

A BIBLIOGRAPHY OF LAKE KARIBA, 1969-1978

LAKE KARIBA FISHERIES RESEARCH INSTITUTE  
PROJECT REPORT NO 31

by

B.E. MARSHALL

JANUARY 1979

DEPARTMENT OF NATIONAL PARKS AND WILD LIFE MANAGEMENT.



## INTRODUCTION

Lake Kariba was the first of the great African man-made lakes and it has stimulated much scientific interest. A comprehensive bibliography, up to 1968, was published by A.G. Coche in 1971 (see ref. no. 77) and it is now appropriate that a new one be prepared.

Unpublished reports and manuscripts are not readily available and, with the exception of Lake Kariba Fisheries Research Institute project reports, I have not attempted to include these. University theses are not as difficult to consult and I have therefore listed those known to me in Appendix A.

Papers dealing with aspects of the Zambezi valley immediately below Kariba are included in the main list, whilst papers covering aspects of Caboira Bassa are listed in Appendix B.

This bibliography does not include papers on engineering aspects of the dam itself or of hydro-electric power production. It is thus principally directed towards biologists interested in or working in the Zambezi valley and Lake Kariba.

There are undoubtedly omissions in the list and I would be most grateful if readers could draw my attention to any they might notice.



### SUBJECT INDEX

The main subjects covered in this bibliography are shown below. The numbers are those given to the references in the main section, the appendices are not included.

ANGLING	40
AUFWUCHS	68
BENTHOS	25 141 142 143 144 145 146 147 148 149
BIBLIOGRAPHY	77
BIRDS	6 34 49 85 89 108 116 201
BOTTOM SEDIMENTS	147 149
COMMERCIAL FISHING	4 60 61 69 121 128 160 194
CROCODILES	37 38 42 50
FISH BIOLOGY- AGE & GROWTH	11 22 109 125 126
- ANADROMESIS	22 54 59
- ANGUILLIDAE	17 20 22
- BREEDING	22 109 124 125 126 127 133
- CICHLIDAE	22 67 71 87 88 115 127 177
- CHARACIDAE	11 12 22 78 121 123 124 125 126 126 130
- CLARIIDAE	22 75
- CLUPEIDAE	13 22 39 41 43 47 79 91 117 131
- CYPRINIDAE	22 67 120
- DEPTH DISTRIBUTION	176
- DISTRIBUTION	12 19 22 30 45 46 63 112 113 114 175
- DIURNAL ACTIVITY	176
- FEEDING	67 71 109 110 123 125 126 130
- MORMYRIDAE	22 109 110
- MISCELLANEOUS	18
- POPULATION CHANGES	12 19 22 30 63 80 86 113 114 120 122 131 181
- STOCK ASSESSMENT	14 15 16 22 156 175
GEOLOGY	51 64 65 97 100 137 138 139 178
GEOMORPHOLOGY	100
GEOPHYSICS & SEISMOLOGY	5 95 96 195 196 197
HEALTH ASPECTS	199 207
HYDROLOGY	2 3
INSECTS	144 152 154 158 174
INVERTEBRATES	10 44 47 148 157
LAKE KARIBA - GENERAL	1 21 23 57 111 134 140 169 188 204 205
LAKE KARIBA FISHERIES RESEARCH INSTITUTE	118

LIMNOLOGY	- CHEMICAL	22 26 27 28 35 56 62 70 76 150 151 167 186 200
	- PHYSICAL	22 28 31 35 53 56 62 74 76 136 200
	- RIVERS	22 26 27 28 56
MAMMALS		72 73 84 103 104 105 106 118 198
MAPS		55
METEOROLOGY		102
NUFFIELD LAKE KARIBA RESEARCH STATION		164 180
PALEONTOLOGY		51 52
PESTICIDES		48
PLANKTON		24 31 32 35 41 43 90 101 135 157 158 159 186
PLANTS	- AQUATIC	29 58 93 94 132 142 146 161 162 165 166 168 170
	- TERRESTRIAL	98 99 107 129 153 155 163 182 203
SCHOOL EXPEDITIONS		183 184 185
SEICHES		206
SOCIOLOGY		66 81 82 83 92 160 189 190 191 192 193 194 203 208
TIDES		206
WATER-LEVEL FLUCTUATION		33 132 141 145 190
ZAMBEZI VALLEY BELOW KARIBA		7 8 9 33 98 99 105 119 133 198

REFERENCE LIST

1. ACKERMANN, W.C., WHITE, G.F. & WORTHINGTON. (Eds.) (1973) Man-made Lakes: their problems and environmental effects. Washington, D.C.: American Geophysical Union. Geophysical Monograph series Vol. 17. 847 pp.
2. ALLISON, G.F. (1969a) The hydrological management of Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl.): 1-8
3. ALLISON, G.F. (1969b) The hydrological management of Kariba. Rhod. Sci. News 4: 49-50
4. ANONYMOUS. 1970-1978. Annual Kariba Fish statistics 1969-1977. Lake Kariba Fisheries Research Institute Proj. Repts. (Cyclostyled).
5. ARCHER, C.B. (1969) Ten years of Kariba earthquakes. Rhod. Sci. News 3: 132-133.
6. ASPINWALL, D.R. The middle Zambezi and Lower Luangwa valleys. Honeyguide 83: 19-21
7. ATTWELL, R.I.G. (1969) Some effects of Lake Kariba on the ecology of a floodplain of the mid-Zambezi valley of Rhodesia. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl.): 83
8. ATTWELL, R.I.G. (1970a) Some effects of Lake Kariba on the ecology of the mid-Zambezi valley in Rhodesia. Rhod. Sci. News 4: 51
9. ATTWELL, R.I.G. (1970b) Some effects of Lake Kariba on the ecology of a flood plain of the mid-Zambezi valley in Rhodesia. Biel. Cons. 2: 189-195
10. BALINSKEY, B.I. (1969) The effect of creation of Lake Kariba on the aquatic organisms and organisms closely associated with water. Nuffield L. Kariba Res. Stn. Rept. 1962-68: 23
11. BALON, E.K. (1971a) Age and growth of Hydrocynus vittatus Castelnau 1861 in Lake Kariba, Sinazongwe area. Fish. Res. Bull. Zambia 5: 89-118

