

REGION 6

AFRIQUE ORIENTALE

Coordinateur

EASTERN AFRICA

Co-ordinator

M.J. BURGIS, F. GASSE and/et J. MOREAU

INTRODUCTION

This region is well known for the "Great Lakes", but it also contains a considerable number of less obvious lakes which are extremely varied. Their depths vary from <2 m to >200 m, and their conductivities from 25 to >250 000 $\mu\text{s cm}^{-1}$.

This Bibliography has been subdivided into relatively simple geographical divisions, rather than by "system". The following structure has been adopted:

6.0 Regional references

- 6.1 The Lakes of the Afar, the Ethiopian Rift and the Ethiopian Highlands.
- 6.2 The Gregory Rift and adjacent highlands.
- 6.3 The Central Plateau.
- 6.4 The Western Rift.

This subdivision requires the following notes:

6.1: The Bibliography relating to the shallow lakes of Ethiopia, the Republic of Djibouti and of Somalia has been grouped in order to avoid excessive fragmentation, although it covers very diverse "systems". Despite its depth (266 m), Lake Shala has been included here because of its close connection with the other Galla Lakes.

The topography of the region is dominated by the two great Rifts, the Eastern Rift (Gregory Rift and Ethiopian Rift) and the Western Rift (6.2-6.4).

6.2: The Gregory Rift is occupied by numerous small lakes many of which are highly saline. The larger Lake Turkana is an exception: it has been excluded because of its depth. Lake Rukwa, which occupies an isolated Rift situated north-west of the convergence of the two main rifts, has been included here because in its hydrology and chemistry it resembles the lakes of the Gregory Rift. This sub-region also covers several small lakes in the highland areas to the east of the Gregory Rift.

6.3: Lake Victoria lies on a plateau between the two Great Rifts. While it is difficult to class Lake Victoria as shallow (maximum depth 56 m), the Nyanza (= Winam = Kavirondo) Gulf is connected to the main lake only by a narrow channel and has many characteristics of an independent shallow lake. References concerned primarily with the Nyanza Gulf have, therefore, been included. Section 6.3 also lists references of work on the lakes which lie in the western part of the Lake Victoria catchment area, those south of the Virunga Volcanoes, and for Lake Kyoga on the Nile.

6.4: The Western Rift is, above all, filled by deep rift lakes but, since we are considering shallow lakes, Lakes Mobutu Sese Seko (= Lake Albert), Lake Idi Amin Dada (= Lake Edward), Lake Kivu and Lake Tanganyika have been excluded.

INTRODUCTION

L'Afrique de l'Est est une région bien connue pour ses "grands lacs", mais qui présente également un nombre considérable de lacs de moindre importance, de type extrêmement variés; leur profondeur varie de 2 m à plus de 200 m, et leur conductivité est comprise entre 25 et plus de 250 000 $\mu\text{S cm}^{-1}$.

La bibliographie suivante a été basée sur des divisions géographiques relativement simples plutôt que sur les systèmes. L'organisation suivante a été adoptée:

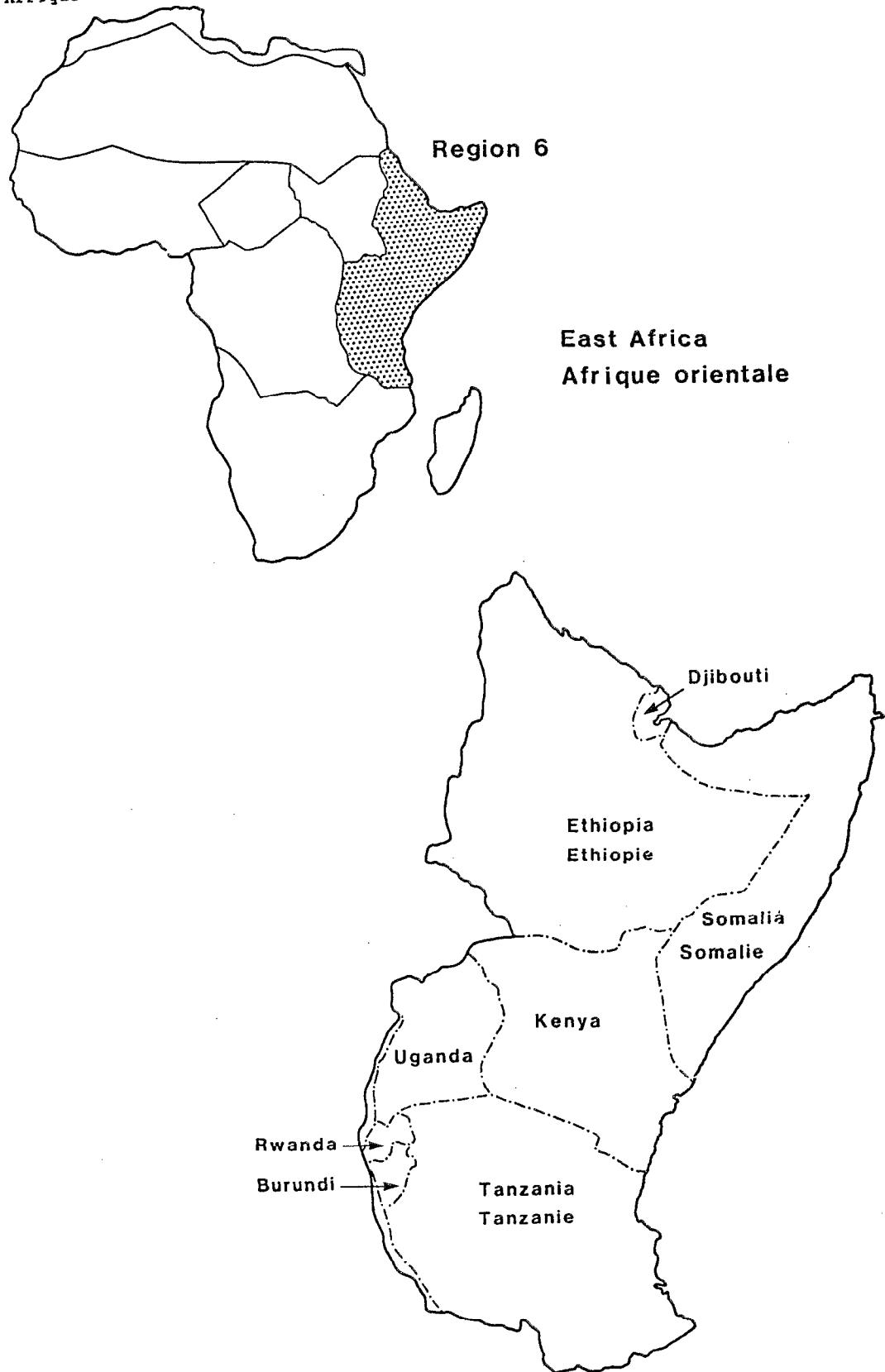
- 6.0 Bibliographie régionale.
- 6.1 Les lacs de l'Afar, du Rift éthiopien et des hautes régions éthiopiennes.
- 6.2 Le Gregory Rift et les hautes régions adjacentes.
- 6.3 Le plateau central.
- 6.4 Le Rift occidental.

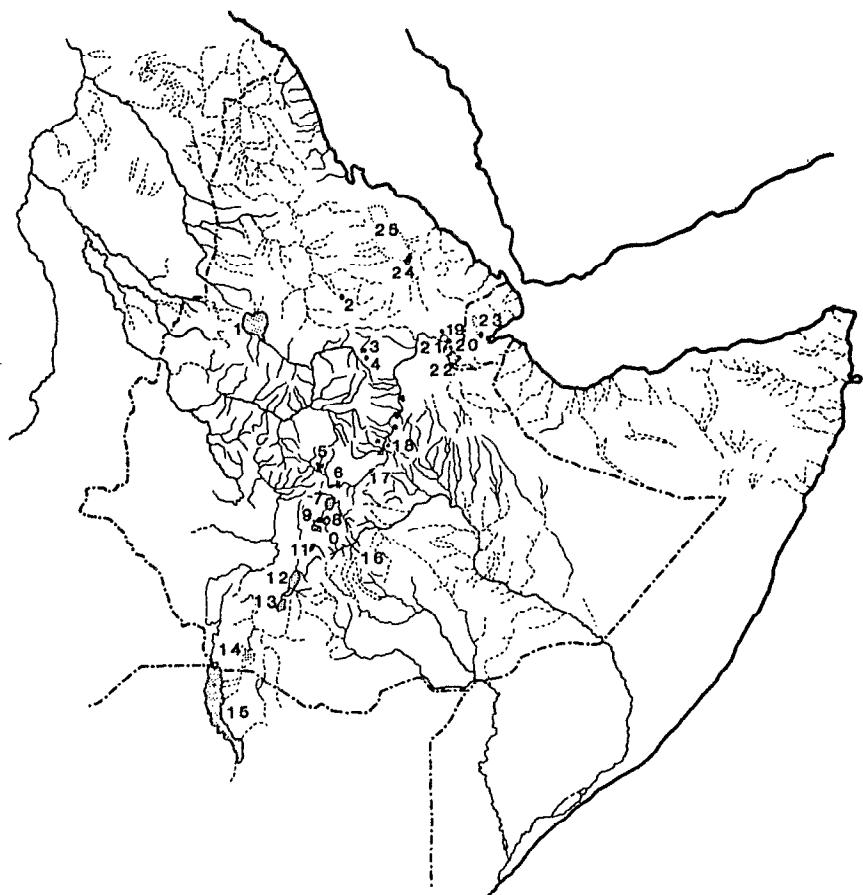
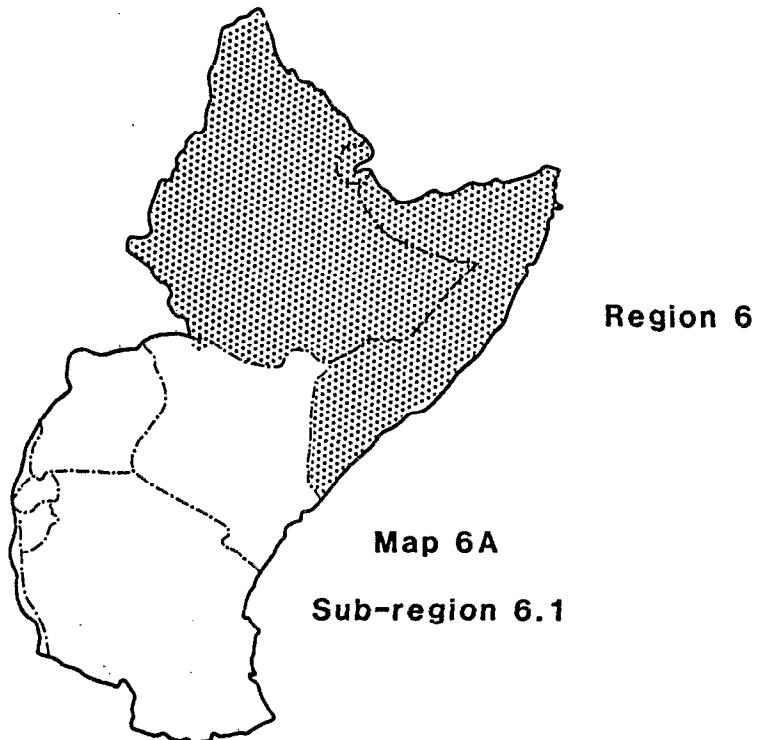
Cette subdivision suscite les remarques suivantes:

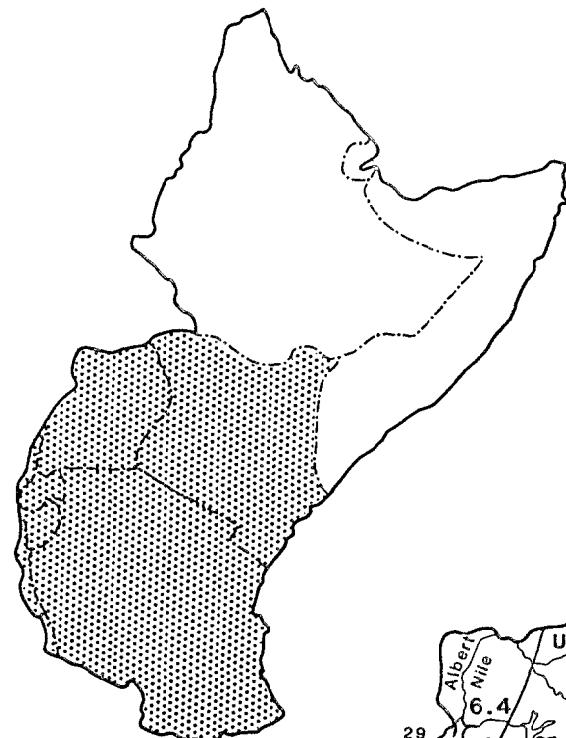
6.1: La bibliographie relative aux milieux aquatiques peu profonds d'Ethiopie, de la République de Djibouti et de Somalie a été regroupée afin d'éviter une fragmentation excessive, bien qu'elle concerne des systèmes très divers. Malgré sa profondeur de 266 m, le lac Shala a été inclus ici en raison de ses rapports étroits avec les autres lacs Gallas.

La topographie régionale est principalement déterminée par l'existence des deux grands rifts, le Rift oriental (Gregory Rift et Ethiopian Rift), et le Rift occidental (Western Rift):

- 6.2: Le Rift oriental (Gregory Rift) est occupé par de nombreux petits lacs, beaucoup d'entre eux étant très salés. Le grand lac Turkana est une exception; il a été exclus en raison de sa profondeur. Le lac Rukwa, qui occupe un fossé isolé situé au nord-ouest de la jonction des deux grands rifts, a été classé ici en raison de ses ressemblances hydrologiques et chimiques avec les lacs du Gregory Rift. Cette sous-région inclut également plusieurs petits lacs dans les régions hautes situées à l'Est du rift.
- 6.3: Le lac Victoria s'étend sur un plateau situé entre les deux grands rifts. Le lac Victoria peut difficilement être classé comme un lac peu profond (profondeur maximale: 56 m). Cependant le Golfe de Nyanza (= Kavirondo = Winam) n'est relié au lac principal que par un étroit chenal et présente les principales caractéristiques d'un lac indépendant peu profond. Les références relatives au Golfe de Nyanza ont donc été considérés ici. La section 6.3 inclut par ailleurs les références aux travaux sur les lacs situés dans la région occidentale du bassin versant du lac Victoria et situés au pied des volcans de Virunga, ainsi que le lac Kioga situé sur le Nil.
- 6.4: Le Rift occidental est avant tout le domaine des grands lacs profonds. Ne considérant ici que les milieux peu profonds, les plus vastes d'entre eux (lac Mobutu Sese Seko = lac Albert, lac Idi Amin Dada = lac Edouard, lac Kivu et le lac Tanganyika) sont exclus.



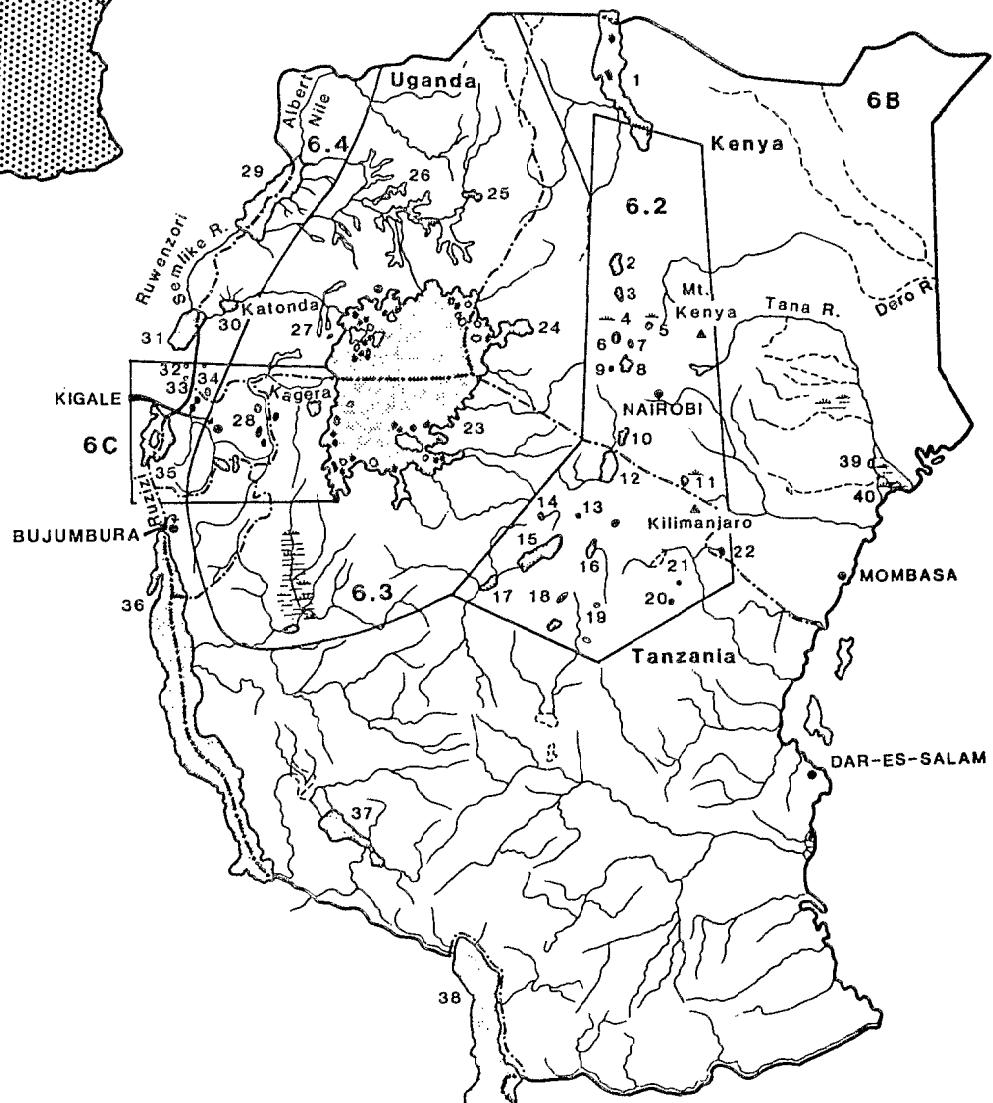


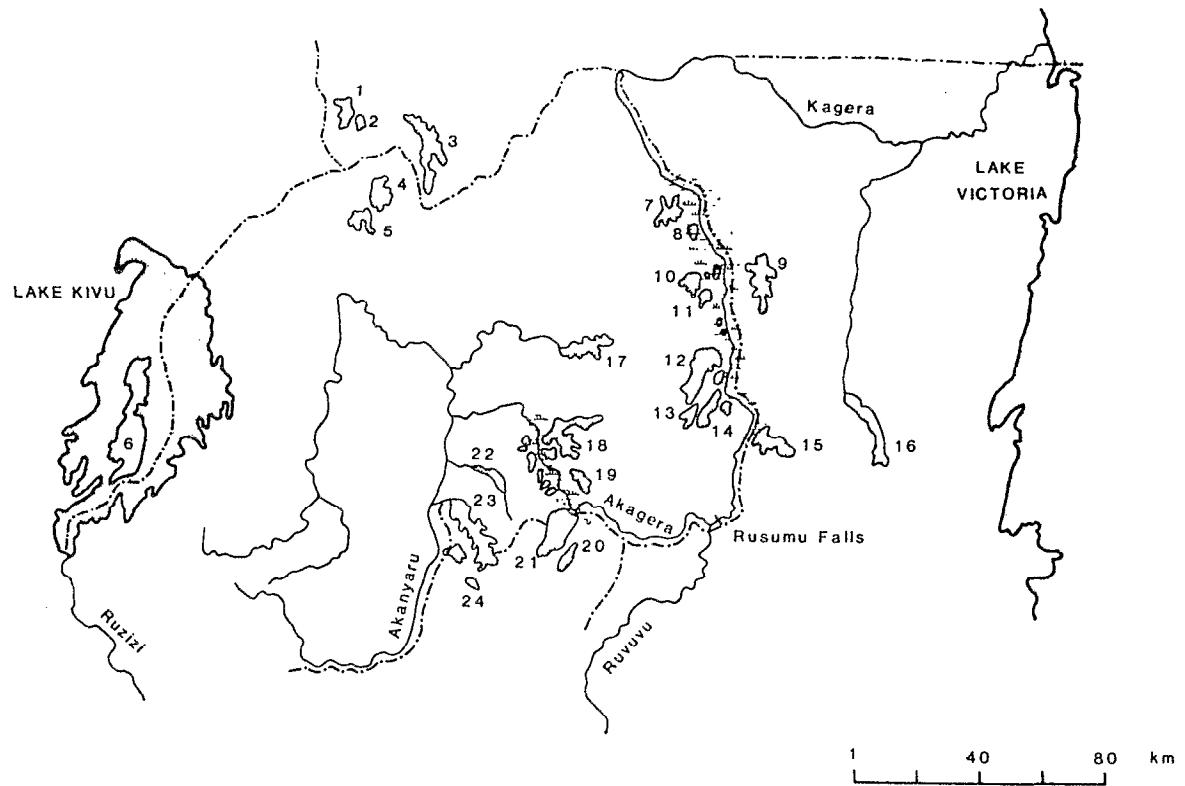
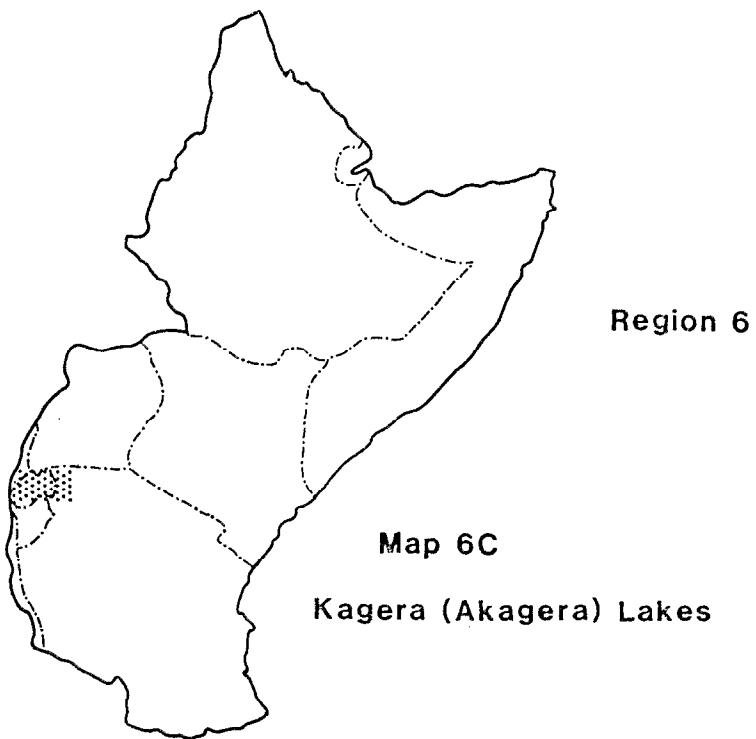


Region 6

Map 6B

Sub-regions 6.2, 6.3 & 6.4





MAP 6A
Sub-region 6.1

Ethiopian Plateau: 1. Lake Tana; 2. Lake Ashanghi; 3. Lake Hayq; 4. Lake Ardiba; 5. Bishoftu Crater lakes

Ethiopian Rift: 6. Lake Koka (reservoir); 7. Lake Ziway; 8. Lake Langano; 9. Lake Abiyata; 10. Lake Shala; 11. Lake Awasa; 12. Lake Abaya; 13. Lake Chamo; 14. Lake Chew Bahir; 15. Lake Turkana

Southeastern Plateau: 16. Mts Bale lakes

Afar: 17. Lake Metahara; 18. Gawani Swamps; 19. Lake Gamari; 20. Lake Afambo; 21. Lake Bario; 22. Lake Abhe; 23. Lake Asal; 24. Lake Afrera; 25. Dallol salt plain

MAP 6B
Sub-regions 6.2, 6.3 & 6.4

6.2 Gregory Rift: 1. Lake Turkana; 2. Lake Baringo; 3. Lake Bogoria; 4. Olobanita swamps; 5. Lake Ol Bolossat and Ol Bolossat swamp; 6. Lake Nakuru; 7. Lake Elmenteita; 8. Lake Naivasha; 9. Sonachi Crater lake; 10. Lake Magadi; 11. Lake Amboseli and Amboseli swamp; 12. Lake Natron; 13. Ngorongoro Crater lake; 14. Lake Lgarya; 15. Lake Eyasi; 16. Lake Manyara; 17. Lake Kitangiri; 18. Lake Balangida; 19. Lake Babati; 20. Balbal Ambussei; 21. Lake Ambussei; 22. Lake Jipe

6.3 Central Plateau: 23. Lake Victoria; 24. Nyanza Gulf; 25. Lake Bisina; 26. Lake Kyoga and Kyoga swamps; 27. Katonga river lakes; 28. Kagera river lakes (see Map 6C)

6.4 Western Rift: 29. Lake Mobutu Sese Seko (Lake Albert); 30. Lake George; 31. Lake Idi Amin (Lake Edward); 32. Lake Mutanda; 33. Lake Mulehe; 34. Lake Bunyoni; 35. Lake Kivu; 36. Lake Tanganyika; 37. Lake Rukwa; 38. Lake Malawi

Coastal: 39. Lake Biliza; 40. River Tana floodplains and swamps

MAP 6C
Kagera (Akagera) Lakes

1. Lake Mutanda; 2. Lake Mulehe; 3. Lake Bunyoni; 4. Lake Bulera; 5. Lake Luhondo; 6. Idjwi Island; 7. Lake Rwanjakinga; 8. Lake Mihindi; 9. Lake Mujuju; 10. Lake Hayo; 11. Lake Kivumba; 12. Lake Thema; 13. Lake Nasho; 14. Lake Rwehikama; 15. Lake Bisongo; 16. Lake Burigi; 17. Lake Muhazi; 18. Lake Mugesera; 19. Lake Sake; 20. Lake Kanzigiri; 21. Lake Rugweru; 22. Lake Cyohoha North; 23. Lake Cyohoha South; 24. Lake Lirwihinda

6.0: REGIONAL REFERENCES/BIBLIOGRAPHIE REGIONALE

PUBLISHED WORKS/TRAVEAUX REALISES

General/Divers

Brown 1974; Bugenyi 1980; Kenya Government 1970; Leakey 1931; Livingstone & Melack 1981; Marlier 1962; Mavuti 1980; Okemwa 1980; Speke 1864; Welcomme 1971; Worthington 1932a,b; Worthington & Worthington 1933.

