCOTT. 1981b. Tests of hearing ability. Pp. 341-345 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- RAMSEY, F. L., J. M. SCOTT, AND R. T. CLARK. 1979. Statistical problems arising from surveys of rare and endangered forest birds. *Proc. 42nd Sess. Intl. Stat. Inst. (Manila, P. I.)* 1:471-483.
- RAPPAPORT, R. A. 1963. Aspects of man's influence upon island ecosystems: alteration and control. Pp. 155-170 in F. R. Fosberg (ed.). *Man's place in the island ecosystem*. Bishop Museum Press, Honolulu.
- RECHER, H. 1969. Bird species diversity and habitat diversity in Australia and North America. *Amer. Nat.* 103:75-80.
- REYNOLDS, R. T., J. M. SCOTT, AND R. A. NUSSBAUM. 1980. A variable circular-plot method for estimating bird numbers. *Condor* 82:309-313.
- RICE, E. L. 1972. Allelopathic effects of *Andropogon virginicus* and its persistence in old fields. *Amer. J. Bot.* 59:752-755.
- RICE, J., R. D. OHMART, AND B. W. ANDERSON. 1983. Habitat selection attributes of an avian community: a discriminant analysis investigation. *Ecol. Monogr.* 53:263-290.
- RICHARDS, L. P., AND P. H. BALDWIN. 1953. Recent records of some Hawaiian honeycreepers. *Condor* 55:221-222.
- RICHARDS, L. P., AND W. J. BOCK. 1973. Functional anatomy and adaptive evolution of the feeding apparatus in the Hawaiian honeycreeper genus *Loxops* (Drepanididae). *Ornithol. Monogr.* 15.
- RICHARDSON, F. 1949. Status of native land birds of Molokai. *Pacific Sci.* 3:226-230.
- RICHARDSON, F., AND J. BOWLES. 1961. Records of the rare native forest birds of Kauai, Hawaii. *Condor* 63:179-180.
- RICHARDSON, F., AND J. BOWLES. 1964. A survey of the birds of Kauai, Hawaii. B. P. Bishop Mus. *Bull.* 227.
- RIPPERTON, J. C., AND E. Y. HOSAKA. 1942. Vegetation zones of Hawaii. *Hawaii Agr. Exp. Sta., Bull.* 89.

- ROCK, J. F. 1913. The indigenous trees of the Hawaiian Islands. Privately printed, Honolulu.
- ROCK, J. F. 1919. A monographic study of the Hawaiian species of the tribe Lobelioideae, family Campanulaceae. Mem. B. P. Bishop Mus. 7(2):1-394.
- ROOT, R. B. 1967. The niche exploitation pattern of the Blue-gray Gnatcatcher. Ecol. Monogr. 37:317-350.
- ROTENBERRY, J. T., AND J. A. WIENS. 1980a. Habitat structure, patchiness, and avian communities in North American steppe vegetation: a multivariate analysis. Ecology 61:1228-1250.
- ROTENBERRY, J. T., AND J. A. WIENS. 1980b. Temporal variation in habitat structure and shrubsteppe bird dynamics. Oecologia 47:1-9.
- ROTENBERRY, J. T., AND J. A. WIENS. 1981. A synthetic approach to principal components analysis of bird/habitat relationships. Pp. 197-208 in D.E. Capen (ed.). The use of multivariate statistics in studies of wildlife habitat. U.S. Forest Serv., Gen. Tech. Rept. RM-87.
- ROTH, R. R. 1976. Spatial heterogeneity and bird species diversity. Ecology 57:773-782.
- ROTHSCHILD, W. 1893-1900. The avifauna of Laysan and the neighbouring islands. 3 vol. R. H. Porter, London.
- ROUTLEDGE, R. D. 1980. Bias in estimating the diversity of large, uncensused communities. Ecology 61:276-281.
- RUSSELL, P. F., F. W. KNIPE, T. R. RAO, AND P. PUTNAM. 1944. Some experiments on flight range of *Anopheles culicifacies*. J. Exp. Zool. 97:135-163.
- SABO, S. R. 1980. Niche and habitat relationships in subalpine bird communities of the White Mountains of New Hampshire. Ecol. Monogr. 50:241-259.