12. BALON, E.K. (1971b) Replacement of Alestes imberi Peters 1852 by A. lateralis Blgr. 1900 in Lake Kariba, with ecological notes. Fish. Res. Bull. Zambia 5: 119-162
13. BALON, E.K. (1971c) First catches of Lake Tanganyika clupeids (Kapenta - Limnothrissa miodon) in Lake Kariba. Fish. Res. Bull. Zambia 5: 175-186
14. BALON, E.K. (1971d) Lake Kariba In Regier, H.A. Evaluation of fisheries resources in African freshwaters. Afr. J. Trop. Hydrobiol. Fish., 1: 75-76
15. BALON, E.K. (1972) Possible fish stock size assessment and available production as developed on Lake Kariba. Afr. J. Trop. Hydrobiol. Fish., 2: 45-73
16. BALON, E.K. (1973a) Results of fish population size assessments in Lake Kariba coves (Zambia) a decade after their creation. p. 149-158 In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes : their problems and environmental effects. Washington, D.C.: American Geophysical Union.
17. BALON, E.K. (1973b) The eels of Siengwazi Falls (Kalomo River, Zambia) and their significance. Zambia Mus. J. 2: 65-82
18. BALON, E.K. (1974a) Fishes of Lake Kariba, Africa. Neptune City, New Jersey: TFH Publications. 144 pp.
19. BALON, E.K. (1974b) Fishes from the edge of Victoria Falls, Africa: demise of a physical barrier for downstream invasions. Copeia 1974: 643-660
20. BALON, E.K. (1975) The eels of Lake Kariba: distribution, taxonomic status, age, growth and density. J. Fish. Biol. 7: 797-815
21. BALON, E.K. (1978) Kariba: the dubious benefits of large dams. Ambio 7: 40-48
22. BALON, E.K. & COCHE, A.G. (1974) Lake Kariba: man-made tropical ecosystem in central Africa. The Hague : Dr W. Junk 767 pp.

23. BEADLE, L.C. (1974) The inland waters of tropical Africa, London: Longmans. 373 pp.
24. BEGG, G.W. (n.d.) Notes on the planktonic fauna of Lake Kariba from net collections made in 1967. Lake Kariba Fisheries Research Institute, Proj. Rept. 2: 1-35 (Cyclostyled).
25. BEGG, G.W. (n.d.) Notes on the molluscan constituents of the benthos of Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 3: 1-20 (Cyclostyled).
26. BEGG, G.W. (1969a) Observations on the water quality and nature of the affluent rivers of Lake Kariba, with reference to their biological significance. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl.): 26-33
27. BEGG, G.W. (1969b) Observations on the water quality of the affluent rivers Lake Kariba with special reference to the importance of Salvinia mats on anadromesis. Rhod. Sci. News 4: 61-62
28. BEGG, G.W. (1970) Limnological observations on Lake Kariba during 1967, with emphasis on some special features. Limnol. Oceanogr. 15: 776-788
29. BEGG, G.W. (1971) Preliminary tests using formalin as a possible means of chemically controlling Salvinia suriculata and other undesirable floating plants. Newslett. Limnol. Soc. Sthn. Afr. 17: 22-26
30. BEGG, G.W. (1972a) Some abnormalities and an interesting anatomical feature occurring in the Tigerfish (Hydrocynus vittatus) at Lake Kariba. Piscator 36:
31. BEGG, G.W. (1972b) The hydrology at the mouth of the Sanyati Gorge, Lake Kariba with particular emphasis on the influence of thermal stratification on the vertical distribution of zooplankton. Lake Kariba Fisheries Research Institute, Proj. Rept. 15: 1-54 (Cyclostyled)

- (32.) BEGG, G.W. (1972c) A critical appraisal of conventional mesh dimensions in plankton sampling methods, after trials with a plankton pump and sand filter apparatus. Newslett. Limnol. Soc. Sthn. Afr. 19:19-24
- (33.) BEGG, G.W. (1973a) The biological consequences of discharge above and below Kariba Dam. 11th Congress, International Commission for Large Dams, p 421-430.
- (34.) BEGG, G.W. (1973b) The feeding habits of The Whitewinged Black Tern on Lake Kariba. Ostrich 44:149-153
- (35.) BEGG, G.W. (1974a) The influence of thermal and oxygen stratification on the vertical distribution of zooplankton at the mouth of the Sanyati Gorge, Lake Kariba. Kariba Studies (4): 60-67
- (36.) BEGG, G.W. (1974b) The distribution of fish of riverine origin in relation to the limnological characteristics of the five basins of Lake Kariba. Hydrobiologia 44: 277-286.
- (37.) BEGG, G.W. (1974c) Kariba Crocodiles (Part 1). Wild Rhodesia 4: 46-47
- (38.) BEGG, G.W. (1974d) Kariba Crocodiles (Part 2). Wild Rhodesia 5: 36-37
- (39.) BEGG, G.W. (1974e) Investigations into the biology and status of the Tanganyika sardine Limnothrissa miodon (Boulenger) in Lake Kariba, Rhodesia. Lake Kariba Fisheries Research Institute, Proj. Rept. 17: 1- (Cyclostyled)
- (40.) BEGG, G.W. (1974f) Report on a four-month angling census in the Sanyati Gorge, Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 19:1-22 (Cyclostyled).
- (41.) BEGG, G.W. (1974g) The relationship between the diurnal movements of some of the zooplankton and the sardine Limnothrissa miodon in Lake Kariba, Rhodesia. Lake Kariba Fisheries Research Institute, Proj. Rept. 20: 1-22 (Cyclostyled)
- (42.) BEGG, G.W. (1975) Kariba Crocodiles (Part 3). Wild Rhodesia 6: 39-40