Geology/Géologie

Adamson et al. 1980; Bishop 1978; Gasse & Tekaia 1982; Gregory 1921; Livingstone 1975; Nilsson 1932, 1940, 1963; Ramberg & Neumann 1978; Yuretich 1982.

Hydrology/Hydrologie

Obasi & Kiangi 1973; Tomlinson 1970; Uganda Protectorate 1951; Uganda Water Development Dept 1969; Woodhead 1968.

Climate/Climat

East African Meteorological Dept 1962; Griffiths 1958, 1961a,b; Hamilton 1982; Jameson & McCallum 1970; Livingstone 1975; Manning 1956; Nilsson 1940; Nyenzi 1980a,b; Rhode & Virji 1976; Street & Grove 1976.

Physico-chemistry/Physicochimie

Burke 1963; Gaudet 1977; Kalff 1983; Kilham 1971; Kilham & Hecky 1973; LaBarbera & Kilham 1974; McIntyre 1981; Talling 1957, 1962; Talling & Talling 1965; Visser 1974; Visser & Villeneuve 1975.

Palaeolimnology/Paléolimnologie

Butzer et al. 1972; Gasse & Tekaia 1982; Livingstone 1975; Nilsson 1932, 1963; Yuretich 1982.

Macrophytes

Beadle & Lind 1960; Gaudet 1977; Keay 1959; Moore 1980; Vesey-Fitzgerald 1963.

Algae/Algues

Gasse et al. 1983; Lenzenweger 1980; Melack 1976, 1979; Richardson et al. 1978; Talling 1957, 1962.

Invertebrates/Invertébrés

Brown et al. 1981; LaBarbera & Kilham 1974; Mandahl-Barth 1954.

Fish/Poissons

Bernacšek 1980; Copley 1958; Greenwood 1958; Matthes 1975; Trewavas 1933, 1983.

Fisheries/Pêches

Beauchamp 1954, 1955; Butcher & Colaris 1975; East African Freshwater Fisheries Research Organisation 1967; FAO/UN Dept Fisheries 1973; FAO/UN 1971, 1979; Hyholm & Whiting 1975; Mann 1969; Kegier et al. 1971; Rhodes 1956; Uganda Protectorate 1934-1940, 1951, 1952-1958; Worthington 1932c.

Aves

Bell-Cross 1974; Cott 1952; Mackworth-Praed & Grant 1952; Uganda Protectorate 1934-1940, 1952-1958.

Vertebrata

Uganda Protectorate 1934-1940, 1951, 1952-1958.

Pollution

Alabaster 1981; FAO/UN 1971; Thorslund 1971.

Human Health/Santé

Brown et al. 1981.

BIBLIOGRAPHY/BIBLIOGRAPHIE

- Adamson D A, F Gasse, F A Street & M A J Williams 1980. Late Quaternary history of the Nile. Nature Lond. 288, 50-55.
- Alabaster J S 1981. Review of the state of aquatic pollution of East African inland waters. C.I.F.A. Occ. Pap., FAO, Rome. 9, 36 pp.
- Beadle L C & Lind E M 1960. Research on the swamps of Uganda. Uganda J. 24, 84-87.
- Beauchamp R S A 1954. Fishery Research in the lakes of East Africa. E. Afr. Agric. J. 19, 203-207.
- Beauchamp R S A 1955. Fishery Research in East Africa. Uganda J. 19, 169-176.
- Bell-Cross G 1974. Observations on fish-eating birds in Central Africa. Honeyguide 77, 23-31.
- Bernacsek G M 1980. Introduction to the freshwater fishes of Tanzania. Univ. Dar-es-Salaam, 78 pp.
- Bishop W W 1978. Geological background to fossil man. Scottish Acad. Press, Univ. Toronto Press, 564 pp.
- Brown D S, J E Jelnes, G K Kinoti & J Ouma 1981. Distribution in Kenya of intermediate hosts for Schistosoma. Trop. geogr. Med. 33, 95-103.
- Brown L H 1974. East African Mountains and Lakes. East Afr. Publ. House, Nairobi.
- Bugenyi F W B 1980. Past and present limnological investigations in Uganda - an overview. pp. 159-166. In Proc. First Workshop for the Promotion of Limnology in Developing Countries, Kyoto.
- Burke K 1963. Dissolved gases in East African lakes. Nature, Lond. 198, 568-569.
- Butcher D A P & J C Colaris 1975. Kenya, Tanzania, Uganda. A sociological survey of the fisherman population around Lake Victoria. A report prepared for the Lake Victoria Regional Fisheries Research Project. Rep. UNDP, Lake Victoria Regional Fish. Res. Proj., FAO-FI: DP-RAF/71/242/4.
- Butzer K W, G L Isaac, J L Richardson & C Washbourn-Kamau C 1972. Radiocarbon dating of East African lake levels. Science 175, 1069-1076.
- Copley H 1958. Common Freshwater Fishes in East Africa. Witherby, Lond.

- Cott H B 1952. Fish eating birds. Ann. Rep. E. Afr. Freshwat. Fish. Res. Orgsn., 23.
- East African Freshwater Fisheries Research Organisation 1967. The history and research results of the East African Freshwater Fisheries Research Organisation. E. Afr. Freshwat. Fish. Res. Orgsn. Occ. Pap. 2, 7 pp. Mimeo.
- East African Meteorological Dept 1962. Temperature data for stations in East Africa, Part 2 Uganda. Meteorological Dept, Nairobi, 25 pp.
- FAO/UN 1966. Report to the Government of Kenya on fishery development possibilities. Based on the work of D H Rhodes FAO/TA fisheries development adviser. Report FAO/UNDP (TA) 2144, 77 pp.
- FAO/UN 1971. Report on a survey of inland water pollution in Uganda, Kenya, Zambia and Tanzania. Based on the work of Anders E Thorslund, Fishery Officer (Inland water pollution). FAO Regular Programme Rep. 11, 12 pp.
- FAO/UN 1979. The role of fishery technology in management and development of freshwater fisheries in Africa. CIFA Tech. Pap. 6, 67 pp.
- FAO/UN Dept Fisheries 1973. A brief review of the current status of the inland fisheries of Africa. Afr. J. trop. Hydrobiol. Fish. Spec. Issue 1, 3-19.
- Fish G R 1955. The food of Tilapia in East Africa. Uganda J. 19, 85-89.
- Gasse F, J Talling & P Kilham 1983. East African diatom assemblages: definition, distribution, ecology. Rev. Hydrobiol. trop., 16, 3-34.
- Gasse F & F Tekiaia 1982. Tentative definition, comparison and interpretation of fossil diatom assemblages from Eastern Africa. Acta geol. Acad. Scient. Hung. 25, 135-147.
- Gaudet J J 1977. Uptake, accumulation and loss of nutrients by papyrus in tropical swamps. Ecology 58, 415-422.
- Greenwood P H 1958. The fishes of Uganda. The Uganda Society, Kampala.
- Gregory J W 1921. The Rift Valley and Geology of East Africa. Seeley, Service & Co.
- Griffiths J F 1958. Climatic zones of East Africa. E. Afr. Agr. J. 1958, 179-185.
- Griffiths J F 1961a. Solar radiation, its measurement and temporal distribution. In Inter-African Conference on Hydrology, Nairobi 1961. CCTA Publ. No 66.
- Griffiths J F 1961b. Some rainfall relationships in East Africa. In Inter-African Conference on Hydrology, Nairobi 1961. CCTA Publ. No 66.
- Hamilton A C 1982. Environmental history of East Africa. Acad. Press, Lond., 328 pp.
- Hyholm E & P S Whiting 1975. Kenya, Uganda, The United Republic of Tanzania. Freshwater fish economic studies in Kenya, Uganda and the United Republic of Tanzania (1967-71). A report prepared for the Lake Victoria Fish. Res. Proj. FAO/FI/DP/RAF-65/049/2, 77 pp.
- Jameson J D & D McCallum 1970. Climate. In, J D Jameson (ed.), Agriculture in Uganda. 2 edn, Oxford Univ. Press.
- Kalff J 1983. Phosphorus limitation in some tropical African lakes. Hydrobiologia 100, 101-112.
- Keay R W J (Ed.) 1959. Vegetation map of East Africa south of the Tropic of Cancer. Oxford Univ. Press, Lond. 24 pp. with coloured map 1:10 000 000.
- Kenya Government 1970. Kenya Atlas.
- Kilham P 1971. Biogeochemistry of African lakes and rivers. PhD thesis, Duke Univ., 199 pp.
- Kilham P & R E Hecky 1973. Fluoride: geochemical and ecological significance in East African waters and sediments. Limnol. Oceanogr. 18, 932-945.
- LaBarbera M C & P Kilham 1974. The chemical ecology of copepod distribution in the lakes of East and Central Africa. Limnol. Oceanogr. 19, 459-465.
- Leakey L S B 1931. East African lakes. Geogr. J. 77, 497-514.
- Lenzenweger R 1980. Some Desmidaceae from East Africa. Linzer Biol. Beitr. 12, 385-387.
- Livingstone D A 1975. Late Quaternary climatic change in Africa. Ann. Rev. Ecol. Syst. 6, 249-280.

- Livingstone D A & J M Melack 1984. Some lakes of sub-Saharan Africa. In F B Taub (ed.) Lake and Reservoir Ecosystems. Elsevier, Amsterdam.
- Hackworth-Praed C W & C H B Grant 1952. Birds of East and North Africa. v. 1, Collins, Lond.
- Handahl-Barth G 1954. The freshwater molluscs of Uganda and adjacent territories. Ann. Mus. Congo Belge 32.
- Hann M J 1969. Freshwater fisheries. pp. 229-242. In W W Morgan (Ed.) East Africa, its people and resources. Oxford Univ. Press.
- Hanning H L 1956. The statistical assessment of rainfall probability and its application in Ugandan agriculture. Proc. R. Soc. B 144, 460-480.
- Matthes H 1975. Key to the families and genera of freshwater fishes of Tanzania. Afr. J. trop. Hydrobiol. Fish. Spec Issue 4.
- Marlier G 1962. Freshwater Biology. In Survey of the natural resources of the African continent. U.N.E.S.C.O., Paris.
- Mavuti K H 1980. The characteristics, status and important points of limnological investigations in Kenya. pp. 145-150. In Proc. First Workshop for the promotion of Limnology in Developing Countries, Kyoto, Japan.
- McIntyre S 1981. Stratification and mixing in shallow tropical African lakes. PhD thesis, Duke Univ., 338 pp.
- Melack J M 1976. Limnology and dynamics of phytoplankton in equatorial African lakes. PhD thesis, Duke Univ., 453 pp.
- Melack J M 1979. Temporal variability of phytoplankton in tropical lakes. Oecologia 44, 1-7.
- Moore P D 1980. Exploiting papyrus. Nature, Lond. 284, 510.
- Nilsson E 1932. Quaternary glaciations and pluvial lakes in British East Africa. Geogr. Ann. Stockholm 13, 241-348.
- Nilsson E 1940. Ancient changes of climate in British East Africa and Abyssinia. Medd. Stockh. Geol. Inst. 50, 1-79.
- Nilsson E 1963. Pluvial lakes and glaciers in East Africa. Stockh. Contr. Geol. 11, 21-57.
- Nyenzi B S 1980a. Climatological estimates of actual evapotranspiration and potential evaporation values in East Africa. pp. 81-88. In E. Afr. Inst. Meteorol. Training & Res. Record of Research, Ann. Rep. 1978, Nairobi, June 1980.
- Nyenzi B S 1980b. The distribution of actual evaporation/evapotranspiration over East Africa. E. Afr. Inst. Meteorol. Training & Res. Record of Research, Rep. no. 7/80 29 pp.
- Obasi G O P & P M R Kiangi 1973. Monthly and annual water balance for Kenya. E. Afr. Meteorol. Dept Tech. Memo, E. Afr. Community, Nairobi.
- Okemwa E N 1980. An overview of limnological investigations and its future development in Kenya. Proc. First Workshop for the promotion of Limnology in Developing Countries, Kyoto, Japan, pp. 137-144.
- Ramberg I B & E R Neumann 1978. A comparison between the older (Karoo) rifts and the younger (Cenozoic) rifts of Eastern Africa. pp. 347-350. In Tectonics and Geophysics of Continental Rifts. Reidel, Dordrecht, Netherlands.
- Regier H A, A J Cordone & R A Ryder 1971. Total fish landings from freshwaters as a function of limnological variables, with special reference to lakes of east-central Africa. Fish stock assessment on African inland waters. FAO Working paper No 3 FI:SF/GHA 10, Rome.
- Rhode H & H Virji 1976. Trends and periodicities in East African rainfall data. Monthly Weather Rev. 104, 307-315.
- Rhodes D H 1956. General account of Uganda's fisheries. In Second Symposium on African Hydrobiology and Inland Fisheries. Scientific Council for Africa South of the Sahara, Publ. 25, pp. 67-69.
- Richardson J L, T J Harvey & S A Holdship 1978. Diatoms in the history of East African shallow lakes. Pol. Arch. Hydrobiol. 25, 341-353.
- Speke F M 1864. Les sources du Nil. Journal de voyage du Capitaline Speke, Paris.
- Street F A & A T Grove 1976. Environment and climatic implications of late Quaternary lake-level fluctuations in Africa. Nature, Lond. 261, 385-390.

- Talling J F 1957. Diurnal changes of stratification and photosynthesis in some tropical African lakes. Proc. R. Soc. Lond. B 147, 57-83.
- Talling J F 1962. Report on limnological work during a visit to E.A.F.F.R.O. between August 1960 and September 1961. E. Afr. Freshwat. Fish. Res. Orgsn. Ann. Rep. 1961.
- Talling J F & I B Talling 1965. The chemical composition of African lake water. Int. Revue ges. Hydrobiol. 50, 421-463.
- Thorslund A E 1971. Report on survey of inland water pollution in Uganda, Kenya, Zambia and Tanzania. FAO Regular Programme Rep. 11, FAO, Rome, 16 pp.
- Tomlinson J (Ed.) 1970. A water resources handbook for Kenya. Trans Africa Press, Nairobi.
- Trewavas E 1933. Scientific results of the Cambridge Expedition to the East African lakes 1930-31. 11 - The cichlid fishes. Zool. J. linn. Soc., Lond 38, 309-341.
- Trewavas E 1983. The Tilapine Fishes of the Genera Sarotherodon, Oreochromis and Danakilia. Brit. Mus. (Nat. Hist.). Lond. 583 pp.
- Uganda Protectorate 1934-1940. Annual Reports of the Game Dept (Ed. Pitman).
- Uganda Protectorate 1951. Annual Report of the Department of Hydrological Survey for the year ended 31 December 1950. (Compilers note: there are probably many such reports, M.J.B.)
- Uganda Protectorate 1952-1958. Annual Reports of the Game and Fisheries Department, 1952; 1953; Jan. 1954-June 1955; Jan. 1955- June 1956; July 1956-June 1957; July 1957-June 1958.
- Uganda Water Development Dept 1969. Summary of Hydrological Records 1962-1968, Entebbe, Uganda.
- Vesey-Fitzgerald D F 1963. Central African grasslands. J. Ecol. 51, 243-274.
- Visser S A 1974. Composition of waters of lakes and rivers in East and West Africa. Afr. J. trop. Hydrobiol. Fish. 3, 43-60.
- Visser S A & J P Villeneuve 1975. Similarities and differences in the chemical composition of waters from West, Central and East Africa. Verh. int. Ver. Limnol. 19, 1416-1425.
- Welcomme R L 1971. Preliminary list of the inland waters of Africa and their characteristics. FAO Fish. Circular 134, 32 pp.
- Woodhead T W 1968. Studies of potential evaporation in Kenya. Min. Nat. Resources, Kenya Govt Printer, Nairobi.
- Worthington E B 1932a. Scientific results of the Cambridge Expedition to the East African lakes, 1930-31. 1 - General introduction and station list. Zool. J. linn. Soc., Lond. 38, 99-119.
- Worthington E B 1932b. The lakes of Kenya and Uganda. Geogr. J. 76, 275-297.
- Worthington E B 1932c. A report on the fisheries of Uganda investigated by the Cambridge Expedition to the East African lakes, 1930-31. Crown Agents, London.
- Worthington S & E B Worthington 1933. Inland waters of Africa. Macmillan, Lond. 259 pp.
- Yuretich R F 1982. Possible influences upon lake development in the East African Rift Valleys. J. Geol. 90, 329-337.

6.1: ETHIOPIE, ET REPUBLIQUE DE DJIBOUTI
 6.1: ETHIOPIA AND REPUBLIC OF DJIBOUTI

TRAVAUX REALISES/PUBLISHED WORKS

Divers/General

Beckingham & Huntingford 1954; Blundell 1906; Bolton 1969; Brunelli 1939; Brunelli & Cannicci 1938; Brunelli et al. 1941; Cheesman 1935, 1936; Duchesne-Fournet 1909; Dupuis 1936; Graham & Black 1925; McKerchar & Douglas 1974; Morandini 1940, 1942a,b; Neumann 1901, 1902; Omer-Cooper 1930; Pardi 1976; Parenzan 1937a, 1938a; Riedel 1961, 1962b; Rzóska 1976; Vatova 1938, 1940; Wenner 1967, 1970, 1973a,b; Werdecker 1962; Zavattari 1941, 1942.

Géologie/Geology

Bacci 1940; Barberi et al. 1975; Bentor 1967; Besairie 1949; Bini 1938; Brown 1973b; Butzer 1971, 1976; Butzer et al. 1969; Castracane 1889; Dainelli 1943; Di Paola 1972; Fontes et al. 1973; Gèze 1974, 1975; Mohr 1961, 1966, 1971; Smeds 1964; Venzo 1971.

Géomorphologie/Geomorphology

Mesfin Wolde-Mariam 1972.

Pédologie/Pedology

Raunet 1978a,b; Riche & Segalen 1969.

Climatologie/Climatology

Besairie 1949; Bethke 1976; Dosseur 1977; Dugdale 1964; Fantoli 1966; Griffiths 1972a,b; Kingham 1975; Lapeyre 1939; Makin et al. 1975, 1976; Mesfin Wolde-Mariam 1972; Morandini 1940; Raunet 1978a,b; Street 1979, 1980; Street-Perrott 1982; Suzuki 1967; United Nations/FAO 1965; Wood & Lovett 1974; Wood et al. 1976.

Hydrologie/Hydrology

Bauduin & Dubreuil 1973; Butzer 1976; Demange et al. 1971; Dosseur 1977; Fantoli 1966; Fontes et al. 1979; Gentilini 1936; Italconsult 1970; McKerchar & Douglas 1974; Makin et al. 1975, 1976; Perrott 1981; Street 1980; Street-Perrott 1982; Talling & Rzóska 1967; United Nations/FAO 1965; United Nations/UNDP 1973; Vatova 1938, 1940, 1941a,b; Venzo 1971; Wenner 1967, 1970, 1973a,b.

Paléolimnologie/Palaeolimnology

Descourtieux-Coqueugniot 1979; Fontes & Pouchan 1975; Forti 1910, 1932; Gasse 1974a,b,c, 1975, 1976, 1977a,b, 1978, 1980; Gasse & Delivras 1977; Gasse & Descourtieux 1979; Gasse et al. 1974, 1980; Gasse & Steltjes 1973; Gasse & Street 1978a,b; Gasse & Tekaia 1979; Grove & Dekker 1976; Grove & Goudie 1971a,b; Grove et al. 1975; Kuls & Semmel 1965; Lézine 1981, 1982; Lézine & Bonnefille 1982; Löffler 1979; Minucci 1938; Nilsson 1936, 1940; Perrott 1981; Semmel 1971; Smeds 1964; Street 1979, 1980, 1981; Street & Grove 1976; Taieb 1974; Van Damme & Gautier 1972; Williams et al. 1977, 1981.

Physicochimie/Physico-chemistry

Baumann et al. 1975; Baxter & Golobitsch 1970, 1981; Baxter et al. 1965; Baxter & Urban 1970; Baxter & Wood 1965; Bentor 1967; Bini 1938, 1940a,b; De Filippis 1940; Demange et al. 1971; Fontes et al. 1979; Gasse 1975; Löffler 1979; Loffredo 1940; Loffredo & Maldura 1941; Makin et al. 1975, 1976; Martini 1969; Morandini 1938, 1940, 1941, 1942a, 1947; Perrott 1981; Pitwell 1967, 1972; Prosser et al. 1968; Rzóska 1976; Talling 1965, 1976; Talling et al. 1973; Talling & Rzóska 1967; United Nations/FAO 1965; United Nations/UNDP 1973; Wood 1968; Wood & Prosser 1979, 1981; Wood et al. 1969, 1976.

Bacteria

Brisou et al. 1974.

Algues/Algae

Baxter & Golobitsch 1981; Baxter et al. 1965; Baxter & Wood 1965; Brisou et al. 1974; Brunelli & Cannicci 1939, 1940, 1941; Brunelli et al. 1941; Cannicci & Almagia 1947; Castracane 1889; Descourtieux-Coqueugniot 1979; De Toni 1892; Forti 1910, 1932; Frenguelli 1929; Gasse 1974a,b,c, 1975, 1976, 1977a,b, 1978, 1980; Gasse & Descourtieux 1979; Gasse et al. 1974, 1980; Gasse & Street 1978a,b; Gasse & Tekiaia 1979; Rzóska 1976; Talling 1965; Talling & Rzóska 1967; Talling et al. 1973; Wood 1968; Wood & Prosser 1981; Zanon 1942.

Macrophytes

Bolton 1969; Brunelli & Cannicci 1940; Dugdale 1964; Lézine 1981; Makin et al. 1976; Martelli 1886; Picchi-Sermoli 1957; Raunet 1978a,b.

Invertébrés/Invertebrates

Ayad 1956; Bacci 1940, 1941, 1951; Bourguignat 1883; Brinck 1955; Brown 1961, 1964, 1965, 1973a,b, 1980; Brown & Lemma 1970; Brown & Wright 1972; Brunelli & Cannicci 1940; Bryce 1931; Burch 1967; Carfi 1974; Connolly 1928; Consiglio 1978; Daday Von 1910; Dussart 1974; Ferrara & Lanza 1978; Ferrara & Monod 1972; Fittkau 1980; Germain 1904; Giovannola 1937, 1939; Goll 1982; Goll & Aweitu 1974a,b; Goll & Scott 1978; Huang 1979, Kloos et al. 1978; Lanza 1966; Lanza et al. 1966; Löffler 1977; Lowndes 1930, 1932; Mandahl-Barth 1957; Martens 1869; Mekuria et al. 1978; Meskal 1970; Messana et al. 1974; Morelet 1872; Neuville & Anthony 1905, 1908; Omer-Cooper 1930; Parent 1934; Piersanti 1940, 1941; Pinhey 1981; Pollonera 1888, 1898; Rodhain et al. 1977a,b,c; Ruffo 1970; Sciacchitano 1967; Thiele 1933; Van Damme & Gautier 1972; Wodajo & Belay 1984; Wright & Brown 1962; Wurzinger 1979.

Poissons/Fish

Banister 1973; Bianchi 1975, 1978a,b; Bianchi et al. 1978; Bini 1940b; Boulenger 1902; Brunelli 1939, 1940a,b; Brunelli & Cannicci 1938, 1940; Brunelli et al. 1941; Ercolini & Berti 1975, 1977, 1978; Funaiol & Roncati 1964; Morandini 1942a,b; Omer-Cooper 1930; Parenzan 1937a,b, 1938b, 1941b; Pellegrin 1905; Riedel 1962a,b; Tedla 1973; Zolezzi 1940, 1941a,b.

Pêches/Fisheries

Hamblyn 1965; Meskal 1974; Parenzan 1938a, 1941a; Redda 1959.

Amphibia

Largen et al. 1978; Meskal 1970; Omer-Cooper 1930; Scortecci 1933.

Aves

Baxter & Urban 1970; Brown & Urban 1969; Brunelli et al. 1941; Kahl 1971; Löffler 1977; Urban 1970; Urban & Brown 1971; Urban & Jefford 1977.

Santé/Human Health

Ayad 1956; Brown 1980; Brown & Lemma 1970; Burch 1967; Giovannola 1937, 1939; Goll 1982; Goll & Scott 1978; Kloos et al. 1978; Mandahl-Barth 1957; Mekuria et al. 1978; Rodhain et al. 1977a,b,c; Schaller & Kuls 1972.