- SABO, S. R. 1982. The rediscovery of Bishop's 'O'o on Maui. 'Elepaio 42:69-70.
- SABO, S.R., AND R. T. HOLMES. 1983. Foraging niches and community structure of forest birds in contrasting habitats in the White Mountains, New Hampshire. Condor 85:121-138.
- SABO, S. R., AND R. H. WHITTAKER. 1979. Bird niches in a subalpine forest: an indirect ordination. Proc. Natl. Acad. Sci. 76:1338-1342.
- ST. JOHN, H. 1973. List and summary of the flowering plants in the Hawaiian Islands. Pacific Trop. Bot. Garden, Mem. 1.
- SAKAI, H. F., AND T. C. JOHANOS. 1983. The nest, egg, young, and aspects of the life history of the endangered Hawaii Creeper. West. Birds 14:73-84.
- SAKAI, H., AND C. J. RALPH. 1980. Observations on the Hawaiian Crow in South Kona, Hawaii. 'Elepaio 40:133-138.
- SALT, G. W. 1952. The relation of metabolism to climate and distribution in three finches of the genus *Carpodacus*. Ecol. Monogr. 22:121-152.
- SALT, G. W. 1957. An analysis of avifaunas in the Teton Mountains and Jackson Hole, Wyoming. Condor 59:373-393.
- SCHEMSKE, D. W., AND N. BROKAW. 1981. Treefalls and the distribution of understory birds in a tropical forest. Ecology 62:938-945.
- SCHOENER, T. W. 1974. Competition and the form of habitat shift. Theoret. Pop. Biol. 6:265-307.
- SCHWARTZ, C. W., AND E. R. SCHWARTZ. 1949. A reconnaissance of the game birds in Hawaii. Board of Commissioners of Agriculture and Forestry, Territory of Hawaii.
- SCHWARTZ, C. W., AND E. R. SCHWARTZ. 1950. The California Quail in Hawaii. Auk 67:1-38.
- SCHWARTZ, C. W., AND E. R. SCHWARTZ. 1951a. A survey of the Lace-necked Dove in Hawaii. Pacific Sci. 5:90-107.
- SCHWARTZ, C. W., AND E. R. SCHWARTZ. 1951b. An ecological reconnaissance of the pheasants in Hawaii. Auk 68:281-314.
- SCHWARTZ, C. W., AND E. R. SCHWARTZ. 1951c. Food habits of the Barred Dove in Hawaii. Wilson Bull. 63:149-156.
- SCOTT, J. M., J. K. BAKER, A. J. BERGER, E. KOSAKA, L. LANDGRAF, C. J. RALPH, D. WOODSIDE, R. BACHMAN, AND T. BURR. 1983. Hawaii Forest Bird Recovery Plan. U.S. Fish and Wildlife Service, Portland, Ore.
- SCOTT, J. M., S. CONANT, AND H. D. PRATT. 1979. Field identification of the Hawaiian Creeper on the island of Hawaii. West. Birds 10:71-80.
- SCOTT, J. M., J. D. JACOBI, AND F. L. RAMSEY. 1981. Avian surveys of large geographical areas: a systematic approach. Wildl. Soc. Bull. 9:190-200.
- SCOTT, J. M., S. MOUNTAINSPRING, C. VAN RIPER III, C. B. KEPLER, J. D. JACOBI, T. A. BURR, AND J. G. GIFFIN. 1984. Annual variation in the distribution, abundance, and habitat of the Palila (*Loxioides bailleui*). Auk 101:647-664.
- SCOTT, J. M., AND F. L. RAMSEY. 1981a. Length of count period as a possible source of bias in estimating bird numbers. Pp. 409-413 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. Stud. Avian Biol. 6.
- SCOTT, J. M., AND F. L. RAMSEY. 1981b. The effect of abundant species on the ability of observers to make accurate counts of birds. Auk 99:610-613.
- SCOTT, J. M., F. L. RAMSEY, AND C. B. KEPLER. 1981. Distance estimation as a variable in estimating bird numbers. Pp. 334-340 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. Stud. Avian Biol. 6.
- SCOTT, J. M., AND J. L. SINCOCK. 1977. Recent observations on the birds of the Koolau Forest Reserve, Maui. West. Birds 8:113-116.
