

XI. BIBLIOGRAPHY

1. Allee, W.C., and Schmidt, K.P. 1951 "Ecological Animal Geography", John Wiley & Sons, New York.
2. American Public Health Association. 1923 "Standard methods for examination of water and sewage", as revised by American Chemical Society, New York.
3. Anon. 1939 Description of exhibit of air-breathing fishes of India, Science & Culture, 4: 703-704.
4. Atz, J.W. 1952a Narial breathing in fishes and evolution of internal nares, Quart.Rev.Biol., 27(4): 366-377.
5. Idem 1952b Internal nares in the teleost *Astocarpus*, Anat.Rec., 113(1): 105-116.
6. *Bader, R. 1937 Bau, Entwicklung und Function des akzessorischen atmungsorgans der labyrinth fische, Zeitsch.Wissen.Zool.
7. Baldwin, E. 1949 "Introduction to Comparative Biochemistry", Cambridge Univ.Press.
8. Beadle, L.C. 1933 Scientific results of the Cambridge expedition to the East African lakes, J.Linn.Soc.(Zool.), 38.
9. Berg, L.S. 1947 "Classification of fishes, Both recent and fossil", Trav.Inst.Zool.Acad.Sci., U.S.S.R., Lithoprinted by J.W.Edwards, Ann.Arbor, Michigan.
10. Black, E.C. 1940 The transport of the oxygen by the blood of Fresh-water fish, Biol.Bull., 79(1): 215-229.
11. Breder, C. (Jr.) 1931 On the organic equilibrium in aquaria, Copeia, 2: 66.
12. Idem 1941 Respiratory behaviour in fishes not especially modified for breathing air under conditions of depleted oxygen, Zoologica, 26(3): 243-244.

13. Brock, G.T. 1938 The Cranial muscles of Gecko. - A general account with a comparison of the muscles in other gnathostomes, Proc.Zool.Soc., London, 108: 735-761.
14. Carter, G.S. 1931 Aquatic and aerial respiration in animals, Biol.Rev., 6(1): 1-35.
15. Idem 1935 Respiratory adaptations of the fishes of forest waters, with description of accessory respiratory organs of Electrophorus electricus (Linn.) and Plecostomus plecostomus (Linn.), J.Linn.Soc.(Zool.), 39.
16. Idem 1951 "Animal Evolution", Sidgwick & Jackson, London.
17. Idem 1957 Air-breathing - from "The Physiology of Fishes", 65-79, Academic Press Inc., New York.
18. Carter, G.S., and Beadle, L.C. 1930 The fauna of swamps of Paraguayan Chaco in relation to its environment, - I. The Physico-chemical nature of the environment, J.Linn.Soc.(Zool.), 37: 205-258.
19. Idem 1931 The fauna of the swamps of Paraguayan Chaco in relation to its environment, - II. Respiratory adaptations in fishes, J.Linn.Soc.(Zool.), 37: 327-368.
20. Colbert, E.H. 1955 "Evolution of the Vertebrates", John Wiley & Sons, New York.
21. Copper, G. et al 1949 Relation of dissolved oxygen to winter mortality of fish in Michigan lakes, Trans.Amer.Fish.Soc., 76: 23-33.
22. Das, B.K. 1927 The bionomics of certain air-breathing fishes of India, together with an account of the development of their air-breathing organs, Philos.Trans., B216: 183-219.
23. Idem 1928a On a curious mode of development of the supra-branchial labyrinthiform accessory air-breathing apparatus in the climbing perch, 15th Proc.Ind.Sci.Cong.

