This book is apparently a compilation of 18 fish disease articles published in 1972 and a few from 1970 (3) and 1971 (4). An appendix lists 49 supported research projects in fish diseases in 1973. No Introduction is provided to explain how or why these particular articles were chosen. The senior author apparently made every senior author of an article used in the book an author of the book, although he only listed the first three followed by et al. He removed the addresses of all authors, any identification of where and when each article was published, and the original page numbers from the reprints; however, all but the authors’ addresses were noted in Credits and Acknowledgments.

We enclose the first seven pages including the Table of Contents, Credits and Acknowledgments, Author Index (p. 231), the incomplete Key-Word Title Index (p. 232), and Guide to Current Research (introduction) (p. 233). We did not see the usefulness of copying all the copied articles (p. 10-230), or the research projects (p. 233-270), particularly since this would probably be illegal. However, we did compile a list of the research projects including author, title, support agency, and page number.
Diseases of Fish

Papers by
Lionel E. Mawdesley-Thomas, Kenneth Wayne
Burris, Joseph L. Knuckles et al.

IN COOPERATION WITH THE
SMITHSONIAN SCIENCE INFORMATION EXCHANGE

Summaries of current research projects are included in the final section of this volume. Previously unpublished, these summaries were obtained from a search conducted by the Smithsonian Science Information Exchange, a national collection of information on ongoing and recently terminated research.

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# TABLE OF CONTENTS

Credits and Acknowledgements .................................................. 5
Preface ................................................................................. 7

Occurrence ............................................................................ 9

Research into Fish Diseases .............................................. Mawdesley-Thomas 10

*Ergasilus rhinos* sp. N. (Copepoda: Cyclopoida) 
from the Nasal Fossae of Three Centrarchid Fishes 
of North Carolina ........................................ Burris and Miller 18

*Ictalurus melas* (Rafinesque), a New Host 
for *Argulus diversus* (Wilson) ......................... Knuckles 27

Studies on Helminths of North Dakota. 
III. Parasites of the Bigmouth Buffalo, 
*Ictiobus cyprinellus* (Val.), with the Description 
of Three New Species and the Proposal of 
*Icelandonchohaptor* Gen. N. (Monogenea) ....... Leiby, 
Kritsky and Peterson 29

Helminth Parasitism in the Pacific Killfish, 
*Fundulus parvipinnis*, from Southern 
California ........................................ Yoshino 45

Copepod Parasites of California Halibut, 
*Paralichthys californicus* (Ayres), in Anaheim 
Bay, California ........................................ Ho 48

*Otodistomum hydrolagi* sp. N. (Trematoda: 
Azygiidae) from the Coelom of the Ratfish, 
*Hydrologus colliei* (Lay and Bennett, 1839) .......... Schell 58

*Ancyrocephalus cornutus* sp. N. (Trematoda: 
Monogenea) and a Redescription of *A. parvus* 
Linton, 1940, from the Atlantic Needlefish, 
*Strongylura marina* (Walbaum) ........ Williams and Rogers 62

Studies on Helminths of North Dakota. 
IV. Parasites of the River Carpsucker, *Carpiodes 
carpio*, with Descriptions of Three New Species 
(Monogenea) .................. Kritsky, Leiby and Shelton 69

Two Species of Acanthocephala from 
Australian Fishes with Description of 
*Arhythmacanthus paraplagusiarum* sp. N. ........ Nickol 88

Pathology and Etiology ....................................................... 93

Studies on the Heterophyid Trematoda 
*Apophallus brevis*, the “sand-grain grub” of 
Yellow Perch (*Perca flavescens*). II. The Meta- 
cercaria: Position, Structure, and Composition 
of the Cyst; Hosts; Geographical Distribution 
and Variation .................................................. Sinclair 95

Pathobiology of *Artystone trysibia* Schiedte 
(Isopoda: Cymothoidae) an Endoparasitic Isopod 
of South American Fresh Water Fishes .......... Huizinga 114
Coagulation Changes in Healthy and Sick
Pacific Salmon ........................................... Hougie 122

Fish Kill Caused by an Intermediate
Oil from Coke Ovens ................................. Zitko and Tibbo 136

Studies on Ulcerative Dermal Necrosis
of Salmonids. I. The Skin of the Normal
Salmon Head ................................. Roberts, Shearer, Elson and Munro 138