- SCOTT, J. M., J. L. SINCOCK, AND A. J. BERGER. 1980. Records of nests, eggs, nestlings and cavity nesting of endemic passerine birds in Hawaii. 'Elepaio 40:163-168.
- SCOTT, J. M., D. H. WOODSIDE, AND T. L. C. CASEY. 1977. Observations of birds in the Molokai Forest Reserve, July 1975. 'Elepaio 38:25-27.
- SCOWCROFT, P. G. 1983. Tree cover changes in mamane (*Sophora chrysophylla*) forests grazed by sheep and cattle. Pacific Sci. 37:109-119.
- SCOWCROFT, P. G., AND J. G. GIFFIN. 1983. Feral herbivores suppress mamane and other browse species on Mauna Kea, Hawaii. J. Range Manage. 36:638-645.
- SCOWCROFT, P. G., AND H. F. SAKAI. 1983. Impact of feral herbivores on mamane forests of Mauna Kea, Hawaii: bark stripping and diameter class structure. J. Range Manage. 36:495-498.
- SCOWCROFT, P. G., AND H. F. SAKAI. 1984. Stripping

- of *Acacia koa* bark by rats on Hawaii and Maui. Pacific Sci. 38:80-86.
- SEALE, A. 1900. Field notes on the birds of Oahu, H. I. Occ. Pap. B. P. Bishop Mus. 1:33-46.
- SEBER, G. A. F. 1973. The estimation of animal abundance. Hafner, New York.
- SHALLENBERGER, R. J., AND G. K. VAUGHN. 1978. Avifaunal survey in the central Ko'alaui Range, Oahu. Ahuimanu Productions, Honolulu.
- SHARP, D. (ed.). 1899-1913. Fauna Hawaiiensis. The University Press, Cambridge, England.
- SHUGART, H. H., JR., AND D. JAMES. 1973. Ecological succession of breeding bird populations in north-western Arkansas. Auk 90:62-77.
- SHUGART, H. H., JR., AND B. C. PATTEN. 1972. Niche quantification and the concept of niche pattern. Pp. 284-327 in B. C. Patten (ed.). Systems analysis and simulation in ecology. Vol. 2. Academic Press, New York.
- SIBLEY, C. G., AND J. E. AHLQUIST. 1982. The relationships of the Hawaiian honeycreepers (*Drepanini*) as indicated by DNA-DNA hybridization. Auk 99:130-140.
- SIMON, H. A. 1962. The architecture of complexity. Proc. Amer. Philosoph. Soc. 106:467-482.
- SIMONS, T. R. 1983. Biology and conservation of the endangered Hawaiian Dark-rumped Petrel (*Pterodroma phaeopygia sandwichensis*). Tech. Rept. 83-2, Coop. Park Stud. Unit, Univ. Washington, Seattle.
- SIMPSON, E. H. 1949. Measurement of diversity. Nature 163:688.
- SINCOCK, J. L., R. E. DAEHLER, T. TELFER, AND D. H. WOODSIDE. 1984. Kauai forest bird recovery plan. U.S. Fish and Wildlife Service, Portland, Ore.
- SINCOCK, J. L., AND J. M. SCOTT. 1980. Cavity nesting of the Akepa on the island of Hawaii. Wilson Bull. 92:261-263.
- SLUD, P. 1976. Geographic and climatic relationships of avifaunas with special reference to comparative distribution in the Neotropics. Smithsonian Contrib. Zool. 212.
- SMITH, C. W. 1985. Impact of alien plants on Hawaii's native biota. Pp. 180-250 in C. P. Stone and J. M. Scott (eds.). Hawaii's terrestrial ecosystems: preservation and management. Univ. Hawaii Press, Honolulu.
- SMITH, J. D. 1952. The Hawaiian Goose (Nene) restoration program. J. Wildl. Mgmt. 16:1-9.
- SMITH, K. G. 1977. Distribution of summer birds along a forest moisture gradient in an Ozark watershed. Ecology 58:810-819.
- SMITH, K. G., AND J. A. MACMAHON. 1981. Bird communities along a montane sere: community structure and energetics. Auk 98:8-28.