24. Das, B.K. 1928b Observations on the drowning experiments of the Indian fresh-water fishes of the family Ophiocephalidae, 15th Proc. Ind. Sci. Cong.
25. Idem 1929 On a peculiar type of branchia in an Indian Symbranchoid eel Amphipnous cuchia (Ham. Buch.), 16th Proc. Ind. Sci. Cong.
26. Idem 1930 Observation on a new mode of aerial respiration in an estuarine gobiid, 17th Proc. Ind. Sci. Cong.
27. Idem 1932 Further observations on the air-breathing habit of an estuarine gobiid, 18th Proc. Ind. Sci. Cong.
28. Idem 1933 On the bionomics, structure and physiology of respiration in an estuarine fish Pseudapocryptes lanceolatus (Blochet Schneider) with special reference to a new mode of respiration, Current Science, 1: 389-393.
29. Idem 1934 The habits and structure of Pseudapocryptes lanceolatus (Blochet Schneider), a fish in the first stages of structural adaptations to aerial respiration, Proc. Roy. Soc., London, B108.
30. Idem 1935 On ecology and bionomics of an air-breathing loach Lepidocephalus guntea (Ham. Buch.) with a review of air-breathing fishes, Proc. Int. Zoo. Cong., Lisbon, 2: 866-920.
31. Idem 1936 Further observations on the structure, bionomics and physiology of an air-breathing fish Lepidocephalus guntea (Ham. Buch.) found within H.R.H. Nizam's Dominion, 23rd Proc. Ind. Sci. Cong.
32. Idem 1937 Some observations on the structure and physiology of an air-breathing loach, Lepidocephalus guntea (Ham. Buch.) found in Hyderabad, 24th Proc. Ind. Sci. Cong.

33. Das, B.K. 1938 On the bionomics, structure and physiology of certain air-breathing gobies, Periopthalmus Koelreuteri (Pallas) and Boleopthalmus boddarti (Pallas), 25th Proc. Ind. Sci. Cong.
34. Idem 1940 Nature and causes of evolution and adaptation of air-breathing fishes (a resume), Presidential address, 27th Proc. Ind. Sci. Cong., : 215-260.
35. Idem 1946 Further observations on the ecology, bionomics and early development of the semi-terrestrial symbranchoid eel, Amphipnous cuchia (Ham. Buch.), The cuchia eels of India, 26th Proc. Ind. Sci. Cong.
36. Davis, D.D. 1949 Comparative anatomy and evolution of the Vertebrates - from "Genetics, Paleontology and Evolution", : 64-89, Princ. Univ. Press.
37. *Day, F. 1868 Observations on some fresh-water fishes of India, Proc. Zool. Soc., London, as cited by Das-1940.
38. Idem 1877 On amphibious and migratory fishes of India, J. Linn. Soc. (Zool.), 13: 198-215.
39. Idem 1889 "The Fauna of British India" - Fishes, Vol. I & II, Taylor & Francis, London.
40. *Dobson, G.E. 1874 Notes on respiration of some species of Indian fresh-water fishes, Proc. Zool. Soc., London, as cited by Das-1940.
41. Dobzansky, T. 1951 "Genetics and the origin of the Species", Columbia Univ. Press, New York.
42. Dubale, M.S. 1951 A comparative study of the extent of the gill-surface in some representative Indian fishes and its bearing on the origin of the air-breathing habit, J. Univ. Bombay, 29(5): 90-101.
43. Idem 1952 Branchiomic and Hypobranchial muscles of certain Indian air-breathing fishes, J. Univ. Bombay, 30(5): 6-13.

44. Dubale, M.S. 1955 Paucity of oxygen in the medium as a factor in the evolution of air-breathing habit among teleosts, J.M.S.Univ.Baroda, 4(2): 63-72.
45. Edgeworth, F.H. 1935 "The Cranial Muscles of Vertebrates", Cambridge Univ.Press, London.
46. Erichson, J. 1947 The oxygen consumption of Gasterosteus aculeatus L.in toxic solutions, J.Exp.Biol., 23.
47. Fry, F.E.J. and Black, E.C. 1939 The influence of carbon dioxide on the utilisation of oxygen by certain species of fish in Toronto region, Amer.J.Physiol., 126: 497-498.
48. Fry, F.E.J. 1957 The aquatic respiration of fish - from "The Physiology of Fishes", Vol.I, 1-55, Academic Press Inc., New York.
49. Gause, G.F. 1942 The relation of adaptability to adaptation, Quart.Rev.Biol., 17.
50. George, C.J. and Dubale, M.S. 1941 A note on the degeneration of the gills in certain air-breathing fishes, J.Univ.Bombay, 10(3): 80-85.
51. George, J.C. 1953 Observations on the air-breathing habit in Chilioscyllium, J.Univ.Bombay, 21(5).
52. Ghosh, K.G. 1934 An experimental study of the asphyxiation of some air-breathing fishes of Bengal, J.Roy.Asiat.Soc., Bengal, 29: 327-332.
53. Goodrich, K.S. 1930 "Structure and Development of Vertebrate Skull", Macmillan & Co., London.
54. Gray, I.E. 1954 Comparative study of the gill-area of marine fishes, Biol.Bull., 107: 219-225.
55. Idem 1957 A comparative study of the gill-area of crabs, Biol.Bull., 12(1): 34-42.
56. Gregory, J.W. and Barret, B.H. 1931 "General Stratigraphy", Methuen & Co., London.