43. BEGG, G.W. (1976) The relationship between the diurnal movements of some of the zooplankton and the sardine Limnothrissa miodon in Lake Kariba. Limnol. Oceanogr. 21: 529-539
44. BEGG, G.W. & JUNOR, F.J.R. (1971) Some notes on a sponge, a jellyfish and a shrimp from Lake Kariba. Piscator 81: 16-19
45. BELL-CROSS, G. (1972) The fish fauna of the Zambezi river system. Arnoldia, Rhod. 5(29): 1-19
46. BELL-CROSS, G. (1976) The fishes of Rhodesia. Salisbury: Trustees National Museums and Monuments, Rhodesia.
47. BELL-CROSS, G. & BELL-CROSS, B. (1971) Introduction of Limnothrissa miodon and Limnocaradina tanganyicae from Lake Tanganyika into Lake Kariba. Fish. Res. Bull. Zambia 5:207-214
48. BILLING, K.J. & PHELPS, R.J. (1972) Records of chlorinated hydrocarbon pesticide levels from animals in Rhodesia. Proc. Trans. Rhod. Scient. Assoc. 55: 6-9
49. BIRKHEAD, M.E. (1978) Some aspects of the feeding ecology of the Reed Cormorant and Darter on Lake Kariba, Rhodesia. Ostrich 49: 1-7
50. BLAKE, D.K. & LOVERIDGE, J.P. (1975) The role of commercial crocodile farming in crocodile conservation. Biol. Conserv. 8: 261-272
51. BOND, G., WILSON, J.F. & RAATH, M.A. (1970) Upper Karoo pillow lava and a new saurropod horizon in Rhodesia. Nature, London. 227: 1339
52. BOND, G. & FALCON, R. (1973) The Paleontology of Rhodesia. Rhod. Geol. Surv. Bull. 70: 1-121
53. BOWMAKER, A.P. (1969a) Aspects of the physical hydrology of the Mwenda river mouth, Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl): 9-14
54. BOWMAKER, A.P. (1969b) Fish population fluctuations associated with anadromesis at the Mwenda river mouth, Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl.): 45-49

55. BOWMAKER, A.P. (1969c) Map of Mwenda Bay, Lake Kariba. Salisbury: M.O. Collins.
56. BOWMAKER, A.P. (1969d) A study of the hydrobiology of the Sinamwenda river and "estuary", Lake Kariba. Nuffield L. Kariba Res. Stn. Rept. 1962-68: 15-17
57. BOWMAKER, A.P. (1970) A prospect of Lake Kariba. Optima 20: 68-74
58. BOWMAKER, A.P. (1973a) Hydrophyte dynamics in Mwenda Bay, Lake Kariba. Kariba Studies (3): 42-59
59. BOWMAKER, A.P. (1973b) Potamodromesis in the Mwenda river, Lake Kariba. pp. 159-164 In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes, their problems and environmental effects. Washington, D.C.: American Geophysical Union.
60. BOWMAKER, A.P. (1975a) Protein production from fresh water, with special reference to Rhodesia. Rhod. Sci. News 9: 212-216
61. BOWMAKER, A.P. (1975b) Fisheries productivity of Lake Kariba. Tobacco Forum 2: 17-25
62. BOWMAKER, A.P. (1976) The physico-chemical limnology of the Mwenda river mouth, Lake Kariba. Arch. Hydrobiol. 77: 66-108
63. BOWMAKER, A.P., JACKSON, P.B.N. & JUBB, R.A. (1978) Freshwater Fishes pp. 1181-1230 In Werger, M.J.A. (Ed.) Biogeography and ecology in Southern Africa. The Hague: Dr W. Junk.
64. BRASSEY, J.M. (1949) Geological map of the country between the Bumi and Sanyati rivers, Zambezi valley. Salisbury, S. Rhodesia Geology Survey.
65. BRODERICK, T.J. (1976) Explanation of the geological map of the country east of Kariba. Rhod. Geol. Surv. Short Rept. 43: 1-98
66. BROKENSHA, D. & SCUDDER, T. (1968) Resettlement pp. 20-62. In Rubin, N. & Warren, W.M. (Eds.) Dams in Africa. London: Frank Cass.

67. BURNE, R.H. (1971a) A comparative study of the diets of Labeo congoro, Labeo altivelis and Tilapia mossambica in the Sanyati Basin of Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 12: 1-10 (Cyclostyled)
68. BURNE, R.H. (1971b) A preliminary comparative study of epiphytes associated with Naias pectinata, Potamogeton schweinfurthii Potamogeton pusillus, Lagarasiphon ilicifolius and Ceratophyllum demersum in Basin 5 of Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 14: 1-13 (Cyclostyled)
69. BURNE, R.H. (1977) An investigation of the possibility of future exploitation of the estuaries areas of Lake Kariba by the gill-net fisheries. Lake Kariba Fisheries Research Institute, Proj. Rept. 27: 1-36 (Cyclostyled)
70. CAULTON, M.S. (1970) A quantitative analysis of the mode of replacement of inorganic phosphates and nitrates in the waters of Lake Kariba during the period December 1969 - January 1970. Newslett. Limnol. Soc. Sthn. Afr. 15: 52-61
71. CAULTON, M.S. (1977) A quantitative assessment of the daily ingestion of Panicum repens L. by Tilapia rendalli Boulenger (Cichlidae) in Lake Kariba. Trans. Rhod. Sci. Assoc. 58: 38-42
72. CHILD, G. (1968) Behaviour of large mammals during the formation of Lake Kariba. Salisbury: Trustees National Museums of Rhodesia 123 pp.
73. CHOATE, T.S. (1975) Island populations and their role in wildlife conservation. J. Sth. Afr. Wildl. Mgmt. Ass. 5: 53-61
74. CLAY, D. (1976) Several models for water-air temperature relationships of some African lakes. Water SA 2: 61-66
75. CLAY, D. (1977) Biology of the tropical catfish (Family: Clariidae) with special emphasis on its suitability for culture (including a bibliography of the Clariidae and related topics). Fish. Mar. Serv. Canada MS Rept. 1458 : 1-68

