609

Annotated Bibliography of Zooplankton Sampling Devices

SPECIAL SCIENTIFIC REPORT–FISHERIES No. 609

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES

Special Scientific Report--Fisheries are preliminary or progress reports and reports on scientific investigations of restricted scope. Established as Special Scientific Report in 1940, nos. 1 to 67 were issued from that date to 1949, when the new series, Special Scientific Report--Fisheries, with new serial numbering, was started.

Special Scientific Report--Fisheries are distributed free to libraries, research institutions, State agencies, and scientists.

UNITED STATES DEPARTMENT OF THE INTERIOR
Walter J. Hickel, *Secretary*
Leslie L. Glasgow, *Assistant Secretary*
for Fish and Wildlife, Parks, and Marine Resources
Charles H. Meacham, *Commissioner*, U.S. FISH AND WILDLIFE SERVICE
Philip M. Roedel, *Director*, BUREAU OF COMMERCIAL FISHERIES

Annotated Bibliography of Zooplankton Sampling Devices

By

JACK W. JOSSI

Contribution No. 104, Bureau of Commercial Fisheries Tropical Atlantic Biological Laboratory, Miami, Fla. 33149

United States Fish and Wildlife Service
Special Scientific Report--Fisheries 609

Washington, D.C.
July 1970

CONTENTS

Annotated Bibliography of Zooplankton Sampling Devices

By

JACK W. JOSSI, Oceanographer

Bureau of Commercial Fisheries
Tropical Atlantic Biological Laboratory
Miami, Fla. 33149

ABSTRACT

The bibliography gives references to publications issued since 1873. It has information on many characteristics of these devices. The references are listed by author and by KWIC index.

INTRODUCTION

The bibliography presents references to articles on zooplankton sampling devices which have been published since 1873. It has information on the description, performance, deployment, comparative catching ability, and hydrodynamic characteristics of the plankton devices. I have omitted references to devices for the manipulation and processing of plankton samples such as splitters, counting dishes, and zooplankton volumetric apparatus.

Most of the entries refer to published articles. References to unpublished papers, foreign-language papers with translations, and papers difficult to obtain are annotated to aid the reader. References that were not originally printed in the Modern European alphabet have been transliterated. Despite a careful literature search, certain omissions are bound to occur, particularly in the case of untranslated papers, or those occurring in obscure journals.

INDEXING SYSTEM

The Keyword-in-Context (KWIC) indexing system (International Business Machines Corporation, 1962) used in this bibliography provides convenient and rapid retrieval of pertinent articles, as well as an easy method of updating the bibliography at periodic intervals. The bibliography consists of three parts. First, bibliography made up of all articles indexed, arranged alphabetically according to the last name of the author (first author mentioned when there are more than one). Second, the Keyword-in-Context (KWIC) index, which consists of an alphabetical listing of significant words and phrases in the titles and annotations and including the words by which they are surrounded. Each KWIC index entry is accompanied by an accession number located at the right-hand margin. Reference to that number in the bibliographic entries provides the complete reference and its annotation. Third, a list of all journal titles as abbreviated in the bibliography, each followed by the title written out in full.

To illustrate the use of the bibliography, suppose one is interested in papers dealing with the filtration efficiencies of the Indian Ocean Standard Net. Pertinent references will be found by scanning the KWIC index under FILTRATION, EFFICIENCIES, and INDIAN OCEAN STANDARD NET. The accession numbers to the right of each key word are then used to locate the complete reference in the bibliography.

The IBM printer used to prepare the bibliography has a limited number of typographic characters. The following set of symbols was therefore, substituted for certain missing characters:

Symbols	Definitions
.//	Indicates end of title when additional key words have been added. (The additional key words follow the virgules.)
.-	Indicates the end of title without additional key words.
.*	Colon.
,,	Quotation mark.
.,	Semicolon.
,	Apostrophe.
/	Parenthesis.

NOTE

The reader's attention is called to a valuable publication whose issuance was too late to be included. It contains reviews of zooplankton sampling prepared by experts in the field and also references to some papers omitted from this bibliography. This publication is:

UNESCO.
1968. Zooplankton sampling. UNESCO-Monogr. Oceanogr. Methodol. 2, 174 pp. [available from: UNESCO, Place de Fontenoy, 75-Paris-7e France].

ACKNOWLEDGMENTS

Julius Rockwell, BCF (Bureau of Commercial Fisheries), Arlington, Va., let me use his encyclopedia of oceanographic instruments; Allan Child, Smithsonian Institution, Washington, D.C., provided many hard-to-find papers; Albert C. Jones, Conrad Mahnken, Raissa Maurin, and the secretarial staff of the BCF Tropical Atlantic Biological Laboratory, made many valuable suggestions and reviewed and aided in the preparation of the bibliography. The staff of the Computer Center, Institute of Marine Science, University of Miami, processed the references and made the machine runs.

LITERATURE CITED

INTERNATIONAL BUSINESS MACHINES CORPORATION.
1962. Keyword-in-Context (KWIC) indexing. Its Information Manual, form E20-8091, 21 pp.

AGASSIZ, ALEXANDER 007
/1888/
REVIEW OF CHUN /1888/
AMER. J. SCI.
3 /35/ 424-429.
CRITICISM OF THE IMPERFECT CLOSURE OF THE MODIFIED CHUN-PETERSEN NET.

AGASSIZ, ALEXANDER 009
/1888/
THREE CRUISES OF THE UNITED STATES COAST AND GEODETIC SURVEY STEAMER BLAKE.
BULL. MUS. COMP. ZOOL. HARVARD COLL.
14/ 314 PP.
DESCRIPTIONS OF SCOOP NET, TOW NET, AND SIGBEE GRAVITATING TRAP, PP. 34-37.

AGASSIZ, ALEXANDER 01'
/1892/
REPORTS ON THE DREDGING OPERATIONS OFF THE WEST COAST OF CENTRAL AMERICA TO THE GALAPAGOS, TO THE WEST COAST OF MEXICO, AND IN THE GULF OF CALIFORNIA, IN CHARGE OF ALEXANDER AGASSIZ, CARRIED ON BY THE U. S. FISH COMMISSION STEAMER -ALBATROSS-, LT. COM. Z. L. TANNER, U. S. N., COMMANDING. II. GENERAL SKETCH OF THE EXPEDITION OF THE -ALBATROSS- FROM FEBRUARY TO MAY 1891.
BULL. MUS. COMP. ZOOL. HARVARD COLL.
23 /1/ 1-89
ORIGINAL DESCRIPTION OF TANNER,S NET, DESCRIPTION OF A SURFACE TOW NET, AND DISCUSSION OF THE PALUMBO-CHUN-PETERSON NET.

AHLSTROM, ELBERT H. 013
/1948/
A RECORD OF PILCHARD EGGS AND LARVAE COLLECTED DURING SURVEYS MADE IN 1939 TO 1941.-
U.S. FISH. WILDL. SERV., SPEC. SCI. REP. FISH.
54/ 76 PP.
DESCRIPTIONS OF THREE SILK PLANKTON NETS WITH MOUTH DIAMETERS OF 0.5-, 1.0-, AND 1.6-M. DISCUSSIONS OF THE DISTRIBUTION OF FLOW ACROSS THE MOUTH OPENING OF A NET, VOLUME OF WATER FILTERED BY A NET, AND DEPTH OF SAMPLING OF THE NET,
PP. 1-39

AHLSTROM, ELBERT H. 015
/1952/
PILCHARD EGGS AND LARVAE AND OTHER FISH LARVAE, PACIFIC COAST-1950.
U.S FISH WILDL. SERV., SPEC. SCI. REP. FISH.
80/ 8 PP.
COMPARISON OF THE SAMPLING DEPTH OBTAINED FROM CALCULATIONS USING THE COSINE LAW AND FROM A DEPTH RECORDER. DISCUSSIONS OF THE PERFORMANCE OF PLOWMETERS.

AHLSTROM, ELBERT H. 017
/1953/
PILCHARD EGGS AND LARVAE AND OTHER FISH LARVAE, PACIFIC COAST-1951.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
102/ 55 PP.
DESCRIPTION OF THE NET USED, METHOD OF TOWING, DETERMINATION OF THE VOLUME OF WATER STRAINED, VARIATION IN THE DEPTH OF THE NET DURING TOWING, AND DEFINITION OF A STANDARDIZED HAUL FACTOR.

AHLSTROM ELBERT H. 019
/1954/
OCEANOGRAPHIC INSTRUMENTATIONS. III. BIOLOGICAL INSTRUMENTS.
NAT. ACAD. SCI. NAT. RES. COUNC.
309/ 36-46. PUBL.
DESCRIPTIONS OF THE HARDY PLANKTON RECORDER, CLARKE-BUMPUS SAMPLER, ISAACS HIGH-SPEED SAMPLER, AND ISAACS-KIDD MIDWATER TRAWL. RECOMMENDATIONS FOR THE DEVELOPMENT OF A HIGH SPEED SAMPLER CAPABLE OF TAKING DEEP TOWS AND OF AN INSTRUMENT FOR STUDYING PATCHINESS OF PLANKTON.

AHLSTROM, ELBERT H. 021
/1958/
SARDINE EGGS AND LARVAE AND OTHER FISH LARVAE, PACIFIC COAST, 1956.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
251/ 84 PP.
BRIEF DESCRIPTION OF 1-M. NETS OF NO. 30 XXX SILK GRIT GAUZE AND FAIRLY SIMILAR SIZE NYLON BOLTING CLOTH. METHOD FOR MAKING OBLIQUE HAULS.

AHLSTROM, ELBERT H. 023
/1959/
VERTICAL DISTRIBUTION OF PELAGIC FISH EGGS AND LARVAE OFF CALIFORNIA AND BAJA CALIFORNIA.
U.S. FISH WILDL. SERV., FISH. BULL.
60/ 107-146.
BRIEF DESCRIPTIONS OF 0.5- AND 1.0- M. MOUTH DIAMETER CLOSING NETS AND METHOD FOR HAULING THEM, AND DISCUSSION OF AVOIDANCE AS A POSSIBLE CAUSE OF DIFFERENCES BETWEEN DAY AND NIGHT CATCHES.

AHLSTROM, ELBERT H. 027
ISAACS, JOHN D.
THRAILKILL, JAMES R.
KIDD, LEWIS W.
/1958/
HIGH-SPEED PLANKTON SAMPLER.
U.S. FISH WILDL. SERV., FISH. BULL.
58 /132/ 187-214.
DESCRIPTION AND PERFORMANCE OF THE HIGH-SPEED PLANKTON SAMPLER, AND A COMPARISON OF IT WITH A 1-M. PLANKTON NET IN TERMS OF DEPTH CAPABILITIES AND AVOIDANCE.

AHLSTROM, ELBERT H. 025
KRAMER, DAVID
/1957/
SARDINE EGGS AND LARVAE AND OTHER FISH LARVAE, PACIFIC COAST, 1955.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
224/ 90 PP.
COMPARISON BETWEEN NO. 30 XXX GRIT GAUZE SILK AND NO. 471 NITEX NYLON NETTING AND BRIEF DESCRIPTION OF THE STANDARDIZED HAUL FACTOR.

AIKAWA, HIROAKI 029
/1934/
ON THE QUANTITATIVE MEASUREMENTS OF PLANKTON /A REVIEW/.
BULL. JAP. SOC. SCI. FISH.
3 /2/ 100-110.
IN JAPANESE.

AIKAWA, HIROAKI 031
/1934/
ON THE RELIABILITY OF PLANKTON NET.
BULL. JAP. SOC. SCI. FISH.
3 /6/ 331-345.
IN JAPANESE.

AIZAWA, YAUSHI 033
MARUMO, RYUZO
OMORI, MAKOTO
/1965/
MOVEMENT OF PLANKTON NET IN OBLIQUE HAUL.
INFORM. BULL. PLANKTOL. JAP.
12/ 50-66.
DESCRIPTIONS OF A DEPTH-DISTANCE RECORDER /TS-DEPTH RECORDER TAFFRAIL TYPE/ AND AN ORI-C NET. DISCUSSION OF NET SPEED DURING THE TOW, VOLUME OF WATER FILTERED, AND DEPTH OF THE NET WITH DIFFERENT LENGTHS OF TOWING WIRE WHILE TOWING AT CONSTANT SPEED.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

ALBERT I, PRINCE DE MONACO 035
/1887/
SUR LES FILETS FINS DE PROFONDEUR EMPLOYES A BORD DE L,-HIRONDELLE-
COMPT. REND. SOC. BIOL.
39/ 661-664.
DESCRIPTION OF A CLOSING NET MADE BY DUMAIGE.

ALBERT I, PRINCE DE MONACO 037
/1889/
RECHERCHE DES ANIMAUX MARINS, PROGRES REALISES SUR L,-HIRONDELLE- DANS L, OUTILLAGE SPECIAL.
INT. CONGR. ZOOL. PARIS' 1889
1/ 133-159.
DESCRIPTION OF THE PRINCE OF MANACO,S CURTAIN NET.

ALBERT I, PRINCE DE MONACO 039
/1889/
SUR UN APPAREIL NOUVEAU POUR LES RECHERCHES ZOOLOGIQUES ET BIOLOGIQUES DANS DES PROFONDEURS DETERMINEES DE LA MER.
COMPT. REND. ACAD. SCI. PARIS
109/ 17-20.
PRINCE OF MONACO,S CURTAIN NET.

ALBERT I, PRINCE DE MONACO 041
/1902/
SUR LA TROISIEME CAMPAGNE DE LA -PRINCESSE ALICE II-.
COMPT. REND. ACAD. SCI. PARIS
134/ 961-965.
DISCUSSION OF THE MODIFIED GIESBRECHT NET.

ALLEN, W. E. 045
/1934/
THE PROBLEM OF METHODS IN MARINE PLANKTON INVESTIGATIONS.-
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
31/ 40-65.

ANDERSON, WILLIAM W. 047
GEHRINGER, JACK W.
COHEN, EDWARD
/1956/
PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA--SOUTH ATLANTIC COAST OF THE UNITED STATES, M/V,-THEODORE N. GILL-CRUISE 1.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
178/ 160 PP.
DESCRIPTION OF A CONTINUOUS PLANKTON SAMPLER DESIGNED BY ALBERT W. COLLIER JR., AND DETAILS OF A STANDARD 1/2-M NO. 1 SILK NET AND METHOD FOR ITS STANDARD TOW.

ANDERSON, WILLIAM W. 049
GEHRINGER, JACK W.
/1957/
PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA--SOUTH ATLANTIC COAST OF THE UNITED STATES, THEODORE N. GILL CRUISE 3.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
210/ 208 PP.
SEVERAL IMPROVEMENTS IN THE DESIGN OF THE GULF-III SAMPLER, AND A MODIFICATION OF THE GULF-IA SAMPLER.

ANONYMOUS. 051
/1967/
AUTOMATIC MULTIPLE SAMPLING PLANKTON NET. MODELS 1990 AND 1991, DATA SHEET 199 A-2.
BENTHOS INC., NORTH FALMOUTH, MASSACHUSETTS 02556.
OPENING AND CLOSING PLANKTON NET CAPABLE OF SAMPLING THREE DISTINCT DEPTHS AND ACTUATED BY PRESSURE / MODEL 1990 / OR BY ELECTRICITY / MODEL 1991 /.

ANONYMOUS. 052
/1967/
YENTSCH SUBMERSIBLE PLANKTON PUMP AND FILTER SYSTEM. MODEL 3050, DATA SHEET 305-A.
BENTHOS INC., NORTH FALMOUTH, MASSACHUSETTS 02556.

ANRAKU, MASATERU 053
/1956/
SOME EXPERIMENTS ON THE VARIABILITY OF HORIZONTAL PLANKTON HAULS AND ON THE HORIZONTAL DISTRIBUTION OF PLANKTON IN A LIMITED AREA.
BULL. FAC. FISH. HOKKAIDO UNIV.
7 /1/ 1-16.
DISCUSSION OF THE VARIABILITY IN CATCHES IN HORIZONTAL TOWS WITH A PISH LARVAE NET AND IN HIGH SPEED TOWS WITH THE HARDY UNDERWAY PLANKTON CATCHER. DISCUSSION OF SAMPLING DONE WITH A HAND OPERATED PUMP.

ANRAKU, MASATERU 054
AZETA, MASANORI
KIMURA, SHIGETO
/1967/
TOWING EXPERIMENTS OF THREE PLANKTON NETS.
BULL. PLANKT. SOC. JAP.
14/ 50-54.
DISCUSSION OF FILTRATION EFFICIENCY, OF FILTRATION AREA, MOUTH AREA, TOWING SPEED AND CLOGGING.

APSTEIN, C. 055
/1892/
DAS PLANKTON DES SUSSWASSERS UND SEINE QUANTITATIVE BESTIMMUNG.
SCHR. NATURWISS. VER. SCHLESWIG-HOLSTEIN
9 /2/ 267-272.
ILLUSTRATIONS AND DISCUSSIONS OF QUANTITATIVE AND QUALITATIVE PLANKTON NETS.

APSTEIN, C. 057
/1896/
DAS SUSSWASSERPLANKTON., METHODE UND RESULTATE DER QUANTITATIVEN UTERSUCHUNG.
LIPSIUS UND TESCHER, KIEL,
200 PP.
DESCRIPTION OF THE APSTEIN NET.

APSTEIN, C. 059
/1905/
DIE SCHATZUNGSMETHODE IN DER PLANKTONFORSCHUNG.
WISS. MEERESUNTERSUCH. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. KIEL, N. F. 8/

APSTEIN, C. 061
/1906/
PLANKTON IN NORD UND OSTSEE AUF DEN DEUTSCHEN TERMINFAHRTEN.
WISS. MEERESUNTERSUCH. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. KIEL, N. F. 9/ 1-27.
DESCRIPTION OF APSTEIN CLOSING NET OR KLAPPENSCHLIESSNETZ.

ARNOLD, EDGAR L., JR. 063
/1952/
HIGH SPEED PLANKTON SAMPLERS. 1. A HIGH SPEED PLANKTON SAMPLER /MODEL GULF 1-A/.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
88/ 6 PP.

ARNOLD, EDGAR L., JR. 065
/1958/
GULF OF MEXICO PLANKTON INVESTIGATIONS: 1951-53.
U.S. FISH WILDL. SERV., SPEC. SCI. REP. FISH.
269/ 53 PP.
COMPARISON OF THE CATCHING ABILITY OF THE GULF-III NET AND A CONVENTIONAL 1/2-M. SILK NET, AND THE AVOIDANCE BY DIFFERENT SIZED ORGANISMS.

ARNOLD, EDGAR L., JR. 067
/1959/
THE GULF V PLANKTON SAMPLER.
U.S. FISH WILDL. SERV. CIRC.
62/ 111-113.

ARNOLD, ZACH M. 069
/1962/
A HIGH-SPEED PLANKTON SAMPLER FOR MANUAL OPERATION.
MICROPALEONTOLOGY
8 /4/ 515-518.
DESCRIPTION OF THE HIGH-SPEED PLANKTON SAMPLER AND THE TYPES AND CONDITION OF THE ORGANISMS SAMPLED WITH IT.

ARON, WILLIAM 071
/1958/
PRELIMINARY REPORT OF MIDWATER TRAWLING STUDIES IN THE NORTH PACIFIC OCEAN.
UNIV. WASH. DEP. OCEANOGR. TECH. REP.
58/ 64 PP.
DISCUSSION OF THE ISAACS-KIDD MIDWATER TRAWL AS A TOOL IN PLANKTON ECOLOGY.

ARON, WILLIAM 073
/1958/
THE USE OF A LARGE CAPACITY PORTABLE PUMP FOR PLANKTON SAMPLING, WITH NOTES ON PLANKTON PATCHINESS.
J. MAR. RES.
16 /2/ 158-173.
COMPARISON OF CATCHING ABILITY OF THE PLANKTON PUMP AND A 1/2-M. NYLON PLANKTON NET. DISCUSSION OF PLANKTON PATCHINESS, GEAR SELECTIVITY AND AVOIDANCE.

ARON, WILLIAM 075
/1959/
MIDWATER TRAWLING STUDIES IN THE NORTH PACIFIC.
LIMNOL. OCEANOGR.
4 /4/ 409-418.
DISCUSSION OF THE MIDWATER TRAWL AS A TOOL IN PLANKTON ECOLOGY.

ARON, WILLIAM 077
/1962/
SOME ASPECTS OF SAMPLING THE MACROPLANKTON.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153 /5/ 29-38.
HISTORICAL SURVEY OF MACROPLANKTON SAMPLERS AND THEIR COMPARISON WITH RECENT GEAR.

ARON, WILLIAM 079
/1962/
THE DISTRIBUTION OF ANIMALS IN THE EASTERN NORTH PACIFIC AND ITS RELATIONSHIP TO PHYSICAL AND CHEMICAL CONDITIONS.
J. FISH. RES. BOARD CAN.
19 /2/ 271-314.-
DESCRIPTION OF THE 6-FT. ISAACS-KIDD MIDWATER TRAWL.

ARON, WILLIAM 081
RAXTER, NEWELL
NOEL, ROY
ANDREWS, WILLIAM
/1964/
A DESCRIPTION OF A DISGRETE DEPTH PLANKTON SAMPLER WITH SOME NOTES ON THE TOWING BEHAVIOR OF A 6-FOOT ISAACS-KIDD MIDWATER TRAWL AND A ONE-METER RING NET.
LIMNOL. OCEANOGR.
9 /3/ 324-333.

ARON, WILLIAM 083
AHLSTROM, ELBERT H.
BARY, B. MCK.
BE, ALLEN WH.
CLARKE, WILLIAM D.
/1965/
TOWING CHARACTERISTICS OF PLANKTON SAMPLING GEAR.
LIMNOL. OCEANOGR.
10 /3/ 333-340.
SAMPLERS TESTED WERE.. GULF-III, JET NET, 6-FT. ISAACS-KIDD MIDWATER TRAWL, BARY HIGH-SPEED SAMPLER, BE MULTIPLE SAMPLER.1-M. RING NET.

ASAOKA, OSAMU 085
OHWADA, MAMORU
/1960/
ON THE INFLUENCE OF THE PLANKTON ORGANISMS AND OTHER FACTORS UPON THE FILTERING EFFICIENCY OF THE PLANKTON NET.
J. OCEANOGR. SOC. JAP.
16 /3/ 36-39.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

BACHMAN, HANS 087
/1900/
DIE PLANKTONFANGE MITTELS DER PUMPE.
BIOL. ZENTRALBL.
20 /11/ 386-400.

BACKUS, RICHARD H. 089
HERSEY, J.B.
/1956/
ECHO-SOUNDER OBSERVATIONS OF THE MIDWATER NETS AND THEIR TOWING CABLES.
DEEP SEA RES.
3 /4/ 237-241.