57. Gregory, W.K. 1936 The transformations of the organic design. A review of the origin and development of earlier vertebrates, Biol.Rev., 11: 311-344.
58. Hall, F.G. and Gray, I.E. 1929 Haemoglobin concentration of marine fishes, J.Biol.Chem., 81: 589-594.
59. Hall, F.G., Gray, I.E. and Lepkovsky. 1926 The influence of asphyxiation on the blood conditions of the marine fishes, J.Biol.Chem., 77: 549-554.
60. Hawk, Oser and Summerson. 1949 "Practical Physiological Chemistry", J. & A. Churchill Ltd., London.
61. Heilbrunn, L.V. 1952 "An Outline of general Physiology", Saunders, Philadelphia.
62. Hora, S.L. 1921 Fish and Fisheries of Manipur with some observations in those of Naga hills, Rec.Ind.Mus., 22: 165-215.
63. Idem 1922 Observations on the fauna of certain torrential streams of Khasi hills, Rec.Ind.Mus., 24(1): 31-63.
64. Idem 1932 The mechanism of respiration in hill-stream fishes, Current Science, 1 : 34-35.
65. Idem 1933a Animals in Brackish-water, at Uttarbhag, Lower Bengal, Current Science, 1: 381-386.
66. Idem 1933b Respiration in fishes, J.Bomb.Nat.Hist.Soc., 36: 538-560.
67. Idem 1935 Physiology, bionomics and evolution of air-breathing fishes of India, Trans.Nat.Inst.India, 1: 1-16.
68. Idem 1939 Physiology of respiration and evolution of air-breathing fishes, Proc.Nat.Inst.Sci.India, 5: 281-288.
69. Hora, S.L. and Mukerji. 1938 "Table of identification of the Indian fresh-water fishes with descriptions of certain Indian families and observation of the relative utility of the probable larvivorous fishes of India", Manager of Publications, Delhi.

70. Howell, C.G.L. 1915 Notes on the respiration of Murrel, J. Bomb. Nat. Hist. Soc., 34: 195-196.
71. Hyman, L.H. 1942 "Comparative Vertebrate Anatomy", Univ. Chic. Press, Chicago.
72. Irving, L., 1939 The respiratory tolerance of some
Black, E.C. and
Safford, V. Pennsylvanian fish, Amer. J. Physiol.,
126: 545-546.
73. Johnson, H.L. 1939 Colorimetric method for the estimation
and of dissolved oxygen in the fields,
Whitney, R.S. J. Exp. Biol., 16: 56-60.
74. *Jahoda. 1947 Survival of the brook trout in water
of low oxygen content, J. Wildl.
Management, 11(1): 96-97. As cited
by Rounsefell et al, 1953.
75. Kennedy, R.P. 1927 The quantitative determination of
iron in tissues, J. Biol. Chem., 74:
385-391.
76. *King, J.E. and 1947 Investigations of the effect of the
Smith, A. water hyacinth on the fish and fish
habitats of Louisiana water, U.S. Fish.
and Wildl. Servi. Spec. Sci. Rept., 39,
App. A: 30-65, as cited by Rounsefell
et al -1953.
77. Krishnan, M.S. 1949 "Geology of India and Burma", Law
Publishing House, Madras.
78. Kulkarni, C.V. 1954 A preliminary note on air-breathing
and Jaggi, B. habit and respiratory organs in
Megalops cyprinoides (Brau), 41st
Proc. Ind. Sci. Cong.; 182.
79. Lack, D.L. 1947 "Darwin's Finches", Cambridge.
80. Lele, S.H. 1932 The circulation of blood in the air-
-breathing chambers of Ophiocephalus
punctatus (Bloch), J. Linn. Soc. (Zool.),
38.
81. *Lindroth. 1949 As cited by Rounsefell et al -1953.
82. *Lydekkar, R. 1886 As cited by Menon, A.G.K. - 1951.
83. Majumdar, N.N. 1953 On the palatal lining as accessory
respiratory organ in some Indian
Carps, 40th Proc. Ind. Sci. Cong.

