

An Annotated Bibliography of the Natural History of Tuvalu (Ellice Islands)¹

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ABSTRACT: The compilation includes monographs, scientific papers, and published letters and notes concerned with the geology, biology, oceanography, meteorology, and geophysics of the nine atolls of the Ellice Group now known as Tuvalu. Medical matters are included where these concern the zoological. Particular attention is paid to papers arising from three Royal Society expeditions to Funafuti in 1896–1898 concerned with sinking a deep boring through a coral atoll, and the visit of Professor Agassiz in 1899. Excluded are matters concerned with general exploration, anthropology, human geography, history, administration, and general areas of health and hygiene.

THE ARCHIPELAGO OF TUVALU, formerly the Ellice Group, consists of nine atolls situated between 5° and 10.5° S latitude and 176° and 179.8° E longitude (Figure 1). The Spanish explorer Medaña possibly sighted the group in 1568. Captain de Peyster in the *Rebecca* is believed to be the first European to visit the largest atoll, Funafuti, arriving on 18 March 1819.

Specimens of the animal and plant life of the islands start to appear in the collections and herbaria of Western Europe from about the mid-19th century on; a time when black-birders and introduced diseases were rapidly depopulating the archipelago.

A British protectorate was proclaimed over the Ellice Islands in 1892, and in 1896 the Coral Reef Committee of the Royal Society of London made Funafuti the center of attention among the world scientific community by selecting it as a site on which to attempt to sink a deep bore hole in order to test Darwin's theory concerning the formation of coral islands. Three expeditions were to be made in connection with this boring.

The first, in 1896, was headed by W. J. Sollas who was accompanied by Stanley Gardiner. They were joined in Sydney by a representative of the Australian Museum, Charles

Hedley. Two borings were attempted, using a drilling rig supplied by the New South Wales Department of Mines, and were abandoned at 105 and 74 ft. However, considerable other data and specimens of the natural history of the atoll were collected, including soundings and geophysical measurements obtained by the officers of the gunboat *HMS Penguin*.

A second expedition in 1897, led by Edgeworth David of the University of Sydney, achieved the main objective of the Royal Society in boring to a depth greater than 600 ft, although still in limestone. The drilling was continued by G. Sweet to a depth of 698 ft and then abandoned for the year.

The third expedition, under A. E. Finkh, deepened this main hole to 1114.5 ft before running out of cutting diamonds in October 1898. Again the bore remained in limestone.

Within a matter of months of the final departure of *HMS Penguin* with the Royal Society cores, Professor Agassiz from Harvard arrived on board the *USS Albatross* in the course of a Pacific scientific cruise. He reported that, "On all the islands with rock exposures, we came across the hammer marks of Messrs Sollas and David" (1903:219).

The publication of the wealth of zoological, botanical, geological, and oceanographic information collected by these four expeditions was to make the natural history of Funafuti the best documented of any atoll in the Pacific and Indian Ocean.

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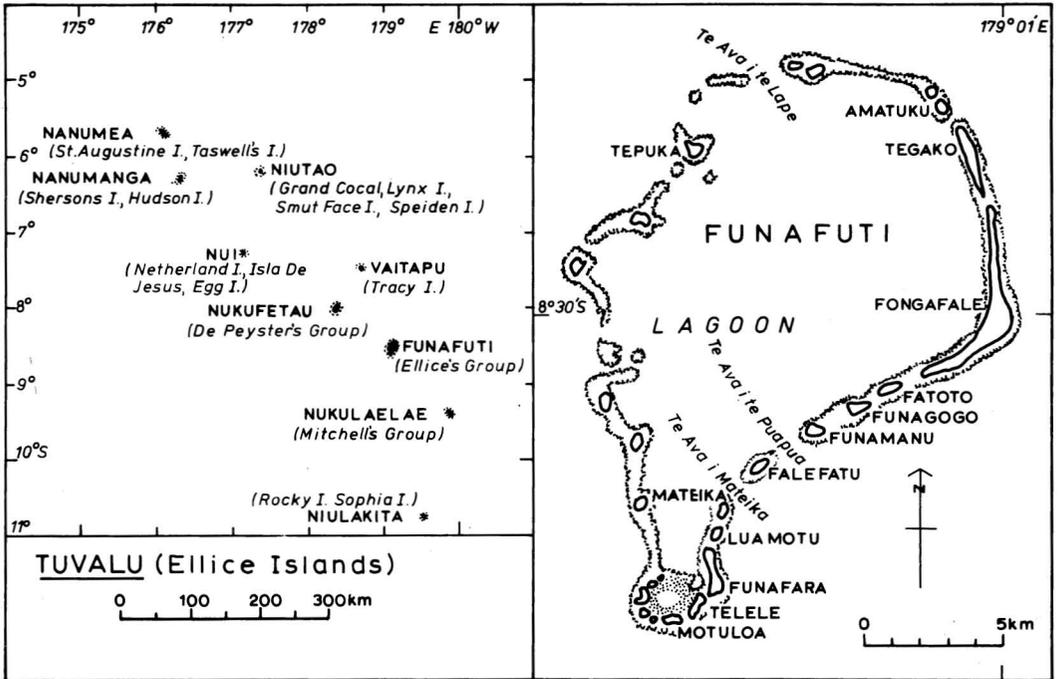


FIGURE 1. Sketch maps of the archipelago of Tuvalu and of the main atoll of Funafuti. Former names of the various atolls are italicized in parentheses. (In part after South Sea Digest Fact Sheet 4, Pacific Publications.)

Subsequently, a number of scientific parties visited Tuvalu in the course of Pacific excursions, both between the world wars and following the second world war. These included Sixten Bock under the auspices of the Swedish Museum of Natural History (1917–1918), P. A. Buxton and G. H. E. Hopkins of the London School of Hygiene and Tropical Medicine in September 1924, and the British survey ship *Challenger* in 1951. However, the collection of fresh specimen material from the atolls was largely done on a part-time or casual basis as an adjunct to some other activity in the Pacific area. For example, Buxton and Hopkins made an extensive collection of arthropods in the course of filarial studies centered on Samoa; Buxton made a short visit to the Ellice Group to supplement their filarial data during which he collected some other insects.

As a direct consequence of the above, the majority of publications concerned with Tuvalu and produced in the early and mid-20th century, consist of reworking and/or reinterpretation of the collections and obser-

vations of earlier expeditions. In one respect this was inevitable: the Royal Society's panel of experts who reported on the cores and other reef materials were under an embargo not to comment on the significance of their findings; an attitude of objectivity was to be maintained. As such, the published information became open to interpretation by all parties. It simply fed the flames rather than shedding much light on the coral reef controversy.

As to the extensive zoological and botanical collections from both Funafuti and other atolls of Tuvalu, most publications have been devoted to listing what occurs and who collected it or to revising classifications of earlier workers. The comparative lack of recent collecting trips devoted to this area of the Pacific, south of the equator, is shown by the few occasions that Tuvalu figures in accounts of the distributions of particular organisms within the Pacific.

In 1973, it was suggested that I re-examine the limestone cores obtained from Funafuti by the Royal Society and held by the Depart-

ment of Mineralogy of the British Museum (Natural History). In the course of this work it was found necessary to obtain a wide familiarity with aspects of the atoll's natural history, other than its geology, out of which has grown the present bibliographic compilation. I hope this may prove useful to other workers in the Pacific, particularly as it appears that in a number of studies several authors have not been aware of some research that has gone before.

For example, it is clear that Chapman (1955), in describing the collection of algae from Funafuti made by the *Challenger*, was not aware of the earlier floral lists of Barton (1900, 1901) and Foslie (1900*a, b*, 1901). To some extent this is understandable. Few scientists would expect to find species from Funafuti described in the records of the *Siboga* expedition, which did not come within 1000 miles of the island. Further, it was by chance that I became aware of the extensive documentation on arthropods from Tuvalu contained in *The Insects of Samoa* published by the British Museum (Natural History). It would appear that some workers have not been aware that these volumes include material other than from Samoa. Certainly, Krauss (1969) was not aware of the existence of these records in his excellent bibliographic coverage of the Ellice Group.

It is only with the enthusiastic help of librarians, particularly from the Australian Museum and the University of Auckland, that the present compilation has reached the stage that it has.

An attempt has been made to include:

(i) all monographs, scientific papers, and published letters and notes concerned with the three Royal Society expeditions of 1896–1898. Where opinions have been expressed on the Funafuti evidence in connection with the coral reef debate, these too have been included. Such was the interest in the scientific community as to the results of the expedition that many of the early (1896–1899) reports were duplicated; the same material appeared not only in British, American, and Australian proceedings of learned societies but also in concurrent publications within one country, *Nature* and *Natural Science* in Great Britain;

(ii) the majority of reports concerned with collections made by Professor Agassiz. However, not all *Reports on the Scientific Results of the Expedition . . . by the USS Albatross* were available for consultation to see if they contained reference to Tuvaluan material;

(iii) all monographs, scientific papers, and the like concerned with other explorations of the atolls in the fields of biology, oceanography, geology (including geomorphology), meteorology, geophysics, and medical matters where these impinge directly on the zoological (see below);

(iv) comments on the above where these provide new data or different interpretations;

(v) prominent textbooks and monographs incorporating reviews of Tuvaluan material, particularly where this information is revised in the light of more recent discoveries.

Excluded are matters connected with general exploration, ethnology (and anthropology in general), human geography, historical matters, and administrative reports, including areas of health and hygiene not referred to above.

Many of the areas included lie outside my field of expertise, and I am aware that some sizeable gaps exist in the coverage. For example, only a few biological revisions that incorporate Tuvaluan specimens but whose geographic coverage is not apparent from the title or abstract have been included here. However, I am prepared to continue with this work and to produce a revision or supplement to the present bibliography. I would like to request any person using the compilation who becomes aware of a deficiency to draw the matter to my attention at the above address. In most cases, a photocopy of a missing article's title page, annotated with the full reference and the relevant pages within the article or book, is sufficient.

Three other points must be noted:

(i) full journal titles are given here. The obscurity of some abbreviation schemes made location of several of the articles cited extremely difficult. As much information as possible has been given in all instances.

(ii) only a broad index is provided. Some effort has been made to cross reference various articles. Again, it has not been possible to

do this in a comprehensive manner as the content of much of the biological material was beyond my competence to assess. Any guidance that could be given here would also be appreciated and would be incorporated in any subsequent revision.

(iii) Katherine Luomala has pointed to one serious problem in understanding the biology of the Gilberts which is apposite also to the nine atolls of Tuvalu: "Often generalizations for the entire group or for the entire Gilbert and Ellice Islands Colony probably apply only to specific islands" (1975: 277). All too often compendia of biological collections record a specimen as coming from "Ellice Islands" or even "Gilbert and Ellice Islands." While these terms were often used in a casual fashion by early collectors and writers, this practice is by no means restricted to early publications. All material in collections and in floral and faunal lists should be treated with caution.

Perhaps, through the relatively intense studies of the last century, Tuvalu is uniquely placed for some accurate assessment to be made of the impact of one hundred years of European culture on the ecology of a group of Pacific islands (cf. Wiess 1962, chap. 19). For example, no assessment of the effect of the remarkable herd of cattle on Niulakita appears to have ever been made; the last of which was killed and eaten but a short time ago. I hope the present bibliography may provide encouragement and a contribution to such an end.

BIBLIOGRAPHY

Certain multiauthor monographs are referenced here, for convenience, under the name of the issuing authority or of the person who wrote the introduction. For example, early memoirs of the Australian Museum are located under "Etheridge," while the report of the Coral Reef Committee of the Royal Society is given as "Bonney (1904)." Papers within the same monographs are also indexed under individual authors.

1. ADAM, W. 1945. Cephalopoda from Dr. Sixten Bock's expedition to the south Paci-

fic Islands. *Arkiv för Zoölogi* 37A(5): 1-25. [Specimens are from Fiji, Marshall, Gilbert, and Ellice islands.]

2. ADAMS, P. A. 1959. Neuroptera: Myrmeleontidae and Chrysopidae. *Bernice P. Bishop Museum Insects of Micronesia* 8(2): 13-33. [*Chrysopa basilis* from Ellice Islands, p. 14.]

3. AGASSIZ, A. 1899. The islands and coral reefs of Fiji. *Bulletin of the Museum of Comparative Zoology* 33: 1-167. [Asides concerning the early reports of the Royal Society's borings, pp. 41, 72, 73, 83, 84.]

4. ———. 1900. Explorations of the Albatross in the Pacific. *American Journal of Science*, ser. 4, 9: 369-374. [General description of trip with reference to visit to Funafuti and to the Royal Society's borings. Soundings made by USS *Albatross* off Ellice Islands confirms HMS *Penguin's* results (cf. Hydrographer, 1896).]

5. ———. 1902. Preliminary report and list of stations: Being part I of Reports on the scientific results of the expedition . . . by the USS *Albatross* from August 1899 to March 1900. *Memoirs of the Museum of Comparative Zoology* 26(1): 1-114. [Visit to Niulakita, Funafuti, and Nukufetau, pp. 34-38; bottom deposits, p. 80; surface haul, p. 87; poverty of surface hauls in Ellice Islands, p. 88; haul from intermediate depths, p. 93.]

6. ———. 1903. The coral reefs of the tropical Pacific: Being part IV of Reports on the scientific results of the expedition . . . by the USS *Albatross* from August 1899 to March 1900. *Memoirs of the Museum of Comparative Zoology* 28: 1-410 (one volume text, three volumes plates). [While this expedition succeeded those of the Royal Society, publication preceded Bonney et al. (1904). Morphology of Niulakita, pp. 210-211; extensive description of Funafuti lagoon and islets in the context of other Indo-Pacific atolls and islands, pp. 212-223; critical discussion of earlier publications on Funafuti and atoll controversy, pp. i-xxxiii, 224-229 with rebukes to both Hedley and Sollas but praise to Gardiner; brief notes on Nukufetau, pp. 229-230, on Nuitao, pp. 230-231; botanical compari-

- sons between Funafuti and Nukufetau, pp. 229–231; plates 129–137, vol. II, show panoramas of the various islets of Niulakita, Nukufetau, and Funafuti; plates 221, 222, 224, vol. III, are maps of Fongafale and Funafuti.]
7. AGASSIZ, A., and A. G. MAYER. 1902. Medusae: Being part III of Reports on the scientific results of the expedition . . . by the USS *Albatross* from August 1899 to March 1900. Memoirs of the Museum of Comparative Zoology 26(3): 137–176. [*Bougainvillia fulva*, p. 145, *Phortis elliceana* n. sp., p. 146, *Liriope hyalina*, p. 148, *Linerges aquila*, p. 156, *Porpita pacifica*, p. 159, *Diphyopsis appendiculata*, pp. 160–161, *D. angustata*, p. 162, *Aglaisma*, p. 164, *Abyla Huxleyii*, p. 166, *Anthemodes Moseri* n. sp., pp. 167–168, *Beroë australis*, p. 172 from Funafuti lagoon and offshore.]
 8. ALLIED GEOGRAPHICAL SECTION: SOUTHWEST PACIFIC AREA. 1944. Annotated bibliography of the Southwest Pacific and adjacent areas. General Headquarters, S.W.P.A. 2, The Mandated Territory of New Guinea, Papua, The British Solomon Islands, The New Hebrides, and Micronesia, 274 pp. [Gilbert and Ellice islands, pp. 270–274. Gives books and articles of military interest in Australian libraries; used in present compilation.]
 9. ANDREWES, H. E. 1927. Coleoptera: Carabidae. In *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part IV(1): 1–14. British Museum, London. [Record of *Endynomena pradiieri* from Ellice Islands, p. 13.]
 10. ANDREWS, E. C. 1922. A contribution to the hypothesis of coral reef formations. Proceedings, Royal Society of New South Wales 56: 10–38. [A general review of the state of the art from a Pacific viewpoint, post-Royal Society's and -Agassiz' visits to Funafuti. Well referenced.]
 11. ANONYMOUS. 1896a. Prof Sollas FRS. Nature 53: 225. [Note on decision of The Royal Society to dispatch Sollas with £800 and a gunboat to make deep borings at Funafuti].
 12. ANONYMOUS. 1896b. Letters. Nature 54: 517. [Brief note of failure of first boring at 65 ft and second at 72 ft (*sic*) but reports successes in other areas.]
 13. ANONYMOUS. 1897a. Funafuti. Natural Science 10(62): 228. [Brief, critical review of (?)first Royal Society expedition based on Etheridge (1896–1900, Parts I–V). Casts doubt on some of Hedley's (1896–1897) conclusions.]
 14. ANONYMOUS. 1897b. The arthropods of Funafuti. Natural Science 11(65): 5–6. [Damning review of Rainbow's (1897a, b) Australian Memoir work; cf. Pont (1968).]
 15. ANONYMOUS. 1897c. The crustaceans and echinoderms of Funafuti. Natural Science 11(65): 6–7. [Somewhat less critical than 1897b, review of Whitelegge's (1897a, b) Australian Memoir work.]
 16. ANONYMOUS. 1897d. Funafuti. Natural Science 11(68): 231. [Brief review of Part III of Etheridge (1896–1900). Apologizes for *some* of the remarks made in 1897b, above.]
 17. ANONYMOUS. 1897e. The confirmation of Darwin's theory of coral islands. Natural Science 11(69): 289–290. [Reports on receipt of telegrams describing success of (?)second Royal Society expedition with a "Hurrah!" and congratulations to the "Australian naturalists."]
 18. ANONYMOUS. 1898a. The growth of coral islands. Natural Science 12: 223–224. [Comments on both an address by Murray to the Edinburgh Geological Society which postulated that the latest (= ? second expedition) boring has been sunk through talus, and Agassiz' (1900) Fijian observations as reported in American Journal of Science. I have not been able to find any other published account of Murray's address].
 19. ANONYMOUS. 1898b. The borings at Funafuti. Natural Science 13: 362–364. [Reports on the success of the Royal Society expedition described in Anon. (1898c).]
 20. ANONYMOUS. 1898c. Recent boring operations at Funafuti. Nature 59: 22–23. [Extract from *Sydney Daily Telegraph* of 9 September 1898 which described both the *Penguin* borings in the lagoon and the deepening of the old 698 ft main Royal Society bore. Also reported in Natural Science 13(77): 70–71 (1898) and see p. 68].