BANSE, KARL 091
/1955/
UBER DAS VERHALTEN VON MEROPLANKTISCHEN LARVEN IN GESCHICHTETEM WASSER.
KIEL. MEERESFORSCH.
11/ 188-200.
USE OF A PUMP TO TAKE SIMULTANEOUS ZOOPLANKTON AND HYDROGRAPHIC SAMPLES.

BANSE, KARL 093
/1956/
UBER DEN TRANSPORT VON MEROPLANKTISCHEN LARVEN AUS DEM KATTEGATT IN DER KIELLER BUCHT.
BER. DEUT. WISS. KOMM. MEERESFORSCH.
14/ 147-164.
USE OF A PUMP TO TAKE SIMULTANEOUS ZOOPLANKTON AND HYDROGRAPHIC SAMPLES.

BANSE, KARL 095
/1957/
UBER DAS VERHALTEN VON COPEPODEN IM GESCHICHTETEN WASSER DER KIELLER BUCHT.
VERH. DEUT. ZOOL. GES.
1956, ZOOL. ANZ. SUPPL.
20/ 435-444.
USE OF A PUMP TO TAKE SIMULTANEOUS ZOOPLANKTON AND HYDROGRAPHIC SAMPLES.

BANSE, KARL 097
/1959/
DIE VERTIKALVERTEILUNG PLANKTISCHER COPEPODEN IN DER KIELER BUCHT.
BER. DEUT. WISS. KOMM. MEERESFORSCH.
15/ 357-390.
USE OF A PUMP TO TAKE SIMULTANEOUS ZOOPLANKTON AND HYDROGRAPHIC SAMPLES.

BANSE, KARL 099
/1962/
NET ZOOPLANKTON AND TOTAL ZOOPLANKTON.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 211-215.
COMPARISON OF THE WEIGHT OF ZOOPLANKTON COLLECTED BY NETS WITH THE AMOUNT OF ZOOPLANKTON ESTIMATED CHEMICALLY FROM SMALL WATER SAMPLES.

BANSE, KARL 101
SEMON, DARRELYN
/1963/
ON THE EFFECTIVE CROSS-SECTION OF THE ISAACS-KIDD MIDWATER TRAWL.
UNIV. WASH. DEP. OCEANOGR. TECH. REP.
88/ 9 PP.
ESTIMATION OF THE EFFECTIVE CROSS-SECTION OF THE 6-FT. ISAACS-KIDD MIDWATER TRAWL FOR ADULT EUPHAUSEA PACIFICA BY COMPARING TRAWL CATCHES WITH THOSE OF A QUANTITATIVE HIGH-SPEED CATCHER.

BARASHKOV, G. K. 103
/1961/
O METODIKE RAZDEL, NOGO SBORA MORSKOGO FITO-I ZOOPLANKTONA.
/A METHOD FOR THE SEPARATE COLLECTING OF MARINE PHYTO- AND ZOOPLANKTON./
TR. VSES. GIDROBIOL. OBSHSCHES.
11/ 416-418.

BARHAM, E. G. 105
/1958/
THE COD-END SAMPLER.-
PUBBL. STA. ZOOL. NAPOLI /NOTE TECH./
30/ 1-8.
DESCRIPTION OF A CLOSING APPARATUS SUITABLE FOR ATTACHMENT TO THE COD-ENDS OF LARGE HIGH-SPEED PLANKTON NETS AND MIDWATER TRAWLS.

BARKLEY, RICHARD A. 107
/1964/
THE THEORETICAL EFFECTIVENESS OF TOWED-NET SAMPLERS AS RELATED TO SAMPLER SIZE AND TO SWIMMING SPEED OF ORGANISMS.
J. CONS.
29 /2/ 146-156.
DISCUSSION OF THE RELATION BETWEEN AVOIDANCE AND SAMPLER SIZE, SWIMMING SPEED OF ORGANISMS, POSITION OF ORGANISMS RELATIVE TO SAMPLER, AND TOWING SPEED.

BARNES, HAROLD 108
/1949/
A STATISTICAL STUDY OF THE VARIATION IN VERTICAL PLANKTON HAULS, WITH SPECIAL REFERENCE TO THE LOSS OF THE CATCH WITH DIVIDED HAULS.
J. MAR. BIOL. ASS. U. K.
28 /2/ 429-446.

BARNES, HAROLD 109
/1949/
ON THE VOLUME MEASUREMENT OF WATER FILTERED BY A PLANKTON PUMP, WITH SOME OBSERVATIONS ON THE DISTRIBUTION OF PLANKTONIC ANIMALS.
J. MAR. BIOL. ASS. U. K.
28 /3/ 651-662.

BARNES, HAROLD 111
/1950/
A NOTE ON THE BARNACLE LARVAE OF THE CLYDE SEA AREA AS SAMPLED BY THE HARDY CONTINUOUS PLANKTON RECORDER.-
J. MAR. BIOL. ASS. U.K.
29 /1/ 73-80.
DISCUSSION OF THE IMPORTANCE OF THE RATIO BETWEEN THE MOUTH APERTURE AREA AND THE FILTERING AREA FOR THE HARDY CONTINUOUS PLANKTON RECORDER.

BARNES, HAROLD 113
/1951/
A STATISTICAL STUDY OF THE VARIABILITY OF CATCHES OBTAINED WITH TWO MODELS OF THE HARDY PLANKTON INDICATOR.
HULL BULL MAR. ECOL.
2 /16/ 283-293.

BARNES, HAROLD 114
/1951/
HORIZONTAL PLANKTON HAULS.-
J. CONS.
17 /2/ 133-139.
DISCUSSION OF THE NEED FOR ACCURATE DEPTH CONTROL IN HORIZONTAL NET HUALS.

BARNES, HAROLD 115
/1953/
A SIMPLE AND INEXPENSIVE CLOSING NET.
MEM. IST. ITAL. IDROBIOL. DOTT
7/ 189-198.
TESTS INDICATE NO LOSS OF CATCH WHEN THE NET IS CLOSED AND THAT COMPLETE FILTRATION IS EFFÉCTED IN THE ABSENCE OF CLOGGING.

BARNES, HAROLD 116
/1959/
OCEANOGRAPHY AND MARINE BIOLOGY.
A BOOK OF TECHNIQUES.
MACMILLAN CO., N. Y., AND GEO. ALLEN AND UNWIN LTD., LONDON, 218 PP.
DESCRIPTION AND DISCUSSION OF A VARIETY OF ZOOPLANKTON SAMPLING DEVICES.

BARNES, HAROLD 117
MARSHALL, S. M.
/1951/
ON THE VARIABILITY OF REPLICATE PLANKTON SAMPLES AND SOME APPLICATIONS OF -CONTAGIOUS- SERIES TO THE STATISTICAL DISTRIBUTION OF CATCHES OVER RESTRICTED PERIODS.
J. MAR. BIOL. ASS. U.K.
30 /2/ 233-263.

BARNES, HAROLD 125
TRANTER, DAVID J.
/1965/
A STATISTICAL EXAMINATION OF THE CATCHES, NUMBERS AND BIOMASS TAKEN BY THREE COMMONLY USED PLANKTON NETS.
AUST. J. MAR. FRESHWATER RES.
16 /3/ 293-306.
COMPARISON OF THE QUALITY AND QUANTITY OF CATCHES TAKEN BY THE INDIAN OCEAN STANDARD NET, TROPICAL JUDAY NET, AND CLARKE-BUMPUS SAMPLER. DISCUSSION OF AVOIDANCE AND ESCAPEMENT, CLOGGING, AND VOLUME OF WATER FILTERED.

BARROIS, TH. 127
/1892/
DESCRIPTION D,UN APPAREIL DESTINE A RECHERCHE DES ORGANISMES PELAGIQUES PAR DES PROFONDEURS DETERMINEES.
REV. BIOL. NORD FRANCE
4/ 192-197.
DESCRIPTION OF THE METHOD FOR USING A MODIFICATION OF THE PRINCE OF MONACO ,S CURTAIN NET.

BARY, B. MCK. 128
/1956/
NOTES ON ECOLOGY, SYSTEMATICS AND DEVELOPMENT OF SOME MYSIDACEA AND EUPHAUSIACEA /CRUSTACEA/ FROM NEW ZEALAND.
PAC. SCI.
10 /4/ 431-467.
COMPARISON OF THE PLANKTON CATCHER WITH A CONVENTIONAL TYPE NET, 50-CM. IN DIAMETER.

BARY, B. MCK. 129
DE STEFANO, J.C.
FORSYTH, M.
VAN DEN KERKHOF, J.
/1958/
A CLOSING, HIGH-SPEED PLANKTON CATCHER FOR USE IN VERTICAL AND HORIZONTAL TOWING.
PAC. SCI.
12 /1/ 46-59.
DISCUSSION OF EFFICIENCY OF THE SAMPLER WITH VARYING TOWING SPEED AND MESH SIZE, OF CLOGGING, AND OF AVOIDANCE.

BE, ALLEN W.H. 130
/1962/
QUANTITATIVE MULTIPLE OPENING-AND-CLOSING PLANKTON SAMPLERS.
DEEP SEA RES.
9/ 144-151.
A MODIFICATION OF THE VERTICAL SAMPLER /BE, EWING, LINTON, 1959/ FOR HORIZONTAL OR OBLIQUE SAMPLING.

BE, ALLEN W.H. 131
EWING, MAURICE
LINTON, LAWRENCE W.
/1959/
A QUANTITATIVE MULTIPLE OPENING-AND-CLOSING PLANKTON SAMPLER FOR VERTICAL TOWING.
J. CONS.
25 /1/ 36-46.

BERCAW, J.S. 134
/1966/
A FOLDING MIDWATER TRAWL DEPRESSOR.
LIMNOL. OCEANOGR.
11 /4/ 633-635.

BERNARD, F. 135
/1962/
CONTRIBUTION DU BATHYSCAPHE A L,ETUDE DU PLANCTON: AVANTAGES ET INCONVENIENTS.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 25-28.

BEVERTON, R. J. H. 136
TUNGATE, D. S.
/1967/
A MULTI-PURPOSE PLANKTON SAMPLER.
J. CONS.
31 /2/ 145-157.

BIERI, ROBERT 137
/1962/
ZOOPLANKTON INVESTIGATIONS.
LIMNOL. OCEANOGR.
SUPPL. 7/ 29-31.
DIMENSIONS OF THREE NYLON PLANKTON NETS.

BIERI, ROBERT 138
NEWBURY, THOMAS K.
/1966/
BOOBY-II, A QUANTITATIVE NEUSTON SAMPLER FOR USE FROM SMALL BOATS.
PUBL. SETO MAR. BIOL. LAB.
13 /5/ 405-410.

BIGELOW, HENRY B. 139
/1913/
A NEW CLOSING-NET FOR HORIZONTAL USE, WITH A SUGGESTED METHOD OF TESTING THE CATENARY IN FAST TOWING.
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
5 /5/6/ 576-580.

BIRGE, E.A. 141
/1895/
PLANKTON STUDIES ON LAKE MENDOTA. I. THE VERTICAL DISTRIBUTION OF THE PELAGIC CRUSTACEA DURING JULY, 1894.-
TRANS. WIS. ACAD. SCI. ARTS LETT.
10/ 421-484.
DESCRIPTION OF THE BIRGE CLOSING NET DEVISED FOR LIMNOLOGICAL EXPLORATIONS.

BIRGE, E.A. 143
JUDAY, CHANCEY
/1922/
THE INLAND LAKES OF WISCONSIN. THE PLANKTON. I. ITS QUANTITY AND CHEMICAL COMPOSITION.
WIS. GEOL. NATUR. HIST. SURV. BULL.
64. SCI. SER. 13/ 222PP.
HISTORICAL SURVEY OF QUANTITATIVE PLANKTON RESEARCH, AND DESCRIPTIONS OF THE APPARATUS, METHODS, AND PURPOSE OF THE STUDIES.

BITYUKOV, E.P. 144
/1961/
NOVAYA MODEL, PLANKTONOCHERPATELYA.
/A NEW MODEL PLANKTON SAMPLER/
TR. VSES. GIDROBIOL. OBSHCHEST.
11/ 419-423.
DESCRIPTION OF A NEW MODEL OF PLANKTON SAMPLER.

BITYUKOV, E.P. 145
/1966/
PLANKTONNAYA SET, S VODOMERNYM USTROISTVOM EE OPISAIE I REZUL,TATY ISPYTANII.
/A PLANKTON NET WITH A WATER-MEASURING DEVICE. DESCRIPTION AND TEST RESULTS./
OKEANOLOGIYA
1/ 165-171.

BLACKBURN, MAURICE 149
/1960/
SCRIPPS TUNA OCEANOGRAPHY RESEARCH /STOR/ PROGRAM.
UNIV. CALIF. SCRIPPS INST. OCEANOGR.
SIO REF.
60-50/ 83 PP.
DESCRIPTION OF BLACKBURN,S MICRONEKTON NET.

BLACKBURN, MAURICE AND ASSOCIATES 151
/1962/
TUNA OCEANOGRAPHY IN THE EASTERN TROPICAL PACIFIC.
U.S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.
400/ 48 PP.
DESCRIPTIONS OF TWO NYLON NETS-- ONE FOR COLLECTING MICRONEKTON AT 5 KNOTS, AND ONE AT 10 KNOTS, AND THEIR RATIOS OF FILTERING AREA/APERTURE AREA, THEIR FILTRATION COEFFICIENTS.

BOGOROV, B.G. 152
/1940/
METODIKE ISSLEDOVANIYA PLANKTONA V MORE NEKOTORYE NOVYE PRIBORY DLYA SBORA PLANKTONA.
/ON THE METHODS OF PLANKTON INVESTIGATIONS IN THE SEA. SOME NEW APPARATUS FOR PLANKTON CATCHES./
ZOOL. ZH.
19/ 172-182.
IN RUSSIAN WITH AN ENGLISH SUMMARY.

BOGOROV, B.G. 157
/1957/
STANDARTIZATSIYA MORSKIKH PLANKTONNYKH NSSLEDOVANII.
/ON THE STANDARDIZATION OF MARINE PLANKTON INVESTIGATIONS./
TR. INST. OKEANOL. AKAD. NAUK SSSR
24/ 200-214.
ILLUSTRATIONS OF BOGOROV,S PLANKTON SAMPLER AND JUDAY NET. SCHEMATIC DIAGRAM OF A PLANKTON PUMP.
IN RUSSIAN. ENGLISH TRANSLATION AVAILABLE IN
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
44/ 621-642, 1957.

BOGOROV, B.G. 159
/1957/
UNIFICATION OF PLANKTON RESEARCH.
ANNEE BIOL.
33/ 299-315.
RECOMMENDATION OF MESH SIZE AND MOUTH DIAMETERS FOR SAMPLING VARIOUS SIZED ORGANISMS, DESCRIPTION OF AN UNDERWAY PUMPING SYSTEM AND A MICROPLANKTON SAMPLER.

BOSSANYI, J. 163
/1951/
AN APPARATUS FOR THE COLLECTION OF PLANKTON IN THE IMMEDIATE VICINITY OF THE SEA BOTTOM.
J. MAR. BIOL. ASS. U.K.
30 /2/ 265-270.

BOURBEAU, FRANK 164
/1966/
UNDERSEA PHOTOMETER FOR MARINE BIOLOGICAL STUDIES.
UNDERSEA TECHNOL.
7 /9/ 39-45.
A DISCRETE DEPTH PLANKTON SAMPLER EQUIPPED WITH AN UNDERSEA PHOTOMETER MAKING IT POSSIBLE TO CORRELATE PLANKTON SPECIES WITH LIGHT LEVEL.

BOURBEAU, FRANK 165
CLARKE, WILLIAM D.
ARON, WILLIAM
/1966/
IMPROVEMENTS IN THE DISCRETE DEPTH PLANKTON SAMPLER SYSTEM.
LIMNOL. OCEANOGR.
11 /3/ 422-426.

BOURDILLON, A. 168
/1963/
ESSAIS COMPARES DE DIVERS FILETS A PLANCTON.-
RAPP. PROCES-VERBAUX REUNIONS COMM. INST. EXPLOR. SCI-MER MEDITER.
17 /2/ 455-461.

BRIDGER, J.P. 169
/1958/
ON EFFICIENCY TESTS MADE WITH A MODIFIED GULF-III HIGHSPEED TOW NET.
J. CONS.
23 /3/ 357-365.
AVOIDANCE BY LARVAL AND POSTLARVAL HERRING OF A MODIFIED GULF-III NET WAS LESS THAN FOR THE HELGOLAND LARVA NET AND THE PETERSEN YOUNG-FISH TRAWL.

BRINTON, EDWARD 171
/1962/
VARIABLE FACTORS AFFECTING THE APPARENT RANGE AND ESTIMATED CONCENTRATION OF EUHPAUSIIDS IN THE NORTH PACIFIC.
PAC. SCI.
16 /4/ 374-408.
DISCUSSION OF THE ERRORS INTRODUCED BY THE COLLECTING METHOD, TYPE OF NET, DEPTH OF TOW, ETC., AND COMPARISON OF THE EFFECTIVENESS OF TWO NETS.

BROOK, A.J. 173
WOODWARD, W.B.
/1956/
SOME OBSERVATIONS ON THE EFFECTS OF WATER INFLOW ON THE PLANKTON OF SMALL LAKES.
J. ANIM. ECOL.
25/ 22-35.
DISCUSSION OF COPEPODS REACTION TO RAPIDLY ACCELERATING CURRENT-- A PUNCTION OF HYDROSTATIC PRESSURE CHANGE.

BRUCE, R. 175
/1904/
THE -SCOTIA- CLOSING PLANKTON NET.
PROC. ROY. PHYS. SOC. EDINBURGH SESS. 1902-1904
15/ 141.

BSHARAH, LEWIS 177
/1957/
PLANKTON OF THE FLORIDA CURRENT. V. ENVIRONMENTAL CONDITIONS, STANDING CROP, SEASONAL AND DIURNAL CHANGES AT A STATION FORTY MILES EAST OF MIAMI.-
BULL. MAR. SCI. GULF CARIBBEAN
7 /3/ 201-251.
ESTIMATES OF THE EFFICIENCY OF A DISCOVERY-TYPE NET /70-CM. DIAMETER OPENING/ AND THE ERROR DUE TO AVOIDANCE BY ORGANISMS.

BUCHANAN-WOLLASTON, H.J. 179
/1911/
ON THE CALCULATION OF THE -FILTRATION COEFFICIENT- OF A VERTICALLY DESCENDING NET, AND ON THE ALLOWANCE TO BE MADE FOR CLOGGING.
PUBL. CIRCON. CONS. PERMA. INT. EXPLOR. MER
58/ 3-8.

BUCHANAN-WOLLASTON, H.J. 181
/1911/
ON A NEW FORM OF PLANKTON-NET, DESIGNED TO MAKE TRULY VERTICAL HAULS IN ANY WEATHER.
PUBL. CIRCON. CONS. PERMA. INT. EXPLOR. MER
59/ 9-14.

BUCHANAN-WOLLASTON, H.J. 183
/1937/
TWO TECHNICAL NOTES. /1/ ESTIMATING THE DEPTH AT WHICH HORIZONTAL HAULS ARE MADE. /2/ ESTIMATING THE TOTAL OR THE MEAN NUMBER OF ORGANISMS UNDER A GIVEN AREA OF SEA OR ON A GIVEN AREA OF SEA BOTTOM.
J. CONS.
12 /3/ 333-334.

BURCKHARDT, G. 185
/1900/
QUANTITATIVE STUDIEN UBER DAS ZOOPLANKTON DES VIERWALDSTATTERSEES.
MITT. NATURFORSCH. GES. LUZERN
3 /129/ 131-437.
CRITICISM OF THE CORI /1897/ NET AND A DESCRIPTION OF THE BURCKHARDT VERTICAL CLOSING NET.

BUTLER, P.A. 187
WILSON, A.J.
/1956/
A CONTINUOUS WATER SAMPLER FOR ESTIMATION OF DAILY CHANGES IN PLANKTON.
PROC. NAT. SHELLFISH. ASS.
47/ 109-113.
DESCRIPTION OF A SAMPLER FOR THE CONTINUOUS COLLECTION OF PHYTOPLANKTON AND SMALL ZOOPLANKTON.

CACHON, JEAN 189
/1957/
SUR QUELQUES TECHNIQUES DE PECHES PLANKTONIQUES POUR ETUDES BIOLOGIQUES.
BULL. INST. OCEANOGR. /FORMERLY DE MONACO/
1.103/ 6 PP.
DESCRIPTION OF A COD END BEAKER DESIGNED FOR MINIMUM DAMAGE TO ORGANISMS.

CALIFORNIA MARINE RESEARCH COMMITTEE 191
/1950/
CALIF. COOP. SARDINE RES.
PROG., PROGRESS REP.
ST. PRINT., SACRAMENTO
54 PP.
DESCRIPTION OF AND FIELD TESTS ON THE FOLLOWING EQUIPMENT.- A 43- POUND HOMOGENEOUS DEPRESSOR, A MIDWATER TRAWL, A HIGH-SPEED PLANKTON COLLECTOR, AND A FLOATING FISH LARVAE TRAP.

CASSIE, R. MORRISON 195
/1956/
SPAWNING OF THE SNAPPER, CHRYSOPHRYS AURATUS FORSTER IN THE HAURAKI GULF.
TRANS. PROC. ROY. SOC. N.Z.
84 /2/ 309-328.
DESCRIPTION OF A HIGH-SPEED PLANKTON CATCHER IN A RIGID FRAME.

CASSIE, R. MORRISON 197
/1958/
APPARATUS FOR INVESTIGATING SPATIAL DISTRIBUTION OF PLANKTON.
N.Z. J. SCI.
1 /3/ 436-448.

CASSIE, R. MORRISON 199
/1959/
SOME CORRELATIONS IN REPLICATE PLANKTON SAMPLES.
N.Z. J. SCI.
2 /4/ 473-484.

CASSIE, R. MORRISON 201
/1964/
IMPROVED FILTER-CHANGER FOR A PLANKTON PUMP.
N.Z. J. SCI.
7/ 409-416.

CECCALDI, H.J. 203
/1962/
SUR UNE METHODE DE RECOLTE DU MACROPLANCTON.
REC. TRAV. STA. MAR. ENDOUME, FAC. SCI. MARSEILLE
26 /41/ 3-6.
DESCRIPTION OF A METHOD FOR HARVESTING MACROPLANKTON USING DIVERS.