- SMYTHIES, B. E. 1953. The birds of Burma. Second ed. Oliver and Boyd, London.
- SNOW, B. K., AND D. N. SNOW. 1971. The feeding ecology of tanagers and honeycreepers in Trinidad. Auk 88:291-322.
- SOULÉ, M. E., B. A. WILCOX, AND C. HOLTBY. 1979. Benign neglect: a model of faunal collapse in the game reserves of East Africa. Biol. Conserv. 15:259-272.
- SPATZ, G., AND D. MUELLER-DOMBOIS. 1973. The influence of feral goats on koa tree reproduction in Hawaii Volcanoes National Park. Ecology 54:870-876.
- SPENCE, G. E., AND G. K. KOBAYASHI. 1971. Checklist of trees and common plants of Puuwaawaa district, North Kona, Hawaii. Mimeograph, Hawaii Natural Areas Reserve Comm., Honolulu.
- SPENCE, G. E., AND S. L. MONTGOMERY. 1976. Ecology of the dryland forest at Kānepu'u, island of Lāna'i. Hawn. Botan. Soc. Newsl. 15:62-80.
- SPIETH, H. T. 1966. Hawaiian honeycreeper, *Vestiaria coccinea* (Foster), feeding on lobeliad flowers, *Clermontia arborescens* (Mann) Hillebrand. Amer. Nat. 100:470-473.
- SPRUNT, A., JR. 1948. *Mimus polyglottos polyglottos* (Linnaeus): Eastern Mockingbird. Pp. 295-315 in A. C. Bent. Life histories of North American nuthatches, wrens, thrashers, and their allies. U.S. Natl. Mus. Bull. 195.
- STEARNS, H. T. 1966. Geology of the State of Hawaii. Pacific Books, Palo Alto, Calif.
- STONE, C. P. 1985. Alien animals in Hawaii's native ecosystems: towards controlling the adverse effects of introduced vertebrates. Pp. 251-297 in C. P. Stone and J. M. Scott (eds.). Hawaii's terrestrial ecosystems: preservation and management. Univ. Hawaii Press, Honolulu.
- STONE, C. P., R. L. WALKER, J. M. SCOTT, AND P. C. BANKO. 1983. Hawaiian Goose Management and research—where do we go from here? 'Elepaio 44: 11-15.
- STRESEMANN, E. 1950. Birds collected during Capt. James Cook's last expedition (1776-1780). Auk 67: 66-88.
- STURMAN, W. A. 1968. Description and analysis of breeding habits of the chickadees, *Parus atricapillus* and *P. rufescens*. Ecology 49:418-431.
- SVÄRDSON, G. 1949. Competition and habitat selection in birds. Oikos 1:157-174.
- SWEZEY, O. H. 1954. Forest entomology in Hawaii; an annotated check-list of the insect faunas of the various components of the Hawaiian forests. B. P. Bishop Mus., Spec. Publ. 44.
- SZARO, R. C., AND R. P. BALDA. 1979. Bird community dynamics in a ponderosa pine forest. Stud. Avian Biol. 3.
- SZARO, R. C., AND M. D. JAKLE. 1982. Comparisons of variable circular-plot and spot-map methods in desert riparian and scrub habitats. Wilson Bull. 94: 546-550.
- TELFER, T. C. 1983. Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater recovery plan. U.S. Fish and Wildlife Service, Portland, Ore.
- TEMPLE, S. A. 1978. The concept of managing endangered birds. Pp. 3-8 in S. A. Temple (ed.). Endangered birds: management techniques for preserving threatened species. Univ. Wisconsin Press, Madison.
- TERBORGH, J. 1971. Distribution on environmental gradients: theory and a preliminary interpretation of distributional pattern in the avifauna of the Cordillera Vilcabamba, Peru. Ecology 52:23-40.
- TERBORGH, J. 1977. Bird species diversity on an Andean elevational gradient. Ecology 58:1007-1019.
- TERBORGH, J., AND J. S. WESKE. 1969. Colonization

- of secondary habitats by Peruvian birds. *Ecology* 50: 765-782.
- TERBORGH, J., AND J. S. WESKE. 1975. The role of competition in the distribution of Andean birds. *Ecology* 56:562-576.