76. COCHE, A.G. (1969) Aspects of the physical and chemical limnology of Lake Kariba, Africa. A general outline pp. 166-172. In Obeng, L.E. (Ed.) Man-made lakes, the Accra symposium, Accra: Ghana University Press.
77. COCHE, A.G. (1971) Lake Kariba basin: a multidisciplinary bibliography, annotated and indexed 1954-1968. Fish. Res. Bull. Zambia 5: 11-87
78. COCHRANE, K.L. (1976) Catches of Hydrocynus vittatus Castelnau during sardine fishing operations in Lake Kariba. Kariba Studies (7): 98-108
79. COCHRANE, K.L. (1978) Seasonal fluctuations in the catches of Limnothrissa miodon (Boulenger) in Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 29: 1-163 (Cyclostyled)
80. COKE, M. (1969) Some observations on fish population dynamics on Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13: 53-56 (Also 13 (Suppl.): 35-37)
81. COLSON, E. (1969) Spirit possession amongst the Tonga of Zambia pp 69-103. In Beattie, J. & Middleton, J. (Eds.) Spirit mediumship and society in Africa. London: Routledge & Kegan Paul.
82. COLSON, E. (1970) The assimilation of aliens among Zambian Tonga. pp 35-54, In Cohen, R. & Middleton, J. (Eds.) From tribe to nation in Africa. San Francisco: Chandler Press.
83. COLSON, E. (1971) The social consequences of resettlement. Kariba Studies IV: Manchester University Press.
84. CONDY, J. (1964) The capture of Black Rhinoceros (Diceros bicornis) and Buffalo (Syncerus caffer) on Lake Kariba. Rhod. J. Agric. Res. 2: 31-34
85. COOPER, J. (1972) A checklist of the birds of the Zambezi valley from Kariba to Zumbo. S. Afr. Avif. Ser. 85:
86. DONNELLY, B. (no date) The fish population changes in Lake Kariba between 1960 and 1968. Lake Kariba Fisheries Research Institute Proj. Rept. 4: 1-20 (Cyclostyled)

- (87.) DONNELLY, B. (1969a) A preliminary survey of Tilapia nurseries on Lake Kariba during 1967-68. Hydrobiologia 34: 195-206
- (88.) DONNELLY, B.G. (1969b) The growth of Tilapia mossambica Peters and Tilapia melanopleura Dum. in Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13 (Suppl.):4.
- (89.) DONNELLY, B.G. (1974) Vertical zonation of feeding swallows and swifts at Kariba, Rhodesia. Ostrich 45: 256-258
90. DOUGLAS, B. (1969) Phytoplankton studies. Nuffield Lake Kariba Research Station Rept. 1962-68: 17-19
91. ECCLES, D.H. (1975) Fishes of the African great lakes as candidates for introduction into large tropical impoundments. J. Fish. Biol. 7: 401-405
92. GARBETT, K. (1969) Spirit mediums as mediators in valley Korekore society. pp 104-127 In Beattie, J. & Middleton, J. (Eds.) Spirit mediumship and society in Africa. London: Routledge and Kegan Paul.
93. GIBBS-RUSSELL, E. (1975) The distribution of vascular aquatic plants in Rhodesia. S. Afr. J. Sci. 71: 270-272
94. GIBBS-RUSSELL, E. (1977) Key to vascular aquatic plants in Rhodesia. Kirkia 10: 411-502
95. GOUGH, D.I. & GOUGH, W.I. (1970a) Stress and deflection in the lithosphere near Lake Kariba. 1. Geophys. J. Roy. Astr. Soc. 21:65-78
96. GOUGH, D.I. & GOUGH, W.I. (1970b) Load-induced earthquakes near Lake Kariba. 2. Geophys. J. Roy. Astr. Soc. 21:79-101
97. GRANT, D. (1970) A red bed facies in the upper Karoo of the middle Zambezi, and its lithological correlation. Detritus 5: 21-26
- (98.) GUY, P.R. (1977a) Notes on the vegetation types of the Zambezi valley, Rhodesia, between the Kariba and Mpata gorges. Kirkia 10: 543-557

- (99) GUY, P.R. (1977b) Notes on the host species of epiphytic Figs (Ficus spp.) on the flood plain of the Mana Pools Game Reserve, Rhodesia. Kirkia 10: 559-562
100. HALSTEAD, L.B. (1973) Evolution of shore-line features of Kainji lake, Nigeria and Kariba Lake, Zambia and Southern Rhodesia. pp. 792-797 In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes: their problems and environmental effects. Washington D.C.: American Geophysical Union.
101. HANCOCK, F.D. (1969) The diatom associations of Lake Kariba. Nuffield Lake Kariba Research Station Rept. 1962-68: 19-20
102. HATTLE, J.B. (1970) The effect on climate of inland lakes. Rhod. Sci. News 4: 207-208
103. JARMAN, P.J. (1969) The effect of the creation of Lake Kariba upon the terrestrial ecology of the middle Zambezi valley, with particular reference to the large mammals. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 26-33
104. JARMAN, P.J. (1971) Diets of large mammals in the woodlands around Lake Kariba, Rhodesia. Oecologia 8: 157-176
105. JARMAN, P.J. (1972a) Seasonal distribution of large mammal populations in the unflooded middle Zambezi valley. J. Appl. Ecol. 9: 283-299
106. JARMAN, P.J. (1972b) The use of drinking sites, wallows and salt licks by herbivores in the flooded middle Zambezi valley. E. Afr. Wildl. J. 10: 193-209
107. JARMAN, P.J. & THOMAS, P.I. (1969) Observations on the distribution and survival of Mopane (Colophospermum mopane (Kirk ex Benth.) Kirk ex Leonard) seeds. Kirkia 7: 103-107
108. JOUBERT, C.S.W. (1974) Black-winged Stilts breeding on Lake Kariba. Honeyguide 80: 28-31