21. ANONYMOUS. 1898*d*. Funafuti. *Nature* 58: 221–222. [A critical review of the Australian Museum Memoir III(Parts I–IV), Etheridge (1896–1900).]
22. ANONYMOUS. 1904*a*. Borings into a coral reef. *Nature* 69: 582–585. [A critical review of Bonney (1904).]
23. ANONYMOUS. 1904*b*. Examples of coral rock cores from the borings at Funafuti. *American Journal of Science*, ser. 4, 18: 239–242.
24. ANONYMOUS. 1965. Storm damage at Funafuti. *Pacific Islands Monthly* 36(2): 103.
25. ANONYMOUS. 1974. A survey of insect pests of crops. Report to the Government of the Gilbert and Ellice Islands Colony. Food and Agriculture Organisation, Rome. 35 pp.
26. ARROW, G. J. 1927. Coleoptera: Clavicornia and Lamellicornia. In *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part IV(1): 35–66. British Museum, London. [Record of *Coccinella transversalis* from Funafuti, p. 59.]
27. AVIAS, J. 1956*a*. (Funafuti) drilling cores. *Lexique Stratigraphique International Océanie*, Fascicule 2: –Océanie proprement dite: 32–33. [Summarizes, in French, results of main Royal Society bore with an updating of Bonney (1904) in light of later works.]
28. ———. 1956*b*. (Funafuti) rocks. *Lexique Stratigraphique International Océanie*, Fascicule 2: Océanie proprement dite: 33–35. [Summarizes, in English, the geology of the atoll of Funafuti].
29. BAGNIS, R. 1973. Fish poisoning in the South Pacific: L'ichtyosarcotoxisme dans le Pacifique Sud. South Pacific Commission, Noumea. 112 pp. [Incidence in Ellice Islands, pp. 19–20, but no specific fishes from Ellice listed.]
30. BAINES, G. B. K., and R. F. McLEAN. 1976. Sequential studies of hurricane deposit evolution at Funafuti Atoll. *Marine Geology* 21: M1–M8.
31. BAINES, G. B. K., P. J. BEVERIDGE, and J. E. MARAGOS. 1974. Storms and island building at Funafuti Atoll, Ellice Islands. *Proceedings, Second International Symposium on Coral Reefs, Queensland*, pp. 485–496.
32. BALFOUR, H. 1897. Another memoir on Funafuti. *Natural Science* 11(70): 423. [Summary and review of Hedley's (1897) Australian Museum ethnology. Fairly patronizing, particularly at end].
33. BALSS, H. 1937. Die Dekapoda Brachyura von Dr. Sixten Bocks Pazifik-Expedition 1917–1918. Göteborgs Kungliga Ventenskaps- och Vitterhets-Samhälles Handlingar. Fente Följden, ser. B, 5(7): 1–85. [Some 20 species are recorded from Nukefetau, Funafuti, and from “Ellice Inseln, Niue”—either a confusion in geography or spelling.]
34. BARTON, E. S. (née GEPP). 1900. On the forms with a new species of *Halimeda* from Funafuti. *Linnean Society Journal of Botany* 34: 479–482.
35. ———. 1901. The genus *Halimeda*. *Uitkomsten op Zoologisch, Botanisch, Oceanographisch en Geologisch gebied verzameld in Nederlandsch Oost-Indië 1899–1900. Siboga-Expeditie* 60, 32 pp. [A complete revision of the genus including the previously described Funafuti material, in the light of the extensive Siboga collection; cf. Colinvaux (1968).]
36. BATHURST, R. G. C. 1975. Carbonate sediments and their diagenesis. *Developments in sedimentology* 12. 2nd ed. Elsevier, Amsterdam, 658 pp. [Summarizes mineralogical evolution of Funafuti corings in modern petrographic terms; cf. Cullis (1899, 1904).]
37. BEDFORD, F. P. 1898. Report on the Holothurians collected by Mr. J. Stanley Gardiner at Funafuti and Rotuma. *Proceedings, Zoological Society of London* 68: 834–848.
38. BELL, G. J. 1898. On the Actinogoniditae echinoderms collected by Mr. J. Stanley Gardiner at Funafuti and Rotuma. *Proceedings, Zoological Society of London* 68: 849–850.
39. BELTRAN Y RÓZPIDE, R. 1884. *La Polinesia*. Fortanet, Madrid, 297 pp. [Being a description “geográficas, clima, constitución, geologica,” etc: “Islas Ellice,” pp. 272–273.]
40. BERNER, R. A. 1965. Dolomitization of mid-Pacific atolls. *Science* 147: 1297–1299. [Discusses dolomitization at Funafuti, Kita-Daito-Jima, and Eniwetok in terms

- of a seepage-reflux mechanism involving hypersaline brines.]
41. BESS, H. A. 1970. Termites of Hawaii and the oceanic islands. *In* K. Krishna and F. M. Weesner, eds. *Biology of termites*. 2 vols. Academic Press, New York. 2: 449–476. [Ellice Island genera, pp. 469.]
 42. BEWG, W. P. 1974. Rainfall distribution in the South Pacific. *South Pacific Bulletin* 24(2): 46–50. [Funafuti, p. 48; cf. Seeyle (1944, 1950), Taylor (1973).]
 43. BLAKE, S. F., and A. C. ATWOOD. 1942. Geographical guide to the floras of the world; an annotated list with special reference to useful plants and common plant names. Part I: Africa, Australia, North America, South America and islands of the Atlantic, Pacific and Indian Oceans. U.S. Department of Agriculture Miscellaneous Publications 401:1–336. [Funafuti, pp. 125–126.]
 44. BLAIR, K. G. 1928. Coleoptera: Heteromera, Bostrychoidea, Malacodermata, and Buprestidae. *In* *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part IV(2): 67–109. British Museum, London. [Ellice Islands' records summarized, pp. 68–70.]
 45. BONNEY, T. G. 1897. Summary of Prof. Edgeworth David's preliminary report on the results of the boring in the atoll of Funafuti. *Nature* 57: 137–138. [Precisely that to a depth of 643 ft.]
 46. ———. 1898. The boring at Funafuti. *Nature* 59: 29. [Letter reporting on success of deepening old bore—now at 987 ft—and limited success in *Penguin's* lagoon borings.]
 47. ———. 1899. Funafuti or three months on a coral island. *Nature* 59: 554–555. [Review of Mrs. E. David's book, q.v.]
 48. ———. ed. 1904. *The atoll of Funafuti. Borings into a coral reef and the results*. Report, Coral Reef Committee, The Royal Society of London. Harrison & Sons, London. 428 pp. [cf. 1904, Creak; Cullis; David; David and Sweet; David, Halligan, and Finckh; Finckh; Halligan; Halligan; Hinde; Judd; Judd; Russell; Sollas; and Sorby.]
 49. BORRADAILE, L. A. 1898*a*. On some crustaceans from the south Pacific. Part I: Stomapoda. *Proceedings, Zoological Society of London* 68: 32–38. [Includes descriptions of specimens from Funafuti and Rotuma collected by Gardiner.]
 50. ———. 1898*b*. On some crustaceans from the south Pacific. Part II: *Macrura anomala*. *Proceedings, Zoological Society of London* 68: 457–468. [All specimens were collected by Gardiner from Funafuti and Rotuma.]
 51. ———. 1898*c*. On some crustaceans from the south Pacific. Part III: *Macrura*. *Proceedings, Zoological Society of London* 68: 1000–1015. [Specimens collected by Gardiner from Funafuti, Rotuma, and Vitu Levu.]
 52. ———. 1898*d*. A revision of the *Pontoniidae*. *Annals and Magazine of Natural History*, ser. 7, 2: 376–391. [Includes Funafuti specimens which are enumerated for the first time.]
 53. ———. 1900*a*. On some crustaceans from the south Pacific. Part IV: The crabs. *Proceedings, Zoological Society of London* 70: 568–596. [Includes specimens from Funafuti, Rotuma, and Fiji collected by Gardiner.]
 54. ———. 1900*b*. On some crustaceans from the south Pacific. Part V: Anthrostraceans and barnacles. *Proceedings, Zoological Society of London* 70: 795–799. [Includes specimens from Funafuti, Rotuma, and Fiji collected by Gardiner.]
 55. BOULENGER, G. A. 1897. A list of fishes obtained by Mr. J. Stanley Gardiner at Rotuma, south Pacific Ocean. *Annals and Magazine of Natural History*, ser. 6, 10: 371–374. [A postscript to the Royal Society Funafuti expeditions.]
 56. BOURNE, G. C. 1903. Some new and rare corals from Funafuti. *Linnean Society of London Journal of Zoology* 29: 26–37.
 57. BRIGHAM, W. T. 1900. An index to the islands of the Pacific Ocean. *Bernice P. Bishop Museum Memoir* 1(2): 87–256. [No more than the title says.]
 58. BRYAN, E. H. 1953. Check list of atolls. *Atoll Research Bulletin* 19: 1–38. [Just that; little more.]
 59. BRYGOO, E. R. 1953. Epidemiology of

- filariasis in the South Pacific. Pages 17–52 in Proceedings, Conference on Filariasis and Elephantiasis, Papeete, 1951. South Pacific Commission, Noumea, 108 pp. [Review with numerous references to the Ellice Islands, e.g., p. 19, p. 22, Table A, etc. cf. Iyengar (various dates).]
60. BUXTON, P. A. 1927. Scorpionidea. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part 8: Terrestrial Arthropoda other than insects. [*Harmurus australasiae* from Ellice Islands, p. 13; cf. Sacht 1953.]
61. ———. 1928. Researches in Polynesia and Melanesia. Parts V–VII: Relating to human diseases and welfare. Memoir Series, London School of Hygiene and Tropical Medicine 2:1–139. [Numerous references primarily concerned with arthropod-borne diseases in Ellice Group, e.g., p. 12 et seq; absence of myositis, p. 43; hydroceles, p. 46; elephantiasis, pp. 50, 58, 60 et seq, 130; filariasis, pp. 68, 72, 74, 120, 122; indigenous mosquitoes, p. 76; intestinal helminthiasis, p. 93, etc.]
62. BUXTON, P. A., and G. H. E. HOPKINS. 1927. Researches in Polynesia and Melanesia. Parts I–IV: Relating primarily to medical entomology. Memoir Series, London School of Hygiene and Tropical Medicine 1:1–260. [Ellice geography summarized, p. 10, flora, p. 12; *Necrobia rufipes*, p. 54; *Musca sorbens*, p. 57; absence of certain flies in Ellice Islands, pp. 60–62; *Culex* sp., pp. 79, 115; *Culex annulirostris*, pp. 79–83; *Aedes vexans*, p. 91; *A. variegatus*, pp. 101–105.]
63. BUTLER, A. G. 1878. On a small collection of Lepidoptera obtained by Rev. J. S. Whitmee at the Ellice Islands. Proceedings, Zoological Society of London 48:296–298. [*Euploea* 2 sp; *Junonia*, *Diadema* 2 sp; *Deiopeia*, *Achaea*.]
64. CATALA, R. L. A. 1957. Report on the Gilbert Islands: Some aspects of human ecology. Atoll Research Bulletin 59:1–187. [Comments on occurrence of “te babai” = *Cryptosperma chamissonis*, the swamp taro, on the Ellice Islands, p. 67.]
65. CAULLERY, M. 1900. Les recifs coralliens. Annales de Géographie 9:1–16, 193–210. [Reviews the coral reef problem up to Gardiner (1898*d*), Agassiz (1899, 1900), C. M. David (1899).]
66. CAYEUX, L. 1935. Les roches sédimentaires de France. Roches carbonatées (calcaires et dolomies). Masson, Paris, 463 pp. [Comprehensive summary in French of Bonney (1904) and Cullis (1899), with additional information and interpretations, pp. 328–336. Translated by A. V. Carozzi (1969). Hafner, New York; Funafuti, pp. 302–311.]
67. CHAMBERLAIN, R. V. 1919. The Annelida Polychaeta: Being part XXXVIII of Reports on an exploration ... by the USS *Albatross* during 1891 and part XX of Reports on the scientific results of the expedition ... of USS *Albatross* from August 1899 to March 1900 and part XXXI of Reports on the scientific results of the expedition ... by USS *Albatross* from October 1904 to March 1905. Memoirs of the Museum of Comparative Zoology 48:1–514. [*Platyneris polyscalma* n. sp., pp. 219–226 from Funafuti].
68. CHAPMAN, F. 1900*a*. On some new and interesting Foraminifera from Funafuti Atoll, Ellice Islands. Linnean Society of London Journal of Zoology 28:1–27.
69. ———. 1900*b*. Foraminifera from the lagoon at Funafuti. Linnean Society of London Journal of Zoology 28:161–210.
70. ———. 1901. On the identity of *Poltrema planum* of Carter with *P. miniaceum* var. *involve*. Annals and Magazine of Natural History, ser. 7, 7:82–83. [Latter name used in earlier descriptions of specimens from Funafuti is withdrawn through priority of former.]
71. ———. 1902*a*. On the Foraminifera collected round the Funafuti Atoll from shallow and moderately deep water. Linnean Society of London Journal of Zoology 28:379–417.
72. ———. 1902*b*. On some ostracoda from Funafuti. Linnean Society of London Journal of Zoology 28:417–433.
73. ———. 1910. On the Foraminifera and Ostracoda from soundings (chiefly deep water) collected round Funafuti by HMS