CHIBA, TAKUO 205
/1963/
SUGGESTION FOR IMPROVEMENT OF GEAR AND TECHNIQUE OF PLANKTON SAMPLING BASED ON THE EXPERIENCE OBTAINED ON THE CRUISE OF THE -KOYO MARU- IN THE INDIAN OCEAN NOVEMBER 1962- JANUARY 1963.
INFORM. BULL. PLANKTOL. JAP.
9/ 35-37.
DISCUSSIONS OF SAMPLING DONE WITH 1- HIGH_SPEED PLANKTON SAMPLER V TYPE, 2- INDIAN OCEAN STANDARD NET WITH RGS FLOW-METER, 3- 160-CM. CONICAL HORIZONTAL NET, 4- 80-CM. JUDAY TYPE VERTICAL NET, AND 5- LARGE AND SMALL TYPES OF ISAACS-KIDD MIDWATER TRAWLS.
IN JAPANESE WITH ENGLISH ABSTRACT.

CHIERCHIA, GAETANO 207
/1884/
THE VOYAGE OF THE -VETTER PISANI-.-
NATURE, /LONDON/.
30/ 365-366.
FIRST DISCUSSION OF THE PALUMBO-CHUN-PETERSEN NET.

CHIERCHIA, GAETANO 209
/1885/
COLLEZIONI PER STUDI DI SCIENZE NATURALI, FATTE NEL VIAGGIO INTORNO AL MONDO DALLA R. CORVETTA -VETTOR PISANI- /COMMANDANTE G. PALUMBO/.
ANNI 1882-1885.
REV. MAR. BRASIL
18 /9/ 239-247,
/10/ 5-42,
/11/ 195-238.
DISCUSSION OF THE PALUMBO-CHUN-PETERSEN NET.

CHILD, C. ALLAN 211
/1964/
BIOLOGICAL AND GEOLOGICAL COLLECTING GEAR USED IN OCEANOGRAPHY.
PRELIMINARY LIST.
ANTARCTIC DEP. SMITHSONIAN OCEANOGR. SORT. CENT. WASH. D.C. UNPUBLISHED MANUSCRIPT
DESCRIPTIONS OF A VARIETY OF ZOOPLANKTON SAMPLING DEVICES.

CHUN, CARL 213
/1888/
DIE PELAGISCHE TIERWELT IN GROSSEREN MEERESTIEFEN UND IHRE BEZIEHUNGEN ZU DER OBERFLACHENFAUNA.
ZOOLOGICA, STUTTGART
1 /1/ 1-72.
DESCRIPTION OF THE PALUMBO-CHUN-PETERSEN NET.

CHUN, CARL 215
/1889/
UNTERSUCHEN UBER DIE PELAGISCHE FAUNA DER CANARISCHEN INSELN.
SITZUNGSBER. PREUSS. AKAD. WISS. BERLIN, 1889.
519-553.
DISCUSSION OF THE DEFECTS OF THE CHUN PETERSEN NET.

CHUN, CARL 217
/1903/
AUS DEM TIEFEN DES WELTMEERES.
DEUT. TIEFSEE-EXPED.
592 PP.
PROPELLER-DRIVEN RELEASING DEVICE FOR THE PALUMBO-CHUN-PETERSEN NET.

CLARKE, GEORGE L. 219
/1933/
DIURNAL MIGRATION OF PLANKTON IN THE GULF OF MAINE AND ITS CORRELATION WITH CHANGES IN SUBMARINE IRRADIATION.
BIOL. BULL./WOODS HOLE/
65/ 402-436.
DESCRIPTION OF AN OPENING-CLOSING NET WITH ILLUSTRATIONS OF THE NET AND ITS ATTACHMENT TO THE TOWING-WIRE, AND DISCUSSION OF THE ERRORS DUE TO PATCHINESS, DEPTH SAMPLED, VOLUME OF WATER STRAINED, CLOGGING, AND AVOIDANCE.

CLARKE, GEORGE L. 221
/1939/
PLANKTON AS A FOOD SOURCE FOR MAN.
SCIENCE
89 /2322/ 602-603.
DISCUSSION OF THE USE OF NETS WHICH ARE ALLOWED TO SWING WITH THE TIDE FOR THE COLLECTION OF PLANKTON.

CLARKE, GEORGE L. 223
BUMPUS, DEAN F.
/1939/
BRIEF ACCOUNT OF THE PLANKTON SAMPLER.
INT. REV. GESAMTEN HYDROBIOL HYDROGR.
39 /1/2/ 190.
DESCRIPTION OF THE CLARKE-BUMPUS PLANKTON SAMPLER.

CLARKE, GEORGE L. 225
BUMPUS, DEAN F.
/1950/
THE PLANKTON SAMPLER-AN INSTRUMENT FOR QUANTITATIVE PLANKTON INVESTIGATIONS.
LIMNOL. SOC. AMER.
SPEC. PUBL.
5/ 2-8.
DESCRIPTION OF THE CLARKE-BUMPUS PLANKTON SAMPLER.

CLARKE, WILLIAM D. 227
/1964/
THE JET NET, A NEW HIGH-SPEED PLANKTON SAMPLER.
J. MAR. RES.
22 /3/ 284-287.
DESCRIPTION OF A HYDRODYNAMICALLY DESIGNED SAMPLER AND COMPARISON OF IT WITH THE GULF-III WITH REGARD TO TOWING CHARACTERISTICS, DAMAGE TO ORGANISMS, FILTRATION EFFICIENCY, PERCENTAGE OF FILTERING MATERIAL UTILIZED, AND FILTRATION SPEEDS. RESULTS OF PRELIMINARY FIELD TESTS OF THE JET NET, THE GULF-III, AND THE BARY HIGH-SPEED PLANKTON CATCHER.

CLEVE, P.T. 229
/1896/
MICROSCOPIC MARINE ORGANISMS IN THE SERVICE OF HYDROGRAPHY.
NATURE /LONDON/.
55 /1413/ 89-90.
DISCUSSION OF A SILK NET ATTACHED TO THE SHIP,S PUMP WHENEVER THE DECK WAS WASHED.

CLEVE, P.T. 231
/1904/
REPORT ON PLANKTON COLLECTED BY MR. TH. WULFF DURING A VOYAGE TO AND FROM BOMBAY.
ARK. ZOOL.
1/ 329-381.
DISCUSSION OF THE FIRST ATTEMPT TO OBTAIN SIMULTANEOUS PLANKTON AND HYDROGRAPHIC DATA WITH A PUMP.

CLUTTER, ROBERT I. 233
/1965/
SELF-CLOSING DEVICE FOR SAMPLING PLANKTON NEAR THE SEA BOTTOM.
LIMNOL. OCEANOGR.
10 /2/ 293-295.
DISCUSSION OF FILTERING EFFICIENCY AND FLOW VELOCITY ACROSS THE MOUTH.

COLLIER, ALBERT 235
/1957/
GULF-II SEMIAUTOMATIC PLANKTON SAMPLER FOR INBOARD USE.
U.S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.
199/ 11 PP.
DESCRIPTION OF THE GULF-II SEMIAUTOMATIC PLANKTON SAMPLE, ITS ADVANTAGES AND DISADVANTAGES. COMPARISON OF CATCHES TAKEN WITH THE GULF-II AND THE GULF-IA. SUGGESTION TO ADAPT THE INTERNAL MECHANISM OF THE HARDY CONTINUOUS PLANKTON RECORDER TO INBOARD USE.

COLTON, JOHN B. JR. 237
/1958/
ADAPTABILITY OF THE HARDY PLANKTON RECORDER TO RESEARCH SHIP STUDIES.
IN: SOME PROBLEMS FOR BIOLOGICAL FISHERY SURVEY AND TECHNIQUES FOR THEIR SOLUTION.
INT. COM. NORTHWEST ATL. FISH. SPEC. PUBL.
COMPARISON OF THE QUANTITIES OF PLANKTON TAKEN BY THE HARDY PLANKTON RECORDER, 1-M. TOW NETS, AND THE CLARKE-BUMPUS SAMPLER. DISCUSSION OF VARIATION BETWEEN DAY AND NIGHT CATCHES OF LARVAL FISH AND THEIR AVOIDANCE OF THE SAMPLERS.

COLTON, JOHN B. JR. 239
/1959/
THE MULTIPLANE KITE-OTTER AS A DEPRESSOR FOR HIGH-SPEED PLANKTON SAMPLERS.
J. CONS.
25 /1/ 29-35.

COLTON, JOHN B. JR. 241
HONEY, KENNETH A.
TEMPLE, ROBERT F.
/1961/
THE EFFECTIVENESS OF SAMPLING METHODS USED TO STUDY THE DISTRIBUTION OF LARVAL HERRINGS IN THE GULF OF MAINE.
J. CONS.
26 /2/ 180-190.
COMPARISON OF THE VALIDITY OF CATCHES MADE WITH THE HARDY PLANKTON RECORDER AND 1-M. NET.

COLTON, JOHN B. JR. 243
MARAK, ROBERT R.
/1962/
USE OF THE HARDY CONTINUOUS PLANKTON RECORDER IN A FISHERY RESEARCH PROGRAMME.
BULL. MAR. ECOL.
5 /49/ 231-246.

COMITA, GABRIAL W. 245
COMITA, JEAN J.
/1957/
THE INTERNAL DISTRIBUTION PATTERNS OF A CALANOID COPEPOD POPULATION, AND A DESCRIPTION OF A MODIFIED CLARKE-BUMPUS PLANKTON SAMPLER.
LIMNOL. OCEANOGR.
2 /4/ 321-332.

COMMERCIAL FISHERIES REVIEW 247
/1958/
HIGH-SPEED PLANKTON SAMPLER AND MULTIPLANE KITE OTTER TESTED.
ITS PUBL.
20 /7/ 38.

COMMERCIAL FISHERIES REVIEW 249
/1965/
RESULTS OF PLANKTON NET TESTS IN HAWAIIAN WATERS.
ITS PUBL.
27 /10/ 27-28.
COMPARISON OF CATCHES WITH A SQUARE NET, 2-M. TO THE SIDE, AND A STANDARD 1-M. NET. DISCUSSION OF THE CATCHES TAKEN BY THE BRITISH NEUSTON NET, AND OF AVOIDANCE OF ALL THREE SAMPLERS BY ORGANISMS.

CONSEIL PERMANENT INTERNATIONAL POUR L,EXPLORATION DE LA MER 251
/1937/
PLANKTON COMMITTEE, II. RECOMMENDATIONS.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
105 /1/ 32.
RECOMMENDATION OF THE HENSEN NET.

CONSEIL PERMANENT INTERNATIONAL POUR L,EXPLORATION DE LA MER 253
/1962/
PLANKTON COMMITTEE, INTERIM REPORT OF ZOOPLANKTON SUBCOMMITTEE.
ITS PUBL.
1-G013, MIMEOGRAPH.
RECOMMENDATIONS FOR THE STANDARDIZATION OF SAMPLING DEVICES AND METHODS.

CORI, C.J. 254
/1897/
EIN HORIZONTAL FISCHENDES SCHLIESSNETZ.
Z. WISS. MIKROSK. MIKROSK. TECH.
14 /2/ 178-184.
DESCRIPTION OF CORI,S CLOSING NET AND HORIZONTAL CLOSING NET.

CORI, C.J. 255
/1904/
EIN PLANKTONNETZ.
OST. FICHZTG. 2 JAHRG.
/4/ 65-66.

CURRIE, RONALD I. 257
/1962/
NET CLOSING GEAR.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 48-54.

CURRIE, RONALD I. 264
/1963/
THE INDIAN OCEAN STANDARD NET.
DEEP SEA RES.
10 /27-32.

CURRIE, RONALD I. 265
FOXTON, P.
/1956/
THE NANSEN CLOSING METHOD WITH VERTICAL PLANKTON NETS.-
J. MAR. BIOL. ASS. U.K.
35 /3/ 483-492.
DESCRIPTION OF A MODIFIED INTERNATIONAL NET WITH A NANSEN CLOSING MECHANISM AND THE DISCOVERY NET /N7OV/, AND DISCUSSION OF THE POSSIBLE LOSS OF PLANKTON WITH THE NANSEN CLOSING METHOD.

CURRIE, RONALD I. 266
FOXTON, P.
/1957/
A NEW QUANTITATIVE PLANKTON NET.
J. MAR. BIOL. ASS. U.K.
36/ 17-32
DESCRIPTION OF A MODIFIED NANSEN NET EQUIPPED WITH A DEPTH-FLOWMETER. DISCUSSION OF FILTRATION COEFFICIENT, DEPTH RANGE FISHED, AND CLOGGING.

CUSHING, C.E., JR. 267
/1964/
AN APPARATUS FOR SAMPLING DRIFTING ORGANISMS IN STREAMS.
J. WILD. MANAGE.
28 /3/ 592-594.

DAKIN, WILLIAM J. 268
/1908/
METHODS OF PLANKTON RESEARCH.-
PROC. TRANS. LIVERPOOL BIOL. SOC.
22/ 500-553.
DESCRIPTION OF THE METHODS USED AT KIEL IN PLANKTON RESEARCH. CRITICISM OF THE HENSEN METHOD. DISCUSSION OF VOLUME OF WATER FILTERED, ESCAPEMENT, DEPTH OF FISHING, CLOGGING, AND PATCHINESS. COMPARISON OF SAMPLING WITH PUMP AND NET. DESCRIPTION OF COARSE NETS--SIMPLE CONICAL SHAPE, BRUTNETZ, SCHERBRUTNETZ, AND PLANKTON ROHRE.

DAKIN, WILLIAM J. 269
COLEFAX, ALAN N.
/1940/
THE PLANKTON OF THE AUSTRALIAN COASTAL WATERS OFF NEW SOUTH WALES. PART 1.
PUBL. UNIV. SYDNEY, DEP. ZOOL. MONOGR. NO. 1, AUSTRALASIAN MEDICAL PUBLISHING COMPANY, NEW SOUTH WALES,
215 PP.
DESCRIPTION OF TWO SIMPLE, CONICAL NETS.

DAVID, R.M. 271
/1965/
THE NEUSTON NET, A DEVICE FOR SAMPLING THE SURFACE FAUNA OF THE OCEAN.
J. MAR. BIOL. ASS. U. K.
45 /2/ 313-320.

DE ALMEIDA PRADO, M.S. 273
/1962/
SOBRE O PLANCTON DA ENSEADA DO MAR VIRADOE OS METODOS DE COLETAS.
BOL. INST. OCEANOGR.
12 /3/ 49-68.
BRIEF DESCRIPTION OF A PLANKTON NET. IN PORTUGESE WITH ENGLISH SUMMARY. ENGLISH ABSTRACT ALSO AVAILABLE IN DEEP SEA RES.
11 /5/ 854.

DE DECKER, A. 275
/1962/
ZUR OEKOLOGIE UND VERBREITUNG DER COPEPODEN AUS DEM MEERESPLANKTON SUD AFRIKAS.-
BIOL. JAAR.
30/ 86-122.
DESCRIPTION OF AN UNDERWAY PLANKTON SAMPLER.

DORRIS, TROY C. 281
/1961/
A PLANKTON SAMPLER FOR DEEP RIVER WATERS.
LIMNOL. OCEANOGR.
6 /3/ 336-337.
DESCRIPTION OF A VERTICAL-CLOSING MODIFICATION OF THE JUDAY PLANKTON TRAP.

DOVEL, WILLIAM L. 283
/1964/
AN APPROACH TO SAMPLING ESTUARINE MACROPLANKTON.
CHESAPEAKE SCI.
5 /1-2/ 77-90.
DESCRIPTION OF A PLANKTON SLED, 1 M. NET, MID-DEPTH SAMPLING NET, SURFACE SAMPLER, AND SET NETS.

EHRENBAUM, E. 287
STRODTMANN, S.
/1904/
DAS SCHERBRUTNETZ.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
2/ 62-64.
DESCRIPTION OF THE HELIGOLAND YOUNG-FISH TRAWL, HJORT,S RING NET, HENSEN,S EGG NET, AND THE SCHERBRUTNETZ.

EHRENBAUM, E. 289
STRODTMANN, S.
/1904/
EIER UND JUGENDFORMEN DER OSTSEE-FISCHE.
WISS. MEERESUNTERSUCH. DER KOMM. WISS UNTERSUCH. DEUT. MEERE, ABT. HELGOLAND
N. F. 6/ 57-126.
DESCRIPTION OF THE HELIGOLAND YOUNG-FISH TRAWL--SCHERBRUTNETZ.

EMERY, ALAN R. 290
/1968/
PRELIMINARY OBSERVATIONS ON CORAL REEFS. PLANKTON.
LIMNOL. OCEANOGR.
13 /2/ 293-303.
DESCRIPTION OF A HAND-TOWED NET AND A SUCTION DEVICE FOR SAMPLING CAVES AND OTHER SPECIFIC AREAS, BOTH USED BY SCUBA DIVERS.

ENOMOTO, Y. 291
/1955/
SOME EXPERIMENTS ON THE FILTERING-RATE AND THE RESISTANCE OF PLANKTON NET IN THE WATER TANK.
BULL. SEIKAI REG. FISH. RES. LAB.
6/ 3-10.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

ENRIGHT, J. T. 292
/1962/
RESPONSE OF AN AMPHIPOD TO PRESSURE CHANGES.
COMPAR. BIOCHEM. PHYSIOL.
7/ 131-145.

ERDMANN, WILHELM 293
/1937/
EIN NEUES PLANKTONGERAT FUR HORIZONTAL FANGE IN VERSCHIEDENEN TIEFEN UND SEINE BEDEUTUNG FUR DIE PRAKTISCHE FISHEREI.
BER. DEUT. WISS. KOMM. MEERESFORSCH.
N. F. 8 /3/ 165-179.

FISH, CHARLES J. 295
SNOGRASS, JAMES M.
/1962/
THE SCRIPPS-NARRAGANSETT HIGH-SPEED MULTIPLE PLANKTON SAMPLER.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 23-24.

FLEMINGER, ABRAHAM 297
CLUTTER, ROBERT I.
/1965/
AVOIDANCE OF TOWED NETS BY ZOOPLANKTON.
LIMNOL. OCEANOG.
10 /1/ 96-104.
COMPARISON OF THE AVOIDANCE OF THREE SIZES OF PLANKTON NETS BY SEVERAL SPECIES OF MARINE COPEPODS AND MYSIDS, IN A LARGE ENCLOSED SEA-WATER POOL, BETWEEN REPLICATE TOWS DURING MIDDAY AND MIDNIGHT UNDER THREE LIGHT CONDITIONS, AND WITH PLANKTON POPULATIONS OF DIFFERENT DENSITIES.

FOERSTER, J. W. 299
/1964/
AN INEXPENSIVE ADAPTATION FOR PLANKTON NETS.
TURTOX NEWS
42 /1/ 22-23.

FORDYCE, CHARLES 301
/1898/
A NEW PLANKTON PUMP.
PROC. COLLECT. NEBR. STATE HIST. SOC.
2/2.

FOWLER, G. H. 303
/1898/
CONTRIBUTIONS TO OUR KNOWLEDGE OF THE PLANKTON OF FAEROE CHANNEL.- VI. DESCRIPTION OF A NEW MID-WATER TOW NET.
PROC. ZOOL. SOC. LONDON, 1898.
/567-584.

FOXTON, P. 305
/1963/
AN AUTOMATIC OPENING-CLOSING DEVICE FOR LARGE PLANKTON NETS AND MID-WATER TRAWLS.
J. MAR. BIOL. ASS. U. K.
43 /2/ 295-308.

FOXTON, P. 307
/1963/
REPORT OF SCOR WORKING GROUP III ON THE QUESTIONAIRE REGARDING PLANKTON NETS IN USE IN VARIOUS LABORATORIES. REPORTS ON STANDARDIZATION AND INTERCALIBRATION OF OCEANOGRAPHIC TECHNIQUES AND METHODS.
REP. SCOR OF ICSU UNESCO
REF. 1-G012.
DETAILS AND OUTLINE SHAPES OF SOME TYPICAL PLANKTON NETS DRAWN TO SCALE.

FRASER, J.H. 308
/1966/
ZOOPLANKTON SAMPLING.
NATURE /LONDON/
211 /5052/ 915-916.
DESCRIPTION OF NETS PROPOSED BY ICES, SCOR, AND UNESCO WITH DISCUSSION OF MIXED OR GRADED NETTING, TOWING SPEEDS, VOLUMES OF WATER FILTERED, FILTRATION EFFICIENCY, CLOGGING, WATER BOTTLES AND PUMPS, AND NETTING MATERIAL.

FRASER-BRUNNER, A. 309
/1934/
AN ARRANGEMENT OF NETS FOR CAPTURING SMALL OCEANIC FISHES.
J. CONS.
9 /1/ 46-48.
DESCRIPTION OF A MULTIPLE NET--ONE AHEAD OF THE OTHER.

FRENZEL, J. 311
/1897/
ZUR PLANKTONMETHODIK.
BIOL. ZENTRALBL.
17/
DISCUSSION ON THE USE OF A PUMP TO SAMPLE PLANKTON.

FRIC, A. 313
VAVRA, V.
/1893/
UNTERSUCHUNGEN UBER DIE GEWASSER BOHMENS. IV. DIE THIERWELT DES UNTERPOCERNITZER UND GATTERSCHLAGER TEICHES ALS RESULTAT DER ARBEITEN AN DER UBERTRAGBAREN ZOOLOGISCHEN STATION.
ARCH. NATURWISS. LANDES-DURCHFORSCH. BOHMEN.
9 /2/ 1-124.
DESCRIPTION OF A SMALL HORIZONTAL CLOSING NET.

FROLANDER, H.F. 315
PRATT, IVAN
/1962/
A BOTTOM SKIMMER.
LIMNOL. OCEANOGR.
7 /1/ 104-106.
DESCRIPTION OF A DEVICE FOR SAMPLING MEROPLANKTON NEAR OCEAN OR LAKE BOTTOMS.

FRY, DONALD H. JR. 317
/1937/
A METAL PLANKTON NET.
CALIF. FISH GAME
23 /4/ 329-330.
DESCRIPTION OF A HIGH-SPEED SAMPLER DESIGNED TO REDUCE SAMPLING ERROR DUE TO THE PATCHINESS OF PLANKTONIC FISH EGGS. DISCUSSION OF THE REDUCED AVOIDANCE BY FISH LARVAE AND THE CONDITION OF THE SAMPLE CAUGHT.

FUJITA, H. 319
/1956/
THE COLLECTION EFFICIENCY OF A PLANKTON NET.
STUD. AUTOECOL. COMPILED BY LAB. ENTOMOL. FAC. AGR. KYOTO UNIV.
/3/ 8-15.
IN JAPANESE.

GARDINER, A.C. 321
/1931/
THE VALIDITY OF SINGLE VERTICAL HAULS OF THE INTERNATIONAL NET IN THE STUDY OF THE DISTRIBUTION OF THE PLANKTON.
J. MAR. BIOL. ASS. U.K. NEW SER.
17 /2/ 449-472.