109. JOUBERT, C.S.W. (1975a) A preliminary investigation into the biology and status of two mormyrids Mormyrops deliciosus (Leach) 1818, and Mormyrus longirostris Peters 1852 (Pisces: Mormyridae) in Lake Kariba, Rhodesia. Lake Kariba Fisheries Research Institute, Proj. Rept. 22: 1-121 (Cyclostyled)
110. JOUBERT, C.S.W. (1975b) The food and feeding habits of Mormyrops deliciosus (Leach) 1818 and Mormyrus longirostris Peters 1852 (Pisces: Mormyridae) in Lake Kariba. Kariba Studies (5): 68-85
111. JOERIS, L.S. (1973) Lake Kariba: the U.N.D.P. programme and north shore pp. 143-147. In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes: their problems and environmental effects. Washington D.C: American Geophysical Union.
112. JUBB, R.A. (1974) The distribution of Tilapia mossambica Peters 1852 and Tilapia mortimeri Trewavas 1966, in Rhodesian waters. Arnoldia, Rhod. 6(25): 1-14
113. JUBB, R.A. (1976a) Unintentional introductions of fishes via hydroelectric power stations and centrifugal pumps. J. Limnol. Soc. Sthn. Afr. 2: 29-30
114. JUBB, R.A. (1976b) Letter to the editor. J. Limnol. Soc. Sthn. Afr. 2: 35-36
115. JUNOR, F.J.R. (1969) Tilapia melanopleura Dum. in artificial lakes and dams in Rhodesia, with special reference to its undesirable effects. Rhod. J. Agric. Res. 7: 61-69
116. JUNOR, F.J.R. (1972) Offshore fishing by the Pied Kingfisher Ceryle rudis at Lake Kariba. Ostrich 43: 185
117. JUNOR, F.J.R. & BEGG, G.W. (1971) A note on the successful introduction of Limnothrissa miodon Boulenger "the Lake Tanganyika sardine" to Lake Kariba. Newslett. Limnol. Soc. Sthn Afr. 16: 8-14
118. JUNOR, F.J.R. & VAN DER LINGEN, M.I. (1970) Lake Kariba Fisheries Research Institute. Rhod. Sci. News 4: 59-60

119. KERR, M.A. & FRAZER, A. (1975) Distribution of elephant in a part of the Zambezi valley. Arnoldia, Rhod. 7(21)1-14.
120. KENMUIR, D.H.S. (undated a) An investigation into the decline of the Labeo congoro stocks in the Sanyati Basin of Lake Kariba. Lake Kariba Fisheries Research Institute Proj. Rept. 7: 1-30 (Cyclostyled)
121. KENMUIR, D.H.S. (undated b) A review of the factors concerned with  $2\frac{1}{2}$ -inch stretched-mesh netting on a commercial scale on Lake Kariba, with regard to Hydrocynus vittatus. Lake Kariba Fisheries Research Institute Proj. Rept. 13: 1-8 (Cyclostyled).
122. KENMUIR, D.H.S. (undated c) Fish population changes in Lake Kariba, Rhodesia. Lake Kariba Fisheries Research Institute Proj. Rept. 18: 1-52 (Cyclostyled)
123. KENMUIR, D.H.S. (1971a) An analysis of data on the Tigerfish Hydrocynus vittatus Castelnau obtained from Kariba International Tigerfish Tournaments 1969-70. Newslett. Limnol. Soc. Sthn. Afr. 17: 13-21
124. KENMUIR, D.H.S. (1971b) Report on a study of the ecology of the Tigerfish Hydrocynus vittatus Castelnau in Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 17: 33-38
125. KENMUIR, D.H.S. (1972) Report on a study of the ecology of the Tigerfish Hydrocynus vittatus Castelnau in Lake Kariba. Lake Kariba Fisheries Research Institute Proj. Rept. 6: 1-99 (Cyclostyled)
126. KENMUIR, D.H.S. (1973a) The ecology of the Tigerfish Hydrocynus vittatus Castelnau in Lake Kariba. Occ. Pap. Nat. Mus. Rhod. B. 5: 115-170
127. KENMUIR, D.H.S. (1973b) Observations on a breeding pair of Tilapia rendalli rendalli Boulenger 1896 in an experimental tank at Lake Kariba Fisheries Research Institute. Hydrobiologia 43: 365-370

128. KENMUIR, D.H.S. (1973c) The commercial exploitation of stocks of Tigerfish Hydrocynus vittatus Castelnau in Lake Kariba, Rhodesia by means of small-meshed gill nets. Rhod. J. Agric. Res. 11: 171-179
129. KENMUIR, D.H.S. (1974) Kariba's Wild Figs. Wild Rhodesia 5: 32-33
130. KENMUIR, D.H.S. (1975a) The diet of fingerling Tigerfish Hydrocynus vittatus Castelnau in Lake Kariba. Arnoldia, Rhod. 9 (7): 1-6
131. KENMUIR, D.H.S. (1975b) Sardines in Cabora Bassa lake. New Scientist 65: 379-380
132. KENMUIR, D.H.S. (1975c) Observations on the reaction of submerged hydrophytes to lake level rise, Lake Kariba. Lake Kariba Fisheries Research Institute, Proj. Rept. 24: 1-25 (Cyclostyled).
133. KENMUIR, D.H.S. (1976) Fish spawning under artificial flood conditions on the Mana flood plain, Zambezi river. Kariba Studies (6): 86-97
134. KENMUIR, D.H.S. (1976) A wilderness called Kariba, Salisbury: Wilderness Publications. 140 pp.
135. KING, K.J. (1971a) Report on the application of spectrophotometric methods to phytoplankton analysis in Lake Kariba. Lake Kariba Fisheries Research Institute Proj. Rept. 10: 1-5 (Cyclostyled)
136. KING, K.J. (1971b) The determination of a heat budget for Lake Kariba, Rhodesia. Lake Kariba Fisheries Research Institute, Proj. Rept. 11: 1-7 (Cyclostyled)
137. KNILL, J.L. & JONES, K.S. (1965) The recording and interpretation of geological conditions in the foundations of the Roseires, Kariba and Latiyan dams. Geotechnique, London. 15: 94-124
138. LONEY, P.E. (1966) Preliminary report on the geology of the Kariba district of Rhodesia. 10th Ann. Rept. Res. Inst. Afr. Geol., Leeds Univ. pp. 14-15