- Penguin*. Linnean Society of London Journal of Zoology 30: 388–444.
74. ———. 1941. On the sequence of age of the rocks in borings, in the atoll of Funafuti. Geological Society of London Abstract Programme 1375:16–19. [Reef-forming rocks drilled at Funafuti are not talus; Darwin's subsidence theory supported. Intercalations of foraminiferal sand are an important part of the rock, and age of lowest core is post-Tertiary; but cf. Grimdale 1952. This reference is often abbreviated incorrectly.]
75. ———. 1944. The Foraminifera of the Funafuti boring. Annals and Magazine of Natural History, ser. 11, 11:98–110. [Apart from a comprehensive list of species with notes of their abundance and the depths at which they are found, gives geological and bathymetrical deductions from organisms occurring in boring.]
76. CHAPMAN, V. J. 1955. Algal collections from Funafuti Atoll. Pacific Science 9:354–356. [Report on collections made by *Challenger*, September 1951, and now deposited at Auckland Museum, New Zealand. Notes lack of records of Algae in reports of Funafuti Royal Society expeditions but apparently unaware of Barton 1900, 1901; Foslie 1900*a, b*, 1901, 1929; and see Schmidt 1928, Colinvaux 1968, Tsuda and Wray 1977.]
77. CHILD, P. 1960. Birds of the Gilbert and Ellice Islands colony. Atoll Research Bulletin 74: 1–38. [cf. North 1896, Gadow 1898, Townsend and Whitmore 1919.]
78. CHOPARD, L. 1929. Orthoptera. In *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part I(2): 1–58. British Museum, London. [*Cutilia soror* from Nui, p. 19.]
79. CHUBB, L. J. 1957. The pattern of some Pacific island chains. Geological Magazine 94:221–228. [Evidence of Funafuti and Eniwetok borings suggests that atolls are built on subsiding foundations.]
80. CLARK, H. L. 1907. The apodus holothurians: A monograph of the Synaptidae and Molpadiidae. Smithsonian Contributions to Knowledge 35: 1–231. [*Leptosynapta öoplax* from Funafuti, p. 24.]
81. ———. 1917. Ophiuroidea: Being part XVIII of Reports on the scientific results of the expedition ... by the USS *Albatross* from August 1899 to March 1900 and part XXX of Reports on the scientific results of the expedition by the USS *Albatross* from October 1904 to March 1905. Bulletin, Museum of Comparative Zoology 61(12): 429–453. [Funafuti record of *Ophiactis savignyi*, p. 436.]
82. ———. 1924. The holothurians of the Museum of Comparative Zoology. The Synaptinae. Bulletin, Museum of Comparative Zoology 65(13):459–501. [*Leptosynapta öoplax* from Funafuti collected by *Albatross* (1899), pp. 489–490.]
83. CLARKE, F. W. and W. C. WHEELER. 1917. The inorganic constituents of marine invertebrates. U.S. Geological Survey Professional Paper 102:1–56. [Analyses of *Lithothamnium* [*sic*] and *Halemida* by Judd (1904) and Skeats (1905) are discussed in the light of more recent results, p. 48. Dolomitization of the Funafuti reef rocks is summarized, pp. 51–53, and ascribed to stillstands, etc., pp. 53–54.]
84. ———. 1917. The inorganic constituents of marine invertebrates. 2nd ed. U.S. Geological Survey Professional Paper 124:1–62. [Algal analyses pp. 54, 57; dolomitization pp. 58–60.]
85. CLOUD, P. E., Jr. 1952. Preliminary report on geology and marine environments of Onotoa atoll, Gilbert Islands. Atoll Research Bulletin 12:1–73. [Discussion of recent sea-level falls includes reference to David and Sweet's (1904) Funafuti data. Suggests their observations on reef structure and zonation might be true for Gilbert and Ellice islands as a whole, p. 24.]
86. ———. 1959. Geology of Saipan Mariana Islands. Part 4: Submarine topography and shoal-water ecology, U.S. Geological Survey Professional Paper 280K: 361–445. [Discussion of origin of sediments of organic-reef complex makes passing reference to Halligan's (1904*a*) Funafuti data.]
87. COLINVAUX, L. H. 1968. New species of *Halimeda*: A taxonomic reappraisal. Journal of Phycology 4:30–35. [Reviews Barton's (1901) species: *H. Hederacea* f. *elongata* n. comb. from Funamanu (type)

- and Falefatu p. 32; *H. distorta* n. comb. from Funafuti, p. 33; cf. Schmidt 1928.]
88. COOKSEY, T. 1896. Rock specimens from Funafuti. In Etheridge (1896–1900), The atoll of Funafuti, Ellice Group. Part I: 73–78.
89. COOPER, G. A. 1964. Brachiopods from Eniwetok and Bikini drill holes. U.S. Geological Survey Professional Paper 260FF: 1117–1120. [Specimen of *Thecidolina* from Funafuti at 70 ft, p. 1119.]
90. CREAK, E. W. 1904. Report on the results of the magnetic survey of Funafuti Atoll by officers of HMS *Penguin*, 1896. In Bonney (1904). The atoll of Funafuti. Section III: 33–39.
91. CULLIS, C. G. 1899. The chemical and mineralogical changes which take place in coral rocks as illustrated from the boring at Funafuti. John Bellows, Gloucester. 46 pp. [Concerns the Royal Society main core to 698 ft.]
92. ———. 1904. Mineralogical changes observed in cores of Funafuti borings. In Bonney (1904). The atoll of Funafuti. Section XIV: 392–420. [Concerns the total Royal Society cores.]
93. CUSHMAN, J. A., R. TODD, and R. J. POST. 1954. Recent Foraminifera of the Marshall Islands. U.S. Geological Survey Professional Paper 260H: 1–384. [Reference to, comments on, and revisions of some of Chapman's Funafuti foram species.]
94. DALY, R. A. 1910. Pleistocene glaciation and the coral reef problem. American Journal of Science, ser. 4, 30:297–308. [Funafuti Royal Society borings cited as evidence against the "Darwin-Dana hypothesis," p. 297; Agassiz' (1903) Funafuti observations interpreted, pp. 300–301, 306.]
95. ———. 1915. The glacial control theory of coral reefs. Proceedings, American Academy of Arts and Science 51: 155–251. [Funafuti lagoon soundings briefly noted, pp. 188, 193 (Fig. 12); borings interpreted as reef proper stopping at 46 m with remainder passing through "talus material all the way to the bottom," p. 218; "actual site of the borings was unwisely chosen," p. 247.]
96. ———. 1916a. Problems of Pacific islands. American Journal of Science, ser. 4, 41:153–186. [Funafuti Royal Society evidence discussed, pp. 172–174; boring interpreted as reef proper stopping at 150 ft and remainder being "reef talus mixed with pelagic shells."]
97. ———. 1916b. A new test of the subsidence theory of coral reefs. Proceedings, National Academy of Science 2: 664–670. [Funafuti lagoon soundings cited in detail as evidence against the subsidence theory of Darwin.]
98. ———. 1919. The coral reef zone during and after the glacial period. American Journal of Science, ser. 4, 48:136–159. [Discounts Funafuti Royal Society results by showing adherents of the subsidence theory of coral reefs each interpret the results differently, pp. 156–157.]
99. ———. 1920a. A recent world-wide sinking of the ocean level. Geological Magazine 57:247–261. [Funafuti Royal Society observations used to support concept, p. 256.]
100. ———. 1920b. The general sinking of sea level in Recent time. Proceedings, National Academy of Science 6:246–250. [Funafuti Royal Society observations used to support concept, p. 249.]
101. ———. 1929. Swinging sea level of the ice age. Bulletin, Geological Society of America 40:721–734. ["... bore-hole at Funafuti was wrongly placed and therefore affords no clear test of the rival theories of coral reefs," p. 732.]
102. ———. 1942. The floor of the ocean: New light on old mysteries. Virginia, North Carolina. 177 pp. [Funafuti, among other "submarine mountains," cited as evidence of prolonged crustal stability, pp. 68, 72.]
103. ———. 1948. Coral reefs—a review. American Journal of Science 246:193–207. [Funafuti Royal Society evidence ignored—except as a footnote.]
104. DARWIN, C. 1842. The structure and distribution of coral reefs. Smith Elder, London, 214 pp. 2nd rev. ed., 1874:278 pp; 3rd rev. ed. with appendix by Bonney, 1889:344 pp. [First physiographic description of Ellice Islands, 1st ed., pp. 162;

- 2nd ed., pp. 212–213; 3rd ed., pp. 216–217.]
105. DAVID, E. (Mrs). [Caroline M. David.] 1899. Funafuti, or three months on a coral island; an unscientific account of a scientific expedition. John Murray, London. 318 pp. [Reviewed by Bonney (1899).]
106. DAVID, M. E. 1937. Professor David. Edward Arnold, London. 320 pp. [Funafuti 1897 visit of Professor David in retrospect, with many anecdotes, pp. 58–81.]
107. DAVID, T. W. E. 1900. Letter. In E. C. Andrews (1900). Notes on the limestones and general geology of the Fiji Islands, with special reference to the Lau Group. Based upon surveys made for Alexander Agassiz. Bulletin, Museum of Comparative Zoology 5: 5–10. [In the course of general comments on Andrew's findings, compares the raised reefs of Lau with those drilled at Funafuti.]
108. ———. 1904. Narrative of the second and third expeditions. In Bonney (1904). The atoll of Funafuti. Section IV: 40–60.
109. DAVID, T. W. E. and G. SWEET. 1904. The geology of Funafuti. In Bonney (1904). The atoll of Funafuti. Section V: 61–124. [Describes mapping techniques and geological history of Funafuti with observations on other islets of the atoll.]
110. DAVIS, W. M. 1914. The home study of coral reefs. Bulletin, American Geographical Society 46: 561–577, 641–654, 721–739. [An attempted objective discussion of coral reefs by one who, at that point, had never seen one. Funafuti discussed, pp. 576, 737.]
111. ———. 1919. This significant features of reef bordered coasts. Transactions, New Zealand Institute 51: 6–30. [Brief references to Funafuti, p. 6, 26, etc.]
112. ———. 1928. The coral reef problem. American Geographical Society Special Publication 9: 1–596. [Judd (1904a) quoted regarding lagoon floor, p. 17; true relevance of Funafuti boring to the coral reef problem succinctly assessed, p. 514, including diagram illustrating unfortunate choice of site, but cf. Gaskell et al. (1958), Ritchie (1957). Stresses that Royal Society experts (= Bonney 1904) were only allowed to report the facts, not to comment on their relevance to any theories, p. 533.]
113. DAWSON, E. Y. 1961. The rim of the reef. Natural History 70(6): 8–17. [Stresses importance of Royal Society Funafuti expeditions in identifying major role played by calcareous algae in growth of atolls, p. 13.]
114. DEANE, H. 1898. Anniversary address: Funafuti coral boring expedition. Journal and Proceedings, Royal Society of New South Wales 32: 36–37. [Summarizes success of second Royal Society Expedition with provisional comments by David.]
115. DEMOND, J. 1957. Micronesian reef associated gastropods. Pacific Science 11: 275–336. [Ellice Islands referred to in the ranges of some species.]
116. DOBRIN, M. B. 1950. Submarine geology of Bikini Lagoon as indicated by dispersion of water borne explosion waves. Bulletin, Geological Society of America 61: 1091–1118. [Skeats (1918) work on Funafuti lagoon borings cited briefly.]
117. DOBRIN, M. B. and B. PERKINS. 1954. Bikini and nearby atolls. Part 3: Geophysics. Seismic studies of Bikini Atoll. U.S. Geological Survey Professional Paper 260J: 487–505. [As in Dobrin (1950).]
118. DOTY, M. S. 1954. Distribution of the algal genera *Rhiplia* and *Sargassum* in the central Pacific. Pacific Science 8: 367–368. [“... there is an area in the Central Pacific ... between about 141° W and 165° E and between about 16° N and 16° S ... (that) ... may prove to be an important biotic province.” cf. Tsuda (1976).]
119. DOUGLAS, G. 1963. Army blasters have blown dangers out of GEIC boat passages. Pacific Islands Monthly 33(11): 81, 83. [GEIC = Gilbert and Ellice Islands Colony.]
120. DROUET, F. 1968. Revision of the classification of the Oscillatoriaceae. Monograph, Academy of Natural Sciences of Philadelphia 15: 1–370. [*Microcoleus lyngbyaceus* from Ellice Islands, p. 305.]
121. DUERDEN, J. E. 1902. Boring algae as agents of disintegration of corals. Bulletin, American Museum of Natural History 16: 323–332. [Discusses the slight contribution that corals make to the sand of Funafuti as described by Sollas (1899), p. 329.]
122. EDMONDSON, C. H. 1944. Callianssidae

- of the central Pacific. Bernice P. Bishop Museum Occasional Papers 18(2):35–61. [Includes species from Funafuti.]
123. EDWARDS, F. W. 1924. A synopsis of the adult mosquitoes of the Australasian region. *Bulletin of Entomological Research* 14:351–401. [Record of *Culex annulirostris* (= *Culex jepsoni* of O' Connor, 1923) from the Ellice Islands, p. 395.]
124. ———. 1928. Diptera: Nematocera. *In* *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part VI(2):23–102. British Museum, London. [Record from Ellice Islands, p. 46.]
125. EMERY, K. O., J. I. TRACEY Jr., and H. S. LADD. 1954. Geology of Bikini and nearby atolls. U.S. Geological Survey Professional Paper 260A:1–265. [Compares Funafuti with other atolls, reefs, and borings, pp. 131 et seq.]
126. ESBEN-PETERSEN, P. 1928. Neuroptera. *In* *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part VII(3):89–108. British Museum, London. [Record of *Chrysopa skottsbergi* from Funafuti, pp. 99, 104.]
127. ETHERIDGE, R. ed. 1896–1900. The atoll of Funafuti, Ellice Group: Its zoology, botany, ethnology and general structure based on collections made by Mr. Charles Hedley, of the Australian Museum. *Australian Museum Memoir* 3:1–609. [cf. Cooksey (1896), Hedley (1896, 1897, 1899a, b, c), Hedley et al. (1899), Hill (1897a, b), North (1896), Rainbow (1897a, b), Waite (1897, 1899), Whitelegge (1897a, b, c, d, e, 1898), Whitelegge and Hill (1899). Part X contains the title page, contents, and a most comprehensive index.]
128. ———. ed. 1899–1914. Scientific results of the trawling expedition of HMCS *Thetis* off the coast of New South Wales in February and March 1898. *Australian Museum Memoir* 4:929 pp. 2 vols. [Krauss (1969) cites this as including Funafuti. However, the references are few and far between and largely incidental, e.g., pp. 330, 344.]
129. FAANIU, S., V. IELEMIA, T. ISAKO, T. ISALA, L. KOFE, N. LAFITA, P. LAFAI, N. NIA, T. O'BRIEN, S. PAPE, L. SAMUELU, E. SAPOAGA, P. TAAFAKI, M. TELAVI, N. P. TEO, and V. TINILAU. 1983. Tuvalu: a history. Institute of Pacific Studies, Suva and Government of Tuvalu, Funafuti, 208 pp. [Mainly historical and sociological but with numerous references to matters relevant to the atolls' natural history, e.g., Royal Society borings, pp.17–18; traditional medicine, pp. 24–26; mosquito-free Nanumea, p. 56; description of Niulakita, pp. 62–63; fertility of Niutao soils, p. 63; cows on Niulakita, p. 64; correlation between lack of native dogs on Funafuti and high moral tone of the community, p. 118; how to make a 6 v battery out of empty cans, beer bottles, and the *pua* tree, pp. 138–139.]
130. FAIRBRIDGE, R. W. 1950. Recent and Pleistocene coral reefs of Australia. *Journal of Geology* 58:330–401. [Summarizes Funafuti Royal Society cores; compares with Australian cores; discusses Reuling's (1934) results on Funafuti dolomites; postulates what is below 1114.5 ft. at Funafuti.]
131. ———. 1955. Warm marine carbonate environments and dolomitization. *Tulsa Geological Society Digest* 23:39–48. [Suggests "shearing pressure" arising from "gravitative collapse" of the atoll to explain Funafuti dolomites below 638 ft.]
132. ———. 1957. The dolomite question. *In* Le Blanc, R. J., and J. G. Breeding, eds. *Regional aspects of carbonate deposition*. Society of Economic Paleontologists and Mineralogists Special Publication 5:125–178. [Includes information on Funafuti dolomites, especially that of Reuling (1934).]
133. FENNAH, R. G. 1956. Fulgoroidea. Bernice P. Bishop Museum *Insects of Micronesia* 6(3):1–211. [*Lamenia caliginea charon* record from the Ellice Islands, p. 44.]
134. FINCKH, A. E. 1904. Biology of the reef-forming organisms at Funafuti Atoll. *In* Bonney (1904). *The atoll of Funafuti*. Section VI:125–150.
135. FOSBERG, F. R. 1939. Notes on Polynesian grasses. Bernice P. Bishop Museum Occasional Papers 15(3):37–48. [Comments on possible occurrence of *Digitaria pacifica* at Funafuti.]
136. FOSLIE, M. 1900a. Notes on two Lithothamnium from Funafuti. *Det Kongelige Norske Videnskabers Selskabs Skrifter* 1899(2):1–11. [New form, *Lithothamnium*