GARDINER, A. C. 323
/1933/
VERTICAL DISTRIBUTION OF CALANUS FINMARCHICUS.
J. MAR. BIOL. ASS. U. K.
18 /2/ 575-610.
DESCRIPTION OF A PARAVANE DEPRESSOR FOR USE WITH THE HARDY PLANKTON INDICATOR AND DISCUSSION OF THE EFFECT OF SPEED OF TOWING AND MOUTH SIZE ON THE ABILITY OF ANIMALS TO AVOID THE NET.

GARDINER, A.C. 325
GRAHAM, M.
/1925/
THE WORKING ERROR OF PETERSEN,S YOUNG-FISH TRAWL.
GR. BRIT. MIN. AGR., FISH. FOOD, FISH. INVEST.
8 /3/ 1-8.

GAULD, D.T. 327
BEGANAL, T. N.
/1951/
A HIGH-SPEED TOW-NET.
NATURE /LONDON/
186 /4273/ 523.
DESCRIPTION OF THE SHEARD HIGH-SPEED NET AND A COMPARISON OF ITS EFFICIENCY AND THE SAMPLES TAKEN WITH THOSE OF A NORMAL PLANKTON NET.

GEHRINGER, JACK W. 329
/1952/
HIGH SPEED PLANKTON SAMPLERS. 2. AN ALL METAL PLANKTON SAMPLER / MODEL GULF-III/.
U.S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.
88/ 7-12.
DESCRIPTION OF THE GULF-III HIGH SPEED PLANKTON SAMPLER. DISCUSSION OF CLOGGING, AVOIDANCE, EASE OF CLEANING NETTING, REDUCED FOREWARNING, AND THE VOLUME OF WATER FILTERED.

GEHRINGER, JACK W. 331
/1962/
THE GULF-III AND OTHER MODERN HIGH-SPEED PLANKTON SAMPLERS.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153 /3/ 19-22.

GIBBONS, SYDNEY G. 332
/1933/
A NEW TYPE OF SAMPLER FOR USE IN THE QUANTITATIVE ANALYSIS OF PLANKTON COLLECTIONS.
J. CONS.
8 /2/ 195-200.

GIBBONS, SYDNEY G. 333
/1939/
THE HENSEN NET.
J. CONS.
14 /2/ 242-248.
DISCUSSION OF SAMPLING ERROR AND A COMPARISON OF CLOGGING AND SAMPLE SIZE TAKEN WITH A FINE SILK NET OF MOUTH AREA 0.174-SQ. M. AND A HENSEN NET OF MOUTH AREA 0.379-SQ. M.

GIBBONS, SYDNEY G. 335
FRASER, JAMES H.
/1937/
EXPERIMENTS WITH THE HARDY PLANKTON INDICATOR IN SCOTTISH WATERS.-I.
J. CONS.
12 /1/ 45-50.
BRIEF DISCUSSION OF THE MERITS OF THE HARDY PLANKTON INDICATOR.

GIBBONS, SYDNEY G. 337
FRASER, JAMES H.
/1937/
THE CENTRIFUGAL PUMP AND SUCTION HOSE AS A METHOD OF COLLECTING PLANKTON SAMPLES.
J. CONS.
12 /2/ 155-170.

GIBBONS, SYDNEY G. 339
FRASER, JAMES H.
/1937/
THE MODERN CENTRIFUGAL PUMP AS A PLANKTON COLLECTOR.
NATURE /LONDON/
139 /3514/ 417.

GIESBRECHT, WILHELM 340
/1893/
EIN NEUES SCHLIESSNETZ.
MITT. ZOOL. STA. NEAPEL
11/ 306-324.

GIESBRECHT, WILHELM 343
/1896/
UBER PELAGISCHE COPEPODEN DES ROTHEN MEERES, GESAMMELT VOM MARINESTABARZT DR. AUGUSTIN KRAMER.
ZOOL. JAHRB. SYST.
9/ 315-328.
DESCRIPTION OF KRAMER,S WORK WITH A SHIP,S PUMP TO SAMPLE PLANKTON.

GLOVER, R.S. 347
/1953/
THE HARDY PLANKTON INDICATOR AND SAMPLER: A DESCRIPTION OF THE VARIOUS MODELS IN USE.
BULL. MAR. ECOL.
4 /26/ 7-20.

GLOVER, R.S. 349
/1961/
THE MULTI-DEPTH PLANKTON INDICATOR.
BULL. MAR. ECOL.
5 /44/ 151-164.
DISCUSSION OF THE FILTRATION COEFFICIENT AS A FUNCTION OF TOWING SPEED.

GLOVER, R.S. 351
/1962/
THE CONTINUOUS PLANKTON RECORDER.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 8-15.
DESCRIPTION OF THE CONTINUOUS PLANKTON RECORDER. DISCUSSION OF ITS SAMPLING ERROR, FILTRATION COEFFICIENT, AVOIDANCE BY ORGANISMS, THE SAMPLE CONDITION, AND PATCHINESS.

GLOVER, R.S. 353
POPE, J.A.
/1956/
THE HARDY PLANKTON INDICATOR: A STUDY OF THE VARIATION BETWEEN CATCHES TAKEN BY DAY AND BY NIGHT.-
BULL. MAR. ECOL.
4 /32/ 115-135.

GRAHAM, JOSEPH J. 355
VAUGHAN, GEORGE B.
/1965/
A NEW DEPRESSOR DESIGN FOR HIGH-SPEED SAMPLERS /ABSTRACT/.
TRANS. OCEAN SCI. OCEAN ENG. CONF. 14-17 JUNE 1965, WASH. D.C.
2/ 742.
AVAILABLE FROM MARINE TECHNOLOGY SOCIETY, THE EXECUTIVE BUILDING WASH. D.C. 20005.

GRAN, H.H. 357
/1905/
NORDHAVETS FRITSVAEVEN PLANTE-OG DYRE LIV /PLANKTON/.
NORGE. FISK.
1/ 21-53.
FIRST DESCRIPTION OF THE NANSEN NET.

GREZE, V. N. 359
/1962/
OPYT PRIMENENIYA PLANKTONOMETRA PRI ISSLEDOVANIYAKH MORSKOGO PLANKTONA. /EXPERIMENTAL TESTS OF A PLANKTON SAMPLER IN INVESTIGATIONS OF MARINE PLANKTON./
OKEANOLOGIYA
2 /2/ 305-310.
IN RUSSIAN. ENGLISH TRANSLATION AVAILABLE IN DEEP SEA RES.
11 /1/ 109-112, 1964.

GRIFFITH, R.E. 363
/1957/
A PORTABLE APPARATUS FOR COLLECTING HORIZONTAL PLANKTON SAMPLES.
ECOLOGY
38 /3/ 538-540.

HAECKEL, ERNEST 365
/1890/
PLANKTON STUDIES: A COMPARATIVE INVESTIGATION OF THE IMPORTANCE AND CONSTITUTION OF THE PELAGIC FAUNA AND FLORA.
JENA. Z.
25 /1 and 2/
A REVIEW OF PLANKTOLOGY UP TO THAT TIME WITH A DISCUSSION OF THE GEAR AND METHODS USED.
ENGLISH TRANSLATION AVAILABLE IN THE REP. U.S. COM. FISH FISH. 1889-91, 565-641, 1893.

HANSEN, VAGN KR. 367
ANDERSEN, K.P.
/1962/
SAMPLING THE SMALLER ZOOPLANKTON.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 39-47.
COMPARISONS OF AVOIDANCE AND FILTRATION COEFFICIENTS WITH AN 8-LITRE WATER BOTTLE, A SIMPLE CONICAL NET 50-CM. IN DIAMETER /SILK NO. 3/, AND A HENSEN NET / SILK NO. 3/.

HARDY, ALISTER C. 369
/1926/
A NEW METHOD OF PLANKTON RESEARCH.-
NATURE /LONDON/
118 /2974/ 630-632.
DESCRIPTION OF THE CONTINUOUS PLANKTON RECORDER.

HARDY, ALISTER C. 371
/1926/
THE HERRING IN RELATION TO ITS ANIMATE ENVIRONMENT: PART II. REPORT ON TRIALS WITH THE PLANKTON INDICATOR.-
GT. BRIT. MIN. AGR., FISH. FOOD, FISH. INVEST. SER. 2, 8 /7/ 1-13.

HARDY, ALISTER C. 372
/1935/
THE CONTINUOUS PLANKTON RECORDER. A NEW METHOD OF SURVEY.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
95/ 36-47.

HARDY, ALISTER C. 373
/1936/
THE CONTINUOUS PLANKTON RECORDER.
DISCOVERY REP.
11/ 457-510.

HARDY, ALISTER C. 374
/1936/
THE ECOLOGICAL RELATIONS BETWEEN THE HERRING AND THE PLANKTON INVESTIGATED WITH THE PLANKTON INDICATOR.
J. MAR. BIOL. ASS. U.K.
21 /1/ 147-177.

HARDY, ALISTER C. 375
/1939/
ECOLOGICAL INVESTIGATIONS WITH THE CONTINUOUS PLANKTON RECORDER: OBJECT, PLAN AND METHODS.
HULL BULL. MAR. ECOL.
1 /1/ 1-57.

HARDY, ALISTER C. 378
/1941/
PLANKTON AS A SOURCE OF FOOD.
NATURE /LONDON/
147 /3736/ 695-696.
DISCUSSION OF THE USE OF NETS WHICH ARE ALLOWED TO SWING WITH THE TIDE.

HARDY, ALISTER C. 379
/1956/
THE OPEN-SEA. ITS NATURAL HISTORY: THE WORLD OF PLANKTON.-
HOUGHTON MIFFLIN CO. BOSTON
335 PP.
DESCRIPTION OF A SIMPLE TOW NET, A CLOSING NET, AND THE HARDY CONTINUOUS PLANKTON RECORDER.

HART, E. G. 381
/1935/
SOME DEVICES FOR THE MANIPULATION OF MARINE PLANKTON COLLECTIONS ON BOARD SHIP.
J. CONS.
10 /1/ 173-178.
DESCRIPTION OF A CLOSING NET FOR VERTICAL HAULING.

HARVEY, GEORGE W. 382
/1966/
A LOW VELOCITY PLANKTON SIPHON.
LIMNOL. OCEANOGR.
11 /4/ 646-647.

HARVEY, H. W. 383
/1934/
MEASUREMENT OF PHYTOPLANKTON POPULATION.
J. MAR. BIOL. ASS. U. K.
19 /2/ 761-773.
DESCRIPTIONS OF A DOUBLE RELEASE GEAR FOR OPENING AND CLOSING A NET AND A METER FOR MEASURNNG THE VOLUME OF WATER PASSING THROUGH A NET.

HARVEY, H. W. 385
/1935/
NOTE CONCERNING A MEASURING PLANKTON NET.
J. CONS.
10 /2/ 179-184.
DESCRIPTION OF A MEASURING PLANKTON NET AND ITS ABILITY TO OVERCOME SUCH VARIABLES AFFECTING THE VOLUME OF WATER FILTERED AS TOWING SPEED, CLOGGING, AGE OF THE NET, AND WHETHER THE NET WAS WET OR DRY PRIOR TO TOW.

HAVINGA, B. 387
/1939/
PREDICTION OF THE TIME OF SETTING OF OYSTER SPAT AND A METHOD OF CONTROL.
J. CONS.
14 /3/ 394-400.
DISCUSSION OF A PUMP USED TO SAMPLE PLANKTON IN AN ESTUARY AT OOSTER SCHELDE, NETHERLANDS.

HEDGPETH, JOEL W. 389
/1957/
TREATISE ON MARINE ECOLOGY AND PALEOECOLOGY. VOLUME I. ECOLOGY.
GEOL. SOC. AMER. MEM.
67/ 53-86.
DESCRIPTION OF A VARIETY OF DEVICES FOR THE COLLECTION OF ZOOPLANKTON, P. 56-61.

HEINCKE, FR. 391
/1894/
DIE ARBEITEN DER BIOLOGISCHEN ANSTALT AUF HELGOLAND.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. HELGOLAND.
1/ 1-33.
DESCRIPTION OF THE BRUT-NETZ.

HEINCKE, FR. 393
/1896/
DIE BIOLOGISCHE ANSTALT AUF HELGOLAND UND DIE THATIGKEIT IM JAHRE 1893.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. KIEL-HELGOLAND,
N. F. 1/ 1-33.
DESCRIPTION OF THE BRUT-NETZ, AND THE YOUNG-FISH NET.

HEINCKE, FR. 395
/1905/
THE OCCURENCE AND DISTRIBUTION OF THE EGGS, LARVAE AND VARIOUS AGE-GROUPS OF THE FOOD-FISHES IN THE NORTH SEA, ACOORDING TO THE INVESTIGATIONS OF THE BIOLOGICAL STATION AT HELIGOLAND.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
3/ APPE. 39 PP.
DESCRIPTION AND DISCUSSION OF THE HENSEN EGG NET, THE HELIGOLAND YOUNG FISH NET, THE HELIGOLAND OTTER YOUNG FISH NET, AND HJORT,S RING NET.

HEMPEL, GOTTHILF 397
/1960/
UNTERSUCHUNGEN UBER DIE VERBREITUNG DER HERINGSLARVEN IM ENGLISCHEN KANAL UND DER SUDLICHEN NORDSEE IM JANUARY 1959.
WISS. MEERESUNTERS KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. HELGOLAND.
7 /2/ 72-79.
BRIEF DESCRIPTION OF THE HIGH-SPEED PLANKTON SAMPLER -HAI-.

HEMPEL, GOTTHILF 399
/1964/
DIE FILTERLEISTUNG DER PLANKTONROHRE -HAI- BEI VERSCHIEDENER SCHLEPPGESCHWINDIGKEIT. EINE VORLAUFIGE MITTEILUNG.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. HELGOLAND.
11 /3-4/ 161-167.
FILTRATION CAPACITY OF THE PLANKTON SAMPLER -HAI- AT DIFFERENT TOWING SPEEDS.

HENDERSON, G.T.D. 401
LUCAS, C.E.
FRASER, J.H.
/1935/
THE CONTINUOUS PLANKTON RECORDER: A NEW METHOD OF SURVEY.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
95/ 35-47.

HENDERSON, G.T.D. 403
LUCAS, C.E.
FRASER, J.H.
/1936/
THE ECOLOGICAL RELATIONS BETWEEN THE HERRING AND THE PLANKTON INVESTIGATED WITH THE PLANKTON INDICATOR. PART IV. THE RELATION BETWEEN CATCHES OF HERRING AND PHYTOPLANKTON COLLECTED BY THE PLANKTON INDICATOR.
J. MAR. BIOL. ASS. U. K.
21/1/ 277-291.
DETAILED DESCRIPTION OF THE SMALL PLANKTON INDICATOR.

HENSEN, VICTOR 407
/1887/
UBER DIE BESTIMMUNG DES PLANKTONS ODER DES IM MEERE TREIBENDEN MATERIALS AN PFLANZEN UND TIEREN.
BER. DEUT. WISS. KOMM. MEERESFORSCH.
12/ 1-107.
COMPARISON OF THE TOW NET TO THE PUMP.

HENSEN, VICTOR 408
/1895/
METHODIK DER UNTERSUCHUNGEN.
ERGEB. ATL. OZEAN PLANTONEXPED.
1B/ 1-200.
DESCRIPTIONS OF THE NATIONAL LARGE VERTICAL NET AND THE BRUT-NETZ. ILLUSTRATION OF THE WAGGONNETZ. DISCUSSION OF THE VOLUME OF WATER FILTERED BY A NET, THE PRESSURE DROP ACROSS THE GAUZE, THE RELATION BETWEEN PRESSURE AND APERTURE SIZE, THE TOWING SPEED, THE RATIO OF MOUTH AREA TO FILTERING AREA, AND THE SHAPE OF THE SAMPLER.

HENSEN, VICTOR 410
/1901/
UBER OIE QUANTITATIVE BESTIMMUNG DER KLEINEREN PLANKTONORGANISMEN UND UBER DEN DIAGONAL-ZUG MITTELST GEEIGNETEN NETZFORMEN.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE
5/

HENTSCHEL, ERNST 411
/1932/
DIE BIOLOGISCHE METHODEN UND DAS BIOLOGISCHE BEOBACHTUNGSMATERIAL.
WISS. ERGEB. DEUT. ATL. EXPED.
METEOR
10/ 1-50.
DESCRIPTION OF THE MODIFIED INTERNATIONAL NET.

HERDMAN, W.A. 415
/1908/
THE MARINE BIOLOGICAL STATION AT PORT ERIN, BEING THE TWENTY-FIRST ANNUAL REPORT OF THE LIVERPOOL BIOLOGICAL SOCIETY.
PROC. TRANS. LIVERPOOL BIOL. SOC.
22/ 33-92.
COMPARISON OF THE NANSEN NET AND THE PETERSEN-HENSEN NET. DISCUSSION OF PATCHINESS.

HERDMAN, W.A. 417
/1921/
VARIATION IN SUCCESSIVE VERTICAL PLANKTON HAULS AT PORT ERIN.
PROC. TRANS. LIVERPOOL BIOL. SOC.
35/ 161-174.

HERMANN, F. 419
/1949/
A RECORDING DEPTH GAUGE FOR USE IN HORIZONTAL HAULS WITH STRAMIN NET AND OTHER PELAGIC FISHING IMPLEMENTS.-
MEDD. KOMM. DAN. FISK. HAVUNDERS.
11 /5/ 1-9.

HERON, A.C. 420
KERR, J.D.
/1968/
PROPERTIES OF GAUZES IN RELATION TO LOSS OF ORGANISMS THROUGH PLANKTON NETS.
AUST. J. MAR. FRESHWATER RES.
19 /1/ 57-64.
DISCUSSION OF ESCAPEMENT OF PLANKTON DUE TO STRETCHING OF NETTING AND COMPRESSIBILITY OF ORGANISMS FOR VARIOUS NETTING MATERIAL.

HESS, F.R. 421
/1964/
A SHEAR PIN WEAK-LINK ASSEMBLY FOR OCEANOGRAPHIC USE.
DEEP SEA RES.
11 /4/ 623-624.

HIGO, N. 423
/1964/
STUDIES ON THE ORAG-NET. I. AN INCREASE OF THE CURRENT VELOCITY INSIDE THE NET.
MEM. FAC. FISH. KAGOSHIMA UNIV.
13/ 78-92.
DESCRIPTIONS OF THE CURRENT VELOCITIES AND FLOW PATTERNS INSIDE AND OUTSIDE OF FOUR TYPES OF ORAG NET MODELS.
IN JAPANESE.

HIRAYAMA, N. 425
AKAOKA, T.
TONAGAYA, T.
NAKAI, Y.
/1954/
MOVING OF A PIECE OF NET WITH FLOATS AND SINKER, AND CHANGING ITS FORM WHEN ITS LEAD LINE IS PULLED HORIZONTALLY BY A CONSTANT FORCE.
J. TOKYO UNIV. FISH.
41 /1/ 27-30.

HJORT, J. 427
/1909/
REVIEW OF THE NORWEGIAN FISHERY AND MARINE INVESTIGATIONS, 1900-1908.
REP. NORW. FISH. MAR. INVEST.
2 /1/ 1-204.
ILLUSTRATION OF HJORT,S NET.

HODGSON, T.V. 429
/1907/
ON COLLECTING IN ANTARCTIC SEAS.
NAT. ANTARCTIC EXPED. 1901-1904.
/3/ 1-10.
DISCUSSION OF THE PROBLEMS IN USING A SMALL TRAP, THE D NET, IN ANTARCTIC SEAS.

HOFER, B. 431
/1896/
DIE VERBREITUNG DER TIERWELT IM BODENSEE NEBST VERGLEICHENDEN UNTERSUCHUNGEN IN EINIGEN ANDEREN SUSSWASSERBECKEN.
SCHR. VER. GESCH. BODENSEES UMGEBUNG
25/ 64 PP.
DISCUSSION OF TOWS WITH THE CORI NET AND A STRANGULATION TYPE NET.

HOPKINS, THOMAS L. 433
/1963/
THE VARIATION IN THE CATCH OF PLANKTON NETS IN A SYSTEM OF ESTUARIES.
J. MAR. RES.
21 /1/ 39-47.

HOYLE, WILLIAM E. 435
/1889/
ON A DEEP SEA TOW-NET FOR OPENING AND SHUTTING UNDER WATER.
PROC. LIVERPOOL BIOL. SOC.
3/ 100-112.

HUDSON, J. HAROLD 436
/----/
A DEVICE FOR MULTILEVEL PLANKTON SAMPLING FROM BRIDGES.
UNPUBLISHED MANUSCRIPT, TROPICAL ATLANTIC BIOLOGICAL LABORATORY, MIAMI, FLORIDA 33149.
DESCRIPTION OF A FIXED-FRAME NET FOR SAMPLING IN TIDAL CURRENTS.

IGARASHI, SUUZO 437
/1957/
ON THE FILTERING RATE OF PLANKTON NET.
BULL. FAC. FISH. HOKKAIDO UNIV.
8 /1/ 48-50.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

ILLARIONOV, V.I. 438
/1958/
STRUEMER--IZMERITEL, SKOROSTI I NAPRAVLENIYA TECHENIYA.
/A FLOW-METER--A MEASURER OF THE VELOCITY AND DIRECTION OF FLOW./
METEOROL. GIDROL.
6/ 49-53.
IN RUSSIAN. ENGLISH ABSTRACT AVAILABLE IN U.S. FISH AND WILDLIFE SERVICE, FISHERY OCEANOGRAPHY TRANSLATIONS, 3, ENTRY 230, 1964.

IMANISHI, H. 439
TANIGUCHI, T.
KATAOKA, A.
/1965/
HYDRODYMANIC STUDIES ON THE ISAACS-KIDD MIDWATER TRAWL. II. FIELD EXPERIMENTS OF THE 10-FT. S-II TYPE LARVA NET.
BULL. JAP. SOC. SCI. FISH.
31 /9/ 663-668.

INDO-PACIFIC FISHERIES COUNCIL 441
/1945/
REPORT OF TECHNICAL COMMITTEE I TO THE 5TH MEETING. III. MISCELLANEOUS FISHERIES. 6. PLANKTON STUDIES.
ITS PUBL. PROC. 5TH MEETING
SECT. 1/ 83-92.
DISCUSSION OF STANDARD GEAR AND METHODS TO BE USED IN PLANKTON COLLECTION.

ISAACS, JOHN D. 442
BROWN, DANIEL M.
/1966/
ISAACS-BROWN OPENING-CLOSING TRAWL.
UNIV. CALIF. SCRIPPS INST. OCEANOGR.
SIO. REF. 66-18.
DESCRIPTION OF A MODIFIED ISAACS-KIDD MIDWATER TRAWL WITH FIELD TEST ON INTERDEPTH CONTAMINATION, DIVING BEHAVIOR. MAINTENANCE STRENGTH OF STRUCTURE, TOWING FORCES, AND CATCHING ABILITY.