139. LONEY, P.E. (1969) The amphibolite problem in the Kariba district, Rhodesia. 12th Ann. Rept. Res. Inst. Afr. Geol., Leeds Univ., pp. 9-11
140. LOWE-McCONNELL, R. (1975) Fish communities in tropical freshwaters. London: Longman. 337 pp.
141. McLACHLAN, A.J. (1969a) Some effects of water level fluctuation on the benthic fauna of two Central African lakes Newslett. Limnol. Soc. Sthn. Afr. 13: 58-63 (Also 13 (Suppl.): 15-19)
142. McLACHLAN, A.J. (1969b) The effect of aquatic macrophytes on the variety and abundance of benthic fauna in a newly-created lake in the tropics (Lake Kariba) Arch. Hydrobiol. 66: 212-231
143. McLACHLAN, A.J. (1969c) A study of the bottom fauna of Lake Kariba. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 13-14
144. McLACHLAN, A.J. (1969d) Notes on some larval and pupal chironomids (Diptera) from Lake Kariba, Rhodesia. J. Nat. Hist. 3: 261-293
145. McLACHLAN, A.J. (1970a) Some effects of the annual fluctuation of water level on the larval chironomid communities of Lake Kariba. J. Anim. Ecol. 39: 79-90
146. McLACHLAN, A.J. (1970b) Submerged trees as a substrate for benthic fauna in the recently-created Lake Kariba (Central Africa). J. Appl. Ecol. 7: 253-266
147. McLACHLAN, A.J. & McLACHLAN, S.M. (1971) Benthic fauna and sediments in the newly-created Lake Kariba (Central Africa). Ecology 52: 800-809
148. McLACHLAN, A.J. (1974) Development of some lake ecosystems in tropical Africa, with special reference to the invertebrates. Biol. Rev. 49: 365-397
149. McLACHLAN, S.M. (1969) Some physical and chemical characteristics of the mud and water of Lake Kariba, with special reference to the habitat provided for the benthos. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 11-12

150. McLACHLAN, S.M. (1970) The influence of lake level fluctuations and the thermocline on water chemistry in two gradually shelving areas of Lake Kariba, Central Africa. Arch. Hydrobiol. 66: 499-510
151. McLACHLAN, S.M. (1971) The rate of nutrient release from grass and dung following immersion in lake water. Hydrobiologia 37: 521-530
152. MAGADZA, C.H.D. (1968) Pigmentation of Seria squamornata (Collembola) on Lake Kariba Rhod. J. Agric. Res. 6: 117-118
153. MAGADZA, C.H.D. (1969a) The shoreline vegetation. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 24
154. MAGADZA, C.H.D. (1969b) Ecology of collembola. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 33-34
155. MAGADZA, C.H.D. (1970) A preliminary survey of the vegetation of the shore of Lake Kariba. Kirkia 7: 253
156. MAHON, R. & BALON, E.K. (1977) Fish production in Lake Kariba, reconsidered. Env. Biol. Fishes 1: 215-218
157. MILLS, M.L. (1973) The "explosive" occurrence of the freshwater medusa Limnocnida tanganicae Gunther in Lake Kariba during 1972. Arnoldia, Rhod. 6(14): 1-8
158. MILLS, M.L. (1976) The Chaoborus (Diptera: Chaoboridae) component of the invertebrate drift of the Mwenda river, Lake Kariba, Central Africa. Hydrobiologia 48: 247-250
159. MILLS, M.L. (1977) A preliminary report on the planktonic microcrustacea of the Mwenda Bay area, Lake Kariba. Trans. Rhod. Sci. Ass. 58: 28-37
160. MINSHULL, J.L. (1973) The establishment of a fishery among the resettled Batonga people at Lake Kariba, Rhodesia. 11th Congress, International Commission for large dams. pp. 413-419
161. MITCHELL, D.S. (1969a) The ecology of vascular hydrophytes in Lake Kariba. Hydrobiologia 33: 448-464

162. MITCHELL, D.S. (1969b) Autecology of Salvinia auriculata. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 20-22
163. MITCHELL, D.S. (1969c) The development of the shoreline vegetation. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 23-24
164. MITCHELL, D.S. (1970) The Nuffield Lake Kariba Research Station Rhod. Sci. News 4:62
165. MITCHELL, D.S. (1972a) The Kariba weed: Salvinia molesta. Brit. Fern Gaz. 10: 251-252
166. MITCHELL, D.S. (1972b) Aquatic weeds. Rhod. Sci. News 6: 105-106
167. MITCHELL, D.S. (1973a) Supply of plant nutrient chemicals in Lake Kariba pp 165-169. In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes; their problems and environmental effects. Washington D.C: American Geophysical Union.
168. MITCHELL, D.S. (1973b) Aquatic weeds in man-made lakes pp. 606-611. In Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes: their problems and environmental effects. Washington D.C: American Geophysical Union.
169. MITCHELL, D.S. (1974a) Water - the nation's lifeblood. Tobacco Forum 1: 19-23
170. MITCHELL, D.S. (1974b) Aquatic vegetation and its use and control. Paris: UNESCO.
171. MITCHELL, D.S. (1975) Rhodesian Ferns 2: Water Ferns. Wild Rhodesia 7: 19
172. MITCHELL, D.S. (1976) The growth and management of Eichhornia crassipes and Salvinia spp. in their native environment and in alien situations pp. 167-176. In Varshney, C.K. & Rzoska, J. (Eds.) Aquatic weeds in S.E. Asia. The Hague: Dr. W. Junk.
173. MITCHELL, D.S. & TUR, N.M. (1975) The growth of Salvinia molesta (S. auriculata auct.) in laboratory and natural conditions J. Appl. Ecol. 12: 213-225