84. Manager of publications, Delhi. 1941 "Agricultural marketing in India - Preliminary guide to Indian fish, fisheries, methods of fishing", Govt. of India Press, Delhi.
85. *Marlier. 1938 Air-breathing teleosts, G. Ann. Roy. Soc. Zool., Belgrade, 69: 163-185, as cited by Das, B.K. - 1940.
86. Mathur, B.B.L. 1953 The accessory respiratory organ of Rita rita (Ham.), 40th Proc. Ind. Sci. Cong.
87. *Mayr, E. 1947 As cited by Dobzansky-1951.
88. Menon, A.G.K. 1951 Distribution of clariid fishes and its significance in Zoogeographical studies, Proc. Nat. Inst. Sci. India, 17(4): 291-301.
89. Mitchel, P.H. 1938 "General Physiology", McGraw-Hill Book Co., New York.
90. Moore, R.C. 1949 "Introduction to Historical Geology", McGraw-Hill Book Co., New York.
91. *Moore, W.G. 1942 Field studies on oxygen requirements of certain fresh-water fishes, Ecology, 23: 319-329, as cited by Rounsefell et al - 1953.
92. Mott, J.C. 1957 The Cardiovascular system - from "The Physiology of Fishes", Vol. I: 82-108, Academic Press Inc., New York.
93. Moy-Thomas, J.A. 1939 "Palaeozoic Fishes", Chemical Publishing Co., New York.
94. Myers, G.S. 1942 The lungs of Bothriolepis, Stan. Ichthyol. Bull., 2(4): 134-136.
95. Nayar, K.K. 1951 Some burrowing fishes from Travancore, Proc. Ind. Acad. Sci., B17(5): 226-236.
96. Norman, J.R. 1947 "A History of Fishes", Ernest Benn Ltd., London.
97. Parr, A.A. 1926 Adaptiogenese und Phylogenese-zor analyse der anapassunger scheinungen und ikre, enstechung, Theo. Organ. Ent., 1: 1-60.

98. *Pearse, A.S. 1929 As cited by Gray-1957.
99. *Powers. 1927 As cited by Carter & Beadle-1930.
100. Prosser, et al 1950 "Comparative Animal Physiology", Saunders, Philadelphia.
101. *Pruthi. 1927 As cited by Carter & Beadle-1930.
102. *Putter. 1909 As cited by Gray-1954.
103. Ranade, M.R. 1953 A check list of fishes occurring in the fresh-waters of Baroda, J. Bomb. Nat. Hist., 51(2).
104. Rao, S.H. and Hora, S.L. 1938 On the ecology, bionomics and systematics of the blennioid fishes of the genus Andamia, Rec. Ind. Mus., 40(4): 386-389.
105. Redfield, C.A. 1933 Evolution of the respiratory function of the blood, Quart. Rev. Biol., 8: 31-57.
106. Regan, C.T. 1909 The Asiatic fishes of the family Anabantidae, Proc. Zool. Soc., London.
107. *Idem 1912 The anatomy and classification of symbranchoid eels, Ann. Mag. Nat. Hist., London, 9, as cited by Das-1940.
108. Rogers, C.G. 1938 "Text book of Comparative Physiology", McGraw-Hill Book Co., New York.
109. Romer, A.S. 1946 The early evolution of fishes, Quart. Rev. Biol., 21(1): 33-69.
110. Idem 1949 Time, series and trend in animal evolution - from "Genetics, Paleontology and Evolution", 103-120, Princeton Univ. Press, Princeton.
111. Idem 1953 "Vertebrate Paleontology", Univ. Chic. Press, Illinois.
112. Idem 1956 The early evolution of land vertebrates, Proc. Amer. Phil. Soc., 100(3): 157-167.
113. Root, R.W. 1931 The respiratory function of the blood of the marine fishes, Biol. Bull., 61: 427-456.