Studies on Ulcerative Dermal Necrosis
of Salmonids. II. The Sequential Pathology
of the Lesions .............................. Roberts, Shearer, Munro and Elson 150

Studies on Ulcerative Dermal Necrosis
of Salmonids. III. The Healing Process in Fish
Maintained under Experimental Conditions .... Roberts,
Ball, Munro and Shearer 165

Studies on Ulcerative Dermal Necrosis
of Salmonids. IV. Failure to Detect Epithelial
Auto-antibodies in Sera from Diseased Fish .... Roberts,
Shearer and Munro 174

Microbiology and Virology .......................... 179

Infection of American Smelt in Lake Ontario
and Lake Erie with the Microsporidian Parasite
Glugea hertwigi (Weissenberg) ........................ Chen and Power 180

Copepods of the Family Chondracanthidae
(Cyclopoida) Parasitic on South African Marine
Fishes ................................................. Ho 192

Channel Catfish Virus: A New Herpesvirus
of Ictalurid Fish ................................. Wolf and Darlington 204

The Public Health Aspects of a Larval
Roundworm from the Herring ......................... Davey 213

Malignant Diseases .................................. 219

Oral Carcinomata in a Salmon
(Salmo salar L.) ................................... Roberts 220

Acid and Alkaline Phosphatase Activity
in the Liver of Brown and Rainbow
Trout ........................................ Mawdesley-Thomas and Barry 222

Visceral Granuloma in Brook Trout
(Salvelinus fontinalis) ........................... Dunbar and Herman 224

RARIP ................................................. 233


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Roberts, R.J., "Oral Carcinomata in a Salmon (Salmo salar L.)," The Veterinary Record, 1972, 91:199.


Roberts, Ronald J.; W.M. Shearer; and A.L.S. Munro, "Studies on Ulcerative Dermal Necrosis of Salmonids. IV. Failure to Detect Epithelial Auto-Antibodies in Sera from Diseased Fish," Journal of Fish Biology, 1972, 4:21-25.


Zitko, V.; and S.N. Tibbo, "Fish Kill Caused by an Intermediate Oil from Coke Ovens," *Bulletin of Environmental Contamination and Toxicology*, 1971, 6:24-25.
PREFACE

A systemic study of disease in animals more primitive than Aves is largely lacking. In one particular group of animals, the fishes, this precedent is being reversed. However, there are many difficulties which preclude investigations of this nature. A major factor is the environment in which these animals live and their patterns of migration, particularly in marine species. In order to adequately define the etiological agent of a disease one needs to isolate the agent from the host, culture it and produce the same condition by injecting it back into members of the same species. This is difficult and often impossible to do and with species that travel great distances in their normal migration epidemiological studies are also particularly difficult. To further complicate the picture, man, with his ever increasing delight in dumping his waste into the waters of the world, is not only shifting the delicate balance of nature, but establishing conditions that predispose fish to certain maladies. There now seems to be evidence to support an association between pollution and neoplasma. However, as man becomes more interested in culturing fish commercially or for pleasure he becomes more knowledgeable of fish physiology and diseases because artificial environments often support or increase the likelihood of infection. While some of the problems described for fish in the wild have no bearing in these artificial environments, a more controlled study can be conducted as to how an agent infects and what possible means are available to eradicate it.

The literature assembled in this volume should clearly illustrate the shortcomings as well as the prospects of this area of science. The reports have been grouped into categories which hopefully will provide a logical approach to the subject for the layman and specialist. The occurrence of various diseases, their pathology and etiology are covered. In addition there is a section on particular diseases which are caused by microorganisms and viral agents. Finally, a section on malignancies of fish is included. This latter subject is certainly one that will receive increasing attention and many types of neoplasia in fish could well serve as experimental models for higher organisms. The subject is no doubt difficult to formalize at this stage but if the present readings are any indication one suspects that the hazy picture of fish disease will soon begin to present itself more clearly.