ISAACS, JOHN D. 443
KIDD, LEWIS W.
/1951/
A MIDWATER TRAWL.
UNIV. CALIF. SCRIPPS INST. OCEANOGR.
SIO. REF. 51-51.

ISAACS, JOHN D. 445
KIDD, LEWIS W.
/1953/
ISAACS-KIDD MIDWATER TRAWL. FINAL REPORT.
UNIV. CALIF. SCRIPPS INST. OCEANOGR.
SIO. REF. 53-3, OCEANOGR. EQUIP. REP.
1/ 18 PP.

ISAACS, JOHN D. 447
SCHICK, G.B.
/1960/
DEEP SEA FREE INSTRUMENT VEHICLE.
DEEP SEA RES.
7/ 61-67.

ISHIDA, TERUO 450
/1963/
A NEW QUANTITATIVE SAMPLER FOR LARGE CRUSTACEAN PLANKTON.
BULL. HOKKAIDO REG. FISH. RES. LAB.
26/ 73-74.
IN JAPANESE WITH AN ENGLISH ABSTRACT.
ENGLISH ABSTRACT ALSO AVAILABLE IN DEEP SEA RES.
11 /6/ 945, 1964.

ISHIDA, TERUO 451
/1964/
QUANTITATIVE PLANKTON SAMPLER--II.
BULL. HOKKAIDO REG. FISH. RES. LAB.
28/ 61-63.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

ITO, S. 453
/1958/
VARIABILITY OF CATCHES IN THE VERTICAL NET HAUL OF FISH EGGS AND LARVAE.
REP. JAP. SEA REG. FISH. RES. LAB.
4/ 33-41.
DISCUSSION OF VERTICAL HAULS WITH THE STANDARD MARUTOKU NET.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

ITO, S. 455
NISHIMURA, S.
/1958/
EXPERIMENTS ON THE FILTERING RATE OF MARU-TOKU TYPE PLANKTON NET USED IN JAPAN FOR QUANTITATIVE SAMPLING.
REP. JAP. SEA REG. FISH. RES. LAB.
4/ 57-64.
IN JAPANESE.

JACKSON, PHILIP 457
/1954/
ENGINEERING AND ECONOMIC ASPECTS OF MARINE PLANKTON HARVESTING.
J. CONS.
20 /2/ 167-174.

JENKINS, J.T. 463
/1901/
METHODS AND RESULTS OF THE GERMAN PLANKTON INVESTIGATIONS, WITH SPECIAL REFERENCE TO THE HENSEN NETS.
PROC. TRANS. LIVERPOOL BIOL. SOC.
15/ 279-341.

JESPERSEN, P. 465
TAANING, AA.V.
/1934/
INTRODUCTION TO THE REPORTS FROM THE CARLSBERG FOUNDATION,S OCEANOGRAPHICAL EXPEDITION AROUND THE WORLD, 1928-1930.-
DANA REP.
1/ 1-18.
DESCRIPTION OF A 3-M. RING TRAWL WITH 3 SIZES OF MESH AND A CONICAL NET.

JOHNSTONE, JAMES 467
/1908/
CONDITIONS OF LIFE IN THE SEA. A SHORT ACCOUNT OF QUANTITATIVE MARINE BIOLOGICAL RESEARCH.
CAMBRIDGE UNIV. PRESS
332 PP.
DESCRIPTIONS OF THE ORDINARY SURFACE TOW NET, THE HELIGOLAND SCHERBRUTNETZ, THE HENSEN NET, THE KORBNETZ, AND THE PETERSEN-HENSEN QUANTITATIVE NET.

JOSSI, JACK W. 469
/1966/
THE ICITA ONE-METER PLANKTON NET. DESCRIPTION AND EVALUATION.
LIMNOL. OCEANOGR.
11 /4/ 640-642.

JUDAY, CHANCEY 471
/1916/
LIMNOLOGICAL APPARATUS.
TRANS. WIS. ACAD. SCI. ARTS LETT.
18 /2/ 566-592.
DESCRIPTIONS OF THE PLANKTON BUCKET, CLOSING NET, BIRGE CONE NET AND FUNNEL, PLANKTON TRAP, SMALL AND LARGE NET, AND PLANKTON PUMPS.

KAMIYA, SYOKITI 473
/1934/
THE DISTRIBUTION OF TENSIONS IN THE NETS. I.
BULL. JAP. SOC. SCI. FISH.
3 /1/ 5-7.
IN JAPANESE WITH AN ENGLISH SYNOPSIS.

KAWAKAMI, T. 474
/1955/
ON THE MECHANICAL CHARACTERISTICS OF THE DRAG NET.
MEM. COLL. AGR. KYOTO UNIV.
72/ 6-15.

KAWAMURA, AKITO 475
/1968/
PERFORMANCE OF PETERSEN TYPE VERTICAL CLOSING NET.
BULL. PLANKT. SOC. JAPAN
15 /1/ 11-12.
COMPARISONS OF THE SPEEDS OF LOWERING OF A MODIFIED PETERSEN CLOSING NET AND A SIMILAR DIAMETER JUDAY NET.

KAWARADA, YUTAKA 476
AKAMATSU, HIDEO
/1966/
AUTOMATIC OPENING-AND-CLOSING MULTIPLE NET.
OCEANOGR. MAG. JAP. METEOROL. AGENCY
18 /1/2/ 25-29.

KEMP, G.F. 478
BARKER, A.M.
CLARKE, G.M.
BOCKEN, C.F.
/1958/
ANNUAL REPORT OF THE BIOLOGICAL LABORATORY, WOODS HOLE, MASS., FOR THE YEAR ENDING JUNE 30, 1958.
U.S. FISH WILDL. SERV., WASH., D.C.
29-36.
DESCRIPTION OF A THROTTLING TECHNIQUE USED ON A 3-M. ISAACS-KIDD MIDWATER TRAWL.

KEMP, STANLEY 479
HARDY, ALISTER C.
/1929/
THE DISCOVERY INVESTIGATIONS, OBJECTS, EQUIPMENT AND METHODS. PART II. THE SHIPS, THEIR EQUIPMENT AND THE METHODS USED IN RESEARCH.
DISCOVERY REP.
1/ 151-232.

KIMSEY, J. BRUCE 481
/1965/
SHRIMP BIOLOGY PROGRAM.
U.S. FISH WILDL. SERV. CIRC.
230/ 7-9.
ILLUSTRATION OF A GULF-V SAMPLER MOUNTED ON A SLED FOR SAMPLING NEAR THE BOTTOM.

KING, JOSEPH E. 483
/1949/
A PRELIMINARY REPORT ON THE PLANKTON OF THE WEST COAST OF FLORIDA.
QUART. J. FLA. ACAD. SCI.
12 /2/ 109-137.

KING, JOSEPH 485
DESMOND, JOAN
/1953/
ZOOPLANKTON ABUNDANCE IN THE CENTRAL PACIFIC.
U.S. FISH WILDL. SERV., FISH BULL.
54/ 111-144.
DESCRIPTIONS OF THREE SILK NETS AND DISCUSSION OF THEIR RELATIVE CATCHING ABILITY.

KINZER, JOHANNES 487
/1962/
EIN EINFACHER SCHLIESSMECHANISMUS FUR DIE PLANKTONROHRE -HAI-
KURZE MITT. INST. FISCHEREIBIOL. UNIV. HAMBURG.
12/ 13-17.
IN GERMAN. ENGLISH TRANSL. AVAIL. FROM BUR. COMM. FISH.
U.S. DEP. INT. WASHINGTON, D.C. 20240

KIRPICHENKO, M. J. 489
/1962/
A NEW QUANTITATIVE RAPIDLY MOVING PLANKTON-CATCHER.
PROBL. ECOL.
4/

KISS, R. 491
/1960/
NOTE SUR LA TECHNIQUE DE L,EMPLOI D,UN COMPLEX DE FILETS POUR LA PECHE DU ZOOPLANKTON POUR LES LACS TANGANYIKA ET KIVU.
PUBL. CONS. SCI. AFRI. SUD SAHARA.
63/ 97-101.

KNIGHT-JONES, E. M. 493
/1952/
REPRODUCTION OF OYSTERS IN THE RIVERS CROUCH AND ROACH, ESSEX, DURING 1947, 1948 and 1949.
GT. BRIT. MIN. AGR., FISH. FOOD, FISH. SER. 2,
18 /2/ 3-48.
DISCUSSION ON THE USE OF A PUMP TO SAMPLE PLANKTON IN AN ESTUARY.

KOBAYASHI, KIICHIRO 495
DEGUCHI, TOYOKICHI
/1952/
AN EXPERIMENT OF A BEAM-TYPE TRAWL NET FOR FISH LARVAE AT THE VARIOUS DEPTHS OF SEA WATER.
BULL. FAC. FISH. HOKKAIDO UNIV.
3/ 104-108.
IN JAPANESE WITH AN ENGLISH ABSTRACT AND TITLES.

KOBAYASHI, KIICHIRO 497
IGARASHI, SHUZO
/1956/
MATHEMATICAL ANALYSIS OF THE FILTERING RATE OF PLANKTON NET.
BULL. FAC. FISH. HOKKAIDO UNIV.
7 /1/ 17-20.

KOFOID, CHARLES ATWOOD 499
/1897/
ON SOME IMPORTANT SOURCES OF ERROR IN THE PLANKTON METHOD.
SCIENCE NEW SER.
6 /153/ 829-832.
CRITICISM OF HENSEN,S NET COEFFICIENT AND A DISCUSSION OF SAMPLING ERROR, VOLUME OF WATER FILTERED, CLOGGING, AND ESCAPEMENT.

KOFOID, CHARLES ATWOOD 501
/1897/
PLANKTON STUDIES I. METHODS AND APPARATUS IN USE IN PLANKTON INVESTIGATIONS AT THE BIOLOGICAL EXPERIMENTAL STATION OF THE UNIVERSITY OF ILLINOIS.
BULL. ILL. STATE LAB. NATUR. HIST.
5 /1/ 1-25.
DISCUSSION OF SAMPLING ERROR, VOLUME OF WATER FILTERED AND COMPARISON OF THE PUMP WITH THE NET.

KOFOID, CHARLES ATWOOD 503
/1905/
A SELF-CLOSING WATER BUCKET FOR PLANKTON INVESTIGATIONS.-
PUBL. CIRCON.
CONS. PERMA. INT. EXPLOR. MER
32/ 10 PP.

KOFOID, CHARLES ATWOOD 504
/1911/
ON AN IMPROVED FORM OF SELF-CLOSING WATER-BUCKET FOR PLANKTON INVESTIGATIONS.
UNIV. CALIF. PUBL. ZOOL.
8 /9/ 349-352.

KOFOID CHARLES ATWOOD 505
/1911/
ON A SELF-CLOSING PLANKTON NET FOR HORIZONTAL TOWING.
UNIV. CALIF. PUBL. ZOOL.
8 /8/ 311-348.
HISTORICAL DISCUSSION OF THE DEVELOPMENT OF THIS LINE OF APPARATUS AND A DESCRIPTION OF A NEW SAMPLER.

KOFOID, CHARLES ATWOOD 509
/1912/
A NEW HORIZONTAL SELF-CLOSING PLANKTON NET.
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
5 /1/ 91-92.
IN ENGLISH.

KOKUBO, SEIJI 511
/1933/
A PLANKTON PUMP IN WHICH THE WINDING OF THE TOW LINE OF SUCTION TUBING IS MADE AUTOMATICALLY.
BULL. JAP. SOC. SCI. FISH.
1 /6/ 277-280.
IN JAPANESE WITH AN ENGLISH SYNOPSIS.

KOKUBO, SEIJI 513
TAMURA, TADASHI
/1931/
A QUANTITATIVE INVESTIGATION OF THE PLANKTON OF AOMORI BAY AS STUDIED COMPARATIVELY BY PUMP AND NET COLLECTION.
SCI. REP. TOHOKU UNIV.
6 /3/ 491-531.
DISCUSSION OF FILTRATION COEFFICIENTS AND SAMPLING ERROR.

KORRINGA, P. 515
/1941/
EXPERIMENTS AND OBSERVATIONS ON SWARMING, PELAGIC LIFE, AND SETTING IN THE EUROPEAN FLAT OYSTER, OSTREA EDULIS L.
ARCH. NEER. ZOOL.
5 /1/2/ 1-249.
DISCUSSION OF PLANKTON SAMPLING WITH A PUMP IN AN ESTUARY.

KULIKOVA, E.B. 518
/1954/
SRAVNITEL,NAYA ULOVISTOST: NESKOL,-KIKH SETEI.
/COMPARATIVE CATCHING ABILITY OF SEVERAL TYPES OF PLANKTON NETS./
TR. INST. OKEANOL. AKAD. NAUK SSSR
11/ 233-237.
DISCUSSION OF AVOIDANCE. IN RUSSIAN. ENGLISH TRANSLATION AVAILABLE FROM U.S. DEPT. INT., WASHINGTON, D.C. 20240.

KULIKOVA, E.B. 519
/1956/
OB ULOVISTOSTI IKHTIOPLANKTONNYKH SETEI, PRIMENYAVSHIKHSYA NA EKSNEDITSIONNOM SVDNE -VITYAZ-.
/THE EFFICIENCY OF THE ICHTHYOPLANKTON NET AS USED ON THE RESEARCH VESSEL -VITYAZ-./
TR. INST. OKEANOL. AKAD. NAUK SSSR
19/ 330-333.
IN RUSSIAN.

KUNNE, C.L. 521
/1929/
VERGLEICH DER FANGFAHIGKEIT VERSCHIEDENER MODELLE VON PLANKTON-NETZEN.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
59/ 3-24.
COMPARISON OF THE HENSEN EGG NET TO THE NANSEN NET AND AN INTERNATIONAL STANDARD NET.
IN GERMAN WITH ENGLISH RESUME.

KUNNE, C.L. 523
/1933/
WEITERE UNTERSUCHUNGEN ZUM VERGLEICH DER FANGFAHIGKEIT VERSCHIEDENER MODELLE VON VERTIKAL FISCHENDEN PLANKTON NETZEN.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
83/ 3-19.
COMPARISON OF THE CATCHING ABILITY OF THE LARGE VERTICAL NET WITHOUT TOP-PIECE -STRAMIN-, LARGE VERTICAL NET WITH TOP-PIECE -GRIT GAUZE 22-, LARGE VERTICAL NET WITH TOP-PIECE -MOSQUITO NETTING-, HELIGOLAND LARVA NET -SILK GAUZE-, HENSEN EGG NET WITHOUT TOP-PIECE -SILK GAUZE-, AND MEDIUM APSTEIN NET -SILK GAUZE 20-. DISCUSSION OF SAMPLING ERROR, ESCAPEMENT, AND AVOIDANCE. IN GERMAN. ENGLISH RESUME.

KURASHIGE, H. 525
/1932/
ON THE COMPARATIVE QUANTITATIVE DETERMINATION OF PLANKTON BY VARIOUS TYPES OF NETS.
J. OCEANOGR.
3 /2/ 430-437.
IN JAPANESE.

LAEVASTU, T. 527
/1958/
REVIEW OF THE METHODS USED IN PLANKTON RESEARCH AND CONVERSION TABLES FOR RECORDING THE DATA AND RECOMMENDATIONS FOR STANDARDIZATION.
F. A. O. FISH. BIOL. BR.
FB/58/T2, 50 PP. MIMEOGR.
DISCUSSION OF FLOW PATTERNS AT THE MOUTH OF NETS, AVOIDANCE, COMPARATIVE CATCHING ABILITY, AND THE VOLUME OF WATER FILTERED.

LAEVASTU, T. 529
/1962/
THE ADEQUACY OF PLANKTON SAMPLING.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 66-73.

LAKOWITZ, 531
/1896/
EIN NEUES HORIZONTAL-SCHLIESSNETZ.
SCHR. NATURFORSCH GES. DANZIG
9/ 275-279.

LANGFORD, R.R. 533
/1953/
METHODS OF PLANKTON COLLECTION AND A DESCRIPTION OF A NEW SAMPLER.
J. FISH. RES. CAN.
10 /5/ 238-252.
COMPARISON OF THE CATCHING ABILITY OF PUMPS, WATER SAMPLERS, TOW NETS, PLANKTON TRAPS, AND THE CLARKE-BUMPUS SAMPLER. DISCUSSION OF SAMPLING ERROR, CLOGGING, AND VOLUME OF WATER FILTERED.

LEAVITT, BENJAMIN B. 535
/1935/
A QUANTITATIVE STUDY OF THE VERTICAL DISTRIBUTION OF THE LARGER ZOOPLANKTON IN DEEP WATER.
BIOL. BULL. /WOODS HOLE/ MASS.,
68 /1/ 115-130.
DESCRIPTION OF A CLOSING DEVICE FOR A PLANKTON NET.

LEAVITT, BENJAMIN B. 537
/1938/
THE QUANTITATIVE VERTICAL DISTRIBUTION OF MACROZOOPLANKTON IN THE ATLANTIC OCEAN BASIN.
BIOL. BULL. /WOODS HOLE/ MASS.,
74 /3/ 376-394.
DESCRIPTION OF A 1-M. AND A 2-M. CLOSING NET.

LEONG, RODERICK 539
/1967/
EVALUATION OF A PUMP AND REELED HOSE SYSTEM FOR STUDYING THE VERTICAL DISTRIBUTION OF SMALL PLANKTON.
U.S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.
549/ 9 PP.

LIMNOLOGY AND OCEANOGRAPHY 540
/1964/
SOURCES OF LIMNOLOGICAL AND OCEANOGRAPHIC APPARATUS AND SUPPLIES.
SUPPL. VOL. 9, SPEC. PUBL. 1.
/THIRD REV./ 32 PP.

LINGER, FAY I. 541
/1961/
A HISTORICAL SURVEY OF MACROPLANKTON SAMPLING GEAR.
UNIV. WASH., DEP. OCEANOGR.
UNPUBL. MANUSCRIPT, 31 PP.

LITTLEFORD, ROBERT A. 543
NEWCOMBE, CURTIS L.
SHEPHERD, ROLAND B.
/1940/
AN EXPERIMENTAL STUDY OF CERTAIN QUANTITATIVE PLANKTON METHODS.
ECOLOGY
21 /3/ 309-322.
DISCUSSION OF SAMPLING ERROR.

LIVRON, D.E. 545
/1893/
DRAGUE POUR PECHER DE PETITS ANIMAUX A UNE PROFONDEUR DONNEE.
C. R. CONGR. INT. ZOOL.
DEUX. SESS. MOSCOW 1892-1893.
2/ 259-261.
DESCRIPTION OF A PRESSURE-OPERATED OPENING AND CLOSING NET.

LO BIANCO, S. 547
/1890/
METODI USATI NELLA STAZIONE ZOOLOGICA PER LA CONSERVAZIONE DEGLI ANIMALI MARINI.
MITT. ZOOL. STA. NEAPEL
9/ 435-474.

LO BIANCO, S. 549
/1903/
LA PESCHE ABESSALI ESEQUITE DA F. A. KRUPPCOL YACHT PURITAN- NELE ADIACENZE DI CAPRI ED IN ALTRE LOCALITA DEL MEDITERRANEO.
MITT. ZOOL. STA. NEAPEL
16/ 109-280.
COLLECTIONS MADE WITH A VERY LARGE CLOSING NET, SIMILAR TO THE CHUN-PETERSEN NET.

LOHMANN. 551
/1901/
UBER DAS FISCHEN MIT NETZEN AUS MULLERGAZE NO. 20 ZU DEM ZWECKE QUANTITATIVER UNTERSUCHUNGEN DES AUFTRIEBS.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. KIEL
N. F. 5 /2/ 47-67.

LOHMANN, H. 553
/1903/
NEUE UNTERSUCHUNGEN UBER DEN REICHTUM DES MEERES AN PLANKTON UND UBER DIE BRAUCHBARKEIT DER VERSCHIEDENEN FANGMETHODEN.
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE, ABT. KIEL,
N.F. 7/ 88 PP.
SAMPLING PHYTO-AND NANNOPLANKTON DOWN TO 100 M. WITH A PUMP.

LONGHURST, ALAN R. 557
/1964/
RECENT WORK ON ZOOPLANKTON OFF BAJA CALIFORNIA.
PROC. FIFTEENTH PAC. TUNA CONF., LAKE ARROWHEAD, CALIF. 28-30 SEPT. 1964, /33-34.
REFERENCE TO A NEW CONTINUOUS PLANKTON RECORDER.

LONGHURST, ALAN R. 559
REITH, A.D.
BOWER, R.W.
SEIBERT, D.L.R.
/1966/
A NEW SYSTEM FOR THE COLLECTION OF MULTIPLE SERIAL PLANKTON SAMPLES.
DEEP SEA RES.
13/ 213-222.

LUFEROVA, L.A. 561
/1963/
K METHODIKE IZUCHENIYA VLIYANIYA TECHENIYA NA VODNYKH BESPOZVONOCHNYKH. /ON METHODS OF STUDYING THE EFFECTS OF FLOW ON AQUATIC INVERTEBRATES./
BIOL. ABSTR.
43/ 8242.

LUKJANOVA, W.S. 563
/1940/
ON THE MAXIMUM VELOCITIES OF MARINE PLANKTERS.
DOKL. AKAD. NAUK SSSR, NEW SER.
28/ 641-644.

MACER, C.T. 564
/1967/
A NEW BOTTOM PLANKTON SAMPLER.
J. CONS.
31 /2/ 158-163.

MACKINTOSH, N.A. 565
ARDLEY, R.A.
/1936/
THE ROYAL RESEARCH SHIP -DISCOVERY II-.
DISCOVERY REP.
13/ 100-101.
DESCRIPTION OF A 2-M. STRAMIN NET, REFERRED TO AS A YOUNG-FISH TRAWL, WITH A THROTTLING DEVICE.

MAHADEVA, N. 567
/1962/
PRELIMINARY REPORT ON THE EXPERIMENTS WITH MARUTOKU-B NET AND A 45-CM. NET X 90-CM NET OF NO. 0 BOLTING SILK, OFF TRINCOMALEE CEYLON, DURING OCTOBER 1960.
PROC. INDO-PAC. FISH. COUNC., 9th SESSION, 6-23 JANUARY, 1961.
SEC. 2 AND 3, 17-24

MAHNKEN, CONRAD V.W. 569
JOSSI, JACK W.
/1967/
FLUME EXPERIMENTS ON THE HYDRODYNAMICS OF PLANKTON NETS.
J. CONS.
31 /1/ 38-45.

MARENZELLER, E. VON 571
/1890/
UBER DEN MODERNEN APPARAT ZUR ERFORSCHUNG DER MEERESTIEFEN.
VERH. ZOOL. BOT. GES. WIEN
40/ 207-226.