BIBLIOGRAPHIE/BIBLIOGRAPHY

- Ayad N 1956. Bilharziasis survey in British Somaliland, Eritrea, Ethiopia, Somalia, Sudan and Yemen. Bull. Wld Hlth Orgsn 14, 117 pp.
- Bacci G 1940. Molluschi fossile dell'antico fondo del Lago Zwai. Ann. Mus. civ. Stor. nat., Genova 60, 454-458.
- Bacci G 1941. Nuovo contributo alla conoscenza della malacofauna dell'Africa Orientale Italiana. Ann. Mus. civ. Stor. nat., Genova 61, 120-140.
- Bacci G 1951. Elementi per una malacofauna dell'Abissinia e della Somalia. Ann. Mus. civ. Stor. nat., Genova 65, 1-144.
- Banister K E 1973. A revision of the large Barbus (Pisces, Cyprinidae) of East and Central Africa. Studies on Africa: Cyprinidae Part II. Bull. Brit. Mus. (Nat. Hist.) 26, 148 pp.
- Barberi F, G Ferrara, R Santacroce & J Varet 1975. Structural evolution of the Afar triple junction. pp. 38-54. In A Pilger & A Rosler (Eds), Afar Depression of Ethiopia. Inter-Union Commission on Geodynamics Sci. Rep. 14, v. 1, Stuttgart.
- Bauduin D & P Dubreuil 1973. L'inventaire des ressources en eau pour l'aménagement intégré du bassin du Wabi Shevelle d'Ethiopie. Cah. O.R.S.T.O.M., Sér. Hydrol. 10, 307-348.
- Baumann A, U Forstner & R Ode 1975. Lake Shala: water chemistry, mineralogy and geo-chemistry of sediments in an Ethiopian rift lake. Geol. Rundsch. 64, 593-609.
- Baxter R M & D L Golobitsch 1970. A note on the limnology of Lake Hayq, Ethiopia. Limnol. Oceanogr. 15, 144-149.
- Baxter R M & D L Golobitsch 1981. Observations on Garba Guratch, an Ethiopian Mountain lake. Sinet: Ethiop. J. Sci. 4, 63-68.
- Baxter R M, M V Prosser, J F Talling & R B Wood 1965. Stratification in tropical African lakes at moderate altitudes. Limnol. Oceanogr. 10, 511-520.
- Baxter R M & K Urban 1970. On the nature and origin of the feather colouration in the great white pelican Pelecanus onocrotalus roseus in Ethiopia. J. appl. Ecol. 112, 336-339.
- Baxter R M & R B Wood 1965. Studies on stratification in the Bishoftu crater lakes. J. appl. Ecol. 2, 416.
- Beckingham C F & G W B Huntingford 1954. Some records of Ethiopia, 1593-1646. Haklugt Soc., Lond., 267 pp.
- Bentor Y K 1967. Ethiopia - Follow-up geological report. Spec. Rep. Divsn Intern. Coop., Hebrew Univ. Jerusalem, 36 pp.
- Besairie H 1949. La Côte française des Somalis. Haut Commissariat de Madagascar et dépendances. Bureau géologique. Tananarive.
- Bethke S 1976. Basic zonal rainfall patterns in Ethiopia. pp. 97-103. In H M Hussein (Ed.), Rehab: Drought and Famine in Ethiopia. African Environment Spec. Rep. 2, Intern. Afr. Inst., Lond.
- Bianchi S 1975. Preliminary observations on the epidermis of Uegitglanis zammaranoi Gianferrari (Clariidae, Siluriformes). Mon. Zool. Ital., Suppl. VI 5, 91-101.

- Bianchi S 1978a. Osservazioni preliminari sulle cellule mucose di Phreatichthyes andruzzii Vinciguerra, pesce anoftalmo della Somalia. Riv. istochim. norm. patol. 22, 15-18.
- Bianchi S 1978b. Le cellule mucose e l'istochimica dei mucopolisaccaridi nell'epitelio olfattivo di Uegitglanis zammaranoi Gianferrari (Clariidae, Siluriformes), pesce freatico anoftalmo della Somalia. Riv. istochim. norm. patol. 22, 101-107.
- Bianchi S, G Delfino & A Ercolini 1978. Morphology and fine structure of the olfactory organ in Uegitglanis zammaranoi Gianferrari (Clariidae, Siluriformes), an anophthalmic phreatic fish from Somalia. Mon. Zool. Ital., Suppl. 10 11, 157-171.
- Bini G 1938. Ricerche fisiche sul Lago Tana. pp. 47-56. In Missione di studio al Lago Tana. v. I. Relazioni preliminari. Reale Accademia d'Italia, Roma, 164 pp.
- Bini G 1940a. Richerche chimiche nelle acque del Lago Tana. pp. 9-52. In Missione di Studio al Lago Tana. v. III, Ricerche Limnologiche, parte 2: Chimica e biologia. Reale Accademia d'Italia, Roma, 241 pp.
- Bini G 1940b. I Pesci del Lago Tana. pp. 135-206. In Missione di Studio al Lago Tana. v. III, Ricerche Limnologiche, parte 2: Chimica e biologia. Reale Accademia d'Italia, Roma, 241 pp.
- Blundell H W 1906. Exploration in the Abai Basin, Ethiopia. Geogr. J. 27, 529-553.
- Bolton M 1969. Rift Valley Ecological Survey. I: Northern Lakes: Abiyata and Shala. Wildl. Conserv. Orgsn, Addis Ababa, 17 pp. Mimeo.
- Boulenger G A 1902. Description of new fishes from the collection made by K. Degen in Abyssinia. Ann. Mag. Nat. Hist. 10, 421-439.
- Bourguignat J R 1883. Histoire malacologique de l'Abyssinie. Ann. Sci. Nat. 15, 47-162.
- Brinck P 1955. A revision of the Gyrinidae (Coleoptera) of the Ethiopian Region, 1. Lunds. Univ. Ars. N.F. Ard. 2, 51(16).
- Brisou J, D Courtois & F Denis 1974. Microbiological study of a hypersaline lake in French Somaliland. Appl. Microbiol. 27, 819-822.
- Brown D S 1961. A description of Burnupia sp. cf caffra (Krauss) Gastropoda, Ancyliidae from Ethiopia. Ann. Mag. nat. Hist. 13(4), 377-382.
- Brown D S 1964. Observations on the distribution and ecology of freshwater gastropod Mollusca in Ethiopia. Contributions from the Biology Department, Univ. College Addis Ababa. Mimeo.
- Brown D S 1965. Freshwater gastropod Mollusca from Ethiopia. Bull. Brit. Mus. (Nat. Hist.) Zool. 12, 37-94.
- Brown D S 1973a. New species of freshwater Pulmonata from Ethiopia. Proc. malac. soc. Lond. 40, 369-378.
- Brown D S 1973b. The palaeearctic element in Late Quaternary lake faunas of Southern Ethiopia. J. Conch. 28, 79-80.
- Brown D S 1980. Freshwater snails of Africa and their medical importance. Taylor & Francis, Lond., 487 pp.
- Brown D S & A Lemma 1970. The molluscan fauna of the Awash River, Ethiopia, in relation to the transmission of schistosomiasis. Ann. trop. Med. Parasitol. 64, 533-548.
- Brown D S & C A Wright 1972. On a polyploid complex of freshwater snails (Planorbidae: Bulinus) in Ethiopia. J. Zool., Lond. 167, 97-132.
- Brown L H & E K Urban 1969. The breeding biology of the great white pelican Pelecanus onocrotalus roseus at Lake Shala, Ethiopia. Ibis 3, 199-237.
- Brunelli G 1939. Considerazione biogeografiche sulle Caratteristiche dei maggiori Laghi etiopici. Rend. R. Accad. naz. Lincei 29, 281-284.
- Brunelli G 1940a. Considerazioni sulla pesca e la percosita del Tana e modo di irrigliorarla. pp. 215-229. In Missione di Studio al Lago Tana. v. III. Ricerche Limnologiche, parte 2: Chimica e biologia. Reale Accademia d'Italia, Roma, 241 pp.

- Brunelli G 1940b. Le mutazioni del genere Barbus del Lago Tana. pp. 207-213.
 In Missione di Studio al Lago Tana. v. III. Ricerche Limnologiche, parte 2:
 Chimica e biologia. Reale Accademia d'Italia, Roma, 241 pp.
- Brunelli G & G Cannicci 1938. La Caratteristiche biologiche del lago Tana.
Rend. R. Accad. naz. Lincei 27, 319-323.
- Brunelli G & G Cannicci 1939. Ricerche sul plancton del Lago Margherita.
Rend. R. Accad. naz. Lincei 29, 1-4.
- Brunelli G & G Cannicci 1940. Le Caratteristiche biologiche del Lago Tana.
 pp. 69-133. In Missione di Studio al Lago Tana. v. III. Ricerche
 Limnologiche, parte 2, Chimica e biologia. Reale Accademia d'Italia, Roma,
 241 pp.
- Brunelli G & G Cannicci 1941. Ricerche sul plancton e sulle caratteristiche
 biolimnologiche del Lago Margherita. pp. 235-258. In G Brunelli, G Cannicci,
 S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova & G Zolezzi (Eds).
Esplorazione dei Laghi della Fossa Galla. 2 v. Collezione scientifica
 documentaria dell'Africa Italiana. Airoldi, Verbania, Roma, 258 pp.
- Brunelli G, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A
 Vatova & G Zolezzi 1941. Esplorazione dei Laghi della Fossa Galla.
Collezione Scientifica e documentaria dell'Africa Italiana. Airoldi,
 Verbania, Roma, 258 pp.
- Bryce L D 1931. Mr Omer Cooper's investigation of the Abyssinian freshwaters
 (Dr Hugh Scott Expedition). Report on the Rotifera. Proc. Zool. Soc. Lond.
 1931, 865-878.
- Burch J B 1967. Some species of the genus Bulinus in Ethiopia. Malacol. Rev.
 2, 113-114.
- Butzer K W 1971. Recent history of an Ethiopian delta: The Omo River and the
 level of Lake Rudolf. Univ. Chicago Dept. Geogr. Res. Pap. 136, 184 pp.
- Butzer K W 1976. The Mursi, Nkalabong and Kibish Formations, Lower Omo Basin,
 Ethiopia. pp. 12-23. In Y Coppens, F C Howell, G L Isaac Lake & R E F Leakey
 (Eds), Earliest man and environments in the Lake Rudolf Basin. Univ. Chicago
 Press, Chicago.
- Butzer K W, F H Brown & D L Thurber 1969. Horizontal sediments of the Lower
 Omo Valley: the Kibish Formation. Quaternaria 11, 15-30.
- Cannicci G & F Almagia 1947. Notizie sulla "facies" planctonica di alcuni
 laghi della Fossa Galla. Boll. Pesca Piscic. Idrobiol. 23, 2-NS, 54-77
- Carfi S 1974. Contribution to the knowledge of Somalian Odonata. Mon. Zool.
Ital., N.S., Suppl. 5, 147-181.
- Castracane F 1889. Il tripoli africano della valle superiore del Dobi tra
 Assab e Aussa. Atti Acc. Pont. Nuovo Lincei, Roma, 42 pp.
- Cheesman R E 1935. Lake Tana and its islands. Geogr. J., Lond.
- Cheesman R E 1936. Lake Tana and the Blue Nile. MacMillan, Lond. 400 pp.
- Connolly M 1928. On a collection of land and freshwater Mollusca from
 Southern Abyssinia. Proc. Zool. Soc. Lond. 1928, 163-184.
- Consiglio C 1978. Odonata collected in Ethiopia by the expeditions of the
 Accademia nazionale dei Lincei. I. Introduction and the Zygoptera. Atti.
Accad. naz. Lincei, Roma 243, 27-51.
- Dayay von E 1910. Entomosatracs d'eau douce. Collections recueillies par M.
 le Baron de Rothschild dans l'Afrique Orientale (Abyssinie et Ethiopie). Bull.
Mus. Hist. nat., Paris 16, 253-265.
- Dainelli G 1943. Geologia dell'Africa Orientale. R. Acc. Italia, Roma, 4 vols.
- De Filippis N 1940. L'acqua del Lago Hora Abaita. Boll. Idrob. Caccia Pesca
Afr. Orient. Ital. 1, 77-79.
- Demange J, G M Di Paola, J Lavigne, M Lopouckhine & L Stielltjes 1971. Etude
 géothermique du Territoire français des Afars et des Issas. Rapp. 71, SGN 262
 GTH, B.R.G.M., Orléans.
- Descourtieux-Coqueugniot C 1979. Les diatomées du sondage du lac Abiyata
 (Ethiopie) systématique et paléoécologie. Thèse 3ème cycle, Univ. Paris VI,
 76 pp.

- De Toni G B 1892. *Algae Abyssinicae. Alghe dell'Abissinia raccolte nel 1891 dal prof. O. Penzig studiate da G B De Toni.* La Nuova Notarisia, 3 Padova, 96-109.
- Di Paola G M 1972. *The Ethiopian Rift Valley (Between 7° 00' and 8° 40' lat. North).* Bull. volcan. 36, 517-560.
- Dosseur H 1977. *Evaporation au lac Assal.* D.A.F.E.C.O., Div. Hydrol., E.D.F. France, 4 pp. Miméo.
- Duchesne-Fournet J 1909. *Mission en Ethiopie, 1901-1903.* Masson, Paris.
- Dugdale J S 1964. *Ethiopian climates and vegetation: the state of our present knowledge.* J. Semetic studies 9, 250-256.
- Dupuis C E 1936. *Lake Tana and the Nile.* J. Roy. Afr. Soc. 35, 18-25.
- Dussart B 1974. *Contribution à l'étude des Copépodes des eaux douces d'Ethiopie.* Bull. Inst. Fond. Afr. noire, (A Sci. Nat.) 36, 92-116.
- Ercolini A & R Berti 1975. *Light sensitivity experiments and morphology studies of the blind phreatic fish Phreatichthyes andruzzii Vinciguerra from Somalia.* Mon. Zool. Ital., Suppl. 6, 29-43.
- Ercolini A & R Berti 1977. *Morphology and response to light of Uegitglanis zammaranoi Gianferrari, anophthalmic phreatic fish from Somalia.* Mon. Zool. Ital., Suppl. 9, 183-199.
- Ercolini A & R Berti 1978. *Morphology and response to light of Barbopsis devechii Di Caporiacco (Cyprinidae), a croptalmic phreatic fish from Somalia.* Mon. Zool. Ital., Suppl. 10 15, 299-314.
- Fantoli A (Ed.) 1966. *Contributo alla climatologia dell'Etiopia: riassunto dei risultati e tabell meteorologiche e pluviometriche.* Ministero degli Affari Esteri, Roma, 558 pp.
- Ferrara F & B Lanza 1978. *Skotobaena monodi*, espèce nouvelle de Cirolanidé phréatobie de la Somalie (Crustacea, Isopoda). Mon. Zool. Ital., Suppl. 10 6, 105-112.
- Ferrara F & T Monod 1972. Contribution à l'étude de la grotte de Sof Omar (Ethiopie méridionale). 2. Sur un genre nouveau de Cirolanidé troglobie d'Afrique nord-orientale. Ann. Spélisol. 27, 203-204.
- Fittkau E J 1980. A zoogeographical comparison of the Chironomidae from the West Palearctic and Ethiopian faunal regions. pp. 139-149. In D A Murray (Ed.), Chironomidae: Ecology, Systematics, Cytology and Physiology. Pergamon Press, Oxford, 354 pp.
- Fontes J-C, T Florkowski, P Pouchan & G M Zuppi 1979. Preliminary isotopic study of Lake Asal system (Republic of Djibouti). Isotopes in lake studies. pp. 163-174. In Proc. Advisory Group Meeting on the Application of Nuclear Techniques to the Study of Lake Dynamics. Int. Atom. Energy Agency, Vienna 29.08-2.09, 1977.
- Fontes J-C, C Moussie, P Pouchan & M Weidmann 1973. Phases humides au Pléistocène supérieur et à l'Holocène dans le Sud de l'Afar (T.F.A.I.). C. R. hebd. Séances Acad. Sci., Paris D 277, 1973-1976.
- Fontes J-C & P Pouchan 1975. Les cheminées du lac Abbé (T.F.A.I.): stations hydroclimatiques de l'Holocène. C. R. hebd. Séances Acad. Sci., Paris D 280, 383-386.
- Forti A 1910. Diatomée quaternarie et subfossili d'acqua dolce raccolte in Etiopia dal Dott. Giovanni Negri. Atti R. Ist. Veneto Sc., Lett. ed. Arti, Venezia 69, 2.
- Forti A 1932. Diatomée fossili dell'alta valle dell'Uebi Scebeli. pp. 1-8. In S.A.R. il Duca Degli Abruzzi (Ed.), La esplorazione dello Uabi-Uebi Scebeli. Montadori-Milano.
- Frenguelli G 1929. *Algae Bacillariales.* pp. 371-408. In E Chiovenda (Ed.), Flora Somala. Plante raccolte nella penisola somala (1924) dalla Missione Stefanini-Puccioni. Sindacato Italiano arti/grafiche, Roma, 7.
- Funaiol I U & R Roncati 1964. Traditional fishes in Lower Uebi Scebeli (Somalia). J. Rev. Agr. Subtrop. Trop. 58, 250-272.
- Gasse F 1974a. Diatomées des sédiments holocènes du lac Afrera (Afar septentrional, Etiopie). Essai de reconstitution de l'évolution du milieu. Int. Revue ges. Hydrobiol. 58, 941-964.

- Gasse F 1974b. Les diatomées holocènes du bassin inférieur de l'Aouache (Dépression des Danakils, Ethiopie). Leur signification paléoécologique. Int. Revue ges. Hydrobiol. 59, 123-146.
- Gasse F 1974c. Ultrastructure de quelques diatomées fossiles centriques d'Ethiopie, révélée par le microscope électronique à balayage. Revue Algol. 15, 137-153.
- Gasse F 1975. L'évolution des lacs de l'Afar Central (Ethiopie et T.F.A.I.) du Plio-Pléistocène à l'Actuel: Reconstitution des paléomilieux lacustres à partir de l'étude des diatomées. Thèse, Univ. Paris, 6, 406 pp. 3 v.
- Gasse F 1976. Intérêt de l'étude des diatomées pour la reconstitution des paléoénvironnements lacustres. Exemple des lacs d'âge Holocène de l'Afar (Ethiopie et T.F.A.I.). Rev. Géogr. Phys. Géol. Dynam. 18, 199-216.
- Gasse F 1977a. Evolution of Lake Abhé (Ethiopia and T.F.A.I.) from 70 000 B.P. Nature, Lond. 265, 42-45.
- Gasse F 1977b. Les groupements de diatomées planctoniques: base de la classification des lacs Quaternaires de l'Afar Central. pp. 207-234. In Recherches françaises sur le Quaternaire hors de France. Etude Quatern. Comité Nat. franç. de l'I.N.Q.U.A. Bull. Ass. Fr., Suppl., Paris 1, 207-234.
- Gasse F 1978. Les diatomées Holocènes d'une tourbière (4040 m) d'une montagne éthiopienne: le Mont Badda. Rev. Algol., N.S. 113, 105-149.
- Gasse F 1980. Les diatomées lacustres plio-pléistocènes du Gadeb (Ethiopie). Systématique, Paléoécologie, Biostratigraphie. Rev. Algol., Mém. H.S. 3, 249 pp.
- Gasse F & G Delivras 1977. Les lacs de l'Afar Central (Ethiopie et T.F.A.I.) au Pléistocène supérieur. pp. 529-575. In S Horie (Ed.), Paleolimnology of Lake Biwa and the Japanese Pleistocene. v. 4., Kyoto.
- Gasse F & C Descourtieux 1979. Diatomées et évolution de trois milieux éthiopiens d'altitude différente, au cours du Quaternaire supérieur. pp. 117-134. Palaeoecology of Africa. A A Balkema, Rotterdam, 11.
- Gasse F, J C Fontes & P Rognon 1974. Variations hydrologiques et extension des lacs Holocènes du désert danakil. Palaeogeogr. Palaeoclimatol. Palaeoecol. 15, 109-148.
- Gasse F, P Rognon & F A Street 1980. Quaternary history of the Afar and Ethiopian Rift lakes. pp. 361-400. In M A J Williams & H Faure (Eds), The Sahara and the Nile. A A Balkema, Rotterdam, 607 pp.
- Gasse F & L Stieltjes 1973. Les sédiments du Quaternaire récent du lac Asal (Afar Central, Territoire français des Afars et des Issas). Bull. Bur. Rech. Géol. min., 2e sér. 4, 229-245.
- Gasse F & F A Street 1978a. Late Quaternary lake-level fluctuations and environments of the northern Rift Valley and Afar region (Ethiopia and Djibouti). Palaeogeogr. Palaeoclimatol. Palaeoecol. 24, 279-325.
- Gasse F & F A Street 1978b. The main stages of the late Quaternary evolution of the northern Rift Valley and Afar lakes (Ethiopia and Djibouti). Polsk. Arch. Hydrobiol. 25, 145-150.
- Gasse F & F Tekiaia 1979. La paléoécologie des diatomées. Evolution des lacs de l'Afar Central. Les cahiers de l'Analyse des données, Paris 4, 81-94.
- Gentilini B 1936. Sul regime idraulico del lago Tana. Ministero dei Lavori Pubblici. Ann. Lavori Publ. 74, 329-341.
- Germain L 1904. Sur quelques mollusques terrestres et fluviatiles rapportés par M. Ch. Gravier du Désert Somali. Bull. Mus. Hist. Nat., Paris 10, 344-359.
- Gèze F 1974. La région centrale du rift éthiopien. Thèse 3ème cycle, Univ. Paris-Sorbonne, 218 pp.
- Gèze F 1975. New dates on ancient Galla lake levels (Ethiopian Rift Valley.) Bull. geophys. Obs., Addis Ababa 15, 119-124.
- Giovannola A 1937. Schistosomiasis intestinale da S. mansoni nel Harar e sua transmisione con il Planorbis boissyi. Riv. Parassit. 1, 158-162.
- Giovannola A 1939. Ospiti intermedi dello Schistosoma mansoni in Africa Orientale Italiana. Riv. Parassit. 3, 139-144.
- Goll P H 1982. Seasonal changes in the distribution of Biomphalaria sudanica (Martens) in Lake Zwai, Ethiopia. Ann. Trop. Med. Parasit. 76, 159-164.

- Goll P H & F Aweitu 1974a. Mollusc survey in Lake Zwai, 5-8 March 1974. Rep. L.R.D., Addis Ababa, 7 pp. Mimeo.
- Goll P H & F Aweitu 1974b. Further mollusc survey in Lake Zwai, 22-25 October 1974. Rep. L.R.D., Addis Ababa, 11 pp. Mimeo.
- Goll P H & J M Scott 1978. The interrelationship of Lymnea truncatula and ovine fasciolasis in the Ethiopian central highlands. Br. Vet. J. 134, 551-555.
- Graham G W & R P Black 1925. Report of the Mission to Lake Tana 1920-22. Min. Publ. Works Egypt. Govt Press, Cairo, 207 pp.
- Griffiths J F 1972a. Ethiopian highlands. pp. 369-388. In J F Griffiths (Ed.), Climates of Africa. Whd Surv. Climatol. 10, Elsevier, Amsterdam, 604 pp.
- Griffiths J F 1972b. The Horn of Africa. pp 133-166. In J F Griffiths (Ed.), Climates of Africa. Whd Surv. Climatol. 10, Elsevier, Amsterdam, 604 pp.
- Grove A T & G Dekker 1976. Late Quaternary lake levels in the Rift Valley of southern Ethiopia. pp. 405-407. In B Abebe, J Chavaillon & J E G Sutton (Eds), Proc. 7th Panafrican Congress of Prehistory and Quaternary Studies. Ethiopian Min. Culture, Addis Ababa.
- Grove A T & A S Goudie 1971a. Late Quaternary lake levels in the Rift Valley of southern Ethiopia and elsewhere in tropical Africa. Nature, Lond. 234, 403-405.
- Grove A T & A S Goudie 1971b. Secrets of Lake Stefanie's past. Geogr. Mag. 43, 542-547.
- Grove A T, F A Street & A S Goudie 1975. Former lake levels and climatic change in the Rift Valley of southern Ethiopia. Geogr. J. 141, 177-202.
- Hamblin E L 1965. A scheme for the development of the inland fisheries of Ethiopia with special reference to the Rift Valley Lakes. Imperial Ethiopian Govt, Addis Ababa. Mimeo.
- Huang Y M 1979. Aedes (Stegomyia) simpsoni Complex in the Ethiopian region with lectotype designation for Simpson: (Theobald) (Diptera: Culicidae). Mosqu. Syst. 11, 221-234.
- Italconsumit 1970. Meki River Diversion Scheme. Imperial Ethiopian Govt, Addis Ababa. Rome, 5 v.
- Kahl M P 1971. Observations of the breeding of Abdim's Stork at Lake Shala, Ethiopia. Ostrich 42, 233-241.
- Kingham T J 1975. Rainfall records for the southern Rift Valley of Ethiopia. Land Resources Division, U.K. Min. Overseas Devel., Tolworth, Suppl. Rep. 18, 50 pp.
- Kloos H, A Lemma & G Desole 1978. Schistosoma mansoni distribution in Ethiopia: a study in medical geography. Ann. trop. Med. Parasitol. 72, 461-470.
- Kuls W & A Semmel 1965. Zur Frage pluvialzeitlicher Solifluktionsvorgänge im Hochland von Godjam (Äthiopien). Erdkund 19, 292-297.
- Lanza B 1966. Stenasellus pardi sp. n. della Somalia e note sistematiche su gli Stenasellinae (Crustacea, Isopoda). Mon. Zool. Ital., Suppl. I, 221-256.
- Lanza B, L Chelazzi & G Messana 1966. Stenasellus costai sp. n. isopode freatobio gigante della Somalia. Mon. Zool. Ital., Suppl. 3, 133-158.
- Lapeyre L 1939. Le climat de Djibouti, Aix les Bains. Thèse, Paris.
- Largent M J, M Tandy & J Tandy 1978. A new species of toad from the Rift Valley of Ethiopia, with observations on the other species of Bufo (Amphibia: Anura: Bufonidae) recorded from this country. Mon. Zool. Ital., Suppl. 10, 1-41.
- Lézine A M 1981. Le lac Abiyata (Ethiopie) Palynologie et paléoclimatologie du Quaternaire récent. Thèse 3ème cycle, Univ. Bordeaux 1, 125 pp.
- Lézine A M 1982. Etude palynologique des sédiments quaternaires du lac Abiyata (Ethiopie). Paleoecology of Africa. 14, 93-98.
- Lézine A M & R Bonnefille 1982. Diagram of Holocene pollen from a sounding of Lake Abiyata, Ethiopia. Pollen et Spores (France) 24, 463-480.
- Löffler H 1977. Beobachtungen zur Anatidenfauna der Bale-Berge (Äthiopien). Egretta 20, 36-44.