- TITUS, K., AND J. A. MOSHER. 1981. Nest-site habitat selected by woodland hawks in the central Appalachians. *Auk* 98:270-281.
- TOMICH, P. Q. 1962. Notes on the Barn Owl in Hawaii. *'Elepaio* 23:16-17.
- TOMICH, P. Q. 1969. *Mammals in Hawaii*. Bishop Mus. Press, Honolulu.
- TOMICH, P. Q. 1971a. Notes on foods and feeding behavior of raptorial birds in Hawaii. *'Elepaio* 31: 111-114.
- TOMICH, P. Q. 1971b. Notes on nests and behavior of the Hawaiian Crow. *Pacific Sci.* 25:465-474.
- TOMICH, P. Q. 1981. Community structure of introduced rodents and carnivores. Pp. 301-309 in D. Mueller-Dombois, K. W. Bridges, and H. L. Carson (eds.). *Island ecosystems: biological organization in selected Hawaiian communities*. Hutchinson Ross, Stroudsburg, Pa.
- TROST, C. H. 1972. Adaptations of Horned Larks (*Eremophila alpestris*) to hot environments. *Auk* 89: 506-527.
- TURNER, M. E., AND C. D. STEVENS. 1959. The regression analysis of causal paths. *Biometrics* 15:236-258.
- TWAIN, M. 1872. *Roughing it*. American Publ. Co., Hartford, Conn.
- UDVARDY, M. D. F. 1957. An evaluation of quantitative studies in birds. *Cold Spring Harbor Symp. Quant. Biol.* 22:301-311.
- UDVARDY, M. D. F. 1961. The occurrence of the Mockingbird on the island of Maui. *'Elepaio* 21:72.
- U.S. FISH AND WILDLIFE SERVICE. 1983. Republication of the lists of endangered and threatened species. *Fed. Reg.* 48:34182-34196.
- VANDER WALL, S. B., AND R. P. BALDA. 1977. Coadaptations of the Clark's Nutcracker and the piñon pine for efficient seed harvest and dispersal. *Ecol. Monogr.* 47:89-111.
- VAN RIPER, C., III. 1972. Discovery of the nest of the Maui Creeper. *'Elepaio* 32:100-102.
- VAN RIPER, C., III. 1973a. Island of Hawaii land bird distribution and abundance. *'Elepaio* 34:1-3.
- VAN RIPER, C., III. 1973b. The nesting of the Apapane in lava caves on the island of Hawaii. *Wilson Bull.* 85:238-240.
- VAN RIPER, C., III. 1976. Aspects of House Finch breeding biology in Hawaii. *Condor* 78:224-229.
- VAN RIPER, C., III. 1978a. An 'O'ū observation at Hawaii Volcanoes National Park. *'Elepaio* 39:32-33.
- VAN RIPER, C., III. 1978b. Discovery of the Yellow-fronted Canary on Mauna Kea, Hawaii. *'Elepaio* 38: 99-100.
- VAN RIPER, C., III. 1978c. The breeding biology of the Amakihi (*Loxops virens*) and Palila (*Psittirostra bailleui*) on Mauna Kea, Hawaii. Ph.D. thesis, Univ. Hawaii, Honolulu.
- VAN RIPER, C., III. 1980. Observations on the breeding of the Palila *Psittirostra bailleui* of Hawaii. *Ibis* 122:462-475.
- VAN RIPER, C., III. 1982. Censuses and breeding observations of the birds on Kohala Mountain, Hawaii. *Wilson Bull.* 94:463-476.
- VAN RIPER, C., III. 1984. The influence of nectar resources on nesting success and movement patterns of the Common Amakihi (*Hemignathus virens*). *Auk* 101:38-46.
- VAN RIPER, C., III, AND J. M. SCOTT. 1979. Observations on distribution, diet, and breeding of the Hawaiian Thrush. *Condor* 81:65-71.
- VAN RIPER, C., III, J. M. SCOTT, AND D. M. WOODSIDE. 1978. Distribution and abundance patterns of the Palila on Mauna Kea, Hawaii. *Auk* 95:518-527.