MARENZELLER, E. VON 573
/1891/
ZUR ERFORSCHUNG DER MEERE UND IHRER BEWOHNER, GESAMMELTE SCHRIFTEN DES FURSTEN ALBERT I VON MONACO.
HOLDER, WIEN
16/ 207 PP.
DESCRIPTION OF THE PRINCE OF MONACO,S CURTAIN NET.

MARINE RESEARCH COMMITTEE 575
/1950/
CALIFORNIA COOPERATIVE SARDINE RESEARCH PROGRAM, PROGRESS REPORT, 1950
SACRAMENTO.
54 PP.
DESCRIPTION OF A DEPRESSOR DESIGNED BY JOHN ISAACS OF THE SCRIPPS INSTITUTION OF OCEANOGRAPHY, AND USED COMMONLY WITH PLANKTON SAMPLERS.

MARPLES, TIMOTHY G. 577
/1962/
AN INTERVAL PLANKTON SAMPLER FOR USE IN PONDS.
ECOLOGY
43 /2/ 323-324.

MARR, J.W.S. 579
/1938/
ON THE OPERATION OF LARGE PLANKTON NETS.
DISCOVERY REP.
18/ 105-120.
DESCRIPTION OF THE INTERNATIONAL THROTTLING NET.

MARSH, C.D. 581
/1898/
ON THE LIMNETIC CRUSTACEA OF GREEN LAKE.
TRANS. WISC. ACAD. SCI. ARTS LETT.
11/ 179-185.
DESCRIPTION OF MARSH,S VERTICAL CLOSING NET.

MARUMO, R. 583
/1958/
ON THE NORPAC STANDARD PLANKTON NET.
OCEANOGR. REP. JAPAN METEOROL. AGENCY
6 /1/ 45-47.
THE SPECIFICATIONS AND METHOD OF HAULING OF THE NORPAC STANDARD NET ARE GIVEN.
IN JAPANESE.

MARUMO, R. 585
/1961/
RESEARCH ON DEEP-SEA ANIMALS BY THE -RYOFU MARU-.
INFORM. BULL. PLANKTOL. JAP.
7/ 1-7.
DESCRIPTION OF A 130-CM. CONICAL PLANKTON NET AND A TRIANGULAR MIDWATER PLANKTON NET, AND A DISCUSSION OF THEIR USE.

MATSUDAIRA, Y. 589
/1926/
AN EXPERIMENT ON THE PLANKTON NET.
UMI TO SORA
16 /2/ 85-91.
IN JAPANESE.

MATSUE, Y. 590
MARUMO, R.
KOMAKI, Y.
/1961/
NOTES ON THE MIDWATER ANIMALS COLLECTED IN THE THIRD CRUISE OF THE JAPANESE EXPEDITION OF DEEP SEA /EDS-3/.
OCEANOGR. MAG.
12 /2/ 219-223.

MATSUMOTO, W.M. 591
KLAWE, W.L.
RICHARDS, W.J.
UEYANAGI, S.
/1966/
WORKING GROUP REPORT ON METHODS OF COLLECTING LARVAE.
FAO/FOOD AGR. ORGAN.
U.N./ 23 PP.

MC GOWAN, JOHN A. 592
FRAUNDORF, VERNIE J.
/1966/
THE RELATIONSHIP BETWEEN SIZE OF NET USED AND ESTIMATES OF ZOOPLANKTON DIVERSITY.
LIMNOL. OCEANOGR.
11 /4/ 456-469.
DISCUSSION OF PATCHINESS, AVOIDANCE, AND THE NUMBER OF SPECIES AND NUMBER OF INDIVIDUALS CAUGHT WITH DIFFERENT NETS.

MCHARDY, R.A. 593
/1961/
CALIBRATION OF CLARKE-BUMPUS PLANKTON SAMPLERS IN THE FIELD.
UNIV. BRIT. COLUMBIA INST. OCEANOGR.
M.S. REP. 8 /MIMEOGRAPHED/ 10 PP.
DISCUSSION OF THE VOLUME OF WATER FILTERED BY A CLARKE-BUMPUS SAMPLER AS A FUNCTION OF MESH SIZE AND TOWING SPEED.

MENZEL, DAVID W. 595
RYTHER, JOHN H.
/1961/
ZOOPLANKTON IN THE SARGASSO SEA OFF BERMUDA AND ITS RELATION TO ORGANIC PRODUCTION.
J. CONS.
26 /3/ 250-258.
COMPARISON OF THE CATCHES OF A NO. 2 WITH A NO. 8 NET, AND A NO. 2 WITH A NO. 20 net 0.37-, 0.16-, and 0.08-MM. MESH APERTURE, RESPECTIVELY.

MILLER, DAVID 597
/1961/
A MODIFICATION OF THE SMALL HARDY PLANKTON SAMPLER FOR SIMULTANEOUS HIGH-SPEED PLANKTON HAULS.
BULL. MAR. ECOL.
5 /45/ 165-172.
DESCRIPTION OF A MODIFIED HARDY PLANKTON SAMPLER AND DISCUSSION OF THE VOLUME OF WATER FILTERED, SAMPLING ERROR, AND AVOIDANCE BY ORGANISMS.

MILLER, S.M. 599
MOORE, H.B.
KVAMMEN, K.R.
/1953/
PLANKTON OF THE FLORIDA CURRENT. I. GENERAL CONDITIONS.
BULL. MAR. SCI. GULF CARIBBEAN
2 /3/ 465-485.
DESCRIPTION OF TOWS WITH A 70-CM. DIAM. CLOSING NET OF THE DISCOVERY TYPE, IN WHICH THE LEADING THIRD CONSISTS OF 1/4--SIDE MESH, THE CENTRAL THIRD OF STRAMIN AND THE TRAILING THIRD OF NO. 10 SILK BOLTING CLOTH.
DESCRIPTION AND ILLUSTRATION OF A DEPTH-DISTANCE RECORDER.

MOHR, JOHN L. 601
GEIGER, STEPHEN R.
/1962/
COMPARISON OF RESULTS FROM A NEW AUTOMATIC PLANKTON SAMPLER AND FROM CONVENTIONAL METHODS IN THE ARCTIC BASIN.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 205-206.

MONTI, RINA 603
/1911/
UN NOUVEAU PETIT FILET POUR LES PECHES PLANCTONIQUES DE SURFACE A TOUTE VITESSE.
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
3 /5 AND 6/ 548-552.
DESCRIPTION OF A HIGH-SPEED SURFACE NET.

MOORE, HILARY B. 605
/1944/
A WIRE-ANGLE INDICATOR FOR USE WHEN TOWING PLANKTON NETS.
J. MAR. BIOL. ASS. U. K.
25 /2/ 419-422.

MOORE, HILARY B. 607
/1952/
A DEPTH-DISTANCE RECORDER FOR USE WITH TOWED PLANKTON NETS.
UNIV. MIAMI MAR. LAB. TECH. REP.
52-92. /4 PP.

MORIOKA, YASUHIRO 609
/1965/
INTERCALIBRATION OF CATCH EFFICIENCY BETWEEN BOLTING SILK NET AND PYLEN NET.
INFORM. BULL. PLANKTOL. JAP.
12/ 54-60.
TWO INDIAN OCEAN STANDARD NETS WERE CONSTRUCTED OF PYLEN CLOTH NO. 60 AND OF BOLTING SILK GG54, AND COMPARISONS OF THE FILTRATION RATIO WERE MADE. FLOWMETER READINGS WITH AND WITHOUT NETS WERE ALSO MADE. TWO NORPAC STANDARD NETS WERE CONSTRUCTED OF PYLEN CLOTH NO. 60 AND BOLTING SILK GG54 AND COMPARED FOR CATCH EFFICIENCY.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

MORIOKA, YASUHIRO 610
/1967/
PERFORMANCE TEST OF FOUR TYPES OF PLANKTON NETS /TANSEI MARU CRUISE KT 66-5/.
BULL. PLANKT. SOC. JAPAN
14/ 55-58
ILLUSTRATIONS AND COMPARISONS OF THE KAWARADA-AKAMATSU AUTOMATIC OPENING-AND-CLOSING MULTIPLE NET, THE MOTODA 56 CM. HORIZONTAL CLOSING NET, THE NANSEN 45 CM.VERTICAL CLOSING NET, AND THE JUDAY 45 CM.VERTICAL CLOSING NET.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

MOTODA, SIGERU 613
/1952/
NEW PLANKTON SAMPLERS.-
BULL. FAC. FISH. HOKKAIDO UNIV.
3 /3/ 181-186.
DESCRIPTION OF A VERTICAL SUCCESSIVE PLANKTON SAMPLER, A HIGH-SPEED SUCCESSIVE PLANKTON SAMPLER AND REFERENCE TO HENSEN,S BASKET NET.

MOTODA, SIGERU 615
/1954-55/
HANDY UNDERWAY PLANKTON CATCHERS.
BULL. FAC. FISH. HOKKAIDO UNIV.
5 /2/ 149-152.

MOTODA, SIGERU 617
/1957/
NORTH PACIFIC STANDARD PLANKTON NET.
INFOR. BULL. PLANKTOL. JAP.
4/ 13-15.
IN JAPANESE.

MOTODA, SIGERU 619
/1959/
DEVICES OF SIMPLE PLANKTON APPARATUS.
MEM. FAC. FISH. HOKKAIDO UNIV.
7 /1/2/ 73-94.
DESCRIPTION OF TWIN NET WITH SEMI-CIRCULAR OPENINGS, CONTINUOUS VERTICAL SAMPLER, TWIN NET WITH BENT LID, FOUR SQUARE NET, DOUBLE PURSE NET, HORIZONTAL NETS, HORIZONTAL NET WITH SLIDING RING, SMALL HORIZONTAL NET WITH ROTARY MOUTH RING, TRIANGULAR MID-WATER NET, DOUBLE RELEASING MECHANISM WITH DISSOLVING SUBSTANCE, HIGH-SPEED TOW NET WITH HEAVY HEAD, SIMPLE UNDERWAY PLANKTON CATCHER IV, SIMPLE UNDERWAY PLANKTON CATCHER VI WITH OUTSIDE FRAME, MULTIPLE NET UNDERWAY SAMPLER /M.N.U.S./, M.N.U.S. WITH STORING TANK.

MOTODA, SIGERU 621
/1961/
PROGRAMME OF THE INTERNATIONAL INDIAN OCEAN EXPEDITION, PARTICULARLY ON BIOLOGICAL PROGRAMME.
INFORM. BULL. PLANKTOL. JAP.
7/ 11-34.
DESCRIPTIONS OF THE BIOLOGICAL EQUIPMENT TO BE USED FOR STANDARD SAMPLING IN JAPANESE WITH ENGLISH ABSTRACT AND BIBLIOGRAPHY.

MOTODA, SIGERU 622
/1962/
PLANKTON SAMPLER FOR COLLECTING UNCONTAMINATED MATERIALS FROM SEVERAL DIFFERENT ZONES BY A SINGLE VERTICAL HAUL.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 55-58.

MOTODA, SIGERU 623
/1962/
PROPOSED BIOLOGICAL APPARATUS AND METHODS TO BE USED ON JAPANESE SHIPS IN THE INTERNATIONAL INDIAN OCEAN EXPEDITION.
INFOR. BULL. PLANKTOL. JAP.
8/ 40-53.
IN JAPANESE WITH AN ENGLISH ABSTRACT AND TITLES.

MOTODA, SIGERU 625
/1962/
SPECIFICATIONS OF ZOOPLANKTON STANDARD NET TO BE USED IN THE INTERNATIONAL INDIAN OCEAN EXPEDITION, AND A DESIGN OF CLOSING-NET.
INFOR. BULL. PLANKTOL. JAP.
8/ 30-40.
IN JAPANESE WITH AN ENGLISH ABSTRACT AND TITLES.

MOTODA, SIGERU 629
/1963/
DEVICES OF SIMPLE PLANKTON APPARATUS II.
BULL. FAC. FISH. HOKKAIDO UNIV.
14 /3/ 152-162.

MOTODA, SIGERU 632
ANRAKU, MASATERU
/1954/
DAILY CHANGE OF VERTICAL DISTRIBUTION OF PLANKTON ANIMALS NEAR WESTERN ENTRANCE TO THE TSUGARU STRAIT, NORTHERN JAPAN.
BULL. FAC. FISH. HOKKAIDO UNIV.
5 /1/ 15-19.
DESCRIPTION OF A CONICAL PLANKTON NET AND AN IRON CAP FOR CLOSING IT. DISCUSSION OF AVOIDANCE AND THE DIFFERENCE BETWEEN DAY AND NIGHT CATCHES.

MOTODA, SIGERU 633
ANRAKU, MASATERU
/1955/
FURTHER OBSERVATION ON THE DAILY CHANGE IN AMOUNT OF CATCHES OF PLANKTON ANIMALS IN VERTICAL HAULS.
BULL. FAC. FISH. HOKKAIDO UNIV.
6 /1/ 15-18.
DISCUSSION OF VARIATION IN CATCHES BETWEEN DAY AND NIGHT, VARIATION DUE TO AVOIDANCE, AND RESULTING SAMPLING ERROR.

MOTODA, SIGERU 534
ANRAKU, MASATERU
/1955/
THE VARIABILITY OF CATCHES IN VERTICAL PLANKTON HAULS.
BULL. FAC. FISH. HOKKAIDO UNIV.
6 /2/ 152-175.

MOTODA, SIGERU 635
ANRAKU, MASATERU
MINODA, TAKASHI
/1957/
EXPERIMENTS ON THE PERFORMANCE OF PLANKTON SAMPLING WITH NET.
BULL. FAC. FISH. HOKKAIDA UNIV.
8 /1/ 22 PP.
COMPARISON OF THE CATCHES TAKEN WITH A 45-CM. X 100-CM. NET AND A 45-CM. X 180-CM. NET. DISCUSSION OF SAMPLING ERROR AND VOLUME OF WATER FILTERED.

MOTODA, SIGERU 636
KONNO, KENJIRO
KAWAMURA, AKITO
OSAWA, KEISUKE
/1963/
PROPOSED METHOD OF ESTIMATION OF QUANTITY OF WATER FILTERED BY VERTICAL NET HAUL, AND ITS APPLICATION ON ILLUSTRATING DISTRIBUTION OF ZOO-PLANKTON BIOMASS IN THE EASTERN INDIAN OCEAN.
INFOR. BULL. PLANKTOL. JAP.
10/ 22-28.
IN JAPANESE WITH AN ENGLISH ABSTRACT AND TITLES.

MOTODA, SIGERU 637
KONNO, KENJIRO
KAWAMURA, AKITO
OSAWA, KEISUKE
/1963/
ZOOPLANKTON SAMPLINGS ACCOMPLISHED ON THE -UMITAKA MARU- AND THE -OSHORO MARU- IN THE INDIAN OCEAN DECEMBER 1962- JANUARY 1963.
INFOR. BULL. PLANKTOL. JAP.
9/ 37-50.
FILTRATION EFFICIENCIES OF THE INDIAN OCEAN STANDARD NET /IOSN/ WITH AND WITHOUT THE COARSE UPPER PORTION, AND DESCRIPTIONS OF THE IOSN, THE 80-CM. JUDAY NET, THE 25-CM. HART NET, AND A LARGE SQUARE NET.
IN JAPANESE WITH AN ENGLISH ABSTRACT AND TITLES.

MOTODA, SIGERU 638
OSAWA, KEISUKE
/1964/
FILTRATION RATIO, VARIANCE OF SAMPLES AND ESTIMATED DISTANCE OF HAUL IN VERTICAL HAULS WITH THE INDIAN OCEAN STANDARD NET.
INFOR. BULL. PLANKTOL. JAP.
11/ 11-24.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

MURRAY, J. 645
HJORT, J.
/1912/
THE DEPTHS OF THE OCEAN.-
MACMILLAN CO. LTD., LONDON
821 PP.
DESCRIPTIONS OF NUMEROUS PLANKTON SAMPLING DEVICES.

NAKAI, ZINZIRO 646
/1954/
MANUAL OF THE FLOW METER FOR A PLANKTON NET.-
THE TSURUMI-SEIKI KOSAKUSHO CO. LTD. 1506 TSURUMI-CHO, TSURUMI-KU, YOKAHOMA, JAPAN, 3 PP.
TRANSLATED IN PART FROM THE JAPANESE TEXT./PLANKTON NET YO ROSUIKEI KAISETSU/.-

NAKAI, ZINZIRO 647
/1954/
ON THE METHODOLOGY OF MARINE PLANKTON COLLECTION WITH A SUGGESTED CLASSIFICATION.-
PROC. INDO-PAC. FISH. COUNC. 5TH MEETING.
SEC. 2/71-81.

NAKAI, ZINZIRO 649
/1962/
APPARATUS FOR COLLECTING MACROPLANKTON IN THE SPAWNING SURVEYS OF -IWASHI- /SARDINE, ANCHOVY, AND ROUND HERRING/ AND OTHERS.-
BULL. TOKAI REG. FISH. RES. LAB.
9/ 221-237.
IN ENGLISH. JAPANESE SUMMARY.

NANSEN, FRIDTJOF 651
/1915/
CLOSING-NETS FOR VERTICAL HAULS AND FOR HORIZONTAL TOWING.
PUBL. CIRCON.
CONS. PERMA. INT. EXPLOR. MER
67/ 8 PP.

NATIONAL ACADEMY OF SCIENCES- 653
NATIONAL RESEARCH COUNCIL
/1963/
REPORTS ON STANDARDIZATION AND INTERCALIBRATION OF OCEANOGRAPHIC TECHNIQUES AND METHODS. ZOOPLANKTON: DETERMINATION OF AMOUNT /BIOMASS/.
UNESCO, PARIS, 31 DECEMBER, 1963.
REF. UNESCO/NS/9/89J.
15-22.

NATIONAL ACADEMY OF SCIENCES- 655
NATIONAL RESEARCH COUNCIL
/1964/
RECOMMENDED INTERIM PROCEDURES FOR MEASUREMENTS IN BIOLOGICAL OCEANOGRAPHY. VI. SAMPLING ZOOPLANKTON TO DETERMINE BIOMASS.-
NAT. ACAD. SCI. NAT. RES. COUNC. PUBL.
23 PP.

NISHIZAWA, SATOSHI 661
ANRAKU, MASATERU
/1955-56/
A NOTE ON MEASURING OF THE VOLUME OF WATER FILTERED BY PLANKTON NET BY MEANS OF A FLOWMETER.
BULL. FAC. FISH. HOKKAIDO UNIV.
6 /4/ 298-309.
IN JAPANESE WITH ENGLISH ABSTRACT AND TITLES.

NISKIN, S. 663
JONES, J.I.
/1963/
NEW COLLECTING AND RECORDING DEVICES FOR LIMNOLOGICAL AND OCEANOGRAPHIC RESEARCH. THE AQUATIC ENVIRONMENT.
PROC. SIXTH CONF. GREAT LAKES RES., ANN ARBOR, MICHIGAN. INST. SCI. TECHN. UNIV. MICH. PUBL. 10/ 266.

NOBLE, RICHARD LEE 664
/1968/
MORTALITY RATES OF PELAGIC FRY OF THE YELLOW PERCH, PERCA FLAVESCENS /MITCHILL/, IN ONEIDA LAKE, NEW YORK, AND AN ANALYSIS OF THE SAMPLING PROBLEM.
CORNELL UNIVERSITY, GRADUATE SCHOOL DOCTORAL THESIS.
104 PP.

O,CONNELL, CHARLES P. 665
LEONG, RODERICK J.H.
/1963/
A TOWED PUMP AND SHIPBOARD FILTERING SYSTEM FOR SAMPLING SMALL ZOOPLANKTERS.
U.S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.
452/ 19 PP.

OMORI, MAKOTO 667
/1961/
TRIAL TOW WITH HIGH-SPEED UNDERWAY PLANKTON CATCHER, MODEL V AND VI.
INFOR. BULL. PLANKTOL. JAP.
7/ 34-36.

OMORI, MAKOTO 669
/1965/
A 160-CM OPENING-CLOSING PLANKTON NET. I. DESCRIPTION OF THE GEAR.
J. OCEANOGR. SOC. JAP.
21 /5/ 20-26.

OSTENFELD, C.H. 671
JESPERSEN, P.
/1924/
STANDARD NET FOR PLANKTON COLLECTIONS.
PUBL. CIRCON.
CONS. PERMA. INT. EXPLOR. MER
84/ 16 PP.

PAQUETTE, ROBERT G. 673
FROLANDER, HERBERT F.
/1957/
IMPROVEMENTS IN THE CLARKE-BUMPUS PLANKTON SAMPLER.
J. CONS.
22 /3/ 284-288.

PAQUETTE, ROBERT G. 675
SCOTT, EUGENE L.
SUND, PAUL N.
/1961/
AN ENLARGED CLARKE-BUMPUS PLANKTON SAMPLER.
LIMNOL. OCEANOGR.
6 /2/ 230-233.
DISCUSSION OF THE VOLUME OF WATER FILTERED.

PATHANSALI, D. 677
/1962/
COMPARISONS OF EFFICIENCY OF PLANKTON NETS.
PROC. INDO-PAC. FISH. COUNC.
9TH SESS. SEC. 2 AND 3/ 25-28

PAVESI, P. 679
/1883/
ALTRA SERIE, DI RECHERCHE E STUDI SULLA FAUNA PELAGICA DI LAHI ITALIANI.
ATTI SOC. VENETO-TRENTINA SCI. NATUR.
8/ 340-403.
DESCRIPTION OF PAVESI-TYPE CLOSING NET.

PEARCY, WILLIAM G. 681
HUBBARD, LYLE
/1964/
A MODIFIGATION OF THE ISAACS-KIDD MIDWATER TRAWL FOR SAMPLING AT DIFFERENT DEPTH INTERVALS.
DEEP SEA RES.
11 /2/ 263-265.

PECK, JAMES I. 683
/1896/
THE SOURCES OF MARINE FOOD.
BULL. U.S. FISH COM.
15/ 351-368.
DISCUSSION OF STEAM PUMP USED FOR SAMPLING THE PLANKTON IN BUZZARD,S BAY, MASS.

PENNAK, ROBERT W. 685
/1962/
QUANTITATIVE ZOOPLANKTON SAMPLING IN LITTORAL VEGETATION AREAS.
LIMNOL. OCEANOGR.
7 /4/ 487-489.
DESCRIPTION OF THE LITTORAL SAMPLING TUBE.

PETERSEN, C.G.J. 687
/1898/
PLANKTON STUDIES IN THE LIMFJORD.
REP. DAN. BIOL. STAT. BOARD ARG.
7/ 23 PP. /1897/
DESCRIPTION OF THE PETERSEN CLOSING NET.