- Löffler H 1979. Limnological and paleolimnological data on the Bale mountain lakes (Ethiopia). Verh. int. Ver. Limnol. 20, 1131-1138.
- Loffredo S 1940. Ricerche chimiche sui sedimenti del Lago Tana. pp. 53-68. In Missione di Studio al Lago Tana. v III, Ricerche Limnologiche, parte 2: Chimica e biologia. Reale Accademia d'Italia, Roma 2, 241 pp.
- Loffredo S & C M Maldura 1941. Risultati generali delle ricerche di chimica limnologica sulle acque dei laghi dell'Africa orientale italia esplorati dalla Missione ittiologica. pp. 181- 200. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova, G Zolezzi (Eds), Esplorazione dei laghi della Fossa Galla. Vol. 2. Collezione scientifica e documentaria dell'Africa Italiana II. Airoldi, Verbania, Roma, 258 pp.
- Lowndes A G 1930. Freshwater Copepoda from Abyssinia collected by Mr. J. Omer-Cooper. Proc. Zool. Soc. Lond. 1930, 161-179.
- Lowndes A G 1932. Report on the Ostracoda. Mr. Omer-Cooper's investigation of the Abyssinian fresh waters (Dr. Hugh Scott's Expedition). Proc. zool. Soc. Lond. 1932, 677-708.
- McKerchar A I & J R Douglas 1974. Lake Zwai Study. Rep., Inst. Hydrol., Wallingford, 65 pp.
- Hakin M J, T J Kingham, A E Waddams, C J Birchall & B W Eavis 1976. Prospects for irrigation development around Lake Zwai, Ethiopia. Land Resources Division, U.K. Min Overseas Devel., Tolworth. Land Resources Study 26, 270 pp.
- Hakin N J, T J Kingham, A E Waddams, C J Birchall & T Teferra 1975. Development prospects in the southern Rift Valley, Ethiopia. Land Resources Division, U.K. Min. Overseas Devel., Tolworth. Land Resources Study 21, 270 pp.
- Mandahl-Barth G 1957. La validita di Bulinus (Physopsis) abyssinicus (Martens), l'ospite intermedio di Schistosoma haematobium in Somalia. Accad. naz. Lincei, Ser. 8 23, 478-481.
- Martelli U 1886. Florula bogosensis, Enumerazione delle piante dei bogos raccolte dal dott. O. Beccari nell'anno 1870 condescrizione della specie nuovo o poco note. Firenze 150-158.
- Martens E Von 1869. Ueber einige abyssinische Schnedken. Malakozool. Bull. 16, 208-215.
- Martini M 1969. Geochemistry of Lake Giulietti (Ethiopia). Renol Soc. Ital. min. Petrol. 25, 65-78.
- Mekuria Y et al. 1978. Culicine mosquitoes (Diptera: Culicidae) of Ethiopia: checklist and distribution. Ethiop. Med. J. 16, 71-93.
- Mesfin Wolde-Mariam 1972. An introductory geography of Ethiopia. Addis Ababa, 215 pp.
- Meskal F H 1970. Trematodes of anurans from Ethiopia. Mat. nat. Ser. 1, Arbok Univ. Bergen, 73 pp.
- Meskal F H 1974. Research report on increasing the freshwater fish stock of Ethiopia. Dept Biol., H.S.I. Univ. Addis Ababa, 14 pp. Mimeo.
- Hessana G, L Chelazzi & B Lanza 1974. Stenasellus migiurtinicus sp. n. isopode freatobio della Somalia settentrionale. Mon. Zool. Ital., Suppl. 5. 19, 325-340.
- Minucci E 1938. Ricerche geologiche nella regione del Tana. pp. 19-36. In Missione di studio al Lago Tana. Vol. I. Relazione preliminari. Reale Accademia d'Italia, Roma, 164 pp.
- Mohr P 1961. The geology, structure and origin of the Bishoftu explosion Craters, Shoa, Ethiopia. Bull. geophys. Obs., Addis Ababa 2, 65-101.
- Mohr P 1966. Geological report on the Lake Langano and adjacent plateau regions. Bull. geophys. Obs., Addis Ababa 9, 59-75.
- Mohr P 1971. The Geology of Ethiopia. Univ. Coll., Addis Ababa Press, 268 pp.
- Morandini G 1938. Ricerche fisiche sul Lago Tana. pp. 57-76. In Missione di studio al Lago Tana. Vol. 1. Relazione preliminari. Reale Accademia d'Italia, Roma, 164 pp.
- Morandini G (Ed.) 1940. Ricerche limnologiche, parte prima, Geografia fisica. In Missione di studio al Lago Tana. Vol 3. Reale Accademia d'Italia, Roma, 319 pp.

- Morandini G 1941. La Carratteristiche morfometriche dei laghi dell'Africa Orientale Italiana esplorati delle Missione Ittiologica. pp. 131-177. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova, G Zolezzi (Eds), Esplorazione dei laghi della fossa Galla. Collezione scientifica e documentaria dell'Africa Italiana. III. Airoldi, Verbania, Roma, Vol. I, 258 pp.
- Morandini G 1942a. Recenti studi limnologici nell'Africa Orientale Italiana. Mem. Ist. Ital. Idrobiol. de Marchi 1, 155-266.
- Morandini G 1942b. Considerazioni studi limnologici in Africa. Boll. Pesca Piscic. Idrobiol. 22, 61-88.
- Morandini G 1947. Osservazioni sullai Temperatura dei laghi della Fossa Galla (Africa Orientale). Arch. Oceanogr. Limnol. 4, 3-20.
- Morelet A 1872. Notice sur les coquilles terrestres et d'eau douce recueillies sur les côtes de l'Abyssinie. Ann. Mus. civ. Stor. nat., Genova 3, 180-201.
- Neumann O 1901. The Erlanger expedition in north East Africa. Geogr. J. 17, 528-529.
- Neumann O 1902. From the Somali coast through southern Ethiopia to the Sudan. Geogr. J. 20, 373-401.
- Neuville H & R Anthony 1905. Première liste de mollusques d'Abyssinie (collection Maurice de Rothschild). Bull. Mus. natn. Hist. nat., Paris 11, 115-117.
- Neuville H & R Anthony 1908. Recherches sur les mollusques d'Abyssinie. Ann. Sci. nat. 9, 241-340.
- Nilsson E 1935. Traces of ancient changes in climate in East Africa: preliminary report. Geogr. Ann. 17, 1-27.
- Nilsson E 1940. Ancient changes of climate in British East Africa and Abyssinia. Geogr. Ann. 22, 1-78.
- Omer-Cooper J 1930. Dr Hugh Scott's Expedition to Abyssinia. A preliminary investigation of the freshwater fauna of Abyssinia. Proc. zool. Soc. Lond. 1930, 195-206.
- Pardi L 1976. L'attività del "Centro di Studio per la Faunistica ed Ecologia Tropicali" del Consiglio Nazionale delle Ricerche nel quinquennio 1971-1976. Mon. Zool. Ital., Suppl. 7 5, 195-269.
- Parent O 1934. Additions à la faune éthiopienne. Bull. Soc. Ent. d'Egypte 18, 112-138.
- Parenzan P 1937a. Per la valorizzazione biologica delle acque interne dell'Impero Italiano d'Ethiopia. Atti III Congr. Studi Col. Firenze 1937.
- Parenzan P 1937b. La Regione Ittica Ciprienoide dell'Impero Italiana d'Ethiopia. L'Africa Italiana. A55, 1937-16, Napoli.
- Parenzan P 1938a. Prodotti del mare e delle Acque Interne, inclusi quelli delle acque africana del fondo di vista sanitario, tecnico-industriale, annonares, merceologico ed alimentare. Technologica 1 Tif. Schavore, (via B, Unies 31) 1938-17, Napoli.
- Parenzan P 1938b. Nota sui pesci del lago Regino Margherita nel Galla e Sidama. Boll. Pesca Piscic. Idrobiol. 14, 3-5.
- Parenzan P 1941a. Sulle possibilità di ripopolamento ittico di laghi africana. Boll. Idrobiol. Cacc. Pesca Afr. orient. Ital., Addis Ababa 1, 89-93.
- Parenzan P 1941b. I pesci del Bacino del Lago Margherita nel Galla e Sidamo. pp. 131-65. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova & G Zolezzi (Eds), Esplorazione dei laghi della Fossa Galla. Vol. 2. Collezione scientifica e documentario dell'Africa Italiana. Airoldi, Verbania, Roma, 258 pp.
- Pellegrin J 1905. Poissons d'Abyssinie et du lac Rodolphe. Bull. Mus. natn. Hist. nat., Paris 11, 290-294.
- Perrott F A 1981. Late Quaternary lakes in the Ziway-Shala Basin, Southern Ethiopia. PhD thesis, Univ. Microfilms Int. Ann Arbor, Michigan, USA. Lond., 493 pp.

- Picchi-Sermoli R E G 1957. Una Carta Geobotanica dell'Africa orientale (Eritrea, Ethiopia, Somalia). Webbia 13, 15-132.
- Piersanti C 1940. Molluschi del lago Tana e delle zone finitime. pp 231-241. In Missione di Studio al lago Tana. Vol. III, Ricerche Limnologiche, parte 2: Chimica e biologia. Reale Accademia d'Italia, Roma, 241 pp.
- Piersanti C 1941. Mollusca. Missione biologica Sagan-Omo 12, 263-281.
- Pinhey E C G 1981. Odonata collected in Ethiopia. III. Anisoptera. Accad. naz. Lincei 252, 5-56.
- Pittwell L R 1967. A theory of secondary ore-body formation, based on a study of coordination associated with Ethiopian and related rivers, especially those of the carbonate, nitrite and halide ions. Dissertation, Haile Sellassie I Univ, Addis Ababa. (No pagination).
- Pittwell L R 1972. Coordination effects in natural waters of Ethiopia. J. Hydrol. Amsterdam 16, 225-228.
- Pollonera C 1888. Molluschi delle Scicoa e della valle dell'Hayash. Bull. Soc. malac. ital. 13, 49-87.
- Pollonera C 1898. Molluschi terrestri e fluviatile dell'Eritrea raccolti dal Generale Boccard. Boll. Mus. Zool. Anat. Comp. R. Univ. Turino 13, 1-13.
- Prosser H V, R B Wood & R M Baxter 1968. The Bishoftu Crater Lakes: A bathymetric and chemical study. Arch. Hydrobiol. 65, 309-324.
- Raunet P 1978a. Le milieu naturel du bassin des lacs Abaya et Chamo, Ethiopie, Rift Valley méridionale. I.R.A.T., Montpellier (pédologie), 104 pp. Mimeo.
- Raunet P 1978b. Reconnaissance géographique et morpho-pédologique dans la Rift Valley éthiopienne. L'Agronomie trop. 33, 43 pp.
- Redda W A 1959. Report on Lake Tana Fisheries. Imperial Ethiopian Govt, Addis Ababa. Mimeo.
- Riché C & P Segalen 1969. La zonalité verticale des sols en Ethiopie du Sud-Est. Bull. Bibliogr. Pédolog. O.R.S.T.O.M. 18, 5-10.
- Riedel D 1961. Report to the Imperial Ethiopian Government on a reconnaissance survey of Lake Abaya (Margherita) Ethiopia, 1960, (FAO).
- Riedel D 1962a. A giant Nile perch from Lake Margherita (Abaya) Ethiopia. Arch. Hydrobiol. 58, 339-342.
- Riedel D 1962b. Der Margheritensee (Sudabessinien) - Zugleich ein Beitrag zu Kenntnis der abessinischen Graben-seen. Arch. Hydrobiol. 58, 435-466.
- Rodhain F, A Boutonnier, B Carteson & D Morvan 1977a. Les Culicidés du Territoire Français des Afars et des Issas. 1. Le genre Anopheles. Bull. Soc. Pathol. Exotique 70, 302-308.
- Rodhain F, A Boutonnier, B Carteson & D Morvan 1977b. Les Culicidés du Territoire Français des Afars et des Issas. 2. Le genre Culex. Bull. Soc. Pathol. Exotique 70, 309-315.
- Rodhain F, A Boutonnier, B Carteson & D Morvan 1977c. Les Culicidés du Territoire Français des Afars et des Issas. 3. Les genres Aedes, Culiseta, Uranotaenia et Mimomy. Bull. Soc. Pathol. Exotique 70, 316-319.
- Ruffo S 1970. Studi sui Crostacei anfipodi. LXIV. Bogidiella somala n. sp. delle acque sotterranee della Somalia (Crustacea, Amphipoda). Mon. Zool. Ital., Suppl. 3, 159-171.
- Rzóska J 1976. Lake Tana, headwaters of the Blue Nile. pp. 223-232. In J Rzóska (Ed.), The Nile, Biology of an Ancient River. Monographiae Biologicae 29, W Junk, The Hague, 417 pp.
- Schaller K F & W Kuls 1972. Ethiopia - A Geomedical Monograph. Geogr. Monogr. Ser. (H J Jusatz, Ed.) 3, Springer-Verlag, Berlin.
- Sciacchitano I 1967. Leeches (Hirudinea) from Ethiopia. J. Nat. Hist. 1, 189-194.
- Scortecci G 1933. Anfibi della Somalia italiana. Atti Soc. Ital. Sci. nat. Mus. Civ. Stora Nat., Milano 72, 5-70.
- Semmel A 1971. Zur jungquartären klima und relief entwicklung in der danakilwüste (ätiopien) undirhen westlichen randgebieten. Erdkunde 25, 199-203.

- Smeds H 1964. A note on recent volcanic activity on the Ethiopian Plateau, as witnessed by a rise of the level of Lake Wonchi 1400 ± 140 BP. Acta geogr. Helsinki 18, 1-32.
- Street F A 1979. Late Quaternary precipitation estimates for the Ziway - Shala basin, southern Ethiopia. Paleoecology of Africa, 11, 135-144. A A Balkema, Rotterdam.
- Street F A 1980. The relative importance of climate and local hydrological factors influencing lake-level fluctuations. Paleoecology of Africa, 12, 137-158. A A Balkema, Rotterdam.
- Street F A 1981. Chronology of late Pleistocene and Holocene lake-level fluctuations, Ziway - Shala basin, Ethiopia. pp. 143- 146. In R E Leakey & B A Ogot (Eds.), Proc. VIII Panfrican Congress of Prehistory and Quaternary Studies. Int. Louis Leakey Memorial Institute for African Prehistory, Nairobi.
- Street F A & A T Grove 1976. Environmental and climatic implications of late Quaternary lake-level fluctuations in Africa. Nature, Lond. 261, 385-390.
- Street-Perrott F A 1982. Twentieth century fluctuations in lake-level in the Ziway - Shala basin, Ethiopia. Palaeoecology of Africa, 15, 99-110. A A Balkema, Rotterdam.
- Suzuki H 1967. Some aspects of Ethiopian climates. Eth. geogr. J. 5, 19-22.
- Taieb M 1974. Evolution quaternaire du bassin de l'Awash (Rift éthiopien et Afar). Thèse DSc, Univ. Paris VI, 390 pp.
- Talling J F 1965. The photosynthetic activity of phytoplankton in East African Lakes. Int. Revue ges. Hydrobiol. 50, 1-32.
- Talling J F 1976. Water characteristics. pp. 357-384. In J Rzóska (Ed.), The Nile, Biology of an Ancient River. Monographiae Biologicae 29, W Junk, The Hague, 417 pp.
- Talling J F & J Rzóska 1967. The development of plankton in relation to hydrological regime in the Blue Nile. J. Ecol. 55, 637-662.
- Talling J F, R B Wood, M V Prosser & R M Baxter 1973. The upper limit of photosynthetic productivity by phytoplankton: evidence from Ethiopian soda lakes. Freshwat. Biol. 3, 53-76.
- Tedla S 1973. Freshwater fishes of Ethiopia. Dept Biol., Haile Sellassie I Univ., Addis Ababa, 101 pp. Mimeo.
- Thiele J 1933. Die von O Neumann in Abessinien gesammelten und einiger andere africanischen Landschnecken. Sitz. Ges. Naturf. Freunde, Berlin 280-323.
- United Nations/FAO 1965. Report on survey of the Awash River basin. Imperial Ethiopian Govt UN Special Fund Project FAO/SF: 10/ETH, Addis Ababa, 5 v.
- United Nations/UNDP 1973. Investigation of geothermal resources for power development: geology, geochemistry and hydrology of the hot springs of the East African rift system within Ethiopia. Tech. Rep., DP:SF/UN/116,UNDP, N.Y., 275 pp.
- Urban E K 1970. Ecology of water birds of four Rift Valley lakes in Ethiopia. Ostrich Suppl. 8, 315-322.
- Urban E K & L H Brown 1971. A checklist of the birds of Ethiopia. The Univ. Press, Addis Ababa, 143 pp.
- Urban E K & T G Jefford 1977. Movement of juvenile Great White Pelicans Pelecanus onocrotalus from Lake Shala, Ethiopia. Ibis 199, 424-428.
- Van Damme D & A Gautier 1972. Molluscan assemblages from the Late Cenozoic of the Lower Omo Basin, Ethiopia. Quat. Res. 2, 25-37.
- Vatova A 1938. Notizie idrografiche sui laghi dell'A.O.I. Rend. R. Acc. Lincei, Rome, Classe Sci. Fis. Mat. Nat. 28, 172- 175.
- Vatova A 1940. Notizie idrografiche e biologiche sui laghi dell'Africa Orientale Italiana. Thalassia 4, 25 pp.
- Vatova A 1941a. Relazione sui risultati idrografici relativi ai laghi dell'Africa Orientale Italiana esplorati dalla Missione Ittiologica. pp. 65-127. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova & G Zolezzi (Eds), Esplorazione dei laghi della Fossa Galla. Vol. 1. Collezione scientifica e documentaria dell'Africa Italiana. III. Airoldi, Verbania, Roma, 258 pp.

- Vatova A 1941b. Dati idrografici relativi ai laghi dell'Africa Orientale Italiana esplorati dalla Missione Iltiologica. pp. 203-232. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova & G Zolezzi (Eds), Esplorazione dei laghi della Fossa Galla. Vol. 1. Collezione scientifica e documentaria dell'Africa Italiana. III. Airolidi, Verbania, Roma, 258 pp.
- Venzo G A 1971. Geological significance of an abandoned ancient channel across the Galla Lakes - Awash River watershed in Ethiopia. Studi Trent. Sci. nat. A 48, 243-254.
- Wenner C G 1967. Reconnoitering Survey of the Water Resources in the Chilalo Awraja, Ethiopia, November 1966 - February 1967. C.A.D.U., Proj. prep. Per. Publ. 4. Chilalo Agric. Devel. Unit, Asella, 39 pp.
- Wenner C G 1970. A Master Plan for Water Resources within CADU's First Project Area. C.A.D.U., Publ. Chilalo Agric. Devel. Unit, Asella.
- Wenner C G 1973a. Continued Research on Water Resources and Supplies within CADU's Project Areas. C.A.D.U., Publ. 83. Chilalo Agric. Devel. Unit, Asella, 75 pp.
- Wenner C G 1973b. A Master Plan for Water Resources and Supplies in Chilalo Awraja. C.A.D.U., Publ. 89. Chilalo Agric. Devel. Unit, Asella, 163 pp.
- Werdecker J 1962. Eine durch querung des Goba - Massino in Sudathiopien. Hermann von Wissmann-Festschrift, Tübingen pp. 132-144.
- Williams M A J, P M Bishop, F M Dakin & I R Gillespie 1977. Late Quaternary lake levels in southern Afar and adjacent Ethiopian Rift. Nature, Lond. 267, 690-693.
- Williams M A J, F M Williams & P M Bishop 1981. Late Quaternary history of Lake Besaka, Ethiopia. Paleoecology of Africa, 13, 93-104. A A Balkema, Rotterdam.
- Wodajo K & A Belay 1984. Species composition and seasonal abundance of zooplankton in two Ethiopian Rift Valley lakes - Lakes Abiata and Langano. In H J Dumont, & J G Tundisi (Eds), Tropical Zooplankton. Hydrobiologia, 113, 129-136.
- Wood C A & R R Lovett 1974. Rainfall, drought and the solar cycle. Nature, Lond. 251, 594-596.
- Wood R B 1968. The production of Spirulina in open lakes. Conf. on preparing Nutritional Protein from Spirulina Stockholm, 13-15 June, 1968, 10 pp. Mimeo.
- Wood R B & M V Prosser 1979. Optical characteristics of the Rift Valley lakes, Ethiopia. Sinet: Ethiop. J. Sci. 1(2), 73-85.
- Wood R B & M V Prosser 1981. A method for counting Microcystis in the phytoplankton. Sinet: Ethiop. J. Sci. 4(1), 57-62.
- Wood R B, M V Prosser & R M Baxter 1969. A seasonal study of stratification in a tropical African lake at 1800 m altitude. Verh. int. Ver. Limnol. 17, 1050-1061.
- Wood R B, M V Prosser & R M Baxter 1976. The seasonal pattern of thermal characteristics of four of the Bishoftu crater lakes, Ethiopia. Freshwat. Biol. 6, 519-530.
- Wright C & D S Brown 1962. On a collection of freshwater gastropod molluscs from the Ethiopian Highlands. Bull. Brit. Mus. (Nat. Hist.) Zool. 8, 287-311.
- Wurzinger K H 1979. Allozymes of Ethiopian Bulinus sericus and Egyptian Bulinus truncatus. Malac. Rev. 12, 51-58.
- Zanon V 1942. Diatomée dei Laghi Galla (A.O.I.). Atti R. Acad. Ital. Mem. 12, 431-568.
- Zavattari E 1941. Vom Djuba-Fluss zum Rudolfsee: Geographisch- Biologische Reisen und Entdeckungen in sudlichen Äthiopien. Mitt. Geogr. Gesell., Wien 84.
- Zavattari E 1942. I laghi Stefano e Rudolfo (seonds risultari della Missione Zavattari 1939 (A.O.I.)). Mem. Ist. Ital. Idrobiol. 1, 77-83.
- Zolezzi G 1940. Descrizione di tre nuovi Ciprinidi raccolti dalla Missione Iltiologica in A.O.I. Boll. Pesca Piscic. Idrobiol. 15, 369-373.
- Zolezzi G 1941a. Descrizione di un nuovo Discognathus dell'fiume Sucrue Etiopia. Boll. Pesca Piscic. Idrobiol. 16(1).

Zolezzi G 1941b. I pesci dei Laghi Minori. In G Brunelli, G Cannicci, S Lofredo, C M Maldura, G Morandini, P Parenzan, A Vatova & G Zolezzi (Eds), Esplorazione dei laghi della Fossa Galla. Vol. 2. Collezione scientifica e documentario dell'Africa Italiana. Airoldi, Verbania, Roma, 258 pp.

6.2: THE GREGORY RIFT AND ADJACENT HIGHLANDS
6.2: LE GREGORY RIFT ET LES HAUTES REGIONS ADJACENTES

PUBLISHED WORKS/TRAVEAUX REALISES

General/Divers

Beadle 1932a,b; Copely 1948; Fuchs 1939; Gunn 1954; Jaeger 1911; Jenkin 1929, 1932, 1936; Makerere Univ. Expedition 1961; Milbrink 1977a,b; Mwalyosi 1981; Nutt 1896; Pielou 1952; Richardson 1964; Tobias 1971; Vareschi et al. 1981.

Geology/Géologie

Baker 1958; Bishop 1975; Coryndon 1975; Eugster 1967, 1970, 1980; Eugster & Hardie 1978; Fuchs 1950; Greenwood 1957; Gubelin 1974, 1976; Guest & Stevens 1951; Hecky 1971, 1977; Issac et al. 1972; Keller et al. 1975; Kondakov & Mushi 1974; Livingstone & Kendall 1969; McCall 1957, 1967; Owen 1981; Richardson 1964, 1966; Thompson & Dodson 1963; Tiercelin 1981; Tiercelin & Le Fournier 1980; Tiercelin et al. 1980, 1981; Washbourn 1967; Washbourn-Kamau 1970, 1971, 1972; Young & Renaut 1979.

Geomorphology/Géomorphologie

Banister & Clarke 1980; White 1953.

Hydrology/Hydrologie

Brind et al. 1958; Gaudet 1977; Gaudet & Melack 1981; Kenya Ministry of Works (Hydrology) 1958, 1964; McCall 1957; Nimira 1976; Sikes 1936; Vincent et al. 1979; Washbourn-Kamau 1971, 1972; White 1953.

Climate/Climat

Deevey 1953; Griffiths & Gwynne 1962; Gunn 1973; Richardson & Richardson 1972; Vincent et al. 1979; Washbourn 1967; White 1953.

Palaeolimnology/Paléolimnologie

Bishop 1975; Chapman & Brook 1975; Deevey 1953; Hecky, 1971; Holdship 1976; Richardson 1968; Richardson & Richardson 1972; Washbourn 1967; Washbourn-Kamau 1970, 1971, 1972.