174. MITCHELL, S.A. (1976a) The role of Chaoborus in aquatic ecosystems. Rhod. Sci. News 10: 159-161
175. MITCHELL, S.A. (1976b) The marginal fish fauna of Lake Kariba. Kariba Studies (8): 109-162
- (176.) MITCHELL, S.A. (1978) The diurnal activity patterns and depth zonation of marginal fish as shown by gill-netting in Lake Kariba. Kariba Studies (9): 163-173
177. MITCHELL, S.A. & GAHAMADZE, C. (1976) Haplochromis codringtoni (Cichlidae) and bilharzia on Lake Kariba. Lake Kariba Fisheries Research Institute Proj. Rept., 25: 1-8 (Cyclostyled)
178. MOLYNEUX, A.J.C. (1922) Geological reconnaissance in the Sanyati valley. S.Rhod. Geol. Surv. Short Rept. 13
179. NICHOLAS, G. (1975) Kariba weed becomes a blessing. Farmer's Weekly 127: 102-103
180. NUFFIELD LAKE KARIBA RESEARCH STATION (1969) Report for 1962-68. Salisbury: Universities of Rhodesia and Witwatersrand.
181. PETR, T. (1975) On some factors associated with the initial high fish catches in new African man-made lakes. Arch. Hydrobiol. 75: 32-49
182. PORTER, N. (1969) A vegetation ecological study of the Sinamwenda area. Nuffield Lake Kariba Res. Stn. Rept. 1962-68: 24-25
183. PRINCE EDWARD SCHOOL (1963) Zeda expedition. Salisbury: P.E. School.
184. RHODESIAN SCHOOLS EXPLORATION SOCIETY (1955) Report of the West Sebungwe expedition. Bulawayo: R.S.E.S.
185. RHODESIAN SCHOOLS EXPLORATION SOCIETY (1956) Report of the Upper Kariba expedition. Bulawayo: R.S.E.S.

186. ROBARTS, R.D. & SOUTHALL, G.C. (1977) Nutrient limitation of phytoplankton growth in seven tropical man-made lakes, with special reference to Lake McIlwaine, Rhodesia. Arch. Hydrobiol. 79: 1-35
187. ROSE, D.J.W. (1972) Biological control of aquatic weeds. Rhod. Sci. News 6: 158-159
188. RUBIN, N. & WARREN, W. Eds. (1968) Dams in Africa. London: Frank Cass & Co.
189. SCUDDER, T. (1971) Gathering among African woodland savannah cultivators - a case study: the Gwembe Tonga. Zambian Papers 5. Manchester University Press, for the Institute for African studies.
190. SCUDDER, T. (1972) Ecological bottlenecks and the development of the Kariba lake basin. In Farvar, M.T. & Milton, J.P. (Eds.) The careless technology: Ecology and international development New York: Doubleday, Natural History Press.
191. SCUDDER, T. (1973a) Summary: resettlement pp. 707-719 In. Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes: their problems and environmental effects. Washington D.C: American Geophysical Union.
192. SCUDDER, T. (1973b) Ann. Rev. Anthropol. 2: 45-53 (Full title not available)
193. SCUDDER, T. (1975) Resettlement pp. 453-470. In Stanley, N.F. & Alpers, M.P. (Eds.) Man-made lakes and human health. London: Academic Press.
194. SKEHEL, J.P. (1969) The African fishermen on Lake Kariba. Newslett. Limnol. Soc. Sthn. Afr. 13: 45-52 (Also 13 (Suppl.): 84-89)
195. SLEIGH, R.W. (1969) How Kariba dented the earth. Rhod. Sci. News 3: 129-131
196. SLEIGH, R.W. (1976) Further investigation of crustal deformation at Kariba. Rhod. Sci. News 10: 8

197. SLEIGH, R.W., WORRALL, C.C. & SHAW, G.H.L (1969) Crustal deformation resulting from the imposition of a large mass of water. Bull. Geodes. 93: 245-54
198. SMITH, R. (1975) The use of shot samples for gauging Impala population structure in the Zambezi valley, Rhodesia. Arnoldia, Rhod. 7(31): 1-9
199. STANLEY, N.F. & ALPERS, M.P. Eds. (1975) Man-made lakes and human health. London: Academic Press.
200. TALLING, J.F. (1969) The incidence of vertical mixing, and some biological and chemical consequences, in tropical African lakes. Verh. Int. Verein. Limnol. 17: 908-1012
- (201. TAYLOR, R.D. & FYNN, K.J. (1978) Fish Eagles on Lake Kariba. Rhod. Sci. News. 12: 52-53
202. THOMAS, P.A. (1969) The biological control of Salvinia auriculata by Paulinia acuminata. Nuffield Lake Kariba Res. Stn. Rept. 1962-68:22
203. THOMAS, P.I. (1970) A Chitonga-Botanical dictionary of some species in the vicinity of the Mwenda estuary, Lake Kariba. Kirkia 7: 269-284
204. VAN DER LINGEN, M.I. (1970) Some problems of aquatic ecosystems in Southern Africa. Rhod. Sci. News 4: 47-48
205. VAN DER LINGEN, M.I. (1973) Lake Kariba: early history and south shore. pp. 133-142. In. Ackermann, W.C., White, G.F. & Worthington, E.B. (Eds.) Man-made lakes: their problems and environmental effects. Washington, D.C: American Geophysical Union.
206. WARD, P.R.B. (1978) Water surface fluctuations at Lake Kariba. The Rhodesian Engineer 16: 133-142
207. WEBSTER, M.H. (1975) Medical aspects of the Kariba hydro-electric scheme. pp. 69-88. In Stanley, N.F. & Alpers, M.P. (Eds.) Man-made lakes and human health. London: Academic Press.
208. WEINRICH, A.K.H. (1977) The Tonga people of the southern shore of Lake Kariba. Salisbury: Mambo Press.