- Phillipii* f. *funafutiensis*, dredged from 41 fa; *Goniolithon onocodes* from "Consolidated Rock, forming platform Hurrigan Beach".]
137. ———. 1900*b*. New or critical calcareous Algae. Det Kongelige Norske Videnskabers Selskabs Skrifter 1899(5):1–34. [*Lithophyllum craspedium* recorded as "known from Onoatoa Gilbert Islands, Funafuti, collected by Finkh" pp. 26–27.]
138. ———. 1901. Calcareous Algae from Funafuti. Det Kongelige Norske Videnskabers Selskabs Skrifter 1900(1):1–12. [A further, more comprehensive collection: *Lithothamnion Phillipii* f. *funafutiensis*, *Lithophyllum craspedium*, *L. oncodes*, *Goniolithon* (*C.*) *frutescens*.]
139. ———. 1903. The Lithothamnia of the Maldives and Laccadives. In J. S. Gardiner, ed. The Fauna and Geography of the Maldivian and Laccadive Archipelagos 1(IV):460–471. [Importance of *Lithophyllum* stressed as a reef builder at Funafuti, p. 467.]
140. ———. 1929. Contributions to a monograph of the Lithothamnia, H. Printz, ed. Det Kongelige Norske Videnskabers Selskabs Museet. Aktirtrykkeriet, Trondhjem, 60 pp, 75 plates. [*Goniolithon frutescens* f. *flabelliformis* ex Funafuti, p. 30 and plate XLVIII, fig. 5; *G.f.f. typica*, p. 30 and plate XLVIII, figs. 1–3; *Lithophyllum craspedium* f. *compressa*, p. 33 and plate LXIX, fig. 3; *L.c.f. subtilis*, p. 33 and plate LXIX, fig. 7; *L. oncodes* f. *typica*, p. 33 and plate LXVII, figs. 6, 7; *Lithothamnion funafutiense* (*sic*) f. *typica*, p. 41 and plate XII, fig. 3.]
141. FOWLER, H. W. 1928. The fishes of Oceania. Bernice P. Bishop Museum Memoir 10:1–540. [Specimens listed from Funafuti include Boulenger (1897), Waite (1897), and, perhaps, Günther (1873–1910), but possibly not Waite (1899). The supplements (no. 2, Memoir 11, (1934), and no. 3, Memoir 12, 1949) make no specific reference to Funafuti.]
142. FRASER, F. C. 1927. Odonata. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part 7(1):19–44. British Museum, London. [*Agriocnemis*, p. 21, *Ischnura*, p. 23, from Funafuti and *Diplacodes*, p. 40, from Ellice Island.]
143. FRASER, J. 1897. The origin of coral reefs. Notes on Polynesia. American Antiquarian 19:146–147. [Reports on the work of the Royal Society and Australian Museum expeditions and their contributions to the coral reef problem. Cited incorrectly by Krauss (1969), this paper refers to earlier Antiquarian notes on Funafuti not sighted in the present compilation.]
144. FREEMAN, O. W. 1951. Geography of the Pacific. John Wiley, New York. 573 pp. [Brief note on origin of atolls including comment on Funafuti and Bikini borings, pp. 28–30.]
145. GADOW, H. 1898. A list of birds of the island of Rotumah. Ibis 7/1/98:42–46. [Includes list of Funafuti birds cf. North (1898) and Townsend and Wetmore (1919)].
146. GARDINER, J. S. 1898. On some collections of corals of the family Pocilloporida from the southwest Pacific Ocean. Proceedings, Zoological Society of London 67:941–953. [Specimens from Funafuti, Rotuma, Fiji, and Lifu.]
147. ———. 1898*a*. On the perforate corals collected by the author in the south Pacific. Proceedings, Zoological Society of London 68:257–276. [Specimens from Funafuti, Rotuma, and Fiji.]
148. ———. 1898*b*. On the fungid corals collected by the author in the south Pacific. Proceedings, Zoological Society of London 68:525–539. [Funafuti specimens only.]
149. ———. 1898*c*. On the turbinolid and oculinoid corals collected by the author in the south Pacific. Proceedings, Zoological Society of London 68:994–1000. [Funafuti specimens only.]
150. ———. 1898*d*. The coral reefs of Funafuti, Rotuma and Fiji. Proceedings, Cambridge Philosophical Society 9:417–503. [General description of atolls, their flora, fauna, and geomorphology with discussion of their formation.]
151. ———. 1899. On the astraeid corals collected by the author in the south Pacific. Proceedings, Zoological Society of London 69:734–764. [Specimens from Funafuti, Rotuma, and Fiji.]
152. ———. 1904*a*. The formation of coral

- reefs. *Nature* 69:371–373. [A model for formation of Funafuti is proposed.]
153. ———. 1904*b*. The formation of coral reefs. *Nature* 69:581. [A reply to Schwarz' (1904) criticisms; cf. Hedley (1904).]
154. ———. 1930. Studies in coral reefs. *Bulletin, Museum of Comparative Zoology* 71(1):1–16. [Brief references to observations at Funafuti, e.g. lagoon shoals, p. 4, commensal Algae with corals, p. 5.]
155. GASKELL, T. F., and J. C. SWALLOW. 1952. Seismic refraction experiments in the Pacific. *Nature* 170:1010–1012. [Summarizes results of work carried out on HMS *Challenger*: October 1950–April 1952. Includes results from “Station 16” sited in deep ocean near Funafuti; cf. Ritchie (1957).]
156. ———. 1953. Seismic experiments on two Pacific atolls. *Occasional Papers, Challenger Society* 3:1–8, 6 figs. [The geophysics of Funafuti and its interpretation; suggests 550–760 m of carbonates over a volcanic basement; cf. Ritchie (1957).]
157. GASKELL, T. F., M. N. HILL, and J. C. SWALLOW. 1958. Seismic measurements made by HMS *Challenger* in the Atlantic, Pacific and Indian Oceans and in the Mediterranean Sea, 1950–1953. *Philosophical Transactions, Royal Society of London*, ser. A 251:23–83. [Funafuti results of Gaskell and Swallow (1953) summarized, pp. 51–52, including diagram; cf. Ritchie (1957).]
158. GEORGE, T. 1956. Sedimentary environments of organic reefs. *Science Progress* 44:415–434. [Discussion of many bore holes including brief reference to Funafuti.]
159. GILL, W. 1876. Life in the southern isles. *Religious Tract Society, London*. 360 pp. [Chapter VII, “Notes on Natural History,” records the great abundance of robber crabs, *Birgus latro*, in Ellice Group, p. 275.]
160. ———. 1885. Jottings from the Pacific. *Religious Tract Society, London*. 248 pp. [Among detailed notes on missionary work at Nui tao and Nanumanga are references to climate, geography, flora, and fauna, pp. 11–27.]
161. GINSBERG, R. N., D. S. MARZALEK, and N. SCHNEIDERMANN. 1971. Ultrastructure of carbonate cements in a Holocene algal reef of Bermuda. *Journal of Sedimentary Petrology* 41:472–482. [Cullis (1899, 1904) work on cements discussed in light of recent studies and results.]
162. GINSBERG, R. N., and J. H. SCHROEDER. 1973. Growth and submarine fossilization of algal cup reefs, Bermuda. *Sedimentology* 20:575–614. [Compares features of early diagenesis at Bermuda with those at Funafuti, Bikini, and Eniwetok.]
163. GLOCK, W. S. 1923. Algae as limestone makers and climatic indicators. *American Journal of Science*, ser. 5, 6:377–408. [Stresses the importance of algae “in construction of rock materials” at Funafuti, p. 378.]
164. GOLDSMITH, J. R., and D. L. GRAF. 1958. Structural and compositional variations in some natural dolomites. *Journal of Geology* 66:678–693. [Data from four Funafuti samples: 710, 840, 985, 1080 ft.]
165. GRABAU, A. W. 1920. Geology of the non-metallic mineral deposits other than silicates: vol. 1, Principles of salt deposition. McGraw Hill, New York. 435 pp. [In the course of a discussion on dolomitization the Funafuti boring results are contrasted with those from Key West, pp. 361–362.]
166. GRAF, D. L., and J. R. GOLDSMITH. 1963. Carbonate mineralogy of Eniwetok Atoll. *In* Schlanger (1963), pp. 1048–1053. [Gives data on five Royal Society Funafuti core samples, Hinde nos.: 15, 491A, 4A, 224A, 668A.]
167. GRAEFFE, E. 1876. Reisen nach verschiedenen Inseln der Südsee. Das Ausland dem Gebeite der Natur-, Erd- und Völkerkunde 40:1139–1144, 1159–1164, 1184–1191. [The first part gives no specific Ellice Islands material, the second and third present the first comprehensive descriptions of the atolls' geography, flora, fauna, and populations with sketch maps as follows: Nukelaelae as “Mitchells Inselgruppe” and “Nukulailai,” pp. 1159–1162; Funafuti as “Ellis Inseln” and “Funafute,” pp. 1162–1164; Vaitupu, pp. 1184–1185; Nukufetau, pp. 1185–1186; Niutao, pp. 1187–1188; Nanumea as “St Augustine” or “Nanomea,” pp. 1188–1189, Niu, pp. 1190–1191. Numerous plant and animal species noted for the first time. The additional two references cited by Kraus

- (1969), viz., Graeffe (1868). Das Ausland dem Gebeite 41:529–553, 559–563 have no specific Ellice content but concern Uvea and Niuafo'ou.]
168. GREAT BRITAIN. ADMIRALTY. HYDROGRAPHIC OFFICE. 1891. Pacific islands sailing directions, Vol. II: Central islands. 2nd ed. Darling and Son, London. 498 pp.; 4th ed., 1908, Taylor, Garnett, Evans, London. 472 pp.; 5th ed., 1918, Taylor, Garnett, Evans, London. 696 pp.; 6th ed., 1932, HMSO, London. 562 pp.; 8th ed., 1956, Tinling and Co., London. 569 pp. [Summary of meteorology, geomorphology, and oceanography of Ellice Islands, atoll by atoll, shoal by shoal: 2nd ed., pp. 229–236; 4th ed., pp. 196–205; 5th ed., pp. 558–571 (with diagrams); 6th ed., pp. 453–464; 8th ed., pp. 456–457; cf. Agassiz (1903) and United States of America: Defense Mapping Agency (1982).]
169. GREAT BRITAIN. ADMIRALTY. NAVAL INTELLIGENCE DIVISION. 1945. Geographical handbook series. Pacific islands. 3: Western Pacific (Tonga to Solomon Islands). [Geography of Ellice Islands summarized, pp. 380–385 with bibliography, pp. 383–385.]
170. ———. 1945. Pacific islands. 1: General survey. [Numerous references to the Ellice Islands in general as well as to the individual atolls, e.g., climate, pp. 58, 83; fauna, pp. 183, 233; geology, p. 178, etc. Bibliographies at the end of each chapter not used in present compilation.]
171. GREAT BRITAIN. COLONIAL OFFICE. 1910–1962/63. Colonial report on Gilbert and Ellice Islands protectorate/colony. Various publishers, London. [Comments on aspects of the natural history, particularly the weather, soils, and filariasis, are scattered through these reports, e.g., 1910, p. 5, drought in northern Ellice Islands; 1911, p. 7, breaking of drought; 1916/17, pp. 5–6, drought, soil analysis (?); 1916/17, p. 10, records visit of professor from Swedish University of Uppsala (= Dr. Sixten Bock); 1919/20, p. 2, records visit of O'Connor; 1931/32, p. 32, monthly rainfall figures; 1935, p. 37, bibliography; 1949, pp. 38–40, geography and climate.]
172. GREAT BRITAIN: COMMONWEALTH OFFICE. 1966/67. Report for the years 1966 and 1967, Gilbert and Ellice Islands Colony and the Central and Southern Line Islands. HMSO, London, 108 pp. [General geography, pp. 74–77.]
173. GREAT BRITAIN: FOREIGN AND COMMONWEALTH OFFICE. 1968–1973. Report for the year [1968–73] Gilbert and Ellice Islands Colony and the Central and Southern Line Islands. Various publishers, London and Hong Kong. [Various references as above.]
174. GREGORY, J. W. 1930. The geological history of the Pacific. Quarterly Journal, Geological Society of London 86:cxxii–cxxvi. [Brief reference to Funafuti studies as confirming Darwin's hypothesis, p. cxxiv, with dating of sinking put as "Upper Kainozoic," p. cxxv.]
175. GRIMSDALE, T. F. 1952. *Cycloclypeus* (Foraminifera) in the Funafuti boring and its geological significance. Challenger Society Occasional Papers 2:1–11. [Gives evidence that the rocks in the Royal Society boring were deposited on seaward flanks of reef under open sea conditions. Suggest part of boring between 560 and 770 ft is talus but cf. Chapman (1941).]
176. GÜNTHER, A. C. L. G. 1873–1910. Andrew Garrett's Fische der Südsee: vols. 1, 2, 3. Journal des Museum Godeffroy 1(1):1–24(1873); 2/3(5–6):25–96(1874); 4:97–128(1875); 5(11):129–168(1876); 6(11):169–216(1877); 7(15):217–256(1881); 8(16):261–388(1909); 9(17):389–519 (1910). [Several references to museum specimens and records from "Ellice-Inseln" or Fuafuti, e.g., pp. 266–267, 354].
177. GUPPY, H. B. 1897. The Polynesians and their plant names. Journal Transactions, Victoria Institute 29:135–174. [Pages 150–169 are a table of plants listing their name and localities; *Colocasia* and pandanus are listed from Ellice Islands; cf. Lobel (1978).]
178. HALLIGAN, G. H. 1904a. Report on the lagoon borings. In Bonney (1904). The atoll of Funafuti. Section VIII:160–164.
179. ———. 1904b. Permanent reference marks on the island of Funafuti. In Bonney (1904). The atoll of Funafuti. Section IX:165–166.

180. HALLOCK, P. 1981. Production of carbonate sediments by selected large benthic Foraminifera on two Pacific coral atolls. *Journal of Sedimentary Petrology* 51: 467–474. [Passing reference to Chapman (1900a).]
181. HARTWIG, G. 1861. Die Inseln des grossen Oceans im Natur- und Volkerleben. Kreidel's Wiesbaden, 544 pp. [Ellice and "Union" (= Tokelau Islands) summarized, pp. 430–436.]
182. ———. 1862. Söderhafverts Öar fränställda i Naturoch Folklif. Translated by C. Dahlberg. Berg, Stockholm. 512 pp. [As above, in Swedish.]
183. ———. 1868. Naturen og Folkelivet paa Sudhaus-Oerne. Philipsens, Kobenhavn. 640 pp. [As above, in Danish.]
184. HEDLEY, C. 1896. General account of the atoll of Funafuti, *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part I: 1–72.
185. ———. 1897. The ethnology of Funafuti. *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part IV: 227–306.
186. ———. 1898. The broadening of atoll islets. *Natural Science* 12: 174–178. [Particular reference to personal observations made at Funafuti.]
187. ———. 1899a. The Mollusca of Funafuti: Part 1. *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part VII: 395–488.
188. ———. 1899b. The Mollusca of Funafuti: Part 2. *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part VIII: 489–510.
189. ———. 1899c. The Mollusca of Funafuti: Supplement. *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part IX: 547–570.
190. ———. 1899d. A Zoogeographic scheme for the mid-Pacific. *Proceedings, Linnean Society of New South Wales* 24: 391–417. [Funafuti flora and fauna discussed in the light of current knowledge of the rest of the Pacific.]
191. ———. 1904. The formation of coral reefs. *Nature* 70: 391. [Joins Gardiner/Schwarz (1904) fray with relish, discussing, among other things, the evidence of Halligan's (1904a) lagoon borings.]
192. HEDLEY, C. et al. 1899. Summary of the fauna of Funafuti. *In* Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part VIII: 511–538.
193. HEMSLEY, W. B. 1885. Report on the botany of Juan Fernandez, the south-eastern Moluccas and the Admiralty Islands. Report on the Scientific Results of the Voyage of the HMS *Challenger*, Botany, 1(IV): 1–333. [*Suriana* and *Rhizophora* spp. from Funafuti, pp. 131, 237.]
194. HICKMAN, J. S. 1973. Tropical cyclones. *South Pacific Bulletin* 23(4): 33–37. [Includes brief account and map of hurricane "Bebe" that devastated Funafuti in October 1972.]
195. HICKSON, S. 1897. The coral reef at Funafuti. *Nature* 55: 439. [A gentlemanly side-swipe at Sollas (1897b).]
196. ———. 1898a. On the species of the genus *Millepora*, a preliminary communication. *Proceedings, Zoological Society of London* 68: 246–257. [Refers to specimens from Funafuti and personal communications concerning them from J. S. Gardiner, p. 253 et seq.]
197. ———. 1898b. Notes on the collections of specimens of the genus *Millepora* obtained by Mr. Stanley Gardiner at Funafuti and Rotuma. *Proceedings, Zoological Society of London* 68: 828–833.
198. ———. 1899. The medusae of *Millepora*. *Proceedings, Royal Society of London* 66: 3–10. [Notes that one of Gardiner's Funafuti specimens was a male.]
199. HILES, I. L. 1899. Report on the gorgonacean corals collected by Mr. J. Stanley Gardiner at Funafuti. *Proceedings, Zoological Society of London* 69: 46–54.
200. HILL, G. F. 1926. Termites from the Ellice Group. *Proceedings, Royal Society of Victoria* 38: 95–99. [Records of *Prohinotermes inopinatus* and *Calotermes rainbowi* n. sp. = *C. marginipennis* (Rainbow, 1897a), *C.r.* from Nanumea (type loc.), Funafuti, Nanomaga, Nui, and Nukulaelae. See also Insects of Samoa and other Samoan terrestrial Arthropoda, Part VII(1): 1–18.]