Geochemistry/Géochimie

Herbin 1980; Jones et al. 1976.

Physico-chemistry/Physicochimie

Beadle 1932a,b; Beauchamp 1953; Coe 1967; East African Freshwater Fisheries Research Organisation 1954-1973, 1976; Eddy et al. 1981; Eugster 1967, 1970, 1980; Eugster & Hardie 1978; Eugster & Jones 1968; Gaudet 1975, 1977, 1978b, 1979; Gaudet & Melack 1981; Gaudet & Muthuri 1981a,b; Hecky 1977; Hecky & Kilham 1973; Herbin 1980; Jenkin 1929; Jones et al. 1976; Kalff 1983; Kilham 1982; Limnological investigation of lakes in Kenya 1976-1977; Lind 1965a; McIntyre & Melack 1982; Mann 1964a,b; Melack 1979b, 1981, 1982; Melack & Kilham 1974; Melack et al. 1982; Ministry of Water Development 1978; Pappe & Richmond 1971; Peters & McIntyre 1976; Reite et al. 1974; Stevens 1932; Stoffers & Holdship 1976; Surdam & Eugster 1976; Talling 1957; Vareschi 1982; Vareschi et al. 1981.

Bacteria

Bauld 1981; Grant et al. 1979; Kilham 1981; Sileo et al. 1979; Tindall 1980; Tindall et al. 1980

Algae/Algues

Evans 1960; Hecky & Kilham 1973; Heimpel 1978; Kallqvist & Meadows 1978; Lind 1965a,b; Melack 1979a,b, 1981, 1982; Melack & Kilham 1974; Melack et al. 1982; Milbrink 1977a; Rich 1932; Richardson 1968, 1969; Talling 1957, 1965; Tuite 1981; Vareschi 1978, 1979, 1982.

Macrophytes

Albrecht 1964; Beadle 1932a,b; Blacklund 1956; Gaudet 1975, 1976, 1977, 1978a,b, 1979; Greenway & Vesey-Fitzgerald 1969, 1972; Hiscock 1970; Kutilek 1974; L.N.S.C. Report 1970; Mwalyosi 1977a, 1983; Vesey-Fitzgerald 1965, 1973.

Invertebrates/Invertébrés

Beauchamp 1932; Cox & Young 1973; East African Freshwater Fisheries Research Organisation 1954-1973, 1976; Green 1967, 1971; Greichus et al. 1978; Gunn 1954; Hutchinson 1932; Jenkin 1934; Jones & Khalil 1980; Kallqvist & Meadows 1978; Khamala 1975; Lindqvist & Mikkola 1979; Lowery & Mendes 1977a,b; Lowndes 1933, 1936; Mavuti 1975, 1983; Mavuti & Litterick 1981; Mikkola 1978; Njogu & Kinoti 1971; Nogrady 1983; Parker 1974; Pejler 1974; Vareschi & Jacobs 1984; Vareschi & Vareschi 1984; Worthington & Ricardo 1936b; Young 1976.

Fish/Poissons

Banister & Clarke 1980; Coe 1966, 1967, 1969; East African Freshwater Fisheries Research Organisation 1954-1973, 1976; Eddy et al. 1981; Elder 1966; Elder & Garrod 1961; Elder et al. 1971; Greenwood 1957; Greichus et al. 1978; Hyder 1970; Lowe-McConnell 1955; Malvestuto 1974, 1975; Mann 1971; Mann & Ssentongo 1969; Okorie 1975; Reite et al. 1974; Ricardo 1939a,b; Siddiqui 1977a,b, 1979a,b; Ssentongo 1974; Vareschi 1979; Vareschi et al. 1981; Vareschi & Vareschi 1984; Worthington & Ricardo 1936a.

Fisheries/Pêchères

East African Freshwater Fisheries Research Organisation 1954-1973, 1976; Garrod & Elder 1960; Malvestuto 1974; Mann 1964a,b, 1965; Nhwani 1973; Okaronen 1975; Okorie 1972a,b, 1975; Okorie & Ssentongo 1971; Siddiqui 1977a; Ssentongo 1972, 1974; Ssentongo & Okorie 1971; Swynnerton 1939, 1947.

Amphibia/Reptilia

Welman & Worthington 1943.

Aves

Bartholomew & Pennycuick 1973; Berg & Schlosser 1979; Brown 1958, 1971a,b; Brown & Hopcraft 1973; Brown et al. 1973; Cooper et al. 1975; Immelmann 1969; Jones & Khalil 1980; Lundberg & Tallmark 1973; Milbrink 1977b; Morgan-Davies 1960; Peterson 1970; Reynolds 1977; Ridley & Percy 1953; Sileo et al. 1978, 1979; Stroh 1959; Tuite 1979; Vareschi 1978; Vesey-Fitzgerald 1954, 1965; Watson et al. 1970.

Mammalia

Gosling 1976; Kilham 1982; Kutilek 1974; Mwalyosi 1977b, 1981, 1983; Rogers 1978, 1982; Vesey-Fitzgerald 1965, 1969; Watson & Turner 1965.

Pollution

Brown 1971a; Brown & Hopcraft 1973; Greichus et al. 1978; Kallqvist & Meadows 1978; Koeman et al. 1972; Limnological investigation of lakes in Kenya 1976-1977; Lincer et al. 1981; Ministry of Water Development 1978.

Conservation

Mikkola 1978; Milbrink 1977b; Myers 1974; Nakuru update 1977; Nhwani 1973; Okorie 1972a,b; Rogers 1978; Vesey-Fitzgerald 1969.

BIBLIOGRAPHY/BIBLIOGRAPHIE

- Albrecht F O 1964. Natural changes in grass zonations in the Rukwa Valley, Tanganyika. S. Afr. J. Agric. Sci. 7, 123-130.
- Baker B H 1958. The Geology of the Magadi area. Geological Survey of Kenya, Report No. 42. Govt Printer, Nairobi, Kenya, 18 pp.
- Banister K E & M A Clarke 1980. A revision of the large Barbus (Pisces, Cyprinidae) of Lake Malawi with a reconstruction of the history of the southern African Rift Valley lakes. J. Nat. Hist. 14, 483-542.
- Bartholomew G A & C J Pennycuick 1973. The flamingo and pelican populations of the Rift Valley lakes 1968-69. E. Afr. Wildl. J. 11, 189-198.
- Bauld J 1981. Occurrence of benthic microbial mats in saline lakes. Hydrobiologia 81, 87-111.
- Beadle L C 1932a. Scientific results of the Cambridge Expedition to the East African lakes, 1930-31. 3. Observations on the bionomics of some East African swamps. Zool. J. linn. Soc. 38, 135-155.
- Beadle L C 1932b. Scientific results of the Cambridge Expedition to the East African lakes, 1930-31. 4. The waters of some East African lakes in relation to their flora and fauna. Zool. J. linn. Soc. 38, 157-211.
- Beauchamp P de 1932. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. III - Rotifères des Lacs de la Vallée du Rift. Ann. Mag. Nat. Hist. (Ser. 10) 9, 158-165.
- Beauchamp R S A 1953. Sulphates in African inland waters. Nature, Lond. 171, 769-771.
- Berg-Schlosser G 1979. Slender-billed gull Larus genei on Lake Nakuru, Kenya. Vogelwarte (W. Germany) 30, 145-146.
- Bishop W W 1975. Stratigraphy and sedimentary environments of the Baringo basin, Kenya. J. Geol. Soc., Lond. 131, 545-546.

- Blacklund H O 1956. Aspects and succession of some grassland vegetation in the Rukwa Valley. Oikos Suppl. 2, 1-132.
- Brind W, J Robertson, D Probhake & F England 1958. The hydrology of Lake Naivasha. Section of Hydrology, Ministry of Works, Kenya, 9 pp.
- Brown L H 1958. The breeding of the greater flamingo Phoenicopterus ruber at Lake Elmenteita, Kenya Colony. Ibis 100, 388-420.
- Brown L H 1971a. All's well (so far) at Lake Naivasha. Africana 4, 11-12.
- Brown L H 1971b. The flamingos of Lake Nakuru. New Scient. 51, 97-101.
- Brown L H & J B D Hopcraft 1973. Population structure and dynamics in the African fish eagle, Haliaeetus vocifer (Daudin) at Lake Naivasha, Kenya. E. Afr. Wildl. J. 11, 255-270.
- Brown L H, D Powell-Cotton & J B D Hopcraft 1973. The breeding of the greater flamingo and great white pelican in East Africa. Ibis 115, 352-374.
- Chapman G R & M Brook 1975. Chronostratigraphy of the Baringo basin, Kenya.
- Coe H J 1966. The biology of Tilapia grahami Boulenger in Lake Magadi, Kenya. Acta Trop. 23, 146-177.
- Coe H J 1967. Local migration of Tilapia grahami Boulenger in Lake Magadi, Kenya in response to diurnal temperature changes in shallow water. E. Afr. Wildl. J. 5, 171-174.
- Coe H J 1969. Observations on Tilapia alcalica in Lake Natron, Tanzania. Rev. Zool. Bot. afr. 80, 1-14.
- Cooper J E, L Karstad & E Boughton 1975. Tuberculosis in lesser flamingos in Kenya. J. Wildl. Dis. 11, 32-36.
- Copely H 1948. Lakes and Rivers of Kenya. Longmans, Green & Co., Nairobi.
- Cox N & J O Young 1973. A new species of Hydra (Coelenterata) from Kenya, East Africa. J. Zool. 170, 441-449.
- Deevey E S 1953. Paleolimnology and climate. pp. 273-318. In Climatic change: evidence, causes and effects. Harvard Univ. Press, Cambridge, Massachusetts.
- East African Freshwater Fisheries Research Organisation 1953-1973. Annual Reports for 1953, 1959, 1960, 1964, 1968, 1969, 1972, 1973.
- East African Freshwater Fisheries Research Organisation 1976. Director's Report. Jinga, Uganda.
- Eddy F B, O S Bamford & G M O Maloiy 1981. Na^+ and Cl^- effluxes and ionic regulation in Tilapia grahami, a fish living in conditions of extreme alkalinity. J. exp. Biol. 91, 349-353.
- Elder H Y 1966. Report on investigation into the Tilapia population of Lake Naivasha, Kenya 1966. E. Afr. Freshwat. Fish. Res. Orgsn. Occas. Pap. 1.
- Elder H Y & D J Garrod 1961. A natural hybrid of Tilapia nigra and Tilapia leucosticta from Lake Naivasha, Kenya Colony. Nature, Lond. 191, 722-724.
- Elder H Y, D J Garrod & P J Whitehead 1971. Natural hybrids of the African cichlid fishes Tilapia spilurus nigra and T. leucosticta, a case of hybrid introgression. Biol. J. Linn. Soc. 3, 103-146.
- Eugster H P 1967. Hydrous sodium silicates from Lake Magadi, Kenya: precursors of bedded chert. Science (Washington) 157, 1177-1180.
- Eugster H P 1970. Chemistry and origin of the brines of Lake Magadi, Kenya. pp. 215-235. In B A Morgan (Ed.), Mineralogy and chemistry of non-marine evaporites. Mineral Society of America, Special Paper 3.
- Eugster H P 1980. Lake Magadi, Kenya, and its precursors. In A Nissenbaum (Ed.) Hypersaline brines and evaporite environments. Elsevier, N.Y.
- Eugster H P & L A Hardie 1978. Saline lakes. In A Lerman (Ed.) Lakes: Chemistry, Geology and Physics. Springer-Verlag, N.Y.
- Eugster H P & B F Jones 1968. Gels composed of Sodium-Aluminium silicate from Lake Magadi, Kenya. Science (Washington) 161, 160-163.
- Evans J H 1960. Algological studies. E. Afr. Freshwat. Fish. Res. Orgsn. Ann. Rep., 1960.
- Fuchs V 1939. The Lake Rukwa Expedition. Geogr. J. 94, 369-387.
- Fuchs V 1950. Pleistocene events in the Baringo basin, Kenya Colony. Geol. Mag. 87, 149-174.
- Garrod D J & H Y Elder 1960. The fishery on Lake Naivasha. E. Afr. Freshwat. Fish. Res. Orgsn. Ann. Rep., 1960.

- Gaudet J J 1975. Mineral concentrations in papyrus in various African swamps. *J. Ecol.* 63, 483-491.
- Gaudet J J 1976. *Salvinia* infestation on Lake Naivasha, East Africa. pp. 193-209. In *Proc. U.N.E.S.C.O. Regional Seminar on noxious aquatic vegetation in the tropics and sub-tropics*. W Junk, The Hague.
- Gaudet J J 1977. Natural drawdown on Lake Naivasha (Kenya) and the origin of papyrus swamps. *Aquat. Bot.* 3, 1-47.
- Gaudet J J 1978a. Control of aquatic weeds on Lake Naivasha, Kenya. pp. 57-65. In *Proc. 6th East African Weed Science Conference*, 1976.
- Gaudet J J 1978b. Effects of a tropical swamp on water quality. *Verh. int. Ver. Limnol.* 20, 2202-2206.
- Gaudet J J 1979. Seasonal changes in nutrients in a tropical swamp: North Swamp, Lake Naivasha, Kenya. *J. Ecol.* 67, 953-981.
- Gaudet J J & J M Melack 1981. Major ion chemistry in a tropical African lake basin. *Freshwat. Biol.* 11, 309-334.
- Gaudet J J & F M Muthuri 1981a. Nutrient relationships in shallow water in an African lake, Lake Naivasha. *Oecologia* 49, 109-118.
- Gaudet J J & F M Muthuri 1981b. Nutrient regeneration in shallow tropical lake water. *Verh. int. Ver. Limnol.* 21, 725-729.
- Gosling L M 1976. Cypus in Kenya; a preliminary survey. Rep. to Ministry of Water Development, Kenya Govt, 35 pp. Mimeo.
- Grant W D, A A Mills & A K Schofield 1979. An alkalophilic *Ectothiorhodospira* sp. from a Kenya soda lake. *J. Gen. Microbiol.* 110, 137-142.
- Green J 1967. Associations of Rotifera in the zooplankton of the lake sources of the White Nile. *J. Zool.* 151, 343-378.
- Green J 1971. Associations of Cladocera in the zooplankton of the lake sources of the White Nile. *J. Zool.* 165, 373-414.
- Greenway P J & D F Vesey-Fitzgerald 1969. The vegetation of Lake Manyara National Park, Tanzania. *J. Ecol.* 57, 127-149.
- Greenway P J & D F Vesey-Fitzgerald 1972. Annotated list of plants occurring in Lake Manyara National Park. *J. E. Afr. Nat. Hist. Soc.* 28, 1-29.
- Greenwood P H 1957. Fish remains from the Mumbwa Cave, Lake Eyasi. *Mitt. Geol. Inst. Hamburg* 26, 125-130.
- Greichus Y A, A Greichus, B D Ammann & J Hopcraft 1978. Insecticides, poly-chlorinated bi-phenyls and metals in African lake ecosystems, Part 3, Lake Nakuru, Kenya. *Bull. Envir. Contam. Toxicol.* 19, 454-461.
- Griffiths J F & M D Gwynne 1962. The climate of Kenya Masailand. *E. Afr. agric. For. J.* 28, 1-6.
- Gubelin E J 1974. The emerald deposits at Lake Manyara, Tanzania. *Lapidary J. (San Diego)* 28, 338-347.
- Gubelin E J 1976. Alexandrite from Lake Manyara, Tanzania. *Gems & Gemology (Los Angeles)* 15, 203-209.
- Guest N J & J A Stevens 1951. Lake Natron, its springs, rivers, brines and visible saline reserves. Geological Survey of Tanganyika, Mineral Resources Pamphlet No. 58, 21 pp.
- Gunn D L 1954. A history of Lake Rukwa and the red locust. *Tanganyika Notes Rec.* 42, 1-14.
- Gunn D L 1973. Consequences of cycles in East African climate. *Nature, Lond.* 242, 457.
- Hecky R E 1971. *The paleolimnology of the African saline lakes of the Mount Meru lahar*. PhD thesis, Duke Univ., 209 pp.
- Hecky R E 1977. The use of diatom microfossils in interpreting the distribution of pore water solutes in Small Momela Lake (Tanzania). pp. 197-202. In H L Golterman (Ed.), *Interactions between sediments and freshwater*, W Junk, The Hague.
- Hecky R E & P Kilham 1973. Diatoms in alkaline, saline lakes: ecology and geochemical implications. *Limnol. Oceanogr.* 18, 53-71.
- Heimpel H 1978. *Spirulina platensis*, a blue-green alga from the Nakuru Lake, Kenya, Africa. *Mikrokosmos* 67, 361-362.

- Herbin J P 1980. Géochimie organique des sédiments récents du lac Bogoria, Rift Gregory, Kenya. Rech. géol. Afr., C.N.R.S., Paris 5, 140-142.
- Hiscock R 1970. Results of Salvinia control project. Lake Naivasha Fisheries Station Rep. RN/3, Naivasha, Kenya.
- Holdship S A 1976. The paleolimnology of Lake Manyara, Tanzania: a diatom analysis of a 56 m sediment core. PhD thesis, Duke Univ., 121 pp.
- Hutchinson G E 1932. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. II. Notonectidae. Pleidae, and Corixidae from the Rift Valley lakes in Kenya. Ann. Mag. Nat. Hist. (Ser. 10) 9, 323-329.
- Hyder M 1970. Gonadal and reproductive patterns in Tilapia leucosticta (Teleostei: Cichlidae) in an equatorial lake, Lake Naivasha, Kenya. J. Zool., Lond. 162, 179-195.
- Immelmann K 1969. Nakuru, the sea of flamingos. Vogel Kosmos 3, 97-99.
- Isaac G L, H V Merick & C M Nelson 1972. Stratigraphic and archeological studies in the Lake Nakuru basin, Kenya. Palaeoecology of Africa and surrounding islands including Antarctica 6, 225-232.
- Jaeger F 1911. Das Hochland der Riesenkrater und die umliegenden Hochländer Deutsch-Ostafrikas. Mitt. Deutsch Schutz. 1.
- Jenkin P H 1929. Biology of lakes in Kenya. Nature, Lond. 124, 574.
- Jenkin P H 1932. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. I - Introductory account of the biological survey of five freshwater and alkaline lakes. Ann. Mag. Nat. Hist. (Ser. 10) 9, 533-552.
- Jenkin P H 1934. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. VI - Cladocera from the Rift Valley lakes in Kenya. Ann. Mag. Nat. Hist. (Ser. 10) 13, 137-308.
- Jenkin P H 1936. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. VII - Summary of the ecological results, with special reference to the alkaline lakes. Ann. Mag. Nat. Hist. (Ser. 10) 18, 133-181.
- Jones A & L F Khalil 1980. Helminth parasites of the lesser flamingo Phoeniconaias minor from Lake Nakuru, Kenya, including a cestode Phoenicolepis nakuruensis nov. gen., nov. sp. Syst. Parasit. 2, 61-76.
- Jones B F, H P Eugster & S L Rettig 1976. Hydrochemistry of the Lake Magadi basin, Kenya. Geochim. Cosmochim. Acta 41, 53-72.
- Kalff J 1983. Phosphorus limitation in some tropical African lakes. Hydrobiologia 100, 101-112.
- Kallqvist T & B S Meadows 1978. The toxic effect of copper on algae and rotifers from a soda lake, Lake Nakuru, East Africa. Wat. Res. 12, 771-776.
- Keller C H, C Hansen & C S Alexander 1975. Archeology and paleoenvironments in the Manyara and Engaruka basins, northern Tanzania. Geogr. Rev. (N.Y.) 65, 364-376.
- Kenya Ministry of Works (Hydrology) 1958. The hydrology of Lake Naivasha. Himeo.
- Kenya Ministry of Works (Hydrology) 1964. Lake Naivasha, level variations since 1880. Drawing No. L2/5.
- Khamala C P M 1975. Breeding habitats and biting activities of Culicoides (Diptera: Ceratopogonidae) at Lake Nakuru National Park, Kenya, with special reference to C. trifasciellus Goetghebuer. E. Afr. Med. J. 52, 405-412.
- Kilham P 1981. Pelagic bacteria: extreme abundance in African saline lakes. Naturwissenschaften 68, 380-381.
- Kilham P 1982. The effect of hippopotamuses (Hippopotamus amphibius) on potassium and phosphate ion concentrations in an African soda lake. Am. Midl. Nat. 108, 202-205.
- Koeman J H, J H Pennings, J J M De Goeij, P S Tjioe, P M Olindo & J Hopcraft 1972. A preliminary survey of the possible contamination of Lake Nakuru, Kenya with some metals and chlorinated hydrocarbon pesticides. J. appl. Ecol. 9, 411-416.
- Kondakov L A & D M Mushi 1974. On the problem of the origin of the salt deposits in the Lake Natron area, Tanzania. Bull. Acad. Sci. USSR: Geol. Ser. 4, 111-124.

- Kutilek M J 1974. The density and biomass of large mammals in Lake Nakuru National Park. E. Afr. Wildl. J. 12, 201-212.
- Limnological investigation of lakes in Kenya 1976-77. Tech. Rep. No.6, Water Quality and pollution control section, Min. Water Devel., Kenya, 71 pp. (1978).
- Lincer J L, D Zalkind, L H Brown & J Hopcraft 1981. Organochlorine residues in Kenya's Rift Valley lakes. J. appl. Ecol. 18, 157-171.
- Lind E M 1965a. The phytoplankton of some Kenya waters. J. E. Afr. Nat. Hist. Soc. 25, 76-91.
- Lind E M 1965b. Notes on the distribution of phytoplankton in some Kenya waters. Brit. Phycol. Bull. 3, 481-493.
- Lindqvist O V & H Mikkola 1979. On the etiology of the muscle wasting disease in Procambarus clarkii in Kenya. Freshwater Crayfish 4, 363-372.
- Livingstone D & R L Kendall 1969. Stratigraphic studies of East African lakes. Mitt. int. Ver. Limnol. 17, 147-153.
- L.N.S.C. Report 1970. Lake Naivasha Salvinia control. Report of a meeting held November 1970. Lake Naivasha Riparian Owners Assn, PO Box 28, Naivasha, Kenya.
- Lowe R H 1955. New species of Tilapia (Cichlidae) from Lake Jipe and the Pangani River. Bull. Brit. Mus. (Nat. Hist.) Zool. 2, 349-368.
- Lowery R S & A J Mendes 1977a. Procambarus clarkii in Lake Naivasha, Kenya, and its effects on established and potential fisheries. Aquacult. 11, 111-121.
- Lowery R S & A J Mendes 1977b. The biology of Procambarus clarkii in Lake Naivasha, Kenya: with a note on its distribution. Freshwater Crayfish 3, 203-210.
- Lowndes A G 1933. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. V - Copepods from the Rift Valley lakes in Kenya. Ann. Mag. Nat. Hist. (Ser. 10) 11, 307-313.
- Lowndes A G 1936. Scientific Results of the Cambridge Expedition to the East African lakes 1930-31. NO. 16. The smaller Crustacea. Zool. J. linn. Soc. 40, 1-31.
- Lundberg A & B Tallmark 1973. Lake Naivasha and Lake Nakuru, an ecological comparison between two bird lakes in East Africa. Fauna och Flora (Stockholm) 68, 1-15.
- MacIntyre S & J M Melack 1982. Meromixis in an equatorial African soda lake. Limnol. Oceanogr. 27, 595-609.
- Makerere Univ. Expedition 1961. A general report. Makerere Univ. Library, Kampala, Uganda.
- Malvestuto S P 1974. The fishes of Lake Naivasha: their biology, exploitation, and management. Rep. to the Director of Fisheries, Kenya Govt, 37 pp. Mimeo.
- Malvestuto S P 1975. Contracaecumosis of Tilapia leucosticta in Lake Naivasha, Kenya. MSc thesis, Univ. Nairobi.
- Mann M J 1964a. Report on a fisheries survey of Lake Rukwa, Tanganyika. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1962/63, pp. 42-52.
- Mann M J 1964b. The fisheries of Lake Rukwa, Tanganyika. E. Afr. Freshwat. Fish. Res. Orgsn, Occ. Pap. 6.
- Mann M J 1965. Report on a fisheries survey of Lake Kitangiri. E. Afr. Freshwat. Res. Orgsn, Ann. Rep., 1964, pp. 43-49.
- Mann M J 1971. Some taxonomical notes on the fish fauna of the Baringo area. Afr. J. trop. Hydrobiol. Fish. 1, 25-34.
- Mann M J & G W Ssentongo 1969. A note on the Tilapia populations of Lake Naivasha in 1968. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1968, pp. 28-31.
- Mavuti K 1975. Some aspects of the biology of the genera Sigara and Miconecta from Lake Nakuru. MSc thesis, Univ. Nairobi, Kenya.
- Mavuti K M 1983 Studies on the community structure, population dynamics and production of the limnetic zooplankton in a tropical lake, Lake Naivasha, Kenya. PhD thesis, Univ. Nairobi, Kenya, 210 pp.