PETTERSSON, V.I. 689
/1926/
IMPROVEMENTS IN THE HYDROGRAPHIC TECHNIQUE. II. A NEW PLANKTON CATCHER.
SVENSKA HYDROGR.-BIOL. KOMM.
SKR. NEW SER.
HYDROGR. 2.

PIERCE, E. LOWE 691
/1937/
A PLANKTON COLLECTOR FOR FAST TOWING.
NATURE /LONDON/
140 /1014-1015.
DESCRIPTION OF A NEW HIGH-SPEED SAMPLER. DISGUSSION OF CONDITION OF THE SAMPLE AND COMPARISON OF THE CATCHING ABILITY OF THIS HIGH-SPEED NET WITH A COARSE SILK NET.

PLANKTON SOCIETY OF JAPAN 693
/1965/
ICES-SCOR-UNESCO WORKING GROUP ON ZOOPLANKTON METHODS.-
INFOR. BULL. PLANKTOL. JAP.
12/ 117-118.
DISCUSSION OF THE OBJECTIVES OF THE WORKING GROUP ON ZOOPLANKTON METHODS.

PLANKTON SOCIETY OF JAPAN 695
/1965/
SUMMARY OF -MANUAL OF BIOLOGICAL OBSERVATIONS- PREPARED IN JAPAN FOR CSK.
INFOR. BULL. PLANKTOL. JAP.
12/ 111-115.
RECOMMENDATIONS FOR HORIZONTAL, OBLIQUE, VERTICAL, DISCRETE DEPTH, AND HIGH-SPEED TOWS, AND MIDWATER TRAWLS, USING THE FOLLOWING GEAR: NORPAC STANDARD NET /45-CM. X 180-CM., 0.33-MM. MESH APERTURE/, INDIAN OCEAN STANDARD NET /113-CM. IN MOUTH DIAMETER/ AUTOMATIC OPENING AND CLOSING MULTIPLE NET /40-CM. X 40-CM./, DESIGNED AND TESTED BY JAPAN METEOROLOGICAL AGENCY, ISAACS-KIDD MIDWATER TRAWL, HIGH-SPEED SAMPLER, AND LARVA NET /130-CM. IN DIAMETER OF THE MOUTH, 450-CM. LONG/.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

POUCHET, G. 696
CHABRY, L.
/1887/
SUR UN FILET FIN DE PROFONDEUR.-
C. R. SOC. BIOL.
39/ 602-604.
DESCRIPTION OF A MODIFIED PAVESI CLOSING NET.

PULLEN, E.J. 697
MOCK, C.R.
RINGO, R.D.
/1968/
A NET FOR SAMPLING THE INTERTIDAL ZONE OF AN ESTUARY.
LIMNOL. OCEANOGR.
13 /1/ 200-202.

QUAYLE, D.B. 698
TERHUNE, L.D.B.
/1967/
A PLANKTON SAMPLER FOR OYSTER LARVAE.
J. FISH. RES. BOARD CAN.
24 /4/ 883-885.

RAINNIE, W.O. 699
/1968/
ADVENTURES OF ALVIN.
OCEAN IND.
3 /5/ 23-28.
ILLUSTRATION OF AN OPENING AND CLOSING PLANKTON NET ATTACHED TO THE HULL . OF A RESEARCH SUBMERSIBLE.

REED, DONALD G. 701
STEWART, TRIGG
/1949/
A STREAMLINE CABLE DEPRESSOR.
J. MAR. RES.
8 /3/ 226-236.

REGAN, L. 703
/1963/
FIELD TRIALS WITH THE CLARKE-BUMPUS PLANKTON SAMPLER. EFFECTS OF COARSE AND FINE MESHED NETS OVER A RANGE OF SPEEDS ON EUPHAUSIID COLLECTIONS.-
UNIV. BRIT. COLUMBIA INST. OCEANOGR. MS. REP.
/MIMEOGRAPHED/ 28 PP.
DISCUSSION OF THE VOLUME OF WATER FILTERED, ESCAPEMENT, AND AVOIDANCE.

REIGHARD, JACOB 705
/1897/
METHODS OF PLANKTON INVESTIGATION IN THEIR RELATION TO PRACTICAL PROBLEMS.
BULL. U.S. FISH COM.
169-175.
INITIAL DISCUSSION OF FLOW METERS.

RENSHAW, R. WARD 707
PEARCY, WILLIAM G.
/1964/
A NEW SWIVEL CABLE CLAMP FOR TOWING LARGE PLANKTON NETS AT DIFFERENT DEPTHS.
DEEP SEA RES.
11 /6/ 933-934.

RICHARD, JULES 709
/1896/
MODIFICATION DU FILET BATHYPELAGIQUE DE GIESBRECHT.
BULL. SOC. ZOOL. FR.
21/ 214-218.

RICHARD, JULES 711
/1902/
CAMPAGNE SCIENTIFIQUE DE LA -PRINCESSE ALICE- EN 1901.
BULL. SOC. ZOOL. FR.
27/ 81-104.
DISCUSSION OF THE PRINCE OF MONACO,S CURTAIN NET AND THE GIESBRECHT CLOSING NET.

RICHARD, JULES 713
/1904/
CAMPAGNE SCIENTIFIQUE DU YACHT -PRINCESSE ALICE- EN 1903. OBSERVATIONS SUR LA SARDINE, SUR LE PLANKTON, SUR LES CETACES, SUR DES FILETS, NOUVEAUS, ETC.
BULL. MUS. OCEANOGR. MONACO
11/ 1-25.
DESCRIPTION OF THE MONACO LARGE APERTURE NET.

RICHARD, JULES 715
/1908/
L, OCEANOGRAPHIE.
VINEBERT AND NONY, PARIS.
398 PP.
DESCRIPTION OF THE PALUMBO CLOSING NET.

RICHARD, JULES 717
/1910/
LES CAMPAGNES SCIENTIFIQUES DE S. A. S. LE PRINCE ALBERT I DE MONACO
BULL. INST. OCEANOGR. -FORMERLY DE MONACO
162/ 159 PP.
ILLUSTRATIONS OF BATHYPELAGIC OPENING AND CLOSING NET AND THE MODIPIED GIESBRECHT NET. DISCUSSION OF A HENSEN NET AND THE MONACO LARGE APERTURE NET.

RICHARD, JULES 719
/1934/
LISTE GENERALE DES STATIONS DES CAMPAGNES SCIENTIFIQUES DU PRINCE ALBERT DE MONACO, AVEC NEUF CARTES DES ITINERAIRES ET DES NOTES ET OBSERVATIONS.
RESULT. CAMPAGN. SCI. PRINCE ALBERT I VON MONACO
84/ 472 PP.
DESCRIPTION OF THE MONACO SURFACE TRAWL /OBERFLACHENKURRE/ USED FOR CATCHING LARGER PLANKTON.

RICKER, WILLIAM E. 721
/1937/
STATISTICAL TREATMENT OF SAMPLING PROCESSES USEFUL IN THE ENUMERATION OF PLANKTON ORGANISMS.
ARCH. HYDROBIOL.
31/ 68-84.
DISCUSSION OF SAMPLING ERROR.

RICKER, WILLIAM E. 723
/1938/
ON ADEQUATE QUANTITATIVE SAMPLING ON THE PELAGIC NET PLANKTON OF A LAKE.
J. FISH. RES. BOARD CAN.
4 /1/ 19-32.

ROBERT, HENRI 725
/1922/
L,EMPLOI DU FILET ET DE LA POMPE DANS LES PECHES DE PLANCTON.
ANN. BIOL. LACUSTRE
11 /1/ 208-239.

ROCKWELL, JULIUS 727
/1963/
CATALOGUE OF OCEANOGRAPHIC INSTRUMENTS.
/UNPUBLISHED MANUSCRIPT./
BUR. COMMER. FISH. BIOL. LAB.
WASHINGTON, D.C.

ROSE, MAURICE 729
/1948/
UN FILET AUTOMATIQUE POUR LA PECHE DU PLANCTON EN PROFONDEUR.
BULL. INST. OCEANOGR. FORMERLY DE MONACO
933 / 8 PP.

RUKHLYADEV, Y.P. 731
/1958/
OPY S PLANKTONOMETROM NA VOLDE.
/EXPERIMENT OF THE WORK WITH A PLANKTON METER ON THE VOLGA/.
ZOOL. ZH.
37/ 1733-1739.

RUSSELL, F.S. 733
/1925/
A RELEASING APPARATUS FOR HORIZONTALLY TOWED PLANKTON NETS.
J. MAR. BIOL. ASS. U. K. NEW SER.
13/ 673-677.

RUSSELL, F.S. 735
/1926/
THE VERTICAL DISTRIBUTION OF MARINE MACROPLANKTON. II. THE PELAGIC YOUNG OF TELEOSTEAN FISHES IN THE DAYTIME IN THE PYLMOUTH AREA, WITH A NOTE ON THE EGGS OF CERTAIN SPECIES.
J. MAR. BIOL. ASS. U.K. NEW SER.
14 /1/ 101-145.
DISCUSSION OF WIRE-ANGLE DETERMINATION FOR TOWED NETS.

RUSSELL, F.S. 737
/1928/
A NET FOR CATCHING PLANKTON NEAR THE BOTTOM.
J. MAR. BIOL. ASS. U. K. NEW SER.
15 /1/ 105-108.

RUSSELL, F.S. 739
/1928/
THE VERTICAL DISTRIBUTION OF MARINE MACROPLANKTON. VII. OBSERVATIONS ON THE BEHAVIOR OF CALANUS FINMARCHICUS.
J. BIOL. ASS. U. K. NEW SER.
15/ 429-454.
DISCUSSION OF THE ABILITY OF PLANKTONIC ORGANISMS TO AVOID A NET.

RUSSELL, F.S. 740
/1933/
THE SEASONAL DISTRIBUTION OF MACROPLANKTON AS SHOWN BY CATCHES IN THE TWO METRE STRAMIN RING-TRAWL IN OFFSHORE WATERS OFF PLYMOUTH.
J. MAR. BIOL. ASS. U. K. NEW SER.
19 /1/ 73-75.

RUSSELL, F.S. 741
/1935/
A REVIEW OF SOME ASPECTS OF ZOOPLANKTON RESEARCH.
RAPP. PROCES-VERBAUX REUNION CONS. PERMA. INT. EXPLOR. MER
95/ 5-30.
DISCUSSION OF THE FILTRATION COEFFICIENT, MESH SIZE, AND VOLUME OF WATER FILTERED BY A HENSEN-TYPE NET AND HARVEY,S /1934/ NET.

RUSSELL, F.S. 742
COLEMAN, J.S.
/1931/
THE ZOOPLANKTON. I. GEAR, METHODS AND STATION LISTS.
SCI. REP. GREAT BARRIER REEF EXPED.
2 /2/ 2-27.

RZHEPISHEVSKII, I.K. 745
/1962/
K METHODIKE SBOROV PROB PLANKTONA VBLIZI OEREGOV I V GUBAKH.
/ON THE METHOD OF PLANKTON SAMPLE COLLECTION NEXT TO COASTAL AND SMALL GULF AREAS/.
OKEANOLOGIYA
2 /2/ 360-364.
IN RUSSIAN.

SATO, N. 747
/1933/
ON A TANK EXPERIMENT WITH SEINE NETS.
J. IMP. FISH. EXP. STA. 3
PAPER 26/ 49-60.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

SATO, N. 749
TAKAYAMA, I.
/1933/
EXPERIMENTS ON HYDROPOIL SINKER FOR TROLL LINE.
J. IMP. FISH. EXP. STA. 3
PAPER 27/ 61-78.
IN JAPANESE WITH AN ENGLISH ABSTRACT.

SAVILLE, A. 751
/1958/
MESH SELECTION IN PLANKTON NETS.
J. CONS.
23 /2/ 192-201.
DISCUSSION OF ESCAPEMENT.

SAVILOV, A.I. 753
/1963/
METODIKA SBORA PLEISTONA U. REISAKH E/S -VITYAZ-.
/METHODS OF PLEUSTON COLLECTION USED ON EXPEDITIONS OF THE RESEARCH VESSEL -VITYAZ-./
OKEANOLOGIYA
3 /3/ 523-526.
IN RUSSIAN. TRANSLATION AVAILABLE FROM RECENT OCEANOGRAPHIC EXPEDITIONS USSR, JPRS. 23, 281/ 12-17.

SCHMIDT, JOHANNES 755
/1904/
FISKERIUNDERSOGELSER VED ISLAND OG FAEROERNE I SOMMEREN 1903.
SKR. KOMM. DAN. FISK. HAVUNDERS
1/ 148 PP.
DESCRIPTION OF THE AIGNET /EGG NET/.

SCHMIDT, JOHANNES 759
/1912/
INTRODUCTION.
REP. DAN. OCEANOGR. EXPED. 1908-1910 MEDITERR.
1 /1/ 1-52.
DESCRIPTIONS OF SILK NET AND FOLDING RING TRAWL.

SCHMIDT, JOHANNES 761
/1929/
INTRODUCTION TO THE OCEANOGRAPHIC REPORTS.
DANA REP.
1 /1/ 1-87.
DESCRIPTION OF SILK NET.

SEIWELL, H. R. 763
/1929/
PATTERNS FOR CONICAL SILK PLANKTON NETS OF ONE METER AND HALF METER DIAMETERS.
J. CONS.
4 /1/ 99-103.

SETTE, OSCAR E. 765
AHLSTROM, ELBERT H.
/1948/
ESTIMATIONS OF ABUNDANCE OF THE EGGS OF THE FACIFIC PILCHARD /SARDINOPS CAERULEA/ OFF SOUTHERN CALIFORNIA DURING 1940 AND 1941.-
J. MAR. RES.
7 /3/ 511-542.
DESCRIPTION OF OBLIQUE TOWS MADE WITH A 1.6- AND A 1.0-M. MOUTH DIAMETER NET, BOTH CONSTRUCTED OF EITHER NO. 24XXX GRIT GAUZE OR OF COTTON SCRIM OF SIMILAR MESH SIZE. ESTIMATION OF SAMFLING ERROR FROM FAIRED HAULS.

SHEARD, KEITH 767
/1941/
IMPROVED METHODS OF COLLECTING MARINE ORGANISMS.
REC. S. AUST. MUS.
7 /1/ 11-14.
DESCRIPTION OF SHEARD NET AND ITS CATCHING ABILITY COMPARED WITH A STANDARD NET. DISCUSSION OF AVOIDANCE, FLOW FATTERN AND FILTRATION CHARACTERISTICS, AND METHOD OF REMOVING SAMFLE FROM THE NET.

SHEBALIN, O.D. 769
/1958/
FOVTORITEL,NAYA PLANKTONNAYA SETKA.
/MULTIFLE FLANKTON NET/.
TR. BALT. NAUCHNOISSLEDOVATEL'SKOGO INST. MORSK. RYB. KHOZ. OKEANOGR.
4 377-385.
IN RUSSIAN.

SHIKLEEV, S.M. 770
ZHIDKOV, L.F.
/1954/
PLANKTONOMETER-SNARYADOLYA SBORA KOLICHESTVENNYKH PROB PLANKTONA V POTOKAKH
/PLANKTONMETER-A DEVICE FOR COLLECTING QUANTITATIVE PLANKTON SAMPLES IN CURRENTS/.
TR. PROBL. TEMAT. SOVESHCH. ZOOL. INST.
2/

SHROPSHIRE, R.F. 773
/1944/
FLANKTON HARVESTING.
J. MAR. RES.
5 /3/ 185-188.
DISCUSSION OF ROTATING SCREENS AS A METHOD FOR COLLECTING PLANKTON.

SIGSBEE, C.D. 775
/1880/
REPORTS OF THE RESULTS OF DREDGING UNDER THE SUPERVISION OF ALEXANDER AGASSIZ, ON THE EAST COAST OF THE UNITED STATES, BY THE U. S. COAST SURVEY STEAMER -BLAKE-, COMM. J. R. BARTLETT U. S. N. VII. DESCRIPTION OF A GRAVITATING TRAP FOR OBTAINING SPECIMENS OF ANIMAL LIFE FROM INTERMEDIATE OCEAN DEPTHS.
BULL. MUS. COMP. ZOOL., HARVARD COLL.
6 /9/ 155-158.

SILLIMAN, RALPH P. 777
/1946/
A STUDY OF VARIABILITY IN PLANKTON TOW-NET CATCHES OF PACIFIC PILCHARD /SARDINOPS CAERULEA/ EGGS.-
6 /1/ 74-83.

SLACK, H.D. 779
/1955/
A QUANTITATIVE PLANKTON NET FOR HORIZONTAL SAMPLING.
HYDROBIOLOGIA
7/ 264-268.

SMITH, FAUL E. 781
CLUTTER, ROBERT I.
/1965/
HYDRODYNAMICS OF FLOW AND COLLECTION IN PLANKTON NETS /ABSTRACT/.
TRANS. OCEAN SCI. OCEAN ENG. CONF. 14-17 JUNE, 1965, WASHINGTON, D.C.
1/ 515.
AVAILABLE FROM MARINE TECHNOLOGY SOCIETY, THE EXECUTIVE BUILDING, WASHINGTON, D.C. 20005.

SMITH, ROBERT E. 783
DE SYLVA, DONALD P.
LIVELLARA, RICHARD A.
/1964/
MODIFICATION AND OPERATION OF THE GULF I-A HIGH-SPEED FLANKTON SAMPLER.
CHESAPEAKE SCI.
5 /1-2/ 72-76.

SOUTHERN, R. 785
GARDINER, A.C.
/1932/
THE DIURNAL MIGRATIONS OF THE CRUSTACEA OF THE PLANKTON IN LOUGH DERG.
FROC. ROY. IRISH ACAD. SEC. B
40 /121
DISCUSSION OF THE ABILITY OF PLANKTONIC ORGANISMS TO AVOID A NET.

STEEMANN NIELSEN, E. 787
/1935/
EINE METHODE ZUR EXAKTEN QUANTITATIVEN BESTIMMUNG VON ZOOPLANKTON. MIT ALLGEMEINEN BEMERKUNGEN UBER QUANTITATIVE PLANKTONARBEITEN.
J. CONS.
10 /3/ 302-314.

STEUER, A. 789
/1910/
LEITFADEN DEV PLANKTONKUNDE.-
TEUBNER, LEIPZIG UND BERLIN.
723 PP.
ILLUSTRATATIONS OF CHUN NET, HENSEN NET, BURKHARDT,S NET, AN APERTURE CLOSING NET, MONACO LARGE APERTURE NET, CORI ,S PLANKTON NET, CHUN,S VERTICAL NET AND MARSH,S VERTICAL NET.

SUND, PAUL N. 791
RICHARDS, WILLIAM J.
/1965/
RESULTS OF TRIALS WITH A NEUSTON NET IN THE GULF OF GUINEA.
TRANS. OCEAN SCI. OCEAN ENG. CONF. 14-17 JUNE, 1965, WASHINGTON, D.C.
1/ 516-523.
DESCRIPTION OF THE NEUSTON NET. DISCUSSION OF AVOIDANCE, VOLUME OF WATER FILTERED, AND COMFARATIVE CATCHING ABILITY OF THE NEUSTON NET WITH THE ICITA NET AND A NIGHT LIGHT. AVAILABLE FROM MARINE TECHNOLOGY SOCIETY, THE EXECUTIVE BUILDING, WASHINGTON, D.C. 20005.

SURBER, EUGENE W. 793
/1928/
A QUANTITATIVE NET FOR COLLECTING BOTTOM ANIMALS IN STREAMS.
U.S. BUR. FISH. MIMEOGR. PAP.
REF. 1-22/ 4 PP.

SUZUKI, O. 795
MATUDA, K.
/1965/
DRAG FORCE OF PLANE NET PARALLEL TO STREAM.
BULL. JAP. SOC. SCI. FISH.
31/ 579-584.

SVERDRUP, H.U. 797
JOHNSON, MARTIN W.
FLEMING, RICHARD H.
/1942/
THE OCEANS, THEIR PHYSICS, CHEMISTRY, AND GENERAL BIOLOGY.
PRENTICE-HALL, INC., NEW JERSEY
1087 PP.
CHAPTER ON -OBSERVATIONS AND COLLECTIONS AT SEA- INCLUDES ILLUSTRATIONS OF THE HENSEN EGG NET, NANSEN NET, A STANDARD NET, MEDIUM EPSTEIN NET, HELGOLAND NET, AND A LARGE VERTICAL NET OF STRAMIN.

SWANSON, GEORGE A. 799
/1965/
AUTOMATIC PLANKTON SAMPLING SYSTEM.
LIMNOL. OCEANOGR.
10 /1/ 149-152.

SYSOEV, N.N. 801
/1956/
NEKOTORYE GIDRODINAMICHESKIE ISPYTANIYA PLANKTONNYKH SETEI.
/SOME HYDRODYNAMIC EXPERIMENTS WITH PLANKTON NETS./
TRUDY INST. OKEANOL. AKAD. NAUK SSSR
19/ 324-329.
IN RUSSIAN. ENGLISH TRANSLATION AVAILABLE FROM TRANSLATION PROGRAM, U.S. DEP. INT., WASHINGTON, D.C. 20240.

TAKANO, HIDEAKI 803
/1954/
A SIMPLE METHOD FOR FREQUENT SAMPLING OF PLANKTON IN DEEP LAYERS.
BULL. JAP. SOC. SCI. FISH.
19 /12/ 1197-1199.

TAMURA, T. 805
/1948/
THE METHOD OF COLLECTING THE PLANKTON WHILE THE BOAT IS IN MOTION.
J. FISH. HAKODATE COLL. FISH.
53/ 1-4.
DESCRIPTION OF TAMURA,S COLLECTOR.

TANAKA, H. 806
IMAYAMA, Y.
AZETA, M.
ANRAKU, M.
/1968/
A HYDRODYNAMIC STUDY OF A MODIFIED MODEL OF THE CLARKE JET NET.
MAR. BIOL.
1 /3/ 204-209.

TANAKA, H. 807
KASAI, H.
IMAYAMA, Y.
KIMURA, S.
AZETA, M.
ANRAKU, M.
/1968/
HYDRODYNAMIC AND TOWING CHARACTERISTICS OF A MODIFIED MODEL OF THE CLARKE JET NET.
MAR. BIOL.
2 /4/ 297-306.

TANIGUCHI, TAKEO 808
KATOKA, AKIYOSHI
IMANISHI, HAJIME
/1965/
HYDRODYNAMIC STUDIES ON THE ISAACS-KIDD MIDWATER TRAWL. I. FIELD EXPERIMENTS OF THE 10 FOOT S-1 TYPE LARVA NET.
BULL. JAP. SOC. SCI. FISH.
31 /5/ 327-332.
DISCUSSION OF TOWING SPEED, TOWING WIRE TENSION, AND ADJUSTMENT OF BRIDLES IN RELATION TO THE WORKING DEPTH OF THE ISAACS-KIDD MIDWATER TRAWL.