APPENDIX AUNIVERSITY THESES

A number of workers have undertaken higher degrees for which theses have been submitted, on aspects of Kariba. These are not always easily available but parts of some have been published as papers. A list of those known to me follows:

1. BOWMAKER, A.P. (1973) An hydrobiological study of the Mwenda river and its mouth, Lake Kariba. Ph.D., Witwatersrand University.
2. COCHRANE, K.L. (1978) Seasonal fluctuations in the catches of Limnothrissa miodon (Boulenger) in Lake Kariba. M. Phil., University of Rhodesia.
3. FRANCIS, R. (undated) The carrying capacity of Starvation Island (Island 133) in Lake Kariba, with special attention to Impala (Aepycerus melampus) and the grass Panicum repens. Certificate in Field Ecology, University of Rhodesia.
4. HUGHES, B.G. (1970) Observations on dispersion, activity and feeding patterns of Elephant (Loxodonta africana (Blumenbach)) at Sinawenda. Certificate in Field Ecology, University of Rhodesia.
5. JARMAN, P.J. (1968) The effect of the creation of Lake Kariba upon the terrestrial ecology of the middle Zambezi valley, with particular reference to the large mammals. Ph.D., Manchester University.
6. JOUBERT, C.S.W. (1978) A preliminary investigation into the biology and status of two Mormyrids Mormyrops deliciosus (Leach) 1818 and Mormyrus longirostris Peters 1852 (Pisces: Mormyridae) in Lake Kariba, Rhodesia. M.Sc., University of Natal.
7. KING, R.D. (1971) A preliminary investigation of the euplankton in the Mwenda river mouth. B.Sc.Hons., Witwatersrand University.
8. LANGERMAN, J.D. (1977) A study of the habitat preferences of the animals on Zebra Island, Lake Kariba. B.Sc.Hons., Witwatersrand University.

9. LONEY, P.E. (1969) The geology of the Kariba district, Rhodesia with special reference to geochronology and amphibolite petrochemistry. Ph.D., Leeds University.
10. McDONALD, I. (1970) Observations on the woody vegetation occurring in the vicinity of the Mwenda estuary, Lake Kariba. B.Sc.Hons., Witwatersrand University.
11. McLACHLAN, A.J. (1968) A study of the bottom fauna of Lake Kariba. Ph.D., London University:
12. McLACHLAN, S.M. (1970) A study of some physical and chemical characteristics of the mud and water phases of selected areas of Lake Kariba, with special reference to the benthic fauna. M.Sc. Witwatersrand University.
13. MIDDLETON, I.(undated) A study of a low-density Hippopotamus population in the mid-Zambezi valley, Rhodesia. Certificate in Field Ecology, University of Rhodesia.
14. MITCHELL, D.S. (1970) Autecological studies of Salvinia auriculata Aubl. Ph.D., London University.
15. MITCHELL, S.A. (1975) The biology of central African Chaoboridae and their distribution over selected areas of Lake Kariba. M.Phil., London University.
16. PORTER, R.N. (1968) An ecological reconnaissance of the Mwenda area, Lake Kariba. B.Sc. Hons., Witwatersrand University.
17. THOMAS, P.A. (1974) Investigations into the biology of Paulinia acuminata (De Geer)(Orthoptera: Acrididae) with particular reference to the biological control of Salvinia auriculata. M. Phil., London University.

APPENDIX BCABORA BASSA LAKE : SOME REFERENCES

Conditions in Cabora Bassa lake are obviously of great interest as a comparison with Kariba. However, because of the difficulties involved this lake has not received the attention it deserves. Some references of interest are listed below, but as no attempt has been made to locate Portuguese-language journals it is clearly incomplete.

1. ALLANSON, B.R. & DAVIES, T. (1975) Cabora Bassa: the biological control of Eichhornia crassipes (Mart.) Solms by Neochetina eichhorniae Warner. Rep. Rhodes Univ. Inst. Freshwat. Stud. 1974/75. 5 : 1-3
2. ANON. (1975) What's happening to the Zambezi? African Wildlife 29: 18-21
3. ANON. (1975) Death knell for Gorongoza? African Wildlife 29:25
4. DAVIES, B.R. (1975a) Cabora Bassa hazards. Nature, Lond. 254:477-478
5. DAVIES, B.R. (1975b) They pulled the plug out of the lower Zambezi. African Wildlife 29: 26-27
6. DAVIES, B.R. (1975c) Cabora Bassa: pre-and postimpoundment studies of the zooplankton and benthic macroinvertebrates. Rep. Rhodes Univ. Inst. Freshwat. Stud. 1974/75. 6: 1-3
7. DAVIES, B.R. HALL, A. & JACKSON, P.B.N. (1975) Some ecological aspects of the Cabora Bassa dam. Biol. Conserv. 8: 189-200
8. GRIFFITHS, I. Ll. (1975) Master switch for African power (Cabora Bassa). Geographical Mag. 47: 354-359
9. HALL, A., DAVIES, B.R. & VALENTE, I. (1976) Cabora Bassa: some preliminary physico-chemical and zooplankton preimpoundment survey results. Hydrobiologia 50: 17-25
10. HALL, A., VALENTE, I. & DAVIES, B.R. (1977) The Zambezi river in Mocambique: the physico-chemical status of the middle and lower Zambezi prior to the closure of the Cabora Bassa dam. Freshwat. Biol. 7: 187-206

11. HANMER, D.B. (1976) Birds of the lower Zambezi. Sthn. Birds 2: 1-66
12. JACKSON, P.B.N. & DAVIES, B.R. (1976) Cabora Bassa in its first year: some ecological aspects and comparisons. Rhod. Sci. News 10: 128-133
13. JACKSON, P.B.N. & ROGERS, K.H. (1976) Cabora Bassa fish populations before and during the first filling phase. Zoologica Africana 11: 373-397
14. TINLEY, K. (1975) Marromeu wrecked by the big dams. African Wildlife 29: 22-25
15. WILLIAMS, E.L. (1974) African giant: the saga of Cabora Bassa. Optima 24: 94-105