201. HILL, J. P. 1897a. The Enteropneusta of Funafuti, Part 1. In Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part III:203–210.
202. ———. 1897b. The Enteropneusta of Funafuti, Part 2. In Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part V:336–348 [cf. Spengel (1904)].
203. HINDE, G. J. 1904. Report of the materials from the borings at Funafuti Atoll. In Bonney (1904). The atoll of Funafuti. Section XI:186–361. [Log of all cores and description of bioclastic content with tables on distribution of various organisms.]
204. HOLDEN, J. C. 1976. Late Cenozoic Ostracoda from Midway Island drillholes. U.S. Geological Survey Professional Paper 680F:1–43. [Funafuti ostracods dated as Pleistocene instead of Miocene (cf. Chapman 1941).]
205. HOPKINS, G. H. E. 1927a. Butterflies of Samoa and some neighbouring island groups. In Insects of Samoa and other Samoan terrestrial Arthropoda. British Museum, London. Part III(1):1–64. [Includes records from Ellice Islands, e.g., *Danaïda*, p. 7, *Euploea*, pp. 11, 14–15; *Hypolimnas*, p. 34; *Precis*, pp. 35–36, 38; *Catochrysops*, p. 56.]
206. ———. 1927b. Pests of economic plants in Samoa and other island groups. Bulletin of Entomological Research 18:23–32. [Includes Ellice Islands: *Pinnapsis*, *Calotermes*, *Agonoxena*, and *Scholastes bimaculatus* from Funafuti.]
207. HORWITZ, A. S. and P. E. POTTER. 1971. Introductory petrography of fossils. Springer-Verlag, Berlin, 302 pp. [Various references to Cullis' (1899, 1904) work and its historical position in the study of bioclasts.]
208. HOWIE, M. A. 1912. The building of "coral" reefs. Science 35:837–842. [Assesses relative importance of lime-secreting organisms in reefs in the light of Funafuti, and other evidence.]
209. HOYLE, W. E. 1904. Reports on the Cephalopoda: Being Part XXIX, Reports on the dredging operations off the West Coast of Central America to the Galapagos . . . 1891 and Part V, Reports on the scientific results of the expedition to the tropical Pacific by USS *Albatross* from August 1899 to March 1900. Bulletin, Museum of Comparative Zoology 43(1):1–72. [*Euprymna stendactyla* from Funafuti, pp. 24, 49; cf. Adam (1945).]
210. HUANG, Y.-M. 1977. The mosquitoes of Polynesia with a pictorial key to some species associated with filariasis and/or dengue fever. Mosquito Systematics 9(3):289–322. [*Culex* (*C.*) *quinquefaciatus*, *C.* (*C.*) *sitiens*, *C.* (*C.*) *annulirostris*, *Aedes* (*Aëdiformis*) *vexans*, *A.* (*Stegomyia*) *aegypti*, *A.* (*S.*) *polynesiensis* recorded from Ellice Islands, pp. 290–292; cf. Marks (1951) and Iyengar (1960).]
211. HUTCHINGS, J. W. 1953. Tropical cyclones in the southwest Pacific. New Zealand Geographer 9:37–57. [Ellice Islands occupies part of a broad band in which many cyclones have their origin, pp. 49–50.]
212. THE HYDROGRAPHER. 1896. Report on Admiralty Surveys for the year 1896. Her Majesty's Stationery Office, London. [Report on the voyage of HMS *Penguin* to the South Pacific, including Funafuti, pp. 8–9.]
213. IM THURN, E. F. (Sir). 1909. The western Pacific: Its history and present condition. Geographical Journal 34:271–290. [Former Governor of Fiji and High Commissioner of the Western Pacific reviews exploration and exploitation of various island groups including observations on geography and natural history. Ellice Islands, pp. 282–284 et seq.]
214. IYENGAR, M. O. T. 1954. Distribution of filariasis in the south Pacific region. South Pacific Commission Technical Paper 66:1–52. [Ellice Islands microfilarial data and authors summarized, pp. 10–11; elephantiasis data and authors, p. 24; *Wuchereria Bancrofti* information and authors, p. 35; vectors, p. 44.]
215. ———. 1959. A review of the literature on the distribution and epidemiology of filariasis in the south Pacific region. South Pacific Commission Technical Paper 126:1–172. [Thoroughly annotated bibliography not used in the present compilation.]
216. ———. 1960. A review of the mosquito

- fauna of the south Pacific. South Pacific Commission Technical Paper 130:1–102. [Ellice records, pp. 13, 23, 33, 65, 67, 76, 78 but note that records, p. 13, do not match with those on pp. 65–78; cf. Huang (1977).]
217. ———. 1965. Distribution of filariasis in the south Pacific region. South Pacific Commission Technical Paper 148:1–183. [Ellice Islands, pp. 82–90, includes good succinct summary of the geography.]
218. JENKINS, J. S. 1850. Voyage of the U.S. Exploring Squadron commanded by Captain Charles Wilkes in 1838, 1839, 1840, 1841, and 1842 . . . , etc. Alden, Auburn, 517 pp. [Brief notes on geography, flora, and fauna of Funafuti and Nukufetau, pp. 399–401, but largely of historical interest only.]
219. JOHNSON, I. 1947. Adventures with the Survey Navy. National Geographic Magazine 92:130–148. [Channels blasted through Funafuti's coral reefs, pp. 140–142; cf. Great Britain. Colonial Office (1910–1962/63).]
220. JOHNSON, J. H. 1961. Fossil algae from Eniwetok, Funafuti, Kita-Daito-Jima. U.S. Geological Survey Professional Paper 260Z:907–950.
221. ———. 1964. Fossil and recent calcareous algae from Guam. U.S. Geological Survey Professional Paper 403G:1–40. [Various references to and comments on Funafuti specimens.]
222. JORDAN, K. Anthribidae. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part IV(2):161–172. [*Stenorhis ampedus* gen. et sp. nov. from Nukufetau, p. 168.]
223. JUDD, J. W. 1904a. General report on the materials sent from Funafuti and the methods of dealing with them. In Bonney (1904). The atoll of Funafuti. Section X:167–185.
224. ———. 1904b. The chemical examination of the materials from Funafuti. In Bonney (1904). The atoll of Funafuti. Section XII:362–389. [First chemical analyses of the Royal Society cores.]
225. KÄSTNER, A. 1927. Terrestrial Arthropoda other than insects: Pseudoscorpiones. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part VIII:1–78. [*Garypinus oceanicus* from Funafuti = *Olpium longiventer* (Pocock, 1898) p. 16; cf. With (1907).]
226. KAY, E. A. 1976. The status of faunistic studies of Pacific coral reef mollusks: 1974. Micronesica 12(1):187–191. [Brief reference to patterns of distribution of micromolluscs at Funafuti, p. 190.]
227. ———. 1980. Micromolluscan distribution patterns at four central Pacific atolls [abs]. American Zoologist 20:476. [Includes Funafuti.]
228. KENDALL, W. C., and E. L. GOLDSBOROUGH. 1911. The shore fishes: Being part XIII of Reports on the scientific results of the expedition . . . by the USS *Albatross* from August 1899 to March 1900. Memoirs of the Museum of Comparative Zoology 26(7):239–343. [23 species recorded from the Ellice Islands and summarized, pp. 338–343.]
229. KING, W. B. 1967. Preliminary Smithsonian identification manual: Seabirds of the tropical Pacific Ocean. U.S. National Museum, Washington. 126 pp. [Ellice Islands observations, pp. 113–114, mainly from Child (1960).]
230. KIRKPATRICK, R. 1900. Description of sponges from Funafuti. Annals and Magazine of Natural History, ser. 7, 6:345–362. [cf. Lister (1900).]
231. KOPSTEIN, Ph. F. 1921. Die Skorpione des Indo-Australischen Archipels, mit Grundlage der in Holländischen Sammlungen, vornämlich des Rijksmuseums in Leiden, vorhandenen Arten. Zoologische Mededeelingen Rijksmuseums van Natuurlijke Historie, Leiden 6:115–144. [*Hormurus australasiae* record from Funafuti, p. 136; cf. Rainbow (1897), Pocock (1898), Buxton (1927), Sachet (1953).]
232. KRAUSS, N. L. H. 1969. Bibliography of the Ellice Islands, western Pacific. Privately published, Honolulu, 13 pp. [Used extensively in the present compilation; contains some minor errors; not obvious why one or two sources were cited; those references not available to me are not given here.]
233. KUENEN, Ph. H. 1933. Geology of coral reefs. In The Snellius expedition in the east-

- ern part of the Netherlands East Indies 5(2):1-125. [Funafuti discussed by way of comparison, pp. 81, 96-97, 115.]
234. ———. 1950. *Marine Geology*. John Wiley, New York. 568 pp. [*Lithothamnion* on edge of Funafuti atoll discussed, pp. 422, 423, 431.]
235. LADD, H. S. 1956. Coral reef problems in the open Pacific. *Proceedings 8th Pacific Science Congress, Philippines IIA*:833-849. [Summarizes recent work including postwar studies at Funafuti, pp. 840, 846.]
236. ———. 1958. Fossil land snail shells from western Pacific atolls. *Journal of Paleontology* 32:183-198. [Recovery of endodont land snail shells from Funafuti, Bikini, and Eniwetok borings.]
237. ———. 1961. Reef building. *Science* 134:703-715. [Problems connected with Funafuti and other Pacific borings.]
238. ———. 1968. Fossil land snail from Funafuti, Ellice Islands. *Journal of Paleontology* 42:857. [Holotype of *Ptychodon davidii*.]
239. LADD, H. S., R. C. INGERSON, M. R. TOWNSEND, and H. K. STEPHENSON. 1953. Drilling on Eniwetok. *Bulletin, American Association of Petroleum Geologists* 37:2257-2280. [Brief comparison of Fiji, Funafuti, Kita-Daito-Jima, Bikini, Eniwetok bores, pp. 2270-2272, 2276-2277.]
240. LADD, H. S., and S. O. SCHLANGER. 1960. Drilling operations on Eniwetok atoll. U.S. Geological Survey Professional Paper 260Y:863-902. [Diagrammatic summary of results of deep drilling on Pacific atolls to date, p. 902.]
241. LADD, H. S., and J. I. TRACEY. 1957. Fossil land shells from deep drill holes on western Pacific atolls. *Deep-Sea Research* 4:218-219. [Records *Ptychodon* from Funafuti in a leached zone and concludes the atoll as being emergent during Quaternary.]
242. LADD, H. S., J. I. TRACEY, and M. G. GROSS. 1967. Drilling on Midway atoll, Hawaii. *Science* 156:1088-1094. [Diagrammatic summary of results of deep drilling on Pacific atolls to date, p. A20.]
243. ———. 1970. Deep drilling on Midway atoll. U.S. Geological Survey Professional Paper 680A:A1-A22. [As above.]
244. LAIDLAW, F. F. 1903. Notes on some marine Turbellaria from the Torres Strait and the Pacific, with a description of new species, with a description of new species. *Memoirs, Manchester Literary and Philosophical Society* 47(5):1-12. [Record of species collected by Gardiner from Funafuti.]
245. LAGENBECK, R. 1897. Das Atoll Funafuti in der Ellice-Gruppe. *Petermanns Mitteilungen* 43:190-192. [Review and summary of Etheridge (1896-1897, Parts I-V) and Sollas (1897b).]
246. LAING, F. 1927. Coccidae, Aphidadae and Aleyroidadae. *In* *Insects of Samoa and other Samoan terrestrial Arthropoda*. British Museum. London, Part II(1):35-45. [Record of *Pinna sp. minor* from Nanumea and Nanomega (*sic*).]
247. LAIRD, M. 1955. Notes on the mosquitoes of the Gilbert, Ellice and Tokelau Islands and on filariasis in the latter group. *Bulletin of Entomological Research* 46:291-300. [Summarizes picture of mosquito distribution in islands to date, pp. 291-293; Funafuti recollected, pp. 297-299, with information on soils, taro types, and pH and temperature of pools.]
248. LAMBERT, S. M. 1924. Health survey of the Gilbert and Ellice Islands, with special reference to hookworm infection. Government Printer, Suva. 12 pp. [Planet Venus is *Ten Tarai-ki*, "the Man who looks at buttocks," p. 7; infections, pp. 7-12.]
249. ———. 1928. Medical conditions in the South Pacific. *The Medical Journal of Australia* 2:362-378. [Numerous references to disease, parasites, and infections in Ellice Islands, pp. 368 et seq.]
250. ———. 1941. *A doctor in Paradise*. Dent & Sons, London. 421 pp. [Elephantiasis, filariasis, etc., in Ellice Islands, pp. 177-179.]
251. LEESON, I. 1954. *A bibliography of bibliographies of the South Pacific*. Oxford University Press, London. 61 pp. [Published under the auspices of the South Pacific Commission, it contains various sources and possible sources of material on the Ellice Islands. The more obvious ones have been used here.]
252. LIEFTINK, M. A. 1962. *Ondonta*. Bernice P. Bishop Museum Insects of Micronesia

- 5(1): 1–95. [Distribution list includes *Diplacodes bipunctata* from Funafuti, pp. 7, 13.]
253. LIPMAN, C. B. and P. E. SHELLEY. 1924. The chemical composition of *Lithothamnium* from various sources. Carnegie Institution Papers, Department of Marine Biology 19: 195–199. [Comments on data of “Hedley (1904),” p. 199. This is presumably a misreference and meant to be Judd(1904b, pp. 376–378).]
254. LISTER, J. J. 1900. *Astroclera willeyana*, the type of a new family of sponges. A. Willey’s Zoological Results (C.U.P.), Part IV: 459–482. [Detailed description of specimen dredged from 100 fathoms off Funafuti; cf. Kirkpatrick (1900).]
255. LITTLER, M. M. 1976. Calcification and its role among the macroalgae. *Micronesica* 12(1): 27–41. [Importance of observations of Finkh (1904) and David, Halligan, and Finkh (1904) stressed, p. 36.]
256. LOBEL, P. S. 1978. Gilbertese and Ellice islander names for fishes and other organisms. *Micronesica* 14: 177–197. [Cf. Guppy (1897).]
257. LUERSSSEN, C. 1871. Filices Graeffeanae. Beitrag zur Kenntniss der Farnflora der Viti-, Samoa-, Tonga-, und Ellices Inseln. Mittheilungen aus dem Gesammtegebiete der Botanik. Herausgegeben von Prof. Dr. A. Schenk und Dr. Chr. Luerssen 1: 57–312. [Four fern species from Vaitupu: general notes and analyses, pp. 58–62; *Polypodium Phymatodes*, pp. 108–109; *Pteris marginata*, pp. 131; *Asplenium Nidus*, pp. 146–148; *Lindsaya acutifolia*, pp. 223–224; and see tabular analysis, pp. 278–291.]
258. LUOMALA, K. 1975. Cultural associations of land mammals in the Gilbert Islands. Bernice P. Bishop Museum Occasional Papers 24: 227–274. [“Often generalizations for the entire . . . [Gilbert] . . . group or for the entire Gilbert and Ellice Colony probably apply only to specific islands,” p. 277.]
259. MA, T. Y. H. 1956. Coral reefs and problems of sial in oceanic areas. *Oceanographia Sinica* 3: 1–4. [See Ma (1957).]
260. ———. 1957. The effect of warm and cold currents in the southwestern Pacific on the growth rate of reef corals. *Oceanographia Sinica* 5: 1–34. [Ma (1956, 1957) is cited here by way of example of numerous papers by the same author on oceanography, corals, and reefs which make brief reference to the Funafuti corings. Further examples may be found in the bibliographies given at the back of Ma’s papers.]
261. MACFADDEN, C. H. 1941. A bibliography of Pacific area maps. New York, American Council, Institute of Pacific Relations. 107 pp. (= International Research Series of the Institute of Pacific Relations Report: Studies of the Pacific, No. 6). [Oceania maps, pp. 64–65; hydrographic charts of the island groups: American, p. 76; British, p. 71. None is listed separately in the present compilation.]
262. MCLEAN, R. F. 1974. Morphology of hurricane banks at Funafuti Atoll, Ellice Islands. Proceedings, International Geographical Union Regional Conference and Eighth New Zealand Geography Conference, Palmerston North, pp. 269–277.
263. MAIDEN, J. H. 1897. Anniversary address: 2 Zoology. Journal and Proceedings, Royal Society of New South Wales 31: 11–16. [Reports on involvement of Australian Museum in first Royal Society Expedition, pp. 11–14; failures and successes, pp. 15–16; Admiral Wharton’s coral reef theory, p. 16.]
264. ———. 1904. The botany of Funafuti, Ellice Group. Proceedings, Linnean Society of New South Wales 29: 539–556. [Descriptions of collections by Mrs. David (July–August 1897) and Halligan and Finkh in 1898.]
265. MALLOCH, J. R. 1930a. Diptera; Ortalidae. In Insects of Samoa and other Samoan terrestrial Arthropoda. British Museum, London, Part VI(5): 215–231. [*Euxesta semifaciata* from Nukulaelae, p. 217; *Scholastes bimaculatus* from Funafuti, p. 223.]
266. MALLOCH, J. R. 1930b. Diptera: Lonchaeidae, Chloropidae, Piophilidae. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part VI(6): 239–251. British Museum, London. [*Lonchaea (Lamprolonchaea) aurea* from Funafuti, p. 241.]
267. MARAGOS, J. E., G. B. K. BAINES, and P. J. BEVERIDGE. 1973. Tropical cyclone