Ronald T. Acton, Ph.D.
January, 1974
AUTHOR INDEX

Ball, H.J., 165
Barry, David H., 222
Burris, Kenneth Wayne, 18

Chen, M., 180

Darlington, Robert W., 204
Davey, J.T., 213
Dunbar, Clarence E., 224

Elson, K.G.R., 138, 150

Herman, Roger Lee, 224
Ho, Ju-shey, 48, 192
Hougie, Cecil, 122
Huizinga, Harry W., 114

Knuckles, Joseph L., 27
Kritsky, D.C., 29, 69

Leiby, P.D., 29, 69

Mawdesley-Thomas, Lionel E., 10, 222
Miller, Grover C., 18
Munro, A.L.S., 138, 150, 165, 174

Nickol, Brent B., 88
Peterson, C.A., 29
Power, G., 180

Roberts, Ronald J., 138, 150, 165, 174, 220
Rogers, Wilmer A., 62
Schell, Stewart C., 58
Shearer, W.M., 138, 150, 165, 174
Shelton, M.E., 69
Sinclair, Norman R., 95

Tibbo, S.N., 136
Williams, Ernest H. Jr., 62
Wolf, Ken, 204
Yoshino, Timothy P., 45
Zitko, V., 136
A. parvus (Linton), 62
Acanthocephala, 88
American Smelt, Infection of, 180
Ancyrocephalus cornutus, 62
Apophallus brevis, 95
Argulus diversus (Wilson), 27
Arhythmicanthus paraplagusiarum, 88
Artystone trysibia Schioedte, 114
Atlantic Needlefish, 62
California Halibut, 48
Carcinomata, Oral, 220
Carpiodes carpio, 69
Channel Catfish Virus, 204
Copepods, 192

Ergasilus rhinos, 18

Fish
Diseases of, 10
Coagulation Changes in
Healthy and Sick, 122

Fossae, Nasal, 18
Fundulus parvipinnis, 45

Glugea hertwigi (Weissenberg), 180
Granuloma in Brook Trout,
Visceral, 224

Helminths, 29, 45, 69
Herpesvirus, 204
Heterophyid Trematode, 95
Hydrolagus coliei, 58

Icelanonchohaptor, 29
Ictalurid Fish, 204
Ictalurus melas (Rafinesque), 27
Ictiobus cyprinellus (Val.), 29

Liver, Acid and Alkaline Phosphatase Activity in the, 222
Metacercaria, 95

Necrosis, Ulcerative Dermal, 138, 150, 165, 174

Oil, Fish Kill Caused by, 136
Otodistomum hydralagi, 58

Pacific Killfish, 45
Paralichthys californicus
(Ayres), 48

Ratfish, 58
River Carpsucker, Parasites of, 69
Roundworm from the Herring,
Larval, 213

Salmo salar L., 220

Yellow Perch, 95
Guide to Current Research

The research summaries appearing in the following section were obtained through a search of the Smithsonian Science Information Exchange data base conducted in November, 1973.

The Exchange annually registers 85,000 to 100,000 notices of current research projects covering a wide range of disciplines and sources of support. SSIE endeavors to retain up to two full years of current research information in its active file. The selection of summaries appearing in this section does not represent the complete SSIE collection of information on this topic, but, rather, has been specifically tailored to reflect the scientific content of this particular volume. A limited number of summaries may have been omitted because clearance for publication by the supporting agency or organization was not received prior to the publication date.

SSIE is the only, single source for information on ongoing and recently terminated research in all areas of the life, physical, behavioral, social and engineering sciences. The SSIE file is updated daily by a professional staff of scientists utilizing a comprehensive and flexible system of hierarchical indexing. Retrieval of subject information is conducted by these same specialists, using computer-connected, video display terminals which allow instant access to the entire data base and on-line refinement of search strategies. SSIE offers an information service unequalled anywhere: comprehensive and vital information on who is conducting what research where and under whose support.