- VAN RIPER, C., III, S. G. VAN RIPER, M. L. GOFF, AND M. LAIRD. 1982. The impact of malaria on birds in Hawaii Volcanoes National Park. *Tech. Rept. 47, Coop. Nat. Res. Stud. Unit, Univ. Hawaii, Honolulu*.
- VAN RIPER, S. G., AND C. VAN RIPER III. 1985. A summary of known parasites and diseases recorded from the avifauna of the Hawaiian Islands. Pp. 298-371 in C. P. Stone and J. M. Scott (eds.). *Hawaii's terrestrial ecosystems: preservation and management*. Univ. Hawaii Press, Honolulu.
- VAURIE, C. 1980. Taxonomy and geographical distribution of the Furnariidae (Aves, Passeriformes). *Bull. Amer. Mus. Nat. Hist.* 166:1-357.
- VUILLEUMIER, F. 1970. Insular biogeography in continental regions. I. The northern Andes of South America. *Amer. Nat.* 104:373-388.
- VUILLEUMIER, F., AND D. SIMBERLOFF. 1980. Ecology versus history as determinants of patchy and insular distributions in high Andean birds. *Evol. Biol.* 12: 235-379.
- WAGNER, W. L., D. HERBST, AND R. S. N. YEE. 1985. Status of the native flowering plants of the Hawaiian Islands. Pp. 23-74 in C. P. Stone and J. M. Scott (eds.). *Hawaii's terrestrial ecosystems: preservation and management*. Univ. Hawaii Press, Honolulu.
- WALKER, R. L. 1966. Nene restoration project report. *'Elepaio* 26:96-100.
- WALTERS, J. F. 1979. Christmas bird count: Puu O Kali, Maui. *'Elepaio* 39:89-91.
- WARD, W. V. 1964. The songs of the Apapane. *Living Bird* 3:97-117.
- WARNER, R. E. 1967. Scientific report of the Kipahulu Valley expedition. The Nature Conservancy, Washington, D.C.
- WARNER, R. E. 1968. The role of introduced diseases in the extinction of the endemic Hawaiian avifauna. *Condor* 70:101-120.
- WARSHAUER, F. R. 1980. An overview of the feral pig problem in Hawaii Volcanoes National Park. Pp. 476-480 in *Proceedings of the second conference on scientific research in the national parks*. Vol. 8. Natl. Park Serv., Washington, D.C.
- WARSHAUER, F. R., AND J. D. JACOBI. 1982. The distribution and status of *Vicia menziesii* Spreng. (Leguminosae): Hawaii's first officially listed endangered plant species. *Biol. Conserv.* 23:111-126.
- WARSHAUER, F. R., J. D. JACOBI, A. M. LA ROSA, J. M. SCOTT, AND C. W. SMITH. 1983. The distribution, impact and potential management of the introduced vine *Passiflora mollissima* (Passifloraceae) in

- Hawai'i. Tech. Rept. 48, Coop. Natl. Park Res. Stud. Unit, Univ. Hawaii, Honolulu.
- WEATHERS, W. W. 1979. Climatic adaptation in avian standard metabolic rate. *Oecologia* 42:81-89.
- WEATHERS, W. W., AND C. VAN RIPER III. 1982. Temperature regulation in two endangered Hawaiian honeycreepers: the Palila (*Psittirostra bailleui*) and the Laysan Finch (*Psittirostra cantans*). *Auk* 99:667-674.
- WESTMAN, W. E. 1981. Factors influencing the distribution of species of California coastal sage scrub. *Ecology* 62:439-455.
- WETMORE, A. 1925. Bird life among lava rock and coral sand. *Natl. Geogr. Mag.* 48(7):76-108.
- WHITEHEAD, D. R., AND C. E. JONES. 1969. Small islands and the equilibrium theory of insular biogeography. *Evolution* 23:171-179.
- WHITMORE, R. C. 1975. Habitat ordination of passerine birds of the Virgin River Valley, southwestern Utah. *Wilson. Bull.* 87:65-74.
- WHITMORE, R. C. 1977. Habitat partitioning in a community of passerine birds. *Wilson Bull.* 89:253-265.
- WHITTAKER, R. H. 1952. A study of summer foliage insect communities in the Great Smoky Mountains. *Ecol. Monogr.* 22:1-44.