- Havuti K H & M R Litterick 1981. Species composition and distribution of zooplankton in a tropical lake, Lake Naivasha, Kenya. Arch. Hydrobiol. 93, 52-58.
- McCall G J H 1957. Geology and ground water conditions in the Nakuru area. Tech. Rep. 3, Min. Works, Kenya Govt. Govt Printer, Nairobi, 55 pp.
- McCall G J H 1967. Geology of the Nakuru-Thompson's Falls-Lake Hannington area. Geol. Survey Kenya Rep. 78, Govt Printer, Nairobi, 122 pp.
- Melack J M 1979a. Photosynthesis and growth of Spirulina platensis (Cyanophyta) in an equatorial lake (Lake Simbi, Kenya). Limnol. Oceanogr. 24, 753-760.
- Melack J M 1979b. Photosynthetic rates in four tropical African freshwaters. Freshwat. Biol. 9, 555-571.
- Melack J M 1981. Photosynthetic activity of phytoplankton in tropical African soda lakes. Hydrobiologia 81, 71-85.
- Melack J M 1982. Photosynthesis and respiration in an equatorial African soda lake. Freshwat. Biol. 12, 381-400.
- Melack J M & P Kilham 1974. Photosynthetic rates of phytoplankton in East African, saline lakes. Limnol. Oceanogr. 19, 743-755.
- Melack J M, P Kilham & T R Fisher 1982. Responses of phytoplankton to experimental fertilisation with ammonium and phosphate in an African soda lake. Oecologia (Berlin) 52, 321-326.
- Hikkola H 1978. Ecological and social problems in the use of crayfish, Procambarus clarkii in Kenya. Freshwater Crayfish 4, 197-206.
- Milbrink G 1977a. On the limnology of two alkaline lakes, Nakuru and Naivasha, in the East Rift Valley system of Kenya. Int. Revue ges. Hydrobiol. 62, 1-18.
- Milbrink G 1977b. Nakuru, a bird paradise in danger. Fauna och Flora (Stockholm) 72, 164-174.
- Ministry of Water Development 1978. Limnological investigation of lakes in Kenya 1976-77. Tech. Rep. 6, Water quality and pollution control section, Nairobi, 71 pp.
- Morgan-Davies A M 1960. A nesting colony of avocets at Lake Manyara, Tanganyika. J. E. Afr. Nat. Hist. Soc. 23, 241-243.
- Mwalyosi R B B 1977a. Vegetation changes in Lake Manyara National Park. MSc thesis, Univ. Dar-es-Salaam, Tanzania.
- Mwalyosi R B B 1977b. A count of large mammals in Lake Manyara National Park. E. Afr. Wildl. J. 15, 333-336.
- Mwalyosi R B B 1981. Ecological changes in Lake Manyara National Park. Afr. J. Ecol. 19, 201-204.
- Mwalyosi R B B 1983. Utilization of pastures in Lake Manyara National Park, Tanzania. Afr. J. Ecol. 21, 135-138.
- Myers N 1974. The ecologic/socioeconomic interface of wildlife conservation in emergent Africa: Lakes Nakuru and Naivasha in Kenya. J. Environ. Econom. Mangmt 1, 319-334.
- Nakuru update. 1977. Environ. Policy & Law 3, 155.
- Nhwani L B 1973. Preliminary report on Lake Babati fishery. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1973.
- Nimira J K 1976. Estimation of evaporation over Lake Nakuru using the aerodynamic energy budget, Penman and water budget methods. MSc thesis, Univ. Nairobi, Kenya.
- Njogu A R & G K Kinoti 1971. Observations on the breeding sites of mosquitoes in Lake Manyara, a saline lake in the East African Rift Valley. Bull. ent. Res. 60, 473-479.
- Nogrady T 1983. Succession of planktonic rotifer populations in some lakes of the Eastern Rift Valley, Kenya. Hydrobiologia 98, 45-54.
- Nutt W H 1896. Journey to Lake Rukwa. Geogr. J. 7, 427-428.
- Okaronen J O 1975. Experimental fisheries resource surveys of Lakes Wamala, Kijanebalola and Rukwa. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1975, pp. 19-22.

- Okorie O O 1972a. Experimental fisheries surveys in some East African lakes. *E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep.*, 1972, pp. 39-54.
- Okorie O O 1972b. On the management of the Lake Naivasha fishery. *E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep.*, 1972, pp. 18-23.
- Okorie O O 1975. On the ecology and exploitation of the fisheries of an East African Rift Valley lake. Part I. On the bionomics and population structure of *Tilapia nilotica* in Lake Baringo, Kenya. *Afr. J. trop. Hydrobiol. Fish. Spec. Issue 4*.
- Okorie O O & G W Ssentongo 1971. Evaluation of fishery resources in the East African lakes. *E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep.*, 1971, pp. 39-43.
- Owen R B 1981. Quaternary diatomaceous sediments and the geological evolution of Lakes Turkana, Baringo and Bogoria, Kenya Rift Valley. PhD thesis, Univ. London, 474 pp.
- Pappe A & H D Richmond 1980. A Central African salt lake. *J. Soc. Chem. Industry* 9, 734-?
- Parker I S C 1974. The status of the Louisiana red swamp crayfish (*P. clarkii* (Girard)) in Lake Naivasha. *I.S.C. Parker Wildl. Serv.*, Nairobi, 45 pp.
- Pejler B 1974. On the rotifer plankton of some East African lakes. *Hydrobiologia* 44, 389-396.
- Peters R H & S MacIntyre 1976. Orthophosphate turnover in East African lakes. *Oecologia* 25, 313-319.
- Peterson R B 1970. Baharini beside the lake. *Maine Field Nat.* 27, 2-5.
- Pielou E C 1952. Notes on the Rukwa Rift Valley, Tanganyika. *J. Ecol.* 40, 383-392.
- Reite O B, G M O Maloiy & B Aasehang 1974. pH, salinity and temperature tolerance of Lake Magadi *Tilapia*. *Nature, Lond.* 247, 315.
- Reynolds J F 1977. Attempted Food piracy by gull-billed terns. *Brit. Birds* 70, 392-393.
- Ricardo C K 1939a. Report on the fish and fisheries of Lake Rukwa in Tanganyika Territory and the Bangweulu Region in Northern Rhodesia. Crown Agents, London.
- Ricardo C K 1939b. The fishes of Lake Rukwa. *Zool. J. linn. Soc.* 40, 625-657.
- Rich F 1932. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. IV - Phytoplankton from the Rift Valley lakes in Kenya. *Ann. Mag. Nat. Hist. (Ser. 10)* 10, 233-262.
- Richardson J L 1964. The history of an African Rift lake: an interpretation based on current regional limnology. PhD thesis, Duke Univ. 473 pp.
- Richardson J L 1966. Changes in level of Lake Naivasha, Kenya during post-glacial times. *Nature, Lond.* 209, 290-291.
- Richardson J L 1968. Diatoms and lake typology in East and Central Africa. *Int. Revue ges. Hydrobiol.* 53, 299-338.
- Richardson J L 1969. Characteristic planktonic diatoms of the lakes of Tropical Africa (Addendum to: Diatoms and lake typology in East and Central Africa). *Int. Revue ges. Hydrobiol.* 54, 175-176.
- Richardson J L & A E Richardson 1972. History of an African Rift lake and its climatic implications. *Ecol. Monogr.* 42, 499-534.
- Ridley M W & Lord R C Percy 1953. Notes on the birds of Lake Elmenteita, Kenya Colony. *Proc. Univ. Durham Phil. Soc.* 12, 103-118.
- Rogers W A 1978. Recommendations for the improvement of wildlife conservation in Rukwa Region, Tanzania. Bureau of Resource Assessment and Land Use Planning, Univ. Dar es Salaam. Mimeo.
- Rogers W A 1982. The decline of large mammal populations on the Lake Rukwa grasslands. *Afr. J. Ecol.* 20, 13-22.
- Siddiqui A Q 1977a. L. Naivasha (Kenya, East Africa) fishery and its management together with a note on the food habits of fishes. *Biol. Conserv.* 12, 217-227.
- Siddiqui A Q 1977b. Reproductive biology, length-weight relationship and relative condition of *Tilapia leucosticta* (Trewavas) in Lake Naivasha, Kenya. *J. Fish Biol.* 10, 251-260.

- Siddiqui A Q 1979a. Changes in the fish species composition in Lake Naivasha, Kenya. Hydrobiologia 64, 131-138.
- Siddiqui A Q 1979b. Reproductive biology of Tilapia zillii (Gervais) in Lake Naivasha, Kenya. Environ. Biol. Fish. 4, 257-262.
- Sikes H L 1936. Notes on the hydrology of Lake Naivasha. E. Afr. Uganda Nat. Hist. Soc. 13, 73-84.
- Sileo L, J G Grootenhuis, C H Tuite & J B D Hopcraft 1979. Mycobacteriosis in the lesser flamingos Phoeniconaias minor of Lake Nakuru, Kenya. J. Wildl. Dis. 15, 387-390.
- Sileo L, C H Tuite & J B D Hopcraft 1978. Plumages and primary moult in lesser flamingos. Wildfowl 28, 139-142.
- Ssentongo G W 1972. The fisheries of Lake Kitangiri. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1972, pp. 26-35.
- Ssentongo G W 1974. Observations on the fishes and fisheries of Lake Baringo, East Africa. Afr. J. trop. Hydrobiol. Fish. 3, 95-106.
- Ssentongo G W & O O Okorie 1971. Evaluations of fishery resources in the East African lakes. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1971, pp. 39-43.
- Stevens J A 1932. Lake Magadi and its alkaline springs. Rep. to Magadi Soda Company Ltd., Kenya. Mimeo.
- Stoffers P & S A Holdship 1976. Diagenesis of sediments in an alkaline lake: Lake Manyara, Tanzania. IXth Int. Congr. Sedimentology, Nice 1975, pp. 211-218.
- Stroh H 1959. A colony of White pelicans in the Rukwa Valley, Tanganyika. Afr. Wildl. 13, 273-278.
- Surdam R C & H P Eugster 1976. Mineral reactions in the sedimentary deposits of the Lake Magadi region, Kenya. Bull. Geol. Soc. Am. 87, 1739-1752.
- Swynnerton G H 1939. Report of an investigation into an alleged decrease in the number of fish in Lake Rukwa. Typescript, Game Preservation Dept, Dar es Salaam, Tanzania.
- Swynnerton G H 1947. Report of an investigation of the fisheries of Lake Rukwa. Typescript, Game Preservation Dept, Dar es Salaam, Tanzania.
- Talling J F 1957. Diurnal changes of stratification and photosynthesis in some tropical African waters. Proc. R. Soc. B 147, 57-83.
- Talling J F 1965. The photosynthetic activity of phytoplankton in East African lakes. Int. Revue ges. Hydrobiol. 50, 1-32.
- Thompson A O & R G Dodson 1963. Geology of the Naivasha area. Geological Survey of Kenya Rep. 55, Govt Printer, Nairobi, 80 pp.
- Tiercelin J J 1981. Rifts continentaux, tectonique, climats, sédiments. Thèse d'Etat, Univ. Aix-Marseille II. 2 v. 260 pp.
- Tiercelin J J & J Le Fournier 1980. Un exemple de sédimentation récente dans un rift continental: le semi-graben de Baringo- Bogoria, Rift Gregory, Kenya. Rech. géol. Afrique, C.N.R.S., Paris 5, 133-139.
- Tiercelin J J, J Le Fournier, J P Herbin & J P Richert 1980. Continental rifts: modern sedimentation, tectonic and volcanic controls. Examples of the Bogoria-Baringo graben, Gregory Rift, Kenya. Proc. Int. Symp. Geodynamic evolution of the Afro-Arabian Rift system, Rome, April 1979.
- Tiercelin J J, R W Renault, G Delibrias, J Le Fournier & S Bieda 1981. Late Pleistocene and Holocene lake level fluctuations in the Lake Bogoria basin, northern Kenya Rift lake. Paleoecology of Africa, Balkema, Rotterdam 13, 105-120.
- Tindall B J 1980. Phototrophic bacteria from Kenyan soda lakes. PhD thesis, Leicester Univ., 455 pp.
- Tindall B J, A A Mills & W D Grant 1980. An alkaliphilic red halophilic bacterium with a low magnesium requirement from a Kenyan soda lake. J. Gen. Microbiol. 116, 257-260.
- Tobias P V 1971. Lake Eyasi, Tanganyika (Tanzania). In Standard Encyclopedia of southern Africa. Vol. 4.
- Tuite C H 1979. Population size, distribution and biomass density of the lesser flamingo in the Eastern Rift Valley 1974- 1976. J. appl. Ecol. 16, 765-775.

- Tuite C H 1981. Standing crop densities and distribution of Spirulina and benthic diatoms in East African alkaline saline lakes. Freshwat. Biol. 11, 345-360.
- Vareschi E 1978. The ecology of Lake Nakuru (Kenya). I. Abundance and feeding of the lesser flamingo. Oecologia (Berlin) 32, 11-35.
- Vareschi E 1979. The ecology of Lake Nakuru (Kenya). II. Biomass and spatial distribution of the fish Tilapia grahami (= Tilapia alcalicum grahami). Oecologia (Berlin) 37, 321-336.
- Vareschi E 1982. The Ecology of Lake Nakuru (Kenya). III. Abiotic factors and primary production. Oecologia (Berlin) 55, 81-101.
- Vareschi E & J Jacobs 1984. The ecology of Lake Nakuru, Kenya. V. Production and consumption of consumer organisms. Oecologia (Berlin) 61, 83-98.
- Vareschi E, J M Melack & P Kilham 1981. Saline Waters. pp. 93-101. In J-J Symoens, M J Burgis & J J Gaudet (Eds), The Ecology and Utilization of African Inland Waters. U.N.E.P. Rep. Proc. Ser., 1, Nairobi.
- Vareschi E & A Vareschi 1984. The ecology of Lake Nakuru, Kenya. IV. Biomass and distribution of consumer organisms. Oecologia (Berlin) 61, 70-82.
- Vesey-Fitzgerald D F 1954. Note on the breeding of pelicans in the Rukwa Valley, S.W. Tanganyika. Ostrich 25, 139.
- Vesey-Fitzgerald D F 1965. The utilization of natural pastures by wild animals in the Rukwa Valley, Tanganyika. E. Afr. Wildl. J. 3, 38-48.
- Vesey-Fitzgerald D F 1969. Utilization of the habitat by buffalo in Lake Manyara National Park. E. Afr. Wildl. J. 7, 131-145.
- Vesey-Fitzgerald D F 1973. Animal impact on the vegetation and plant succession in Lake Manyara National Park, Tanzania. Oikos 24, 314-325.
- Vincent C, T Davies & A Beresford 1979. Recent changes in the level of Lake Naivasha, Kenya, as an indicator of equatorial westerlies over East Africa. Climatic Change 2, 175-189.
- Washbourn C K 1967. Lake levels and Quaternary climates in the Eastern Rift Valley of Kenya. Nature, Lond. 226, 253-254.
- Washbourn-Kamau C K 1970. Late Quaternary chronology of the Nakuru-Elmenteita basin, Kenya. Nature, Lond. 226, 253-254.
- Washbourn-Kamau C K 1971. Late Quaternary lakes in the Nakuru- Elmenteita basin, Kenya. Geogr. J. 137, 522-534.
- Washbourn-Kamau C K 1972. Studies on former lake levels in the Nakuru-Elmenteita and the Naivasha basins. Paleoecology of Africa and the surrounding islands including Antarctica 6, 138-139.
- Watson R M, T Singh & I C S Parker 1970. The diet of duck and coot on Lake Naivasha. E. Afr. Wildl. J. 8, 131-144.
- Watson R M & M I M Turner 1965. A count of the large mammals of the Manyara National Park: Results and discussion. E. Afr. Wildl. J. 3, 95-98.
- Welman J B & E B Worthington 1943. The food of the crocodile (Crocodylus niloticus). Proc. Zool. Soc., Lond. 113, 108-112.
- White T H 1953. Some speculations on the sudden occurrence of floods in the history of Lake Magadi. J. E. Afr. Nat. Hist. Soc. 22, 95-97.
- Worthington E B & C K Ricardo 1936a. Scientific results of the Cambridge Expedition to the East African lakes 1930-31. The fish of Lake Rudolf and Lake Baringo. Zool. J. linn. Soc. 39, 353-389.
- Worthington E B & C K Ricardo 1936b. Scientific results of the Cambridge Expedition to the East African lakes 1930-31. Part 17. The vertical distribution and movements of plankton in Lake Rudolf, Naivasha, Edward and Bunyoni. Zool. J. linn. Soc. 40, 33-69.
- Young J A T & R W Renaud 1979. A radiocarbon date from Lake Bogoria, Kenya Rift Valley. Nature, Lond. 278, 243-245.
- Young J O 1976. Systematic studies on limnic Macrostomum spp. Turbellaria, Macrostomida from East Africa. Zool. Scripta 5, 49-60.

6.3: THE CENTRAL PLATEAU/LE PLATEAU CENTRAL

PUBLISHED WORKS/TRAVAUX REALISES

General/Divers

Beadle 1932a,b, 1968; Damas 1953, 1955a; Jørgensen 1979; Kendall 1969; Kiss 1976, 1977a; United Nations 1978; Worthington 1929a.

Geology/Géologie

Cahen & Lepersonne 1951, 1967; Doornkamp & Temple 1966; Gerards et al. 1967; Kendall 1969; Saggesson 1952; Shackleton 1951; Temple 1969a,b.

Geomorphology/Géomorphologie

Damas 1954a; Sirven et al. 1974.

Pedology/Pédologie

Neel 1967, 1968; Van Vambeke 1961.

Climate/Climat

Huxley & Turk 1963; Hydrometeorological Survey 1974, 1982; Kite 1981; Krishnamurthy & Ibrahim 1973; Marten & Guluka 1974; Rwanda, Division Climatologique 1976, 1977; Temple 1966.

Hydrology/Hydrologie

Bodeux 1972; Brooks 1925; Devroey 1951; Doornkamp & Temple 1966; East African Freshwater Fisheries Research Organisation 1959; Hydrometeorological Survey 1974, 1982; Jørgensen 1979; Kiss 1976; Kite 1981; Krishnamurthy & Ibrahim 1973; Temple 1966.

Palaeolimnology/Paléolimnologie

Kendall 1969.

Physico-chemistry/Physicochimie

Beadle 1932b; Calder 1959; Carter 1959; Damas 1953, 1954b; East African Freshwater Fisheries Research Organisation 1954, 1955, 1976; Graham 1929; Melack 1979; Michel & Reed 1955; Symoens 1968; Talling 1957, 1965; Wasawo 1963; Wasawo & Visser 1959.

Bacteria

Lemmermann 1911.

Algae/Algues

Evans 1960, 1962; Lemmermann 1911; Melack 1979; Talling 1965.

Macrophytes

Beadle 1932a,b; Carter 1955; Deuse 1963; Lewalle 1972; Lind & Visser 1962; Michel & Reed 1955; Thompson 1976; Wasawo 1963; Wasawo & Visser 1959.

Invertebrates/Invertébrés

Barker 1967; Benda 1979b; Bouillon & Semal-Van Gansen 1956; Chardez 1975; Daday 1907; Damas 1955b, 1956; East African Freshwater Fisheries Research Organisation 1951, 1954; Gillard 1959; Green 1967, 1971; Kiss 1960; Kuiper 1966; Pain 1961; Roth-Woltereck 1942; Rzóska 1956, 1975; Sciacchitano 1957; Thomas 1961; Van Den Berghe 1939; Verheyen & Dumont 1984; Wasawo & Visser 1959; Wiebach 1964.

Fish/Poissons

Achten 1981; Albaret 1979; Benda 1979b; David 1937; Depasse 1956; Deuthwaite 1976; East African Freshwater Fisheries Research Organisation 1951-1974, 1976; Fryer 1973a, 1984; Garrod 1958, 1959; Gee 1964, 1965, 1966, 1969; Greenwood 1959, 1965, 1980; Jackson 1971; Karangwa 1981; Kiss 1977b; Kudhongania & Cordone 1974; Lowe-McConnell 1956a,b, 1958; Mahy 1977b,c, 1979a; Matthes 1962; Okemwa 1981; Regan 1929; Rinne 1974; Kinne & Wanjala 1982; Stoneman et al. 1973; Temple 1969a; Twongo & Ogutu-Ohwayo 1979; Wanjala 1978; Welcomme 1966, 1970; Worthington 1929a,b, 1973.

Fisheries/Pêches

Aubray 1976; Beauchamp 1955; Benda 1979a, 1981; Bergstrand & Cordone 1970, 1971; Bevertton 1959; Blin 1977; Copley 1953; Cordone & Kudhongania 1970, 1972; Depasse 1956; Dunn 1974; East African Freshwater Fisheries Research Organisation 1951-1974, 1976; FAO/UN 1970; Fryer 1973a,b; Garrod 1957, 1960a,b, 1961; Gee 1964, 1965, 1966; Graham 1929; Halain 1952; Hamblin 1960; Hoffman et al. 1974; Jackson 1971; Karangwa 1979, 1980, 1981, 1982; Karuhanga 1974; Kiss 1977b; Kudhongania 1973; Kudhongania & Cordone 1974; Lake Victoria Fisheries Service 1950-1960; Mahy 1977a, 1979a,b,c; Mann 1970; Marten 1975, 1979; Marten & Guluka 1974; Marten et al. 1976; Muller & Benda 1981; Muller et al. 1982; Ndenegejemo 1980; Okaronen 1975a,b; Okedi et al. 1975; Okemwa 1984; Okorie 1971; Okorie & Ssentongo 1971; Proud 1963; Reizer 1975; Rinne 1974; Rwanda Ministère Agriculture et Elevage 1977, 1979; Rwanda, Service Eaux et Forêts 1959; Ssentongo & Okorie 1971; Stoneman et al. 1973; Twongo & Ogutu-Ohwayo 1979; Wanjala & Marten 1974; Weatherall 1972; Welcomme 1966; Whiting 1969; Worthington 1929c,d, 1973.

Amphibia/Reptilia

Cott 1953; Laurent 1943, 1946, 1960; Parker & Watson 1969, 1970; Stoneman 1969; Welman & Worthington 1943.

Aves

Britton 1978; Brown 1960; Deuthwaite 1976; Parsons 1977; Schouteden 1938.

Conservation

Benda 1981; Bergstrand & Cordone 1970, 1971; Bevertton 1959; Fryer 1972, 1973a,b, 1984; Karuhanga 1974; Mahy 1979b; Marten et al. 1976; Meadows 1980; Okorie 1971; Proud 1963; Ssentongo & Okorie 1971; Stoneman et al. 1973; Weatherall 1972; Worthington 1973.

Economics

I.B.R.D. 1976; Okidi 1982; SCET Coopération Marais Rugezi et Kamiranzoun 1976.

BIBLIOGRAPHY/BIBLIOGRAPHIE

- Achten B 1981. Studie van het dieet ende adinggewoonterr bij Clarias gariepinus Burchell en Clarias carsoni: Bigr, vit het Kivu - en het Ihema-meer (onderzoek an maagen darmirhoud). MSc thesis, Katholieke Univ., Leuven, 137 pp.
- Albaret J J 1979. Revue des recherches entreprises sur le fécondité des poissons d'eau douces africaines. S.I.L./U.N.E.P. Réunion de travail sur la limnologie africaine, Univ. Nairobi, décembre. O.R.S.T.O.M., pp. 67 pp.
- Aubray R 1976. La pêche au Rwanda. FAO, Rome, 24 pp. Mimeo.
- Barker P D 1967. Cladocera from Rwanda, Central Africa. Rev. zool. Bot. afr. 75, 3-4.
- Beadle L C 1932a. Scientific results of the Cambridge Expedition to the East African lakes, 1930-31. 3. Observations on the bionomics of some East African swamps. Zool. J. linn. Soc. 38, 135-155.
- Beadle L C 1932b. Scientific results of the Cambridge Expedition to the East African lakes, 1931-32. 4. The waters of some East African lakes in relation to their fauna and flora. Zool. J. linn. Soc. 38, 157-211.
- Beadle L C 1968. East African lakes. pp. 303-308. In R W Fairbridge (Ed.), Encyclopedia of Geomorphology. Reinhold, N.Y.
- Beauchamp R S A 1955. The danger of overfishing existing Tilapia with particular reference to Lake Victoria and the Kavirondo Gulf. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1954/55, pp. 30-34.
- Benda R S 1979a. Analysis of catch data from 1968 to 1976 from nine fish landings in the Kenya waters of Lake Victoria. J. Fish. Biol. 15, 385-387.
- Benda R S 1979b. Infestation rates of Argulus africanus (Stühlmann 1891) (Branchiura) on Bagrus docmac (Forskål 1775) in Kavirondo Gulf. Crustaceana 36, 190-194.
- Benda R S 1981. A comparison of bottom trawl catch rates in the Kenya waters of Lake Victoria. J. Fish. Biol. 18, 609-613.
- Bergstrand E & A J Cordone 1970. Exploratory bottom trawling in Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1969, pp. 42-52.
- Bergstrand E & A J Cordone 1971. Exploratory bottom trawling in Lake Victoria. Afr. J. trop. Hydrobiol. Fish. 1, 13-23.
- Beverton R J H 1959. Report on the state of the Lake Victoria fisheries. Fish. Lab., Lowestoft, England. Mimeo.
- Blin M 1977. Les méthodes actuelles de production du poisson pour l'amélioration des techniques de pêche et le choix de sites favorables pour des projets pilotes de développement de la pêche, dans la région du bassin de la Kagera. FAO FI: RAF/71/147/1 (F), Rome.
- Bodeux A 1972. Hydrologie et bilan de l'eau du bassin versant de la Karuzi au Burundi. Mém. Acad. r. Sc. Outre-Mer, Cl. Sc. nat. méd., n. sér., coll. in-8vo 18(7), 39 pp.
- Bouillon J & P Semal-Van Gansen 1956. Sur quelques Hydres africaines. Rev. Zool. Bot. afr. 54, 202-208.
- Britton P L 1978. Seasonality, density and diversity of birds of a papyrus swamp in western Kenya. Ibis 120, 450-466.
- Brooks C E P 1925. The fluctuations of Lake Victoria. E. Afr. Uganda Nat. Hist. Soc. J. 22, 47-55.
- Brown L H 1960. The African fish eagle Haliaeetus vocifer especially in the Kavirondo Gulf. Ibis 102, 285-297.
- Cahen L & J Lepersonne 1951. Carte géologique du Congo belge et du Rwanda-Urundi. Vaillan-Carmanne (Ed.), Ministère des Colonies, Liège.
- Cahen L & J Lepersonne 1967. The precambrian of the Congo, Rwanda and Burundi. In: K Rankama (Ed.) The Precambrian. Interscience, N.Y. v. 3.
- Calder E A 1959. Nitrogen fixation in a Uganda swamp soil. Nature, Lond. 184, 746.
- Carter G 1955. The papyrus swamps of Uganda. Heffer, Cambridge. 25 pp.
- Chardez D 1975. Quelques Thecamoebiens de la région de Butare (Zaire). Rev. verviet. Hist. nat. 32, 48-49.