- Bebe creates a new land formation of Funafuti Atoll. *Science* 181:1161-1164.
268. MARCUS, E., and E. MARCUS. 1970. Opisthobranch mollusks from the southern tropical Pacific. *Pacific Science* 24:155-179. [*Phyllidia* (P). *tula* n. sp. from Nukulaelae, p. 172.]
269. MARKS, E. N. 1951. The vector of filariasis in Polynesia; a change in nomenclature. *Annals of Tropical Medicine and Parasitology* 45:137-140. [Corrects previous identification of vector on Ellice Islands as *Aedes 'pseudocutellaris'* = *A. polynesiensis*.]
270. MARSHALL, P. 1911. Oceania. In G. Steinmann and O. Wilckens, eds. *Handbuch der Regionalen Geologie* 7(2) Ozeanien 1-36. [Various references to the Ellice group, pp. 1, 4, 5, 9. Summary of Funafuti Royal Society cores, pp. 9-10, and notes "The island has suffered slight oscillations in level in geologically recent times," p. 10.]
271. ———. 1912. Coral reefs of the Cook and Society Islands. *Australasian Association for Advancement of Science* 13, Section C:140-145. [Discusses pros and cons of Funafuti Royal Society main bore passing through talus in part.]
272. ———. 1929. Coral reef rock. *Proceedings, 4th Pacific Science Congress, Bandoeng IIB*:863-867. [Endeavors to elucidate on the mineralogical changes described by Cullis (1904) at Funafuti and found by Marshall in rocks at Atiu and Mangaia.]
273. ———. 1930. Geology of Rarotonga and Atiu. *Bernice P. Bishop Museum Bulletin* 72:1-75. [Comparison of reefs made with Funafuti, pp. 57-60; dolomite and dolomitization discussed, pp. 60-65, with reference to Skeats (1918) and others.]
274. MASSAL, E. 1954. Annotated bibliography of filariasis and elephantiasis. Part I: Epidemiology of filariasis in the South Pacific region. *South Pacific Commission Technical Paper* 65:1-63. [Arranged chronologically and indexed by author only. Indirectly used in present compilation; cf. Iyengar (1954, 1965).]
275. MASSAL, E., and J. KERREST. 1953. Annotated bibliography: Filariasis, elephantiasis and related aspects in the South Pacific area. *Proceedings, Conference on Filariasis and Elephantiasis, Papeete, 1951. South Pacific Commission, Noumea (1953)*. 108 pp. [Partially used in present compilation, pp. 89-100; cf. Iyengar (1954, 1965).]
276. MAXWELL, Wm. H. 1881. Report on the Gilbert, Ellise [*sic*] and other islands to Commodore Wilson. Government Printing Office, Sydney. 21 pp. [Sparse and scattered references to geographic aspects of the Ellice Islands, pp. 1-6.]
277. MAYR, G. 1870. Neue Formiciden. *Verhandlungen der Zoologisch-botanischen Gesellschaft in Wien* 20:939-996. [*Pheidole sexpinosa* n. sp. from Ellice Islands, pp. 997-978; cf. Mayr (1876).]
278. ———. 1876. Die australischen Formiciden. *Journal des Museum Godeffroy* 12:56-115. [Specimens from the Ellice Islands include species of *Camponotus*, *Pre-nolepis*, *Plagiolepis*, *Pheidole*; cf. Santschi (1928) and Wheeler (1953).]
279. MENARD, H. W. 1964. *Marine geology of the Pacific*. McGraw-Hill, New York. 271 pp. [Funafuti Royal Society bores discussed briefly, pp. 71-73, 87.]
280. MERRILL, E. D. 1924. *Bibliography of Polynesian botany*. *Bernice P. Bishop Museum Bulletin* 13:1-68. [Updated below.]
281. ———. 1937. *Bibliography of Polynesian botany*. *Bernice P. Bishop Museum Bulletin* 144:1-194. [Updated below.]
282. ———. 1957. A botanical bibliography of the islands of the Pacific. In *Studies of Pacific Islands Plants, contributions from the United States National Herbarium* 30:1-322. [An enlargement of the two bibliographies above, it is easily accessed by use of the index (Walker, 1957) and has been used in compilation of the present bibliography.]
283. MEYRICK, E. 1927. *Micro-Lepidoptera. In Insects of Samoa and other Samoan terrestrial Arthropoda. Part III(2)*:65-116. *British Museum, London*. [Includes records from Ellice Islands, e.g., *Polychrosis*, p. 75, *Agonoxena*, p. 84, *Labdia*, pp. 87-88.]
284. MOLENGRAAFF, G. A. F. 1917. The coral reef problem and isostasy. *Koninklijke*

- Akademie van Wetenschappen te Amsterdam. Proceedings 19:610–627. [“Translated from the Dutch, somewhat revised and augmented”; Funafuti atoll briefly discussed in an appendix which considers Daly’s (1916*b*) paper, and see also p. 613 where Funafuti boring is cited as indicating subsidence of “± 340 m” (*sic*).]
285. MOORE, W. V. 1897. Formation of coral reefs. *Nature* 55:463. [Criticizes Sollas’ ideas on the formation of coral reefs with respect to Funafuti.]
286. MOUSSON, A. 1873. Faune malacologique de quelques îles de l’océan Pacifique occidental. *Journal de Conchyliologie* 21:101–116. [Seven snail species collected by “M le docteur Graeffe” (q.v.) are described from Funafuti. Other Ellice material is mentioned.]
287. MUIR, F. 1927*a*. Hemiptera: Fulgoroidea. In *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part II(1):1–45. British Museum, London. [*Lamenia caliginea* from Nui, p. 19.]
288. ———. 1927*b*. On some fulgorids from the south Pacific. *Annals and Magazine of Natural History* 20:86–91. [*Lamenia caliginea* from Funafuti, p. 89; *Pyrrhoneura saccharicida* from Funafuti, p. 89; *Swezeyia maurellei* from Nui, pp. 89–90.]
289. MURRAY, J. and G. V. LEE. 1909. The depth and marine deposits of the Pacific: being part XII of Reports on the scientific results of the expedition ... of the USS *Albatross* from August 1899 to March 1900 and part XVII of Reports on the scientific results of the expedition ... of the USS *Albatross* from October 1904 to March 1905. *Memoirs of the Museum of Comparative Zoology* 38:1–170. [Observations on sea floor near Ellice Islands, p. 13; bottom sample from latitude 12° 43’ S, longitude 179° 50’ W (No. 53, Station 194) described, p. 101.]
290. NEW ZEALAND. METEOROLOGICAL SERVICE. 1947–1971. Annual meteorological summary stations in Fiji, Tonga, New Hebrides, and Western Pacific High Commission Territories. Government Printer, Suva. [Data from Nurakita, Nanumea, Nui, Nanumanga, Niutao, Nukulaelae, and Funafuti for some of the following: temperature, pressure, and rainfall, with detailed climatological tables in some years for Nui, Nanumea, Funafuti; tropical storm records each year.]
291. NORDENSTAM, A. 1946. Marine Isopoda from Professor Dr. Sixten Bock’s Pacific expedition, 1917–1918. *Arkiv för Zoölogi* 37A(7):1–31. [Species of *Cirolana* from Nukufetau, pp. 3–8; *Alcirona* from Nukufetau, pp. 10–12; *Bagatus* from various Ellice localities, pp. 15–16; *Sternetrum* from Nukufetau, pp. 20–23; cf. Searle (1914).]
292. NORTH, A. J. 1896. Aves from Funafuti. In Etheridge (1896–1900). *The atoll of Funafuti, Ellice Group*. Part I:79–88. [Cf. Gadow (1898) and Townsend and Whetmore (1919).]
293. ———. 1898. On a species of pigeon frequenting the atolls of the Ellice Group. *Records of the Australian Museum* 3(4):85–87. [Includes an updated avifauna list including Gadow’s (1898) specimens, but see Townsend and Whetmore (1919).]
294. O’CONNOR, F. W. 1922. Some results of medical research in the western Pacific. *Transactions, Society of Tropical Medicine and Hygiene* 16:28–56. [Numerous references to Ellice Group, pp. 28–37, 51, particularly with respect to filarial problems; filarial detail, pp. 37–38; elephantiasis, pp. 38–39; intestinal helminthiasis/ankylostomiasis, pp. 39–40; ascariasis, p. 40; trichuris, p. 40; intestinal protozoa, p. 41; tuberculosis, pp. 41–42; yaws, p. 42; fish poisoning, pp. 42–43; submarine volcanism, p. 42.]
295. ———. 1923. Researches in the western Pacific. Being a report on the results of the expedition sent from the London School of Tropical Medicine to the Ellice, Tokelau and Samoan Islands in 1921–1922. *Research Memoirs of the London School of Tropical Medicine* 4:1–57. [Every atoll of the Ellice Group visited and studied. Geography, climate, pp. 6–7; filarial host = *Stegomyia pseudocutellaris*, pp. 11–13 but cf. Marks (1951), Huang (1977); habits of host, pp. 15–16, including ecology-wrecking experiment on Funafulla (*sic*)

- islet; microfilarial observations, pp. 17–18; filarial incidence, pp. 19–20; tuberculosis, p. 27; yaws, pp. 27–28; syphilis, p. 28; particular aspects of disease in Ellice Islands atoll by atoll and including fish poisoning, pp. 29–42; animal parasites, pp. 51–53; absence of *Finlaya kochi*, p. 56; also plate 1 et seq; excellent index; cf. Buxton (1928), Buxton and Hopkins (1927), Lambert (various dates), Iyengar (various dates).]
296. OGLBY, J. D. 1897. Australian natural science. *Natural Science* 11(69):289. [A sharp, subjective reaction to comments by Anonymous (1897b).]
297. PALMER, C. D. 1952. Tropical meteorology. *Quarterly Journal, Royal Meteorological Society* 78:126–164. [Initial discussion centers on the area to the north of Ellice Islands, but fig. 1, p. 127, shows weather-observing stations in central Pacific including Ellice Group; cf. New Zealand. Meteorological Service (1947–1971).]
298. PARK, J. 1921. Coral reefs and atolls: Modern views of their origin with recent observations at the Isle of Pines. Government Printing Office, Wellington. 13 pp. [Funafuti: subsidence, pp. 5–6; depth of boring, p. 7; other passing references.]
299. PERKINS, R. C. L., and L. E. CHEESMAN. 1928. Hymenoptera: Apoidea, Sphecoidea and Vespoidea. In *Insects of Samoa and other Samoan terrestrial Arthropoda*. British Museum (Natural History). Part V(1):1–32. [Records from Ellice Islands summarized, pp. 4–6.]
300. PILSBURY, H. A. 1916. Mid-Pacific land snail faunas. *Proceedings, National Academy of Sciences* 2:429–433. [Funafuti fauna, p. 433, are presumably those of Mousson (1873); cf. Ladd (1958, 1968) and Vagvolgyi (1975).]
301. PINGITORE, N. E. 1970. Diagenesis and porosity modification in *Acropora palmata*, Pleistocene of Barbados, West Indies. *Journal of Sedimentary Petrology* 40:712–721. [Discusses possible marine origin of aragonite needles—in contrast to Cullis' (1904) subaerial origin.]
302. POCKOCK, R. J. 1898. List of Arachnida and "Myriapoda" obtained in Funafuti by Professor W. J. Sollas and Mr. Stanley Gardiner, and in Rotuma by Mr. Stanley Gardiner. *Annals and Magazine of Natural History*, ser 7, 1:321–329. [Severely criticizes Rainbow's (1897b) *Buthus brevicaudatus*, but see Sachet (1953).]
303. PONT, A. C. 1968. The Diptera described by W. J. Rainbow from Funafuti Atoll, Ellice Islands. *Proceedings, Royal Entomological Society of London (B)*37:89–90. [Establishes three synonyms and one new combination for Rainbow's four new types.]
304. PUSINELLI, F. N. M. 1947. Gilbert and Ellice Islands Colony: A report on the results of the census of population. Government Press, Suva. 103 pp. [Cattle on Niulakita, pp. 13, 20, 102; data on coconut trees, fowl, and pigs, p. 102, with comments, pp. 19–20.]
305. PURDY, E. G. 1974. Reef configurations: Cause and effect. In L. F. Laporte, ed. *Reefs in time and space*. Society of Economic Paleontologists and Mineralogists Special Publication 18:9–76. [Comparison of depth of solution unconformities in reef bore holes including Funafuti, pp. 12 et seq.]
306. RAINBOW, W. J. 1897a. The insect fauna [of Funafuti]. In Etheridge (1896–1900). The atoll of Funafuti. Part II:80–104. [Cf. Pont (1968).]
307. ———. 1897b. The Arachnidian fauna [of Funafuti]. In Etheridge (1896–1900). The atoll of Funafuti. Part II:105–126. [Cf. Sachet (1953).]
308. RATHBUN, M. J. 1907. The Brachyura: Being part IX of Reports on the scientific results of the expedition ... by the USS *Albatross* from August 1899 to March 1900 and part X of Reports on the scientific results of the expedition ... by the USS *Albatross* from October 1904 to March 1905. *Memoirs, Museum of Comparative Zoology* 35(2):21–74. [Funafuti spp., 28, 29, 33, 37, 39, 43, 44, 46 (3 spp.), 50, 51, 53, 55 (2 spp.), 57, 58 (2 spp.), 60 (3 spp.), 63, 64, 65.]
309. REPELLIN, P. 1977. Contribution a l'etude d'un recif corallien: le sondage «COLETTE» Atoll du Muruoa (Polynésie