More current information, and in some cases expanded coverage, on the topic considered in this volume is available directly from SSIE. This information is offered at modest cost in the form of custom searches of the SSIE file designed specifically to meet the user's need or as an update of the subject search in this section. For more information on SSIE, contact MSS or write directly to the Smithsonian Science Information Exchange, 1730 M Street, N.W., Washington, D.C. 20036. Subject search or updated package requirements may be discussed with SSIE scientists by calling the Exchange at (202) 381-5511.
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Title of Research Project</th>
<th>Supporting Agency*</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allison, R.</td>
<td>Epizootiology of parasitic diseases in fish populations under intense management</td>
<td>CSRS</td>
<td>234</td>
</tr>
<tr>
<td>Anderson, D. P.</td>
<td>Oral immunization of hatchery-reared salmonids – Red Mouth comparative vaccine study</td>
<td>BSF</td>
<td>235</td>
</tr>
<tr>
<td>Ashley, L. M.</td>
<td>Histopathology of livers of Rainbow Trout fed rancid pellets containing aflatoxin</td>
<td>BSF</td>
<td>236</td>
</tr>
<tr>
<td>Bouck, G. R.</td>
<td>Effect of nitrogen supersaturation on Colombia River fishes</td>
<td>BSF</td>
<td>236</td>
</tr>
<tr>
<td>Bullock, G. L.</td>
<td>Bacteriological and serological studies on motile aeromonads and pseudomonads freshly isolated from diseased fishes</td>
<td>BSF</td>
<td>237</td>
</tr>
<tr>
<td>Crites, J. L.</td>
<td>Impact of the nematode parasite <em>Eustrongylides tubifex</em></td>
<td>BSF</td>
<td>237</td>
</tr>
<tr>
<td>Crites, J. L.</td>
<td>Impact of the nematode parasite <em>Camallanus oxycephalus</em></td>
<td>BSF</td>
<td>238</td>
</tr>
<tr>
<td>Crites, J. L.</td>
<td>Impact of the nematode parasite <em>Philometra sp.</em></td>
<td>BSF</td>
<td>239</td>
</tr>
<tr>
<td>Ebel, W. J.</td>
<td>Effect of supersaturation of dissolved nitrogen on migrating salmonids</td>
<td>NOAA</td>
<td>240</td>
</tr>
<tr>
<td>Fryer, J. L.</td>
<td>Infectious diseases of salmonid fishes</td>
<td>OSG</td>
<td>241</td>
</tr>
<tr>
<td>Fryer, J. L.</td>
<td>Effect of water temperature on infectious diseases and immune response in of salmonid fishes</td>
<td>OSG</td>
<td>242</td>
</tr>
<tr>
<td>Fryer, J. L.</td>
<td>Biology of the protozoan parasite <em>Ceratomyxa shasta</em></td>
<td>OSG</td>
<td>243</td>
</tr>
<tr>
<td>Fujihara, M. P.</td>
<td>Effect of water temperature as a contributing agent on <em>C. columnaris</em>, <em>D. salmonis</em>, and <em>A. salmonicida</em> fish diseases</td>
<td>AEC</td>
<td>245</td>
</tr>
<tr>
<td>Halver, J. E.</td>
<td>Metabolism and function of nutritional components in hepatomagenesis</td>
<td>BSF</td>
<td>246</td>
</tr>
<tr>
<td>Hoffman, G. L.</td>
<td>Parasites and parasitic diseases of fishes – A new species of <em>Sanguinicolia</em>, blood fluke of fish</td>
<td>BSF</td>
<td>247</td>
</tr>
<tr>
<td>Hoffman, G. L.</td>
<td>Control of <em>Myxosoma cerebralis</em> and other cartilaginous myxosporidia with filtration and ultraviolet radiation</td>
<td>BSF</td>
<td>247</td>
</tr>
<tr>
<td>Johnson, C. L.</td>
<td>Hepatoma induction study utilizing aflatoxin-contaminated feed</td>
<td>BSF</td>
<td>248</td>
</tr>
<tr>
<td>Klontz, G. W.</td>
<td>Parasites and diseases of anadromous and commercial fish</td>
<td>NOAA</td>
<td>249</td>
</tr>
<tr>
<td>Lee, D. J.</td>
<td>Metabolism and carcinogenicity of aflatoxins</td>
<td>DHEW</td>
<td>249</td>
</tr>
<tr>
<td>Mahoney, J. B.</td>
<td>Etiology of estuarine fish diseases</td>
<td>NOAA</td>
<td>250</td>
</tr>
<tr>
<td>McCoy, E.</td>
<td>Bacteria in Great Lakes fish – Pollution related</td>
<td>WSG</td>