- Copley H 1953. The Tilapia fishery of the Kavirondo Gulf. J. E. Afr. Nat. Hist. Soc. 94, 1-5.
- Cordone A J & A W Kudhongania 1970. Catch characteristics of various codend mesh sizes in demersal trawl catches in Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1969, pp. 53-60.
- Cordone A J & A W Kudhongania 1972. Observations on the influences of codend mesh size on bottom trawl catches in Lake Victoria, with emphasis on the Haplochromis population. Afr. J. trop. Hydrobiol. Fish. 2, 1-19.
- Cott H B 1953. The status of the Nile crocodile in Uganda. Uganda J. 18.
- Dayay E von 1907. Plancton-Tiere aus dem Victoria Nyanza. Zool. Jb. Syst., Geogr. Biol. Tiere 25B, 245-262.
- Damas H 1953. Les lacs du Rwanda et leurs problèmes. Ann. Soc. r. Zool. Belg. 84, 17-38.
- Damas H 1954a. Etude limnologique de quelques lacs ruandais I - Le cadre géographique. Mém. Inst. roy. col. belge, Sect. Sc. nat. méd. coll. in-8vo 24(2), 92 pp.
- Damas H 1954b. Etude limnologique de quelques lacs ruandais II - Etude thermique et chimique Mém. Inst. roy. col. belge, Sect. Sc. nat. méd. coll. in-8vo 24(4), 116 pp.
- Damas H 1955a. Recherches limnologiques dans quelques lacs du Ruanda. Verh. int. Ver. Limnol. 12, 335-341.
- Damas H 1955b. Etude limnologique de quelques lacs ruandais III - Le plancton. Mém. Acad. roy. Sc. col. Cl. Sc. nat. méd. coll. in-8vo n. sér. 1(3), 67 pp.
- Damas H 1956. Etude limnologique de quelques lacs ruandais IV - Les sédiments et leur faune. Conclusions générales. Mém. Acad. roy. Sc. col. Cl. Sc. nat. méd. coll. in-8vo n. sér. 3(4), 44 pp.
- David L 1937. Poissons de l'Urundi. Rev. Zool. Bot. afr. 29, 413-420.
- Depasse F 1956. Monographie piscicole de la province orientale, description du milieu limnologique; programme et réalisations en matière de pêche et de pisciculture. Bull. Agric. Congo Belge 47, 959-1088.
- Deuse P 1963. Marais et tourbières au Rwanda et au Burundi. In Colloque sur les problèmes biogéographiques du Parc National de l'Upemba. (Elisabethville 5-9 février 1963). Publ. Univ. Elisabethville 6, 69-80.
- Deuthwaite R J 1976. Fishing techniques and foods of the Pied Kingfisher on Lake Victoria, Uganda. Ostrich 47, 153-160.
- Devroey E J 1951. Observations hydrographiques au Congo Belge et au Rwanda-Urundi (1948-50). Inst. Roy. Col. Belge Mém. in-8vo 177 pp.
- Doornkamp J C & P H Temple 1966. Surface drainage and tectonic instability in part of Southern Uganda. Geogr. J. 132, 238-252.
- Dunn I G 1974. Rapport au gouvernement du Rwanda sur la pisciculture et le développement des pêches. FAO/UNDP RWA/68/004, A 3244, 39 pp.
- East African Freshwater Fisheries Research Organisation 1951- 1974. Ann. Reps for 1950, 1951, 1953, 1954/55, 1956/57, 1958, 1959, 1960, 1964, 1968, 1969, 1972, 1973, 1974.
- East African Freshwater Fisheries Research Organisation 1976. Director's Report, Jinga, Uganda.
- Evans J H 1960. Algological studies. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1960.
- Evans J H 1962. The distribution of phytoplankton in some central East African waters. Hydrobiologia 19, 299-315.
- FAO/UN 1970. Rapport au Gouvernement du Rwanda sur la pisciculture et le développement des pêches. Etabli sur la base des travaux de J de Vries, biologiste des pêches intérieures. Rapp. FAO/UNDP (TA) 3002, 15 pp.
- Fryer G 1972. Conservation of the Great Lakes of East Africa: a lesson and a warning. Biol. Conserv. 4, 256-262.
- Fryer G 1973a. The Lake Victoria fisheries: some facts and fallacies. Biol. Conserv. 5, 304-308.
- Fryer G 1973b. Hopeful empiricism versus scientific method: the Nile perch controversy revived. Biol. Conserv. 5, 222-223.

- Fryer G 1984. The Conservation and Rational Exploitation of the Biota of Africa's Great Lakes. pp. 135-154. In A V Hall (Ed.) Conservation of Threatened Natural Habitats. S. Afr. Natl Sci. Progr. Rep., Pretoria, 92, 185 pp.
- Garrod D J 1957. A review of Lake Victoria Fishery Service records 1951-1956. E. Afr. Freshwat. Fish. Res. Orgsn, pamphlet 1.
- Garrod D J 1958. On the growth of Tilapia esculenta (Graham). E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1956/57, pp. 36-40.
- Garrod D J 1959. The growth of Tilapia esculenta Graham in Lake Victoria. Hydrobiologia 12, 268-298.
- Garrod D J 1960a. Fish population studies on Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1960, pp. 12-17.
- Garrod D J 1960b. The fisheries of Lake Victoria, 1954-59. E. Afr. Agric. For. J. 26, 42-48.
- Garrod D J 1961. The history of the fishing industry of Lake Victoria, East Africa, in relation to the expansion of marketing facilities. E. Afr. Agric. For. J. 27, 95-99.
- Gee M J 1964. Nile perch investigation. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1962/63, pp. 14-24.
- Gee M J 1965. Nile perch investigation. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1964.
- Gee M J 1966. Nile perch studies. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1965, pp. 56-62.
- Gee M J 1969. A comparison of certain aspects of the biology of Lates niloticus (Linné) in some East African lakes. Rev. Zool. Bot. afr. 57, 129-170.
- Gerards J, J Lepersonne & V Petrice 1967. Carte géologique du Rwanda, Feuilles sur l'Akagera. Musée Royal de l'Afrique Centrale, Tervuren (Belgique) et Service géologique de la République Rwandaise.
- Gillard A A M 1959. Contribution à l'étude des Rotifères du Congo belge et du Ruanda. Rev. Zool. Bot. afr. 60, 233-239.
- Graham M 1929. The Victoria Nyanza and its fisheries. A report on the fishing survey of Lake Victoria 1927-1928. Crown Agents, Lond., 36 pp.
- Green J 1967. Associations of Rotifera in the lake sources of the White Nile. J. Zool. Lond. 151, 343-378.
- Green J 1971. Associations of Cladocera in the lake sources of the White Nile. J. Zool. Lond. 165, 373-414.
- Greenwood P H 1959. The Characin fishes of Lakes Victoria and Kyoga. Ann. Mag. Nat. Hist. (Ser. 13) 1, 42-47.
- Greenwood P H 1965. The cichlid fishes of Lake Nabugabo, Uganda. Bull. Brit. Mus. (Nat. Hist.) Zool. Ser. 12, 315-357.
- Greenwood P H 1980. Towards a phyletic classification of the "genus" Haplochromis (Pisces, Cichlidae) and related taxa. Part II; the species from Lakes Victoria, Nabugabo, Edward, George and Kivu. Bull. Brit. Mus. (Nat. Hist.) Zool. Ser. 39, 1-101.
- Halain C 1952. Bilan des réalisations piscicoles au Congo et au Rwanda Urundi. Publ. C.S.A. 152 pp.
- Hamblin K L 1960. The Nile perch project. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1960.
- Hoffman A, J G Disney, A Pinegar & J D Cameron 1974. The preservation of some East African Freshwater fish. Afr. J. trop. Hydrobiol. Fish. 3, 1-13.
- Hydrometeorological Survey 1974 of the catchment of Lakes Victoria, Kyoga and Albert. Burundi, Egypt, Kenya, Rwanda, Sudan, United Republic of Tanzania and Uganda. Vol. 1, Meteorology and hydrology of the basin. Parts 1 & 2, 925 pp. Vol. 2, Atlas of technical maps. 77 pp. Vol. 3, Preliminary reports on the index catchments. 576 pp. Vol. 4, Hydrological studies of selected river basins. 355 pp. UNDP/WMO-RAF-66-025-R-1, Geneva, Switzerland.
- Hydrometeorological Survey 1982 of the catchment of Lakes Victoria, Kyoga and Mobutu Sese Seko. Project findings and recommendations. UNDP/WMO-RAF/73/001, Geneva, Switzerland.

- Huxley P A & A Turk 1963. Meteorological data for Makerere University College Farm, Kabanyolo, Uganda. Meteorol. Bull., Makerere Univ. Coll. 4, 3 pp.
- I.B.R.D. 1976. Memorandum on the economy of Rwanda. (Available in the Ministry of Economy, Kigali, Rwanda).
- Jackson P B N 1971. The African Great Lakes fisheries: Past, present and future. Afr. J. trop. Hydrobiol. Fish. 1, 35-49.
- Jørgensen S E 1979. Water quality and environmental impact model of the Upper Nile Basin. Water Supply & Management 3, 1-7.
- Karangwa A 1979. Empoissonnement des lacs et développement de la pêche au Rwanda. Rapport d'activité Avril 78-Avril 79 du projet ELADEF, 48 pp. Miméo.
- Karangwa A 1980. Les poissons des eaux rwandaises, source de protéines pour l'alimentation de notre peuple. Bull. Agric. Rw. 4, 224-228.
- Karangwa A 1981. Grands lacs, donnez-nous du poisson. Rev. Gr. Lacs, C.E.P.G.L. Ed. Secrétariat exécutif permanent, Gisenyi (3-4), 18-22 & 20-23.
- Karangwa A 1982. Adaptation de Clarias mossambicus Peters 1852 aux conditions de pisciculture au Rwanda. Thèse 3ème cycle I.N.P. Toulouse, 132 pp.
- Karuhanga P N 1974. Preliminary report on cost earning schedule and catch data collection systems on Lake Kyoga and Lake Mobutu Sese-Seko. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1974, pp. 59-68.
- Kendall R L 1969. An ecological history of the Lake Victoria basin. Ecol. Monogr. 39, 121-176.
- Kiss R 1960. Entomostracés de la plaine de la Ruzizi (Congo et Rwanda-Urundi). 1re note. A.R.S./O.M., Mém. in-8vo 11, 5-49.
- Kiss R 1976. Etude hydrobiologique des lacs de l'Akagera moyenne. Publ. Inst. nat. Rech. scient., Butare 16, 167 pp.
- Kiss R 1977a. Hydrobiologie générale du bassin de la Kagera et des lacs Cyohoha Sud et Rugwero. (Troisième partie et quatrième partie). FAO Dist. Restr. FI: RAF/71/147/2, 22 pp.
- Kiss R 1977b. Les poissons et la pêche dans le lac Ihema (Rwanda, bassin moyen de l'Akagera). Ann. Hydrobiol. 8, 263-318.
- Kite G W 1981. Recent changes of level of Lake Victoria. Hydrol. Sci. Bull. 26, 233-243.
- Krishnamurthy K & A M Ibrahim 1973. Hydrometeorological studies of Lakes Victoria, Kyoga and Albert. pp. 272-277. In Ackermann, E White & E B Worthington (Eds), Man-made lakes: their problems and environmental effects. Geophys. Monogr. Ser. 17. Washington D.C.
- Kudhongania W A 1973. Past trends and recent research on the fisheries of Lake Victoria in relation to possible future development. Afr. J. trop. Hydrobiol. Fish. Spec. Issue 2, 93-106.
- Kudhongania A W & A J Gordone 1974. Batho-spatial distribution pattern and biomass estimate of the major demersal fishes in Lake Victoria. Afr. J. trop. Hydrobiol. Fish. 3, 15-31.
- Kuiper J G J 1966. Les espèces africaines du genre Pisidium, leur synonymie et leur distribution (Mollusca, Lamellibranchiata, Sphaeriidae). Ann. Mus. roy. Afr. centr. Tervuren, sér. in-8vo, Sc. Zool. 151, 78 pp.
- Lake Victoria Fisheries Service 1950-1960. Annual Reports.
- Laurent R F 1943. Les Hyperolius (Batraciens) du Musée du Congo. Ann. Mus. Congo belge, sér. in-4to, Zool. sér. 1 4, 61-138.
- Laurent R F 1946. Les genres Cryptothylax, Phlyctimantis et Kassina au Zaïre. Ann. Mus. roy. Afr. centr., Tervuren, sér. in-8vo, Sc. Zool. 213, 1-67.
- Laurent R F 1960. Notes complémentaires sur les Chelonians et les Ophidiens du Congo oriental. Ann. Mus. roy. Afr. centr., Tervuren, sér. in-8vo, Sc. Zool. 84, 86 pp.
- Lemmermann E 1911. Schizophyceae, Flagellatae, Peridiniales, Heterokontae, Protococcales, Ulotrichales, Conjugatae, Bacillariales, Rhodophyceae. pp. 89-94. In Wissenschaftliche Ergebnisse der Deutschen Zentral-Afrika-Expedition 1907-1908. Klinkhard & Biermann, Liepzig. II (Lief 2).
- Lewalle J 1972. Les étages de végétation du Burundi occidental. Bull. Jard. bot. nat. Belg. 42, 1-247.

- Lind E H & S A Visser 1962. A study of a swamp at the north end of Lake Victoria. J. Ecol. 50, 599-613.
- Lowe-McConnell R H 1956a. The breeding behaviour of Tilapia species (Pisces-Cichlidae) in natural waters; observations on T. karomo Poll and T. variabilis Boulenger. Behaviour, Leiden 9, 140-163.
- Lowe-McConnell R H 1956b. Observations on the biology of Tilapia (Pisces-Cichlidae) in Lake Victoria, East Africa. E. Afr. Freshwat. Fish. Res. Orgsn. Suppl. Publ. 1, 72 pp.
- Lowe-McConnell R H 1958. Observations on the biology of Tilapia nilotica (Linné) in East African waters. Rev. Zool. Bot. afr. 57, 129-170.
- Mahy G 1977a. Bases scientifiques pour l'aménagement et l'exploitation rationnelle des ressources piscicoles du Rwanda. Etud. Rwanda 11, 3-35.
- Mahy G 1977b. Contribution à la connaissance de la faune piscicole du Rwanda avec clés d'identification des espèces. Premiers résultats faunistiques d'une étude de Biologie piscicole du lac Muhindi - Parc National de l'Akagera. Doc. mult. diffusion restreinte Fac. Agron. Uni. Nat. Ruanda.
- Mahy G 1977c. Contribution à la connaissance de la faune piscicole du Rwanda avec clés d'identification des espèces. 1. Premiers résultats faunistiques d'une étude de biologie piscicole au lac Muhindi. Etud. Rwanda 10, 43-81.
- Mahy G 1977d. L'Empoissonnement des lacs du pays et expérimentation en pisciculture. Doc. projets/C.R.D.I. No. 3-8-77- 0042, 1-59.
- Mahy G 1979a. Contribution à la connaissance de la faune piscicole du Rwanda avec clés d'identification des espèces. 2. Espèces nouvellement répertoriées des lacs de l'Akagera. Etud. Rwanda 12, 97-119.
- Mahy G 1979b. Exploitation rationnelle et conservation des ressources halieutiques dans le développement intégré au Rwanda. Analyse brève et recommandations. 9 pp. In Proc. 1st Int. Cong. Envir., Methods and strategies of integrated rural development, Arlon Sept. 1979.
- Mahy G 1979c. Programme national d'exploitation rationnelle du milieu aquatique au Rwanda (proposition). S.I.L./U.N.E.P. Workshop on African Limnology, Univ. Nairobi, December 1979, 27 pp. Miméo.
- Mann M J 1970. A resume of the evolution of the Tilapia fisheries of Lake Victoria up to the year 1960. E. Afr. Freshwat. Fish. Res. Orgsn. Ann. Rep., 1969, pp. 21-27.
- Marten G G 1975. The impact of fishing on the Lake Victoria fishery. E. Afr. Freshwat. Fish. Res. Orgsn. Rep., Kisumu, Kenya, 32 pp.
- Marten G G 1979. Impact of fishing on the inshore fishery of Lake Victoria (East Africa). J. Fish. Res. Bd Can. 36, 891-900.
- Marten G G & L T Guluka 1974. Fluctuations in fish catches and prices and their correlation with climatic factors. E. Afr. Freshwat. Fish. Res. Orgsn. Ann. Rep., 1974, pp. 69-75.
- Marten G G, B Wanjala B & L T Guluka 1976. Exploratory trawling of the Lake Victoria fishery during 1975. E. Afr. Freshwat. Fish. Res. Orgsn. MSS, 19 pp.
- Matthes H 1962. Poissons nouveaux ou intéressants du lac Tanganyika et du Ruanda. Ann. Mus. roy. Afr. centr., Tervuren, sér. in-8vo, Sc. Zool. 111, 27-88.
- Meadows B S 1980. The quality of water in Lake Victoria basin and its protection. Seminar Series, Lake Victoria Basin Development. Inst. Development Stud., Univ. Nairobi., Rep. 1, 16 pp.
- Melack J M 1979. Photosynthetic rates in four tropical African fresh waters. Freshwat. Biol. 9, 555-571.
- Michel G & J Reed 1955. Carte des sols et de la végétation du Congo belge et du Ruanda-Urundi. 5. Mosso (Urundi). Publ. I.N.E.A.C., Bruxelles.
- Muller R G & R S Benda 1981. Comparison of bottom trawl stock densities in the inner Kavirondo Gulf of Lake Victoria. J. Fish Biol. 19, 399-401.
- Muller R G, R S Benda & T G Powell 1982. Exploitation of fish in the inner Kavirondo Gulf of Lake Victoria based on tag returns. J. Fish Biol. 20, 667-671.
- Ndenegejemo P B 1980. Inventaire des problèmes liés à la production piscicole. Butare, Rwanda. Miméo.

- Neel H 1967. Marais de la Bishenyi, étude pédologique. I.S.A.R., Kigali, Rwanda. Miméo.
- Neel H 1968. Vallée de Myamugali, étude pédologique. I.S.A.R., Kigali, Rwanda. Miméo.
- Okaronen J O 1975a. Experimental fisheries resources survey of Lake Wamala. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1975.
- Okaronen J O 1975b. Experimental fisheries resource surveys of Lakes Wamala, Kijanebalola and Rukwa. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1975, pp. 19-22.
- Okedi J 1973. Preliminary observations on Engraulicypris argeneus (Pellegrin 1904) from Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1973, pp. 39-42.
- Okedi J, P Basasibwaki & F M Chale 1975. A survey of the fisheries of Lakes Babati and Basotu. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1975, pp. 13-18.
- Okemwa E 1981. The biomass and spatial distribution of fishes in Nyanza Gulf of Lake Victoria. Kenya J. Sci. Technol.
- Okemwa E 1984. Potential fishery of Nile perch Lates niloticus Linne (Pisces: Centropomidae) in Nyanza Gulf of Lake Victoria, East Africa. Hydrobiologia 108, 121-126.
- Okidi C O 1982. Review of treaties on consumptive utilization of waters of Lake Victoria and Nile drainage system. Nat. Resources J. 22, 161-200.
- Okorie O O 1971. An International Fishery Statistics Seminar held at Kisumu (November 1971). E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1971, pp. 43-45.
- Okorie O O & G W Ssentongo 1971. Evaluation of fishery resources in the East African Lakes. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1971, pp. 39-43.
- Pain T 1961. Revision of the African Ampullariidae species of the genus Pila Roding 1798 (Mesogastropoda, Architaenioglossa, Mollusca). Ann. Mus. roy. Afr. centr., Tervuren, sér. in-8vo, Sc. Zool. 96, 27 pp.
- Parker I C S & R M Watson 1969. Crocodile (Crocodylus niloticus Laurenti) distribution and status in the major waters of western and central Uganda in 1969. Rep. Uganda Fish. Dept and the Trustees of the Uganda National Parks. Wildlife Services Ltd., Nairobi. Mimeo.
- Parker I C S & R M Watson 1970. Crocodile distribution and status in the major waters of western and central Uganda in 1969. E. Afr. Wildl. J. 8, 85-103.
- Parsons J 1977. The effect of predation by fish eagles on the breeding success of various Ciconiiformes nesting near Kisumu, Kenya. J. Nat. Hist. 11, 337-353.
- Proud P D 1963. Notes on light fishing experiments in Lake Kyoga. Uganda Fish. Dept, Entebbe. Mimeo.
- Regan C T 1929. New Cichlid fishes from Lakes Victoria, Kyoga and Albert. Ann. Mag. Nat. Hist. 3, 388.
- Reizer C 1975. Essai de définition d'une politique de production de protéines par les poissons en République rwandaise. Rapp. PNUD/FAO RWA/68/09 Arlon, Belg., 148 pp.
- Rinne J N 1974. A preliminary observation on the age, growth and tagging of Bagrus, Clarias and certain Tilapia species from Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1974, pp. 25-48.
- Rinne J N & B Wanjala 1982. Observations on movement patterns of Tilapia spp in Nyanza Gulf, Lake Victoria, East Africa. J. Fish Biol. 20, 317-322.
- Roth-Woltereck E 1942. Untersuchungen an Atyiden (Decapoden) von Belgisch Kongo mit besonderer Beruk-Sichtigung der Rassen und Artbildungsfrage. Rev. Zool. Bot. afr. 36, 229-312.
- Rwanda, Division Climatologique 1976. Bulletin climatologique. Ed. Direction générale de l'Aéronautique, MINIPOS CO Kigali, 57 pp.
- Rwanda, Division Climatologique 1977. Bulletin climatologique. Ed. Direction générale de l'Aéronautique, Kigali, 43 pp.

- Rwanda, Ministère Agriculture et Elevage 1977. Projet d'empoissonnement des lacs et développement de la pêche et pisciculture au Rwanda. Requête de financement adressé au C.R.D.I. (Centre de Recherche pour le développement international), Ottawa, Canada.
- Rwanda, Ministère Agriculture et Elevage 1979. Programme de pisciculture. Doss. techn. Min. Agric., Kigali, Rwanda. Miméo.
- Rwanda, Service Eaux et Forêts 1959. Aperçu sur la pêche lacustre et fluviale au Congo Belge et au Rwanda-Urundi. Bull. Agr. Congo Belg. 50, 1666-1690.
- Rzóska J 1956. The planktonic Crustacea of Lake Victoria. Appendix D of E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1955/56, pp. 12-18.
- Rzóska J 1975. Zooplankton of the Nile System. pp. 333-344. In J Rzoska (Ed.), The Nile, Biology of an Ancient River. Monographiae Biologicae 29, W Junk, The Hague.
- Saggesson E P 1952. Geology of the Kisumu District. Rep. Geol. Survey of Kenya, 21, 86 pp.
- SGET Coopération Marais Rugezi et Kamiranzoun 1976. Avant projet de mise en valeur hydroagricole. Synthèse et Rapport général et annexes. Fond. d'Aide et de Coopération Française. Rép. Rwandaise, Paris, 32 pp.
- Schmidt U W & M M J Wincke 1981. Aquaculture development in Rwanda. Feasability of small-scale rural fish farming. FAO/ADCP/MR/81/12.
- Schouteden H 1938. Le Balaeniceps rex ou Bec-en-Sabot. Rev. Zool. Bot. afr. Suppl. Cercle zool. cong. 14, 96-97.
- Sciacchitano J 1957. Contributo alla conoscenza degli Irudinei del Congo Belga. Rev. Zool. Bot. afr. 56, 373-381.
- Shackleton R M 1951. A contribution to the geology of the Kavirondo rift valley. Quart. J. Geol. Soc., Lond. 106, 345-389.
- Sirven P, J F Cotanegre & C Prioul 1974. Géographie du Rwanda. Ed. A de Boeck & ed. rwandaises, Bruxelles-Kigali, 175 pp.
- Ssentongo G W & O O Okorie 1971. Evaluations of fishery resources in the East African lakes. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1971, pp. 39-43.
- Stoneman J 1969. Crocodile industry in Uganda. Occ. Pap. Fish. Dept., Uganda 2, 15-21.
- Stoneman J, A J Mathotho & K B Meecham 1973. Africa's Great Lakes and their fisheries potential. Biol. Conserv. 5, 299-302.
- Symoens J-J 1968. La minéralisation des eaux naturelles. In Exploration hydrobiologiques du bassin du lac Bangweolo et du Luapula 2, 199 pp.
- Talling J F 1957. Some observations on the stratification of Lake Victoria. Limnol. Oceanogr. 2, 213-221.
- Talling J F 1965. The photosynthetic activity of phytoplankton in East African lakes. Int. Revue ges. Hydrobiol. 50, 1-32.
- Temple P H 1966. Lake Victoria levels. Proc. East Afr. Acad. 2, 50-58.
- Temple P H 1969a. Some biological implications of a revised geological history for Lake Victoria. Biol. J. linn. Soc. 1, 363-371.
- Temple P H 1969b. Raised strandlines and shoreline evolution in the area of Lake Nabugabo, Masaka District, Uganda. In Wright (Ed.), Quaternary geology and climate, N.Y. Nat. Acad. Sci.
- Thomas I F 1961. The Cladocera of the swamps of Uganda. Crustaceana 2, 108-125.
- Thompson K 1976. Swamp development in the headwaters of the White Nile. pp. 177-196. In J Rzóska (Ed.), The Nile, Biology of an Ancient River. Monographiae Biologicae 29, W Junk, The Hague.
- Iwongo T K & R Ogutu-Ohwayo 1979. Changes in the distribution of commercial fish species in Lake Kioga (Uganda) after introduction of non-endemic fishes. S.I.L./U.N.E.P. Workshop on African Limnology, Univ. Nairobi, December 1979. Abstracts of Poster Papers.
- United Nations 1978. International aspects of the River Nile (abstract) In Water development and management. Proc. U.N. Water Conf. Pergamon Press, N.Y.
- Van Den Berghe L 1939. Les Schistosomes et les schistosomoses au Congo belge et dans les territoires du Ruanda-Urundi. Mém. Inst. roy. colon. belge, Sect. Sc. nat. méd., coll. in-8vo 8, 153 pp.