- française). *Cahiers du Pacifique* 20: 1–210. [Makes detailed comparisons with Funafuti and other atoll borings.]
310. REPELLIN, P. and J. TRICHET. 1977. Le sondage «COLETTE»: Atoll de Mururoa (Polynésie française). Devenir des Mardréporaires dans un récif en voie de diagenèse. Second International Symposium on corals and fossil coral reefs, Paris, 396–406 (= *Memoires du Bureau de Recherches Géologique et Minières* 89: 396–406). [Comparisons with Funafuti Royal Society and other borings from the Pacific.]
311. REULING, H. T. 1934. Der Sitz der Dolomitisierung: Versuch einer neuen Auswertung der Bohr-Ergebnisse von Funafuti. *Seneckenbergische Naturforschende Gesellschaft, Abhandlungen (Frankfurt)* 428: 1–44. [Evidence for primary and secondary dolomitization at Funafuti.]
312. RILEY, N. D. 1935. Addenda and Corrigenda. Index to Insects of Samoa and other Samoan terrestrial Arthropoda. *British Museum, London, Part IX(3)*: 105–159. [Records *Longipalpus palazyanus* from Ellice, p. 108.]
313. RITCHIE, G. S. 1957. *Challenger: The life of a survey ship*. Hollis & Carter, London. 249 pp. [Popular account of the 1951 visit to Funafuti and Nukufetau and of Gaskell and Swallow's seismic studies (q.v.) and other, extra-curricular activities, pp. 214–224; diagram, p. 223, shows relationship of 1897–1898 boring to seismic results; 2500 ft of coral below Nukufetau, p. 224.]
314. RUSSELL, H. C. 1904. Report on meteorological observations made on Funafuti. *In Bonney (1904)*. The atoll of Funafuti. Section II: 29–32.
315. SACHET, M-H. 1953. Scorpions on coral atolls. *Atoll Research Bulletin* 26: 1–10. [Funafuti records of Pocock (1898), Rainbow (1898b), Buxton (1927), and Kopstein (1921); discusses validity of *Buthus brevicaudatus* Rainbow and criticism of such by Pocock (1898, p. 323).]
316. SANTISCHI, F. 1928. Formicidae (Fourmis). *In Insects of Samoa and other Samoan terrestrial Arthropoda*. British Museum, London. Part V(1): 41–58. [Record from Ellice Islands, p. 46, but cf. Mayr (1876) and Wheeler (1935).]
317. SASAKAWA, M. 1963. A revision of Polynesian Agromyzidae (Diptera). *Pacific Insects* 5(3): 489–506. [*Ophiomyia cornuta* from Ellice Islands, pp. 490, 500; cf. Spencer (1962).]
318. SCHLANGER, S. O. 1952. Petrography of some Pacific atoll dolomites [abs]. *Bulletin, Geological Society of America* 67: 1825. [Funafuti, Eniwetok, Kita-Daito-Jima dolomites contrasted.]
319. ———. 1963. Subsurface geology of Eniwetok atoll. U.S. Geological Survey Professional Paper 260B: 991–1048. [Compares carbonate rocks and problems related to dolomitization at Eniwetok, Bikini, and Funafuti.]
320. ———. 1964. Petrology of the limestone of Guam. U.S. Geological Survey Professional Paper 403D: 1–52. [Comparison with Funafuti dolomites, pp. D15–D16; Algae, p. D20.]
321. ———. 1965. Dolomite-evaporite relations on Pacific Islands. Science Report of Tohoku University, Sendai, Japan 2nd ser. (Geology) 37: 15–29. [Funafuti one of a number of islands discussed.]
322. SCHMALZ, R. F. 1956. The mineralogy of the Funafuti drill cores and its bearing on the physicochemistry of dolomite. *Journal of Sedimentary Petrology* 26: 185–186 (= *Journal of Paleontology* 30: 1004–1005).
323. ———. 1962a. Cell size anomalies in carbonates from Funafuti atoll [abs]. *Geological Society of America Special Paper* 68: 263.
324. ———. 1962b. A re-examination and physiochemical interpretation of the mineralogy of Funafuti atoll. Contribution 62–26 of Mineral Industries Experimental Station, Pennsylvania State University. 24 pp.
325. SCHMELTZ, J. D. E. 1869–1884. *Catalog Museum Godeffroy* 4–9. [Numerous specimens from “Ellice-Gruppe,” “Ellice-Inseln” and “Funafute” listed. Vols. 1–3 not available to me.]
326. SCHMIDT, O. C. 1928. *Verzeichnis der*

- Meersalgen von Neu-Guinea und dem westlichen Oceanien. *Hedwigia* 68: 19–86. [Includes Ellice Island species of Barton (various dates) and Foslie (various dates) but Graef [*sic*] (cf. Graeffe) is mentioned as a collector: *Aurainvillea pacifica* from “Fualopa. Funafuti,” p. 39; *Halimeda tuna*, p. 39; *H. opuntia*, p. 40; *H. gracilis*, p. 40; *H. incrasata*, p. 40, all ex “Ellice-Inseln”; *Lithothamnion Phillipi funafutiensis*, p. 79; *L. funafutiense*, p. 79; *Porolithon onkodes*, p. 81; *P. craspedium*, p. 81, all ex “Ellice-Inseln”; cf. Colinvaux (1968).]
327. SCHOFIELD, J. C. 1977a. Late Holocene sea level, Gilbert and Ellice Islands, west central Pacific Ocean. *New Zealand Journal of Geology and Geophysics* 20: 503–529. [Updates Funafuti Royal Society expedition onshore observations although no reference to Agassiz (1903).]
328. ———. 1977b. Effect of late Holocene sea-level fall on atoll development. *New Zealand Journal of Geology and Geophysics* 20: 531–536. [Cites recent evidence supporting David and Sweet (1904) and Gardiner (various dates) concerning atoll development.]
329. SCHWARZ, E. H. L. 1904. The formation of coral reefs. *Nature* 69: 581. [A rejection of Gardiner's (various dates) ideas on atoll formation; cf. Hedley (1904).]
330. SEARLE, H. R. 1914. Isopoda: Being part XVII of Reports on the scientific results of the expedition ... by USS *Albatross* from August 1899 to March 1900 and part XXVIII of Reports on the scientific results of the expedition ... by USS *Albatross* from October 1904 to March 1900. *Bulletin, Museum of Comparative Zoology* 58: 361–372. [*Alcirona maldivensis*, p. 361, *Ciroana latistylis*, p. 361 from Funafuti; cf. Nordenstam (1946).]
331. SEELYE, C. J. 1944. Notes on rainfall in the Pacific. *New Zealand Meteorological Office Series A*, no. 5. [Includes report of rapidity of change from wet to dry to wet in Gilbert and Ellice islands; cf. Bewg (1974).]
332. ———. 1950. Rainfall and its variability over the central and south western Pacific. *New Zealand Journal of Science and Technology* 32B: 11–24. [Ellice Islands at center of discussion; cf. Bewg (1974), Taylor (1973).]
333. SEMENIUK, V. 1971. Subaerial leaching in the limestones of the Bowan Park Group (Ordovician) of central western New South Wales. *Journal of Sedimentary Petrology* 41: 939–950. [Illustrates how textures obtained by subaerial leaching are similar to some of those described by Cullis (1899, 1904).]
334. SETCHELL, W. A. 1926a. Nullipore versus coral in reef formation. *Proceedings, American Philosophical Society* 65: 136–140. [Stresses and reviews the importance of nullipores in reef formation as found by the Funafuti Royal Society expeditions, pp. 136, 137, 140.]
335. ———. 1926b. A botanical view of coral reefs, especially those of the Indo-Pacific region. *Proceedings, 3rd Pan-Pacific Science Congress, Tokyo II: 1837–1843*. [Details the main findings of the Royal Society expeditions to Funafuti concerning the importance of nullipores as reef formers, pp. 1839–1840; concludes, p. 1841, “that the Funafuti reef has not suffered subsidence.”]
336. ———. 1928. Coral reefs as zonal plant formations. *Science* 68: 119–121. [Reinforces view that “so called ‘coral’ reef is a biological formation controlled and moulded into zonal form by its plant symbionts.” Details evidence from Royal Society findings at Funafuti.]
337. ———. 1929. Nullipore reef control and its significance. *Proceedings, 4th Pan-Pacific Science Congress, Bandoeng III: 266–286*. [Many references to the findings of the Funafuti Royal Society expeditions (Bonney, 1904).]
338. ———. 1930. Biotic cementation in coral reefs. *Proceedings, National Academy of Sciences* 16: 781–783. [Defines “coral reef” with reference to, among other things, the Funafuti Royal Society studies.]
339. SHEPARD, F. P. 1948. *Submarine geology*. Harper, New York. 348 pp. [Funafuti Royal Society borings summarized, p. 263, and commented on, pp. 267, 272, 276. N.B., date of publication is pre-Bikini boring.]
340. ———. 1963. *Submarine geology*. 2nd ed. Harper, New York. 557 pp. [Funafuti

- borings summarized, pp. 360–361, 363; suggestions that cores passed through talus discounted, pp. 366–367.]
341. SINCLAIR, S. 1897. Funafuti. *Natural Science* 11(69):360. [A firm objective reply to Anonymous (1897b).]
342. SIPLEY, A. E. 1898. Report on the Gephyrean worms collected by Mr. J. Stanley Gardiner at Rotuma and Funafuti. *Proceedings, Zoological Society of London* 68:468–473.
343. SKEATS, E. W. 1903. The chemical composition of limestones from upraised coral islands. *Bulletin, Museum of Comparative Zoology* 42:51–126. [Numerous references to techniques used in studying Funafuti Royal Society cores.]
344. ———. 1905. On the mineralogical evidence as to the origin of the dolomites of southern Tyrol. *Quarterly Journal, Geological Society of London* 61:97–141. [Funafuti dolomites discussed at length, pp. 99–100, and references to Judd (1904), p. 140, and Cullis (1904) p. 141.]
345. ———. 1918a. The coral-reef problem and the evidence of the Funafuti borings. *American Journal of Science*, ser. 4, 45:81–90. [Interpretation of the Royal Society report of Bonney (1904).]
346. ———. 1918b. The formation of dolomite and its bearing on the coral reef problem. *American Journal of Science*, ser. 4, 45:185–200. [Discussion hinges on evidence of Funafuti borings.]
347. SMITH, F. J. 1968. Rat damage to coconuts in the Gilbert and Ellice Islands. *Proceedings—Asia-Pacific Interchange—rodents as a factor in disease and economic loss. East-West Center, Honolulu*, pp. 192–202.
348. ———. 1969. Atoll rat research. *South Pacific Bulletin* 19(3):41–45. [Includes work on Funafuti and other Gilbert and Ellice islands.]
349. SOLLAS, W. J. 1897a. The legendary history of Funafuti. *Nature* 55:353–355.
350. ———. 1897b. Report on the coral reef at Funafuti. *Nature* 55:373–377. [The first, 1896, Royal Society expedition; = *Proceedings of the Royal Society* 60:502–512.]
351. ———. 1899. Funafuti: The study of a coral atoll. *Natural Science* 14(83):17–37. [Discourse on the first Royal Society expedition with a brief reference to the second. Discusses the Murray talus hypothesis (Anonymous 1898a). Cf. *Annual Report of the Smithsonian Institution for 1899*: 389–406 and *American Journal of Science* 158:317.]
352. ———. 1904. Narrative of the expedition in 1896. In Bonney (1904). The atoll of Funafuti. Section I:1–28. [Describes the first and second “unsuccessful” Royal Society bores and gives general description of the atoll.]
353. ———. 1905. The age of the earth. Fisher Unwin, London. 328 pp. 2nd impression, 1908. [Funafuti discussed in depth although much is from his earlier accounts, especially (1899) and (1904), pp. 82–132: recent elevation, ocean beach, submarine slopes, theories, background to expedition logistics, topography of islets and reef, the people, the core itself; discussion of Agassiz’ (1903) suggestions on Funafuti, especially the talus hypothesis and comparisons with Tyrolean dolomites (Skeats 1905).]
354. SORBY, H. C. 1904. Note on the coral rock of Funafuti. In Bonney (1904). The atoll of Funafuti. Section XIII:390–391.
355. SPENCER, K. A. 1962. Some Agromyzidae (Diptera) from New Guinea, Melanesia and Polynesia. *Pacific Insects* 4(3):651–660. [Record of *Ophiomyia cornuta* from Ellice Islands, ?Tukugetau; cf. Sasakawa (1963).]
356. SPENGLER, J. W. 1904. Neue Beiträge zur Kenntnis der Enteropneusten 2. *Ptychodera flava* von Funafuti (Ellice-Gruppe). *Zoologische Jahrbuch Abteilung Systematik*, 20:1–18. [*P.f. funafutica* as opposed to *P.f. caledoniensis* and *P.f. laysanica*; cf. Hill (1897a, b).]
357. STEERS, J. A., and D. R. STODDART. 1977. The origin of fringing reefs, barrier reefs and atolls. In O.A. Jones and R. Endean, eds. *Biology and geology of coral reefs IV (Geology)*, pp. 21–57. [Resumé of Funafuti studies, p. 39, and diagrammatic comparison with all Pacific bores to date, p. 40.]
358. STEPHENS, T. 1900. Notes on coral reefs, with special reference to the Funafuti borings. *Papers and Proceedings, Royal*

- Society of Tasmania 1898–1899:92–96. [A brief review of coral reef theories and of the findings of the three Royal Society expeditions.]
359. ST. JOHN, H. 1945. Revision of the *Cardamine* and related Cruciferae in Hawaii and *Nasturtium*. Polynesian Pacific Plant Studies 3. Bernice P. Bishop Museum Occasional Papers 18(5):78–93. [Records *Nasturtium sarmentosum* from Funafuti, pp. 81–83.]
360. STODDART, D. R. 1969. Ecology and morphology of Recent coral reefs. Biological Reviews 44:433–498. [Significance of Royal Society studies at Funafuti illustrated with reference to later Pacific research, pp. 437–441, 456, 466 et seq.]
361. STUART, T. P. A. 1984. Expedition to bore an atoll in order to determine the formation of coral. Journal and Proceedings, Royal Society of New South Wales 28:2–5. [A member of the Coral Reef Committee of the Royal Society, Stuart gives background on the aims and objects, the people involved, and how the choice of island to be bored had been narrowed to Funafuti or one of the Northern Maldives.]
362. SUESS, E. D. 1897–1918. La face de la terre. 3 vols. Armand Colin, Paris. [Apart from a footnote, II: 539, the dolomitization of the Funafuti rocks is discussed in reference to the Alps, III: 820–823.]
363. SUZUKI, T. 1978. Preliminary studies on blood meal interval of *Aedes polynesiensis*. Japanese Journal of Sanitary Zoology 29:169–174. [Includes field studies on Nui, Niutao, Nanumea, Nanumanga, Nukulaelae, and Nukufetau.]
364. TALBOT, G. 1921 Eupoleines forming mimetic groups on the islands of Key, Aru, Tenimber, Australia, and Fiji. Bulletin, Hill Museum 1(1):16–31. [Synonyms of *Euploea eleutho* from the Ellice Islands, p. 29; cf. Butler (1874).]
365. TAMS, W. H. T. 1935. Heterocera (exclusive of Geometridae and the Microlepidoptera). In Insects of Samoa and other Samoan terrestrial Arthropoda. Part III(4): 169–289. British Museum. London. [Distribution in Ellice Islands summarized, pp. 176–182.]
366. TAYLOR, R. C. 1973. An atlas of Pacific islands' rainfall. Hawaii Institute of Geophysics Data Report No. 25 (HIG-73-9): 1–196. [Gilbert and Ellice Island rainfall station density, p. 1; rainfall stations, pp. D-2, E-1, A-1, A-11; individual station records, Appendix C; cf. Bewg (1974), Seelye (1944, 1950), New Zealand. Meteorological Service (1947–1971).]
367. THOMSON, J. A. (SIR), and M. I. DEAN. 1931. The Alcyonacea of the Siboga Expedition with an addendum to the Gorgonacea. In Siboga-Expeditie Uitkomsten op Zoologisch, Botanisch, Oceanographisch en Geologisch Gedied.... Nederlandsch Oost-Indië 1899–1900 8(13d):1–327. [*Lobophytum crassum* and *Lobophytum hedleyi*, (cf. Whitelegge, 1897c), accepted as distinct species, pp. 65–69; cf. Verseveldt and Alderslade (1982).]
368. TODD, R. 1960. Some observations on the distribution of *Calcarina* and *Baculogyphina* in the Pacific. Science Reports of Tohoku University, ser. 2 (geology), special volume (4):100–107. [Data of Chapman (1900a, 1944) used to establish vertical and horizontal limits of spp.]
369. TOWNSEND, C. H., and A. WHETMORE. 1919. The birds: Being part XXI of Reports on the scientific results of the expedition by USS *Albatross* from August 1899 to March 1900. Bulletin, Museum of Comparative Zoology 63(4):151–225. [Ellice Islands summarized, pp. 162–163; land birds = pigeon (*Globicera pacifica*), p. 191, and cuckoo (*Urodynamis taitensis taitensis*), pp. 194–195; water birds = *Pluvialis dominicus fulvus*, p. 177, *Heteractitis incanus*, p. 179, *Limosa lapponica baueri*, p. 180, and *Anous stolidus pileatus*, pp. 183–184; cf. North (1898).]
370. TRACEY, J. I., S. O. SCHLANGER, J. T. STARK, D. B. DOAN, and H. G. MAY. 1964. The general geology of Guam. U.S. Geological Survey Professional Paper 403A:1–104. [Reference to the toothed algal reef margins described at Funafuti by David and Sweet (1904) and discussed by Kuenen (1950), p. A93.]
371. TSUDA, R. T. 1966. Preliminary bibliography on the marine benthic Algae in the