<td>250</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Institution</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>Miller, G. C.</td>
<td>Parasites of fresh-water fishes in North Carolina</td>
<td>CSRS</td>
<td>252</td>
</tr>
<tr>
<td>Miller, G. C.</td>
<td>The incidence and cause of Gas-bubble Disease in a heated effluent</td>
<td>BSF</td>
<td>253</td>
</tr>
<tr>
<td>Murchelano, R. A.</td>
<td>Comparative pathobiology</td>
<td>NOAA</td>
<td>254</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Evaluation of the toxicity of drugs in treatment of Whirling Disease of trout</td>
<td>BSF</td>
<td>256</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Evaluation of the control of Whirling Disease by drugs</td>
<td>BSF</td>
<td>256</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Study of the life cycle of <em>Myxosoma cerebralis</em> in trout by a method of controlled infection and histological screening</td>
<td>BSF</td>
<td>257</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Development of staining procedures for diagnostic work for Whirling disease organisms</td>
<td>BSF</td>
<td>258</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Study of the control of Whirling Disease by disinfection</td>
<td>BSF</td>
<td>259</td>
</tr>
<tr>
<td>Ogrodnick, J.</td>
<td>Evaluation of egg transmission and control of Whirling Disease by use of the silo</td>
<td>BSF</td>
<td>259</td>
</tr>
<tr>
<td>Ordal, E. J.</td>
<td>Aquatic myxobacteria, marine vibrios and other fish pathogens</td>
<td>AEC</td>
<td>260</td>
</tr>
<tr>
<td>Plumb, J.</td>
<td>Evaluation of the influence of age and size of Channel Catfish on the infectivity of CCV</td>
<td>BSF</td>
<td>261</td>
</tr>
<tr>
<td>Plumb, J.</td>
<td>Method of controlling mortality in Channel Catfish due to CCV infection</td>
<td>BSF</td>
<td>261</td>
</tr>
<tr>
<td>Pratt, I.</td>
<td>Marine fisheries – symbiosis and parasitism</td>
<td>NOAA</td>
<td>262</td>
</tr>
<tr>
<td>Putz, R. E.</td>
<td>Transmission of microsporidia</td>
<td>BSF</td>
<td>262</td>
</tr>
<tr>
<td>Raber, M. D.</td>
<td>Parasites and diseases of anadromous and commercial fish</td>
<td>NOAA</td>
<td>263</td>
</tr>
<tr>
<td>Raible, R. W.</td>
<td>Survival and growth rate of Channel Catfish as a function of dissolved oxygen concentration</td>
<td>OWRR</td>
<td>265</td>
</tr>
<tr>
<td>Rogers, W. A.</td>
<td>Pathology of <em>Aeromonas liquifaciens</em> in Channel Catfish</td>
<td>BSF</td>
<td>265</td>
</tr>
<tr>
<td>Rogers, W. A.</td>
<td>Control of microsporidian parasites</td>
<td>BSF</td>
<td>266</td>
</tr>
<tr>
<td>Rogers, W. A.</td>
<td>Investigations of amebiasis in fish</td>
<td>BSF</td>
<td>266</td>
</tr>
<tr>
<td>Rogers, W. A.</td>
<td>Cooperative fish parasitism and disease study</td>
<td>BSF</td>
<td>267</td>
</tr>
<tr>
<td>Sinnhuber, R. O.</td>
<td>Biological Investigations of metabolites from <em>Aspergillus flavus</em></td>
<td>OSG</td>
<td>268</td>
</tr>
<tr>
<td>Sinnhuber, R. O.</td>
<td>Mycotoxin toxicity and carcinogenesis in trout</td>
<td>OSG</td>
<td>269</td>
</tr>
<tr>
<td>Stunkard, H. W.</td>
<td>Studies on helminthic parasites</td>
<td>NSF</td>
<td>271</td>
</tr>
<tr>
<td>unknown</td>
<td>Studies on Vibrio Disease in fish</td>
<td>UKG</td>
<td>271</td>
</tr>
<tr>
<td>Walker, R.</td>
<td>Cytology of viral neoplasms of fish</td>
<td>DHEW</td>
<td>272</td>
</tr>
</tbody>
</table>
Wedemeyer, G.  Immunosuppressants as diagnostic tools for kidney disease detection  BSF  273
Weidner, E. H.  A biological study of marine microsporidiosis  NSF  273
Wellings, S. R.  Epidermal papillomas in pleuronectid fishes  DHEW  274
Whatley, N.  Parasites, diseases, and control of diseases of commercially important finfishes and shellfishes  NOAA  275
Wolke, R. E.  Marine pathology  NOAA  276