- Van Vambeke A 1961. Les sols du Ruanda. Rev. pédolog. 11, 289-363.
- Verheyen H M & H J Dumont 1984. The calanoid copepods of the Nile system. Hydrobiologia 110, 191-212.
- Wanjala B 1978. The association and distribution of fish species in the Nyanza Gulf, Lake Victoria, East Africa, 1975. MSc thesis, Oregon State Univ. Corvallis, Oregon, USA, 58 pp.
- Wanjala B & G Marten 1974. Survey of the Lake Victoria fishery in Kenya. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1974, pp. 81-85.
- Wasawo D P S 1963. Some problems of Uganda swamps. Address at 9th Tech. Meeting I.U.C.N., Nairobi, Kenya, 10 pp.
- Wasawo D P S & S A Visser 1959. Swamp worms and tussock mounds in the swamps of Teso, Uganda. E. Afr. Agric. J. 25, 86-90.
- Weatherall J A 1972. On the catch assessment survey (CAS) of Lake Victoria. Part II. Kenya waters of Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn Occ. Pap. 14.
- Welcomme R L 1966. The possible role of marginal lagoons and beaches in the improvement of the quantity of Tilapia stocks in Lake Victoria. E. Afr. Freshwat. Fish. Res. Orgsn, Ann. Rep., 1965, pp. 74-78.
- Welcomme R L 1970. Studies on the effects of abnormally high water levels on the ecology of fish in certain shallow regions of Lake Victoria. J. Zool., Lond. 160, 405-436.
- Welman J B & E B Worthington 1943. The food of the crocodile (Crocodylus niloticus). Proc. Zool. Soc. Lond. 113, 108-112.
- Whiting P S 1969. Costing study of a Karva Tilapia gill-netter on Lake Victoria.
- Wiebach F 1964. Untersuchungen an Süsswasser-Bryozoen aus Zentral-Äfrika. Ann. Mus. roy. Afr. centr., sér. in-8vo, Sc. zool. 129, 42 pp.
- World Meteorological Organization 1974. (See Hydrometeorological survey 1974).
- World Meteorological Organization 1982. (See Hydrometeorological survey 1982).
- Worthington E B 1929a. The life of Lake Albert and Lake Kioga. Geogr. J. 74, 109-132.
- Worthington E B 1929b. New species of fish from the Albert Nyanza and Lake Kyoga. Proc. Zool. Soc. Lond. 1929, 429-440.
- Worthington E B 1929c. Report on the fishing survey of Lakes Albert and Kioga. Crown Agents, Lond., 136 pp.
- Worthington E B 1929d. Fishing survey of Lakes Albert and Kyoga. Cambridge.
- Worthington E B 1973. The ecology of introductions - a case study from the African lakes. Biol. Conserv. 5, 221-222.

6.4: THE WESTERN RIFT/LE RIFT OCCIDENTAL

PUBLISHED WORKS/TRAVAUX REALISÉS

General/Divers

Burgis 1978; Burgis & Dunn 1978; Dunn et al. 1969; Greenwood 1976; Greenwood & Lund 1973; Wayland 1934.

Geology/Géologie

Bishop 1970; Bishop & Trendall 1967; Combe & Simmons 1933; Doornkamp & Temple 1966; Holmes & Harwood 1932.

Geomorphology/Géomorphologie

Doornkamp & Temple 1966; Viner & Smith 1973.

Climate/Climat

Viner & Smith 1973.

Hydrology/Hydrologie

Doornkamp & Temple 1966; Viner 1975e; Viner & Smith 1973.

Physico-chemistry/Physicochimie

Arad & Morton 1969; Beadle 1932; Beauchamp 1953; Blažka 1976; Bugenyi 1979; Burgis 1970; East African Freshwater Fisheries Research Organisation 1952-1955; Ganf 1974a,b,c, 1975; Ganf & Blažka 1974; Ganf & Horne 1975; Ganf & Viner 1973; Golterman 1971; Hecky & Kilham 1973; Horne & Viner 1971; Kilham & Melack 1972; Levring & Fish 1956; Melack 1978; Melack & Kilham 1972; Viner 1969, 1970, 1973, 1975a,b,c,d,e, 1977a,b; Viner & Smith 1973; Visser 1962.

Palaeolimnology/Paléolimnologie

Haworth 1977.

Algae/Algues

Burgis et al. 1973; Ganf 1969, 1972, 1974a,b,c,d, 1975; Ganf & Blažka 1974; Ganf & Horne 1975; Ganf & Viner 1973; Golterman 1971; Haworth 1977; Hecky & Kilham 1973; Horne & Viner 1971; Levring & Fish 1956; Moriarty C M 1973; Moriarty C M & Moriarty D J W 1973; Moriarty D J W 1973; Moriarty D J W & Moriarty C M 1973; Moriarty et al. 1973; Richardson 1968, 1969; Viner 1973, 1977.

Macrophytes

Carter 1955; Edroma 1974; Lind 1956; Lock 1967, 1973, 1977; Thompson 1973; Visser 1962.

Invertebrates/Invertébrés

Blažka 1976; Burgis 1969, 1970, 1971, 1973, 1974; Burgis et al. 1973; Burgis & Walker 1971; Darlington 1977; East African Freshwater Fisheries Research Organisation 1951-1955; Ganf & Blažka 1974; Green 1967, 1971, 1976; McGowan 1972, 1973, 1974, 1975; Moriarty et al. 1973; Paperna 1973; Paperna & Thurston 1968, 1969; Pejler 1974; Thurston 1969, 1970; Young 1976.

Fish/Poissons

Burgis et al. 1973; Dunn 1972, 1975; East African Freshwater Fisheries Research Organisation 1951-1955; Fish 1955; Galis & Smit 1979; Greenwood 1973, 1980; Gwahaba 1973a,b, 1975, 1978; Lowe-McConnell 1958; Moriarty C M 1973; Moriarty C M & Moriarty D J W 1973; Moriarty D J W 1973; Moriarty D J W & Moriarty C M 1973; Moriarty et al. 1973; Paperna 1973; Paperna & Thurston 1968, 1969; Thurston 1970.

Fisheries/Pêches

Dunn 1973; East African Freshwater Fisheries Research Organisation 1951-1955; Fry & Kimsey 1959; Gwahaba 1973b.

Amphibia

Tinsley 1973.

Aves

Din & Eltringham 1970, 1974a,b, 1976, 1977; East African Freshwater Fisheries Research Organisation 1951-1955; Eltringham 1975.

Pollution

Barrett 1972; Bugenyi 1979, 1982; Edroma 1974; Origa *et al.* 1973.

BIBLIOGRAPHY/BIBLIOGRAPHIE

- Arad A & W H Morton 1969. Mineral springs and saline lakes of the Western Rift Valley, Uganda. *Geochim. Cosmochim. Acta* 33, 1169-1181.
- Barrett W L 1972. Chronological summary of investigations carried out in connection with recent concentrate losses. Kilembe Mines Ltd., Memo 559.
- Beadle L C 1932. Scientific results of the Cambridge Expedition to the East African lakes, 1930-31. 4. The water of some East African lakes in relation to their flora and fauna. *Zool. J. linn. Soc.* 30, 157-211.
- Beauchamp R S A 1953. Sulphates in African inland waters. *Nature, Lond.* 171, 769-71.
- Bishop W W 1970. Pleistocene stratigraphy in Uganda. Memoir X, Geological Survey of Uganda. 128 pp., Govt. Printer, Entebbe.
- Bishop W W & A F Trendall 1967. Erosion-surfaces, tectonics and volcanic activity in Uganda. *Quart. J. geol. Soc. Lond.* 122, 385-420.
- Blažka P 1976. Nutrient recycling by zooplankton. *Limnologia* 10, 279-286.
- Bugenyi F W B 1979. Copper ion distribution in the surface waters of Lakes George and Idi Amin (Edward). *Hydrobiologia* 64, 9-15.
- Bugenyi F W B 1982. Copper pollution studies in Lake George and Lake Edward, Uganda: distribution of Copper, Cadmium and Iron in the water and sediments. *Environ. Polln. Ser. B, Chem. Phys.* 3, 129-138.
- Burgis M J 1969. A preliminary study of the ecology of zooplankton in Lake George, Uganda. *Verh. int. Ver. Limnol.* 17, 297-302.
- Burgis M J 1970. The effect of temperature on the development time of eggs of *Thermocyclops* sp., a tropical cyclopoid from Lake George, Uganda. *Limnol. Oceanogr.* 15, 742-747.
- Burgis M J 1971. The ecology and production of copepods, particularly *Thermocyclops hyalinus*, in the tropical Lake George, Uganda. *Freshwat. Biol.* 1, 169-192.
- Burgis M J 1973. Observations on the Cladocera of Lake George, Uganda. *J. Zool., Lond.* 170, 339-349.
- Burgis M J 1974. Revised estimates for the biomass and production of zooplankton in Lake George, Uganda. *Freshwat. Biol.* 4, 535-541.
- Burgis M J 1978. Case studies of lake ecosystems at different latitudes: the tropics. The Lake George ecosystem. *Verh. int. Ver. Limnol.* 20, 1139-1152.
- Burgis M J, J P E C Darlington, I G Dunn, G G Ganf, J J Gwahaba & L M McGowan 1973. The biomass and distribution of organisms in Lake George, Uganda. *Proc. R. Soc. Lond. B* 184, 271-298.
- Burgis M J & I G Dunn 1978. Production in three contrasting ecosystems. In S D Gerking (Ed.), *Ecology of Freshwater Fish Production*, Blackwells Sci. Publ., Oxford.
- Burgis M J & A F Walker 1971. A preliminary comparison of the zooplankton in a tropical and a temperate lake (Lake George, Uganda and Loch Leven, Scotland). *Verh. int. Ver. Limnol.* 18, 647-655.
- Carter G 1955. *The papyrus swamps of Uganda*. Heffer, Cambridge. 25 pp.
- Combe A D & W C Simmons 1933. The volcanic area of Bufumbiro. *Geol. Surv. Uganda, Entebbe Mem.* 3 part 1, 150 pp.
- Darlington J P E C 1977. Temporal and spatial variation in the benthic invertebrate fauna of Lake George, Uganda. *J. Zool., Lond.* 181, 95-111.

- Din N A & S K Eltringham 1970. The lesser flamingo in Western Uganda. E. Afr. Wildl. J. 8, 201.
- Din N A & S K Eltringham 1974a. Breeding of the pink-backed pelican Pelecanus rufescens in Ruwenzori National Park, Uganda with notes on a colony of Marabou stork Leptoptilus crumeniferis. Ibis 116, 477-493.
- Din N A & S K Eltringham 1974b. Ecological separation between white and pink-backed pelicans in Ruwenzori National Park, Uganda. Ibis 116, 28-43.
- Din N A & S K Eltringham 1976. Early records of the lesser flamingo (Phoeniconaias minor) in Western Uganda with a note on its present status. E. Afr. Wildl. J. 14, 171-175.
- Din N A & S K Eltringham 1977. Weights and measures of Ugandan pelicans with some seasonal variations. E. Afr. Wildl. J. 15, 317-326.
- Doornkamp J C & P H Temple 1966. Surface drainage and tectonic instability in part of Southern Uganda. Geogr. J. 132, 238-252.
- Dunn I G 1972. Ecological studies on the fish of Lake George, Uganda, with particular reference to the cichlid genus Haplochromis. PhD thesis, Univ. London. 240 pp.
- Dunn I G 1973. The commercial fishery of Lake George, Uganda. Afr. J. trop. Hydrobiol. Fish. 2, 109-120.
- Dunn I G 1975. Ecological notes on the Haplochromis (Pisces: Cichlidae) species-flock of Lake George, Uganda (East Africa). J. Fish. Biol. 7, 651-666.
- Dunn I G, M J Burgis, G G Ganf, L M McGowan & A B Viner 1969. Lake George, Uganda: a limnological survey. Verh. int. Ver. Limnol. 17, 284-288.
- East African Freshwater Fisheries Research Organisation 1951-1955. Ann. Rep. 1950, 1951, 1952, 1953, 1954/55.
- Edroma E L 1974. Copper pollution in Ruwenzori National Park, Uganda. J. appl. Ecol. 11, 1043-1056.
- Eltringham S K 1975. Territory size and distribution in the African fish eagle. J. Zool. 175, 1-13.
- Fish G R 1955. The food of Tilapia in East Africa. Uganda J. 19, 85-89.
- Fry D H & J B Kimsey 1959. Report on the fisheries of Lake George, Uganda. Typescript Rep. UN-FAO Tech. Ass. Proj., FAO, Rome, 82 pp.
- Galis F & H Smit 1979. Hypoxia tolerance of two closely related Haplochromis species (Pisces: Cichlidae); Haplochromis elegans Trewavas 1933 and H. angustifrons Boulenger 1914. Comp. Biochem. Physiol. 64A, 137-139.
- Ganf G G 1969. Physiological and ecological aspects of the phytoplankton of Lake George, Uganda. PhD thesis, Univ. Lancaster, UK.
- Ganf G G 1972. The regulation of net primary production in Lake George, Uganda. pp. 693-708. In Z Kajak & A Hillbricht-Ilkowska (Eds), Productivity problems of Freshwaters. Kazimierz-Dolny, Polish Acad. Sci., Warsaw.
- Ganf G G 1974a. Rates of oxygen uptake by the planktonic community of a shallow equatorial lake (Lake George, Uganda). Oecologia (Berlin) 15, 17-32.
- Ganf G G 1974b. Diurnal mixing and the vertical distribution of phytoplankton in a shallow equatorial lake (Lake George, Uganda). J. Ecol. 62, 611-629.
- Ganf G G 1974c. Phytoplankton biomass and distribution in a shallow eutrophic lake (Lake George, Uganda). Oecologia (Berlin) 16, 2-29.
- Ganf G G 1974d. Incident solar irradiance and underwater light penetration as factors controlling the chlorophyll a content of a shallow equatorial lake (Lake George, Uganda). J. Ecol. 62, 593-609.
- Ganf G G 1975. Photosynthetic production and irradiance-photosynthesis relationships of the phytoplankton from a shallow equatorial lake (Lake George, Uganda). Oecologia (Berlin) 18, 165-183.
- Ganf G G & P Blažka 1974. Oxygen uptake, ammonia and phosphate excretion by zooplankton of a shallow equatorial lake (Lake George, Uganda). Limnol. Oceanogr. 19, 313-325.
- Ganf G G & A J Horne 1975. Diurnal stratification, primary production and nitrogen fixation in a shallow equatorial lake (Lake George, Uganda). Freshwat. Biol. 5, 13-39.
- Ganf G G & A B Viner 1973. Ecological stability in a shallow equatorial lake (Lake George, Uganda). Proc. R. Soc. Lond. B 184, 321-346.

- Golterman H L 1971. The determination of mineralization losses in correlation with the estimation of net primary production with the oxygen method and chemical inhibitors. Freshwat. Biol. 1, 249-256.
- Green J 1967. Associations of Rotifera in the zooplankton of the lake sources of the White Nile. J. Zool. Lond. 151, 343-378.
- Green J 1971. Associations of Cladocera in the zooplankton of the lake sources of the White Nile. J. Zool., Lond. 165, 373-414.
- Green J 1976. Changes in the zooplankton of Lake Mutanda, Lake Bunyoni and Lake Mulehe, Uganda. Freshwat. Biol. 6, 433-436.
- Greenwood P H 1973. A revision of the Haplochromis and related species (Pisces: Cichlidae) from Lake George, Uganda. Bull. Brit. Mus. (Nat. Hist.), Zool. Ser 25, 141-242.
- Greenwood P H 1976. Lake George, Uganda. Phil. Trans. R. Soc. Lond. B 274, 375-391.
- Greenwood P H 1980. Towards a phyletic classification of the "genus" Haplochromis (Pisces: Cichlidae) and related taxa. Part II; the species from Lakes Victoria, Nabugabo, Edward, George and Kivu. Bull. Brit. Mus. (Nat. Hist.), Zool. Ser 39, 1-101.
- Greenwood P H & J W G Lund 1973. Introductory remarks. Proc. R. Soc. Lond. B 184, 229-233.
- Gwahaba J J 1973a. Population studies of the more abundant fish species in Lake George, Uganda. MSc thesis, Makerere Univ., Kampala.
- Gwahaba J J 1973b. Effects of fishing on the Tilapia nilotica (Linne) 1757 population in Lake George, Uganda over the past 20 years. E. Afr. Wildl. J. 11, 317-328.
- Gwahaba J J 1975. The distribution, population density and biomass of fish in an equatorial lake, Lake George, Uganda. Proc. R. Soc. B 190, 393-414.
- Gwahaba J J 1978. The biology of cichlid fishes (Teleostei) in an equatorial lake (Lake George, Uganda). Arch. Hydrobiol. 83, 538-551.
- Haworth E Y 1977. The sediments of Lake George (Uganda). V. The diatom assemblages in relation to the ecological history. Arch. Hydrobiol. 80, 200-215.
- Hecky R E & P Kilham 1973. Diatoms in alkaline, saline lakes: ecology and geochemical implications. Limnol. Oceanogr. 18, 53-71.
- Holmes A & H F Harwood 1932. Petrology of the volcanic fields East and South of Ruwenzori, Uganda. Quart. J. Geol. Soc., Lond. 88, 270-442.
- Horne A J & A B Viner 1971. Nitrogen fixation and its significance in tropical Lake George, Uganda. Nature, Lond. 232, 417-418.
- Kilham P & J M Melack 1972. Primary northupite deposition in Lake Mahega, Uganda. Nature (Phys. Sci.) 238, 123.
- Levrin T & G R Fish 1956. Light penetration in some tropical African lakes. Oikos 7, 98-109.
- Lind E M 1956. Studies in Ugandan swamps. Uganda J. 20, 166-176.
- Lock J M 1967. Vegetation in relation to grazing and soils in Queen Elizabeth National Park. PhD thesis, Cambridge Univ.
- Lock J M 1973. The aquatic vegetation of Lake George, Uganda. Phytocoenologia 1, 250-262.
- Lock J M 1977. The vegetation of Ruwenzori National Park, Uganda. Bot. Jb. Syst. 98, 372-448.
- Lowe-McConnell R H 1958. Observations on the biology of Tilapia nilotica Linné in East African waters. Rev. Zool. Bot. afr. 57, 129-170.
- McGowan L M 1972. Description of the larvae of Chaoborus (Neochaoborus) anomalus Edwards and Chaoborus (Sayomia) ceratopogones Theobald (Diptera, Chaoboridae) from Lake George, Uganda and their morphological variation in other African lakes. Rev. Zool. Bot. afr. 85, 357-368.
- McGowan L M 1973. Studies on Chaoborus (Diptera, Chaoboridae) in Lake George, Uganda. MPhil. thesis, Univ. London.
- McGowan L M 1974. Ecological studies on Chaoborus (Diptera, Chaoboridae) in Lake George, Uganda. Freshwat. Biol. 4, 483-505.

- McGowan L M 1975. The occurrence and behaviour of adult Chaoborus and Procladius (Diptera, Nematocera) from Lake George, Uganda. Zool. J. linn. Soc. 57, 321-334.
- Melack J M 1978. Morphometric, physical and chemical features of the volcanic crater lakes of western Uganda. Arch. Hydrobiol. 84, 430-453.
- Melack J M & P Kilham 1972. Lake Mahega: a mesothermic, sulphatochloride lake in western Uganda. Afr. J. trop. Hydrobiol. Fish. 2, 141-150.
- Moriarty C M 1973. Feeding of herbivorous fish in Lake George, Uganda. MPhil. thesis, Univ. Nottingham, UK.
- Moriarty C M & D J W Moriarty 1973. Quantitative estimation of the daily ingestion of phytoplankton by Tilapia nilotica and Haplochromis nigripinnis in Lake George, Uganda. J. Zool. Lond. 171, 15-23.
- Moriarty D J W 1973. The physiology of digestion of blue-green algae in the cichlid fish, Tilapia nilotica. J. Zool. Lond. 171, 25-39.
- Moriarty D J W, J P E G Darlington, I G Dunn, C M Moriarty & M P Tevlin 1973. Feeding and grazing in Lake George, Uganda. Proc. R. Soc. Lond. B 184, 299-319.
- Moriarty D J W & C M Moriarty 1973. The assimilation of carbon from phytoplankton by two herbivorous fishes: Tilapia nilotica and Haplochromis nigripinnis. J. Zool. Lond. 171, 41-55.
- Origa H O, S M Yoaciel & S Wopuni 1973. Chemical pollution in Ruwenzori National Park. Rep. to Uganda National Parks.
- Paperna I 1973. Hosts, distribution and pathology of infections with larvae of Eustrongylides (Diocotphyidae, Nematoda) in fishes from East African lakes. J. Fish. Biol. 6, 67-76.
- Paperna I & J P Thurston 1968. Monogenetic trematodes (Dactylogyridae) from fish in Uganda. Rev. Zool. Bot. afr. 78, 283-294.
- Paperna I & J P Thurston 1969. Monogenetic trematodes collected from cichlid fish in Uganda; including the description of five new species of Cichlidogyrus. Rev. Zool. Bot. afr. 79, 15-33.
- Pejler B 1974. On the rotifer plankton of some East African lakes. Hydrobiologia 44, 389-396.
- Richardson J L 1968. Diatoms and lake typology in East and Central Africa. Int. Revue ges. Hydrobiol. 53, 299-338.
- Richardson J L 1969. Characteristic planktonic diatoms of the lakes of Tropical Africa (Addendum to: Diatoms and lake typology in East and Central Africa). Int. Revue ges. Hydrobiol. 54, 175-176.
- Talling J F 1965. The photosynthetic activity of phytoplankton in East African lakes. Int. Revue ges. Hydrobiol. 50, 1-32.
- Thompson K 1973. Production of Cyperus papyrus in Lake George. Proc., IBP Synthesis Meeting on the Functioning of Photosynthetic systems in different environments, Aberystwyth, April 1973. Cambridge Univ. Press.
- Thurston J P 1969. The biology of Lernaea barnimiana (Crustacea: Copepoda) in Lake George, Uganda. Rev. Zool. Bot. afr. 80, 15-23.
- Thurston J P 1970. The incidence of Monogenea and parasitic Crustacea on the gills of fish in Uganda. Rev. Zool. Bot. afr. 82, 111-130.
- Tinsley R C 1973. Studies on the ecology and systematics of a new species of clawed toad, of the genus Xenopus, from western Uganda. J. Zool. Lond. 169, 1-27.
- Viner A B 1969. The chemistry of the water of Lake George, Uganda. Verh. int. Ver. Limnol. 17, 289-296.
- Viner A B 1970. Ecological chemistry of a tropical African lake. PhD thesis, Univ. London. 192 pp.
- Viner A B 1973. Responses of a mixed phytoplankton population to nutrient enrichments of ammonia and phosphate, and some associated ecological implications. Proc. R. Soc. Lond. B 183, 351-370.
- Viner A B 1975a. Non-biological factors affecting phosphate recycling in the water of a tropical eutrophic lake. Verh. int. Ver. Limnol. 19, 1404-1415.
- Viner A B 1975b. The sediments of Lake George, Uganda. I: Redox potentials, oxygen consumption and carbon dioxide output. Arch. Hydrobiol. 76, 181-197.

- Viner A B 1975c. The sediments of Lake George, Uganda. II: Release of ammonium and phosphate from an undisturbed mud surface. Arch. Hydrobiol. 76, 368-378.
- Viner A B 1975d. The sediments of Lake George, Uganda. III: The uptake of phosphate. Arch. Hydrobiol. 76, 393-410.
- Viner A B 1975e. The supply of minerals to tropical rivers and lakes (Uganda). pp. 227-261. In J Olson (Ed.), An introduction to land-water interactions, Springer-Verlag.
- Viner A B 1977a. The sediments of Lake George, Uganda. IV: The vertical distribution of chemical characteristics. Arch. Hydrobiol. 80, 40-69.
- Viner A B 1977b. Relationships of nitrogen and phosphorus to a tropical phytoplankton population. Hydrobiologia 52, 185-196.
- Viner A B & I R Smith 1973. Geographical, historical and physical aspects of Lake George. Proc. R. Soc. Lond. B 184, 235-270.
- Visser S A 1962. Chemical investigations into a system of lakes, rivers and swamps in S W Kigezi, Uganda. E. Afr. Agric. For. J. 28, 81-86.
- Wayland E J 1934. Katwe. Uganda J. 1, 96-106.
- Young J O 1976. Systematic studies on limnic Macrostomum spp. Turbellaria Macrostomida from East Africa. Zool. Scripta 5, 49-60.