- central Pacific. Polynesia and Micronesia. University of Hawaii, Hawaiian Institute of Marine Biology Technical Report 10: 1–13. [Tsuda and Wray (1977) is the updated version of this reference.]
372. ———. 1976. Occurrence of the genus *Sargassum* (Phaeophyta) on two Pacific atolls. *Micronesica* 12: 279–282. [“... after 22 years no species of *Sargassum* has been found in ... the Marshall, Gilbert, Ellice, Line, Phoenix and Tokelau Islands ... This central region may prove to be an important biotic province.” p. 281; cf. Doty (1954).]
373. TSUDA, R. T., and F. O. WRAY. 1977. Bibliography of marine benthic Algae in Micronesia. *Micronesica* 13(1): 85–120. [Includes Ellice Islands. The bibliography lists: I. Classification of Micronesian Algae, as reported in publications; II. Alphabetized checklist of all reported species; III. Listing of all atolls from which Algae have been reported; IV. References. II and III are keyed to IV. Does not incorporate all algal references used in this compilation.]
374. UNITED STATES OF AMERICA: DEFENSE MAPPING AGENCY. HYDROGRAPHIC AND TOPOGRAPHIC CENTER. 1982. Sailing directions enroute for the Pacific Islands, 1st ed., 1982. Pub. no. 126: 1–396. [Tuvalu’s geography, meteorology, and oceanography summarized atoll by atoll, shoal by shoal; cf. Great Britain. Admiralty (1891) and Agassiz (1903).]
375. VAGVOLGYI, J. 1975. Body size, aerial dispersal, and origin of the Pacific land snail fauna. *Systematic Zoology* 24: 465–488. [Funafuti evidence of Ladd (1958, 1968, etc.) p. 483; cf. Mousson (1873) and Pilsbury (1916).]
376. VENNER, R. B. 1944. Filial problems in Nanumea. U.S. Naval Medicine Bulletin 43: 955–963. [Includes special reference to the island of Lakena and contrasts mosquitoes on Lakena with those on Nanumea: *Culex annulirostris*, *Aedes aegypti*, and *A. scutellaris* var. *pseudoscutellaris*.]
377. VERSEVELDT, J., and P. ALDERSLADE. 1982. Descriptions of types and other alcyonacean material (Colenterata: Octocorallia) in the Australian Museum, Sydney Records, Australian Museum 34(15): 619–647. [Funafuti material described: *Lobophytum crassum* = *L. hedleyi* (Whitelegge, 1897c), pp. 622–625; *Sinularia densa* = *L. densum* (Whitelegge, 1897c), pp. 625–627; *Scleronephthya pallida* = *Spongodes pallida* (Whitelegge, 1897c) pp. 635–636; *Siphonogorgia macrospina*, pp. 636–637.]
378. VISHNER, S. S. 1925. Tropical cyclones of the Pacific. Bernice P. Bishop Museum Bulletin 20: 1–163. [Ellice Islands to 1914, p. 41.]
379. VOLLMER, A. 1896. Von den Ellice-Inseln. Petermanns Mitteilungen 42: 214–216. [A brief history and geography.]
380. WAITE, E. R. 1897. The mammals, reptiles and fishes of Funafuti. In Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part III: 165–203.
381. ———. 1899. The fishes of Funafuti (supplement). In Etheridge (1896–1900). The atoll of Funafuti, Ellice Group. Part IX: 539–546.
382. WALKER, E. H. 1957. A subject index to Elmer D. Merrill’s “A botanical bibliography of the islands of the Pacific.” In Studies of Pacific island plants, contributions from the United States National Herbarium 30: 323–404. [Ellice Islands, pp. 334, 349, 364.]
383. WATTS, W. W. 1896a. Boring a coral reef. *Nature* 53: 248. [Notes that Anonymous (1896) failed to mention the important contribution to first Royal Society expedition by Anderson Stuart and the N.S.W. Department of Mines.]
384. ———. 1896b. Boring a coral reef at Funafuti. *Nature* 54: 201–202. [Paraphrases Sollas’ first reports and gives general background.]
385. WEBER, J. N. 1964. Trace element composition of dolostones and dolomites and its bearing on the dolomite question. *Geochimica et Cosmochimica Acta* 28: 1817–1868. [Data for Al, Ba, Cl, Cr, Cu, Fe, K, Li, Mn, Pb, Sr, Ti from three samples from Funafuti main boring at 643, 716–736, and 874–881 ft.]
386. WELLS, J. W. 1954. Recent corals of the Marshall Islands. U.S. Geological Survey Professional Paper 260I: 385–486. [Com-

- parisons with Funafuti and other windward reefs as to structure and reef coral zonation showing cross sections, pp. 401 et seq.]
387. WHARTON, W. J. L. 1897. Foundations of coral atolls. *Nature* 55:390-393. [Regrets lack of success in boring (first Royal Society expedition), but comments on successful soundings by HMS *Penguin* around various banks and atolls.]
388. WHEELER, W. M. 1935. Check list of ants of Oceania. Bernice P. Bishop Museum Occasional Papers 11:1-56. [Lists species not given in Mayr (1876); cf. Santischi (1928).]
389. WHITELEGGE, T. 1897a. The Crustacea. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part II:127-154.
390. ———. 1897b. The Echinodermata. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part II:155-164.
391. ———. 1897c. The Alcyonaria of Funafuti, Part 1. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part III:211-116.
392. ———. 1897d. The Alcyonaria of Funafuti, Part 2. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part V:307-322.
393. ———. 1897e. The sponges of Funafuti. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part V:323-335.
394. ———. 1898. The Madreporia of Funafuti. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part VI:349-368.
395. WHITELEGGE, T., and J. P. HILL. 1899. The Hydrozoa, Schyphozoa, Actinzoa, and Vermes. In Etheridge (1896-1900). The atoll of Funafuti, Ellice Group. Part VII:369-394.
396. WHITMEE, S. J. (REV). 1871. A missionary cruise in the South Pacific. Joseph Cook, Sydney. 40 pp. [Examined islands geologically and reports that Ellice atolls confirm Darwin's subsidence theory, pp. iii-iv; comments on geography of Nukulaelae, pp. 10-12, Funafuti, pp. 12-14, Vaitupu, pp. 14-16, Nukufetau, pp. 17-19, Nui, pp. 19-21, Niutao, pp. 21-23, Nanumanga, p. 23, Nanumea, pp. 23-28; records drought on Niutao, pp. 33-35.]
397. WHITNELL, S. J. 1872. Notes on atolls or lagoon-islands. *Quarterly Journal of the Geological Society of London* 28:381-382. [Evidence for "upward movement" cited from Funafuti. Note date: Darwin was still alive and expressed interest in these findings; see discussion after paper.]
398. WIENS, H. J. 1959. Atoll development and morphology. *Annals, Association of American Geographers* 49:31-54. [Funafuti studies briefly referred to, pp. 32, 52.]
399. ———. 1962. Atoll environment and ecology. Yale University Press, New Haven. 532 pp. [Excellent monographic review. Information from numerous publications on Ellice Islands summarized, usually set in context of total Pacific—Ellice Islands: passes, p. 32; islet numbers, p. 44; charts, pp. 139, 143, 153; wind patterns, pp. 143-144; rainfall, pp. 153-154; droughts, p. 158; surface water temperatures, p. 197; annelids, p. 276; poisonous fishes, p. 293; swamp taro, p. 379; *Ochrosia* tree, p. 398; land bird paucity, p. 404; cattle, p. 408; coconut crab, p. 432; rainfall, p. 472; typhoons, p. 474. Funafuti: algal growth, p. 12; Royal Society corings, pp. 85-86, 92; seasons, pp. 156-157; reef zonation, p. 240; annelids, p. 276; freshwater, p. 327; green turtles, p. 422; scorpions, p. 441; coconut pests, p. 451; insects, p. 445; chart, p. 463; rainfall, p. 472. Nanumea: double lagoon, p. 2; new chart, p. 463; rainfall, p. 472. Niulakita: cattle, p. 408. Niutao: freshwater, p. 327; new chart, p. 463. Nui: rainfall, p. 472. Nukufetau: new chart, p. 463; rainfall, p. 472. Nukulaelae: = "Nikulaelae": rainfall, p. 472. Vaitupu: double lagoon, p. 2; chart, p. 463; rainfall, p. 472.]
400. WILSON, E. O., and R. W. TAYLOR. 1967. The ants of Polynesia (Hymenoptera: Formicidae). *Pacific Insects Monograph* 14:1-109. [Includes Ellice Island records of Mayr (1870-1876), Santischi (1928), and Wheeler (1934).]
401. WITH, C. J. 1905. On Chelonethi, chiefly from the Australian region in the collection of the British Museum, with observations on the "coxal sac" and on some cases of abnormal segmentation. *Annals and Magazine of Natural History*, ser. 7, 15:94-148.

- [Funafuti specimens, p. 98: casts doubt on occurrence of *Obisium antipodium* (cf. Rainbow 1897b) and refers *Olpium longiveter* (cf. Pocock 1898) to *Garypinus*.]
402. ———. 1906. Chelonethi: An account of the Indian false-scorpions together with studies on the anatomy and classification of the order: Being part III of the Danish expedition to Siam 1899–1900. Det Kongelige Danske Videnskabernes Selskabs Skrifter, 7 *Raekke*, Naturvidenskabelig og Mathematisk Afdeling 3(1): 1–214. [*Garypinus n. sp.* from Funafuti (= *Olpium longiveter* of Pocock, 1898) discussed throughout text in connection with this genus, e.g., pp. 8, 93, 96, 98, 99.]
403. ———. 1907. On some new species of *Cheliferidae*, Hans, and *Garypidae*, Hans., in the British Museum. *Journal of the Linnean Society, Zoology* 30:49–85. [Describes *Chelifer funafutiensis*, pp. 57–59; *Garypus longidigitatus* = *Chelifer longidigitatus* Rainbow (1897b), pp. 66–68; but see Pocock (1898), and *Garypinus oceanicus* = *Olpium longiveter* Pocock (1898), pp. 77–79.]
404. WOODFORD, C. M. 1895. The Gilbert Islands. *Geographical Journal* 6:325–350. [Various references to the Ellice Group, particularly in respect of the distribution of flora and fauna, e.g., footnote, p. 347, p. 348, p. 350.]
405. WOOD-JONES, F. 1910. Coral and atolls. Lovell Reeve, London. 392 pp. Reissue, 1912. [Chapter 20, pp. 232 et seq., gives a general account of atoll and reef formation, including interpretation of Funafuti bore as having, in part, pierced a talus bank, p. 235, and see fig. 53, p. 153.]
406. ———. 1914. The Funafuti boring. *Nature* 93:135.
407. YALDWYN, J. C. 1973. Decapod Crustacea from the south Pacific reefs and islands. In R. Fraser, ed. *Oceanography of the South Pacific 1972*, New Zealand National Commission for UNESCO, Wellington, pp. 503–511. [Ellice Islands included but simply enumerates Whitelegge's (1897a) and Borradaile's (1898b, c, 1900a) faunal lists, especially, p. 509.]
408. YONGE, C. M. 1930. A year on the Great Barrier Reef. Putnam, New York. 246 pp. [Inconclusive nature of Royal Society Funafuti expeditions's findings mentioned, p. 10.]
409. ———. 1951. The formation of coral reefs. *Endeavour* 10:136–144. [Reference to several examples, including Funafuti.]
410. ———. 1980. The Royal Society and the study of coral reefs. In M. Sears and D. Merriman, eds. *Oceanography. The Past*. Springer Verlag, New York, pp. 438–447. [Brief, highly readable review; 18th century to present day].
411. ZEN, E-AN. 1960. Carbonate equilibria in the open ocean and their bearing on the interpretation of ancient carbonate rocks. *Geochimica et Cosmochimica Acta* 18: 57–71. [Discusses Cullis' (1904) and Judd's (1904) mineralogy and chemistry in light of modern knowledge and later work of Schmalz (1956) and Goldsmith and Graf (1958)].
412. ZWALUWENBERG, R. H. Van. 1928. Coleoptera: Elateridae. In *Insects of Samoa and other Samoan terrestrial Arthropoda. Part IV (2):111–124*. British Museum, London. [*Simodactylus tasmani* from Ellice Group, pp. 111, 120.]
413. ———. 1928. Check list of the Elateridae of Oceania. *Bernice P. Bishop Museum Occasional Paper* 9:1–28. [Includes Ellice Islands.]

INDEX

- Agriculture: 25, 399
- Annelids (worms): 67, 244, 342, 395, 399
- Arthropods: 14, 399
 - arachnids: 302, 307
 - crustaceans: 15, 33, 49, 122, 159, 291, 308, 330, 389, 398, 399, 407
 - insects: 2, 9, 25, 26, 44, 50, 51, 52, 53, 54, 62, 63, 78, 123, 124, 126, 129, 133, 142, 205, 206, 216, 222, 246, 247, 252, 265, 266, 269, 277, 278, 283, 287, 288, 295, 299, 303, 306, 312, 316, 317, 355, 363, 364, 365, 376, 388, 399, 400, 412, 413
 - ostracods: 72, 73, 204
 - pseudoscorpions: 225, 302, 401, 402, 403
 - scorpions: 60, 230, 302, 315
 - termites: 41, 200
- Astronomy: 248
- Bibliographies and indices: 8, 57, 58, 169, 232, 251, 261, 274, 275, 280, 281, 282, 325, 371, 373, 382, 399

- Biology (general): 47, 105, 128, 134, 150, 160, 167, 170, 181, 182, 183, 190, 192, 213, 218, 256, 258, 304, 325, 404
 Australian Museum Memior III: 14, 15, 16, 21, 127, 187, 188, 189, 192, 213, 245, 296, 302, 303, 306, 307, 315, 341, 380, 389, 391, 392, 393, 394, 395
- Birds: 77, 145, 229, 292, 293, 369, 399
- Botany: 43, 64, 177, 193, 206, 247, 264, 280, 281, 282, 359, 382, 399
 Algae: 76, 83, 84, 113, 118, 120, 121, 134, 150, 154, 162, 163, 208, 220, 221, 255, 320, 326, 334, 335, 336, 337, 338, 370, 371, 372, 373, 399
Halimeda: 34, 35, 87, 326
 Lithothamnium, etc.: 136, 137, 138, 139, 140, 234, 253, 326
 ferns: 257
 grasses: 135
- Brachipods (lampshells): 89
- Coelenterates: 121, 395
 corals: 56, 146, 147, 148, 149, 150, 151, 154, 199, 208, 219, 260, 301, 367, 377, 391, 392, 395
 hydrozoans: 7, 196, 197, 198, 395
- Echinoderms:
 brittle stars: 81
 echinoids (sea urchins): 15
 holothurians (sea cucumbers): 37, 80, 82
- Enteropneusta: 201, 202, 356
- Fish: 29, 55, 141, 176, 228, 256, 380, 381
- Forams: 68, 69, 70, 71, 74, 75, 93, 175, 180, 208, 368
- Geology and Geography: 28, 30, 31, 39, 47, 58, 62, 85, 86, 104, 105, 106, 109, 116, 119, 121, 125, 129, 158, 160, 167, 168, 169, 170, 172, 173, 180, 181, 182, 183, 184, 213, 218, 233, 235, 245, 270, 276, 289, 294, 313, 327, 374, 379, 396, 397, 398, 399
 Agassiz' expedition (1899): 4, 5, 6
 atoll and reef formation (but see also Royal Society expeditions): 10, 65, 112, 113, 130, 152, 153, 154, 163, 180, 186, 191, 208, 234, 237, 259, 260, 284, 285, 327, 329, 334, 335, 336, 337, 338, 370, 386, 405, 409
 geophysics: 90, 116, 117, 155, 156, 157, 313
 hydrology, including water chemistry: 247, 399
 Royal Society expeditions (1896, 1897, 1898) including results, commentaries and comparisons: 3, 4, 11, 12, 13, 17, 18, 19, 20, 22, 23, 27, 45, 46, 48, 65, 74, 79, 83, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 107, 108, 110, 111, 112, 114, 125, 129, 130, 143, 144, 158, 165, 174, 178, 179, 184, 186, 195, 203, 223, 237, 239, 240, 241, 242, 243, 263, 270, 271, 279, 296, 298, 305, 309, 310, 339, 340, 341, 345, 350, 351, 352, 353, 357, 358, 360, 361, 383, 384, 387, 399, 405, 406, 408, 410
 mineralogy and petrography including dolomitization: 36, 40, 66, 83, 84, 88, 91, 92, 130, 131, 132, 161, 162, 164, 165, 166, 207, 224, 272, 273, 301, 311, 318, 319, 320, 321, 322, 323, 324, 333, 343, 344, 346, 353, 354, 362, 385, 411
- Mammals: 380, 399
 cows on Niulakita: 129, 304, 398
 dogs: 118
 rats: 347, 348
- Medical biology: 129, 248, 249, 294, 295, 363
 filariasis, etc.: 59, 61, 62, 171, 210, 214, 215, 216, 217, 250, 269, 274, 275, 294, 295, 376
 fish poisoning: 29, 294, 295
- Meteorology and its consequences (weather): 24, 42, 160, 168, 170, 171, 173, 290, 297, 314, 331, 332, 366, 374, 396, 399
 hurricanes (tropical storms) and hurricane deposits: 30, 31, 194, 211, 262, 267, 378
- Mollusks: 187, 188, 189, 226, 227
 cephalopods: 1, 209
 gastropods (snails): 38, 115, 236, 238, 241, 286, 300, 375
- Oceanography: 11, 119, 168, 212, 219, 289
- Reptiles: 380, 399
- Soils: 129, 171, 247
- Sponges: 230, 254, 393

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