114. Rounsefell, G.A. 1953 "Fishery Science", John Wiley & Sons, et al. New York.
115. Saunders and 1949 "Practical Vertebrate Anatomy", Manton. Oxford Univ. Press, London.
116. Schlaifer, A. and 1940 Social and respiratory behaviour of Breder, C.M. small Tarpon, Zoologica, 25: 493-512.
117. Schlaifer, A. 1941 Additional social and physiological aspects of respiratory behaviour in small Tarpon, Zoologica, 26(4): 55-60.
118. Schöötle, E. 1931 Morphologie und physiologie der atmung bei wasser, schlam, und landlebenden gobiiformes, Zeitsch. F. Wiss. Zool., 140: 1-14.
119. Schucert, C. and 1941 "Outlines of Historical Geology", Dunbar, C.O. John Wiley & Sons, New York.
120. Setna, S.B. and 1946 The fresh-water fish and fisheries of Ahmedabad, J. Bomb. Nat. Hist. Soc., Kulkarni, C.V. 46(1): 126-132.
121. Simpson, G.G. 1941 Quantum effects of evolution, Science, 93.
122. Idem 1952 "Meaning of evolution", Yale Univ. Press, Newhaven.
123. Idem 1953 "The Major features of Evolution", Columbia Univ. Press, New York.
124. Smith, H.W. 1930 Metabolism of a lung fish - Protopterus aethiopicus, J. Biol. Chem., 88: 97-130.
125. Idem 1932 Water regulation and its evolution in fishes, Quart. Rev. Biol., 7: 1-26.
126. Idem 1953 "From Fish to Philosopher", Little Brown & Co., Boston (U.S.A.).
127. Srinivasachar, 1955 The skull of Ophiocephalus, Proc. Ind. H.R. Acad. Sci., B17(5): 226-236.
128. Swinnerton, H.H. 1947 "Outlines of Paleontology", Edward Arnold & Co., London.

129. Takahasi, N. 1925 On the morphology of cranial muscles of the cypriniform fishes, J.Morph., 40: 1-109.
130. Tang, P. 1933 On the rate of oxygen consumption of tissues and lower organisms as a function of oxygen tension, Quart. Rev.Biol., 8: 260-270.
131. Thomas, A.B. 1956 The cranial muscles of teleosts, J.Anim.Morph.Physiol., 3(1): 13-24.
132. Umbreit, W.W. et al. 1951 "Manometric techniques and Tissue metabolism", Burgess Publishing Co., Minneapolis.
133. *Vernberg, F.J. 1956 Study of oxygen consumption of excised tissues of certain marine decapod crustacea in relation to the habitat, Physiol.Zool., 29: 227-234, as cited by Gray-1957.
134. *Vetter, B. 1878 Jenaische Zeitschr.Naturw., 12, as cited by Edgeworth-1935.
135. Wadia, D.N. 1953 "Geology of India", Macmillan & Co., London.
136. Watson, D.M.S. 1926 The evolution and origin of Amphibia, Philos.Trans., B214: 189-257.
137. Westoll, T.S. 1949 On the evolution of the Dipnoi - from "Genetics, Paleontology and Evolution", 121-184, Princeton Univ.Press, Princeton.
138. Willmer, E.N. 1934 Some observations on the respiration of certain tropical fresh-water fishes, J.Exp.Biol., 11: 283-306.
139. Worthington, E.B. 1937 On the evolution of fish in the great lakes of Africa, Int.Rev.d.ges. hydrobiol.U.hydrogr., 35: 304-317.
140. Idem 1952 Geographical differentiation in fresh-waters with special reference to fishes - from "The New Systematics", 287-302, Oxford Univ.Press, London.