- WHITTAKER, R. H. 1956. Vegetation of the Great Smoky Mountains. *Ecol. Monogr.* 26:1-80.
- WHITTAKER, R. H. 1960. Vegetation of the Siskiyou Mountains, Oregon and California. *Ecol. Monogr.* 30:279-338.
- WHITTAKER, R. H. 1967. Gradient analysis of vegetation. *Biol. Rev.* 42:207-264.
- WHITTAKER, R. H. 1972. Evolution and measurement of species diversity. *Taxon* 21:213-251.
- WHITTAKER, R. H. 1975. Communities and ecosystems. Second edition. Macmillan, New York.
- WHITTAKER, R. H. 1977. Evolution of species diversity in land communities. *Evol. Ecol.* 10:1-67.
- WHITTAKER, R. H., AND H. G. GAUCH, JR. 1978. Evaluation of ordination techniques. Pp. 277-336 in R. H. Whittaker (ed.). Ordination of plant communities. Junk, The Hague, Netherlands.
- WHITTAKER, R. H., AND S. A. LEVIN. 1977. The role of mosaic phenomena in natural communities. *Theoret. Popul. Biol.* 12:117-139.
- WHITTAKER, R. H., S. A. LEVIN, AND R. B. BOOT. 1973. Niche, habitat, and ecotope. *Amer. Nat.* 107:321-338.
- WIENS, J. A. 1973. Pattern and process in grassland bird communities. *Ecol. Monogr.* 43:237-270.
- WIENS, J. A. 1977. On competition and variable environments. *Amer. Sci.* 65:590-597.
- WIENS, J. A. 1981. Scale problems in avian censusing. Pp. 513-521 in C. J. Ralph and J. M. Scott (eds.). Estimating numbers of terrestrial birds. *Stud. Avian Biol.* 6.
- WIENS, J. A., AND R. A. NUSSBAUM. 1975. Model estimation of energy flow in northwestern coniferous forest bird communities. *Ecology* 56:547-561.
- WILDMAN, V. J. 1983. A new estimator of effective area surveyed in wildlife studies. Ph.D. thesis, Oregon State Univ., Corvallis.
- WILLIAMS, G. R. 1977. Marooning—a technique for saving threatened species from extinction. *Int. Zoo Yearbook* 17:102-106.
- WILLIAMS, J. B., AND G. O. BATZLI. 1979. Competition among bark-foraging birds in central Illinois: experimental evidence. *Condor* 81:122-132.
- WILLIAMS, J. G. 1963. A field guide to the birds of east and central Africa. Houghton-Mifflin, Boston.
- WILLIAMSON, M. 1981. Island populations. Oxford Univ. Press, Oxford.
- WILLSON, M. F. 1974. Avian community organization and habitat structure. *Ecology* 55:1017-1029.
- WILLSON, M. F., AND D. J. MORIARTY. 1976. Bird species diversity in forest understory: analysis of mist-net samples. *Oecologia* 25:373-379.
- WILSON, S. B. 1888. On *Chloridops*, a new generic form of Fringillidae from the island of Hawaii. *Proc. Zool. Soc. London* 1888:218.
- WILSON, S. B., AND A. H. EVANS. 1890-1899. Aves Hawaienses: the birds of the Sandwich Islands. R. H. Porter, London.
- WOLFENBARGER, D. O. 1946. Dispersion of small organisms: distance dispersion rates of bacteria, spores, seeds, pollen and insects; incidence rates of diseases and injuries. *Amer. Midland Nat.* 35:1-152.
- WOODWARD, P. W. 1972. The natural history of Kure Atoll, Northwestern Hawaiian Islands. *Atoll Res. Bull.* 164.
- YOCOM, C. F. 1967. Ecology of feral goats in Haleakala National Park, Maui, Hawaii. *Amer. Midland Nat.* 77:418-451.
- ZIMMERMAN, E. C. 1948. Insects of Hawaii. Vol. 1, Introduction. Univ. Hawaii Press, Honolulu.
- ZIMMERMAN, E. C. 1963. Nature of the land biota. Pp. 57-63 in F. R. Fosberg (ed.). Man's place in the island ecosystem. Bishop Museum Press, Honolulu.