TANNER, Z.L. 809
/1893/
REPORT UPON THE INVESTIGATIONS OF THE U. S. FISH COMMISSION STEAMER ALBATROS FROM JULY 1, 1889 TO JUNE 30, 1891.
U.S. COM. FISH FISH. REP. COM.
PART 17/ 207-342.
DESCRIPTION AND ILLUSTRATION OF THE IMPROVED TANNER CLOSING NET AND A DESCRIPTION OF THE SUBMARINE TOW NET.

TANNER, Z.L. 811
/1895/
ON THE APPLIANCES FOR COLLECTING PELAGIC ORGANISMS, WITH SPECIAL REFERENCE TO THOSE EMPLOYED BY THE UNITED STATES FISH COMMISSION.
BULL. U.S. FISH COM.
14/ 143-151.
DESCRIPTIONS AND ILLUSTRATIONS OF THE IMPROVED SURFACE TOW NET, SIGBEE,S GRAVITATING TRAP, THE CHUN-PETERSEN INTERMEDIATE TOW NET, AND THE TANNER INTERMEDIATE TOW NET /FIRST AND IMPROVED PATTERN/.

TANNER, Z.L. 813
/1897/
DEEP-SEA EXPLORATION: A GENERAL DESCRIPTION OF THE STEAMER ALBATROS, HER APPLIANCES AND METHODS.
BULL. U.S. FISH COM.
16/ 257-427.
DESCRIPTIONS AND ILLUSTRATIONS OF THE IMPROVED SURFACE TOW NET AND THE TANNER INTERMEDIATE TOW NET /FIRST AND IMPROVED PATTERN/.

TAUTI, MORISABURO 815
/1934/
THE FORCE ACTING ON THE PLANE NET IN MOTION THROUGH THE WATER.
BULL. JAP. SOC. SCI. FISH.
3 /1/ 1-4.

TESTER, A.L. 817
STEVENSON, J.C.
/1948/
RESULTS OF THE WEST COAST OF VANCOUVER ISLAND HERRING INVESTIGATION, 1947-48.
BRIT. COLUMBIA DEP. FISH
41-86.
DESCRIPTION OF A PORTABLE, GASOLINE-DRIVEN PUMP USED FOR SAMPLING THE PLANKTON.

THOMSON, C. WYVILLE 819
MURRAY, JOHN
/1885/
THE VOYAGE OF H. M. S. -CHALLENGER-.
REP. SCI. RESULT VOYAGE H. M. S.
CHALLENGER
1 /1/ 79 PP.
DESCRIPTIONS OF THE TOW-NETS AND THEIR
USE ABOARD THE CHALLENGER.

THOMPSON, H. 821
/1950/
NOTES ON THE STANDARDIZATION OF METH-
ODS IN PLANKTOLOGICAL WORK.
PROC. INDO-PAC. FISH. COUNC.
SECOND MEETING, SEC. 1/ 42-44.

THORSON, GUNNAR 823
/1946/
REPRODUCTION AND LARVAL DEVELOPMENT OF
DANISH MARINE BOTTOM INVERTEBRATES,
WITH SPECIAL REFERENCE TO THE PLANK-
TONIC LARVAE IN THE SOUND /ORESUNG/.
MEDD. KOMM. DAN. FISK. HAVUNDERS.
PLANKTON SER.
4 /1/ 7-523.
DISCUSSION OF A HAND-OPERATED WING
PUMP FOR SAMPLING PLANKTON.

TONOLLI, VITTORIO 825
/1951/
A NEW DEVICE FOR CONTINUOUS QUANTITA-
TIVE PLANKTON SAMPLING: THE PLANKTON
BAR.
PROC. INT. ASS. THEOR. AND APPL. LIM-
NOL.
11/ 422-429.

TONOLLI, VITTORIO 827
TONOLLI, LIVIA
/1960/
IRREGULARITIES OF DISTRIBUTION OF
PLANKTON COMMUNITIES: CONSIDERATIONS
AND METHODS.
IN: A. A. BUZZATI-TRAVERSO /EDITOR/
PERSPECTIVES IN MARINE BIOLOGY, UNIV.
CALIF. PRESS 137-143.
DESCRIPTION OF AN INSTRUMENT FOR IN-
VESTIGATING PLANKTON PATCHES. DES-
CRIPTION OF THE ROTATING PLANKTON NET
AND A DISCUSSION OF ITS FILTRATION
EFFICIENCIES.

TOWNSEND, C.H. 829
/1896/
DESCRIPTION OF A CLOSING TOW-NET, FOR
SUBMARINE USE AT ALL DEPTHS.
U.S. COM. FISH FISH. REP. COM.
1894 /20/ 279-282.

TRANTER, D.J. 831
/1962/
REPORT ON THE SCOR-UNESCO ZOOPLANKTON
INTERCALIBRATION TESTS: -VITYAZ-,
35TH CRUISE, 7-8 AUGUST, 1962.
UNESCO INTERGOVT. OCEANOGR. COM.
SECOND SESS. UNESCO, PARIS, 20-29
SEPTEMBER, 1962.
DISCUSSION OF TESTS WITH INDIAN OCEAN
STANDARD NET, THE JUDAY 80/113-CM.
NET, AND THE CLARKE-BUMPUS SAMPLER.
AVAILABLE FROM UNESCO, PLACE
FONTENOY, PARIS-7E, FRANCE.

TRANTER, D.J. 833
/1962/
ZOOPLANKTON ABUNDANCE IN AUSTRALASIAN
WATERS.
AUST. J. MAR. FRESHWATER RES.
13 /2/ 106-142.
INTERCALIBRATION VALUES FOR THE CLARKE-
BUMPUS SAMPLER AND THE MARUTOKU-B
NET, AND THE CLARKE-BUMPUS SAMPLER
AND THE 37-CM. JUDAY NET.

TRANTER, D.J. 835
/1963/
COMPARISON OF ZOOPLANKTON BIOMASS DE-
TERMINATIONS BY INDIAN OCEAN STAND-
ARD NET, JUDAY NET, AND CLARKE-BUMPUS
SAMPLER.
NATURE /LONDON/
198 /4886/ 1179-1180.

TRANTER, D.J. 839
/1966/
THE AUSTRALIAN CLARKE-BUMPUS SAMPLER
AND CALIBRATION TANK.
COMMONW. SCI. IND. RES. ORGAN. DIV.
FISH. OCEANOG. TECH. PAP.
19/ 16 PP.

TRANTER, D.J. 841
/1966/
ANNOTATED BIBLIOGRAPHY, ZOOPLANKTON SAMP-
LING METHODS. ICES-SCOR-UNESCO, WORKING
PARTY 3, WORKING GROUP ON ZOOPLANKTON
METHODS.
COMMONW. SCI. IND. RES. ORGAN. DIV.
FISH. OCEANOGR.
REF. 2235/ 80 PP. MIMEOGR.
REF. 2247/ 29 PP. MIMEOGR.

TRANTER, D.J. 842
HERON, A.C.
/1965/
FILTRATION CHARACTERISTICS OF CLARKE-
BUMPUS SAMPLERS.-
AUST. J. MAR. FRESHWATER RES.
16 /3/ 281-291

TRANTER, D.J. 843
KERR, J.D.
HERON, A.C.
/1968/
EFFECTS OF HAULING SPEED ON ZOOPLANKTON
CATCHES.
AUST. J. MAR. FRESHWATER RES.
19 /1/ 65-75.
DISCUSSION OF AVOIDANCE AND MESH
SELECTIVITY AT DIFFERENT VERTICAL
TOWING SPEEDS.

TREGOUBOFF, G. 844
/1957/
MANUEL DE PLANKTONOLOGIE MEDITERRANEENE.
CHAPTER I. GENERALITIES SUR LE PLANKTON
MARIN.
CENTRE NATIONAL DE LA RESERCHE
SCIENTIFIQUE, PARIS.
1/ 9-22.
DESCRIPTIONS AND ILLUSTRATIONS OF
DIFFERENT OPENING-AND-CLOSING NETS
USED /WITH PILTERING AND FLOATING DEVICES/ FOR QUALITATIVE
PLANKTON CAPTURE, AND INCLUDING
STEEMANN NEILSEN,S CLOSING NET,
OF THE JESPERSEN TYPE.

TREGOUBOFF, G. 845
/1961/
TECHNIQUE ET METHODES DES PECHES QUANTITATIVES.
RAPP. PROCES-VERBAUX REUNIONS COMM. INST. EXPLOR. SCI. MEDITER.
16 /2/ 227-230.
COMPARISON OF VARIOUS PLANKTON SAMPLERS.

TURBYNE, A. 846
/1885/
THE SCOTTISH MARINE STATION FOR RESEARCH., ITS WORK AND PROSPOECTS.
EDINBURGH
DESCRIPTION OF A SHALLOW-WATER CLOSING-NET.

TUCKER, GORDON H. 847
/1951/
RELATION OF FISHES AND OTHER ORGANISMS TO THE SCATTERING OF UNDERWATER SOUND.
J. MAR. RES.
10 /2/ 215-238.
DESCRIPTION OF TUCKER,S MACROPLANKTON NET.

TUNGATE, D.S. 849
MUMMERY, D.
/1965/
AN INEXPENSIVE MECHANICAL DIGITAL FLOWMETER.
J. CONS.
30 /1/ 86.

U. N. E. S. C. O. F. A. O. 855
/1964/
MISCELLANEOUS NEWS ITEMS: OCEANOGRAPHIC EQUIPMENT.
INT. MAR. SCI.
2 /1/ 27-29.
SOURCES AND PRICES OF PLANKTON NETS /1-G001/, PLANKTON SAMPLERS /1-G002/, AND PLOW METERS /1-G003/.

U. N. E. S. C. O. F. A. O. 857
/1965/
MISCELLANEOUS NEWS ITEMS: OCEANOGRAPHIC EQUIPMENT.
INT. MAR. SCI.
3 /1/ 28-29.
ADDENDUM FOR VOL. 2, NO. 1, 1-G002. SOURCES AND PRICES OF PLANKTON NETS.

U. N. E. S. C. O. F. A. O. 859
/1966/
MISCELLANEOUS NEWS ITEMS: OCEANOGRAPHIC EQUIPMENT.
INT. MAR. SCI.
3 /4/ 21.
SOURCES AND PRICES OF PLANKTON NETS /2.1-G001/ AND PLANKTON SAMPLERS /2.1-G002/.

VAN CLEVE, RICHARD 863
/1937/
AN ELECTRICAL PLANKTON-NET CLOSING DEVICE.
J. CONS.
12 /2/ 171-173.

VAN HAAGEN, RICHARD H. 865
/1965/
EVOLUTION OF A SUBMERGED-PUMP SAMPLING SYSTEM.
TRANS. OCEAN SCI. OCEAN ENG. CONF. 14-17 JUNE, 1965, WASHINGTON, D. C.
1/ 540.
AVAILABLE FROM MARINE TECHNOLOGY SOCIEITY, THE EXECUTIVE BUILDING, WASHINGTON, D. C. 20005.

VAN WAGENEN, R.G. 867
O,ROURKE, J.J.
/1960/
THE SELF-PROPELLED RESEARCH VEHICLE., A SECOND PROGRESS REPORT.
UNIV. WASH. APPL. PHYS. LAB.
APL/UW/TE/60-3, 20 PP.
A VEHICLE TO WHICH A MODIFIED CLARKE-BUMPUS SAMPLER CAN BE ATTACHED.

VIGUER, A. 878
/1890/
NOUVEAU FILET PELAGIQUE A FONCTIONNEMENT AUTOMATIQUE.
NATURE /PARIS/
18 /2/ 42-44.
DESCRIPTION OF A PRESSURE ACTUATED OPENING-AND-CLOSING DEVICE.

VINOGRADOV, M.E. 868
/1954/
VERTIKAL,NOE RASPREDELENIE BIOMASSY ZOOPLANKTONA KURILO-KAMCHATSKOI VPADINY.
/VERTICAL DISTRIBUTION OF THE ZOOPLANKTON BIOMASS IN THE KURILE-KAMCHATKA TRENCH/.
DOKL. AKAD. NAUK SSSR
96 /3/ 637-640.
IN RUSSIAN.

VINOGRADOV, M.E. 869
/1955/
KHARAKTER VERTIKAL, NOGO RASPREDELENIYA ZOOPLANKTONA V VODAKH KURILO-KAMCHATSKOI VPADINY.
/PATTERNOF VERTICAL ZOOPLANKTON DISTRIBUTION IN WATERS OF THE KURILE-KAMCHATKA TRENCH/.
TR. INST. OKEANOL. AKAD. NAUK SSSR
12/ 177-183.
IN RUSSIAN. TRANSLATION AVAILABLE IN NAT. INST. OCEANOGR.
WORMLEY, GODALMING, SURREY, ENGLAND
NIOT/22.

VINOGRADOV, M.E. 870
VORONINA, N.M.
SUKHANOVA, I.M.
/1961/
GORIZONTAL,NOE RASPREDELENIE TROPICHESKOGO PLANKTONA I EGO SVYAZ, S. NEKOTORYMI OSOBENNOSTYAMI STRUKTURY VOD OTKRYTYKH RAIONOV OKEANA.
/THE HORIZONTAL DISTRIBUTION OF THE TROPICAL PLANKTON AND ITS RELATION TO SOME PECULIAR STRUCTURE OF WATERS IN THE OPEN SEAS AREAS/.
OKEANOLOGIYA
1 /2/ 283-293.
IN RUSSIAN.

VULETIC, T. 871
/1961/
VERTIKALNA RASPODJELE ZOOPLANKTONA U VELIKOM JEZERU OTOKA MLJEIA.
/VERTICAL DISTRIBUTION OF ZOOPLANKTON IN VELIKO JEZERO BAY ON THE ISLAND OF MLJET/.
ACTA ADRIATICA
6 /9/ 20 PP.
IN YUGOSLAVIAN WITH ENGLISH TRANSLATION.

VIRKETIS, M. 872
/1934/
SRAVNENIE ULOVISTOSTI PLANKTONNYKH SETOK SNSTEMY NANSENA I DZHEDI.
/COMPARATIVE CATCHABILITY OF PLANKTON NETS OF THE NANSEN AND JUDAY TYPES/.
IZV. GOS. GIDROL. INST.
68/ 54-55.

VOIGT, M. 879
/1902/
BEITRAGE ZUR METHODIK DER PLANKTON-FISHEREI. I. EIN HORIZONTAL FISHENDES SCHLIESSNETZ.
FORSHUNGSBER. BIOL. STA. PLON
9/ 86-87.

WEBER, M. 882
/1902/
INTRODUCTION ET DESCRIPTION DE L, EXPEDITION.
SIBOGA EXPED.
1/ 159 PP.
DISCUSSION OF CHUN,S HORIZONTAL CLOSING NET AND FOWLER,S MIDWATER TOW NET.

WIEBE, PETER HOWARD 883
HOLLAND, WILLIAM ROBERT
/1968/
PLANKTON PATCHINESS: EFFECTS ON REPEATED NET TOWS.
LIMNOL. OCEANOGR.
13 /2/ 315-321.
COMPARISON BETWEEN TOWS TAKEN WITH NETS OF 25-, 100-, AND 200-CM. DIAMETER SHOWED THAT, IN GENERAL ESTIMATES OF ABUNDANCE FROM THE LARGEST NET WERE THE MOST ACCURATE AND PRECISE.

WELCH, P.S. 884
/1948/
LIMNOLOGICAL METHODS.-
BLAKISTON CO., PHILADELPHIA
381 PP.
DESCRIPTIONS AND ILLUSTRATIONS OF A VARIETY OF TOW NETS, TRAWLS, AND PLANKTON TRAPS.

WESTLEY, RONALD E. 885
/1954/
A MULTIPLE-DEPTH RUNNING PLANKTON SAMPLER.
DEP. FISH. STATE WASH., FISH. RES. PAP.
1 /2/ 46-49.

WHALEY, RICHARD C. 887
/1958/
A SUBMERSIBLE SAMPLING PUMP.
LIMNOL. OCEANOGR.
3 /4/ 476-477.

WHEELER, J.F.G. 889
/1941/
THE PARACHUTE NET.
J. MAR. RES.
4 /1/ 92-98.

WIBORG, FR. 891
/1948/
EXPERIMENTS WITH THE CLARKE-BUMPUS PLANKTON SAMPLER AND WITH A PLANKTON PUMP IN THE LOFOTEN AREA IN NORTHERN NORWAY.-
REP. NORW. FISH. MAR. INVEST.
9 /2/ 22PP.
COMPARISON OF THE CLARKE-BUMPUS SAMPLER WITH A PUMP AND WITH THE NANSEN NET. DISCUSSION OF VOLUME OF WATER FILTERED AND AVOIDANCE.

WICKSTEAD, J.H. 893
/1953/
A NEW APPARATUS FOR THE COLLECTION OF BOTTOM PLANKTON.
J. MAR. BIOL. ASS. U. K.
32 /2/ 347-355.

WICKSTEAD, J.H. 895
/1961/
QUANTITATIVE AND QUALITATIVE STUDY OF SOME INDO-WEST PACIFIC PLANKTON.
FISH. PUBL. COLON. OFF.
16/ 195 PP.
DISCUSSION OF APPARATUS, METHODS, VALIDITY OF METHODS, AND EFFICIENCY OF THE PLANKTON NETS, PP. 11-22.

WICKSTEAD, J.H. 897
/1963/
ESTIMATES OF TOTAL ZOOPLANKTON IN THE ZANZIBAR AREA OF THE INDIAN OCEAN WITH A COMPARISON OF THE RESULTS WITH TWO DIFFERENT NETS.
PROC. ZOOL. SOC. LONDON
141/ 577-608.
DISCUSSION OF ESCAPEMENT.

WICKSTEAD, J.H. 899
/1963/
THE CLADOCERA OF THE ZANZIBAR AREA OF THE INDIAN OCEAN, WITH A NOTE ON THE COMPARATIVE CATCHES OF TWO PLANKTON NETS.
EAST AFR. AGR. FOREST. J.
29/ 164-172.
COMPARISON OF THE INTERNATIONAL COARSE SILK NET AND THE CURRIE-FOXTON MEASURING NET WITH REGARD TO VOLUME OF WATER FILTERED, CATCHING ABILITY, AND ESCAPEMENT.

WILLIAMSON, D.I. 901
/1962/
AN AUTOMATIC SAMPLER FOR USE IN SURVEYS OF PLANKTON DISTRIBUTION.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153/ 16-18.
ALSO AVAILABLE IN BULL. MAR. ECOL.
6 /1/ 1-16, 1963.

WILLIAMSON, D.I. 903
/1963/
AN AUTOMATIC PLANKTON SAMPLER.-
BULL. MAR. ECOL.
6 /1/ 1-15.
DESCRIPTION OF A SAMPLER DESIGNED FOR HIGH-SPEED TOWING AND CAPABLE OF TAKING UP TO 20 CONSECUTIVE SAMPLES, EACH COVERING 3.3 OR 4.3 SEA MILES AND FILTERING 2.18 OR 2.84 CUBIC METERS OF WATER. TANK TESTS INDICATE THAT VOLUME OF WATER FILTERED WOULD BE APPRECIABLE REDUCED ONLY IN EXTREMELY DENSE PHYTOPLANKTON.

WILLIS, R.P. 905
/1963/
A SMALL TOWED NET FOR OCEAN SURFACE SAMPLING.
N. Z. J. SCI.
6 /1/ 120-126.

WIMPENNY, R.S. 907
/1928/
A TRANSPARENT BUCKET WITH A DETACHABLE BOTTOM FOR USE WITH OSTENFELD,S AND JESPERSEN,S STANDARD NET FOR PLANKTON COLLECTION.
J. CONS.
3 /1/ 94-97.

WIMPENNY, R.S. 909
/1937/
A NEW FORM OF HENSEN NET BUCKET.
J. CONS.
12 /2/ 178-181.

WINSOR, C.P. 911
WALFORD, L.A.
/1936/
SAMPLING VARIATIONS IN THE USE OF PLANKTON NETS.
J. CONS.
11 /2/ 190-204.
A QUALITATIVE AND QUANTATIVE REVIEW OF SAMPLING VARIATIONS ENCOUNTERED USING VARIOUS TYPES OF NETS.

WINSOR, C.P. 913
CLARKE, GEORGE L.
/1940/
A STATISTICAL STUDY OF VARIATION IN THE CATCH OF PLANKTON NETS.
J. MAR. RES.
3 /1/ 34 PP.
COMPARISON OF DIFFERENT SAMPLERS AND A DISCUSSION OF SAMPLING ERROR AND AVOIDANCE.

WOLFENDEN, R. NORRIS 915
/1909/
SCIENTIFIC AND BIOLOGICAL RESEARCHES IN THE NORTH ATLANTIC, CONDUCTED BY THE AUTHOR ON HIS YACHTS - THE WALWIN-AND-THE SILVERBELLE-
MEM. CHALLENGER SOC.
1/ 234 PP.
DESCRIPTION OF THE WOLFENDEN NET.

WORTHINGTON, E.B. 917
/1931/
VERTICAL MOVEMENTS OF FRESH-WATER MACROPLANKTON.
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.
25/ 394.
DISCUSSION OF THE ABILITY OF PLANKTONIC ORGANISMS TO AVOID A NET.

YAMAZI, ISAMU 919
/1960/
AUTOMATIC PLANKTON SAMPLER WITH MULTIPLE NETS. III. DESCRIPTION.
PUBL. SETO MAR. BIOL. LAB.
8 /2/ 451-453.

YAMAZI, ISAMU 921
/1961/
NEW DEVICE OF AUTOMATIC PLANKTON SAMPLER WITH MULTIPLE NETS AND ITS EXPERIMENTAL RESULTS. 1.
ZOOL. MAG.
70 /6/ 180-187.
IN JAPANESE.

YANAGISAWA, T. 923
/1934/
DAILY CHANGES OF PLANKTON OFF SUMA, HYOGO PREFECTURE, AND THE COMPARISON OF METHOD OF COLLECTION BY THE PLANKTON NET AND THE NANSEN BOTTLE.
BULL. KOBE MAR. OBSERV.
72/ 11 PP.
IN JAPANESE.

YASHNOV, V.A. 924
/1961/
SKOROSTNAYA PLANKTICHESKAYA SET,.
/A HIGH-SPEED PLANKTON NET./
ZOOL. ZH.
40 /1/ 122-128.
DESCRIPTION OF A HIGH-SPEED NET WITH A FILTERING AREA SIX TIMES THAT OF THE MOUTH.
IN RUSSIAN WITH AN ENGLISH SUMMARY.

YENTSCH, CHARLES S. 927
DUXBURY, ALYN C.
/1956/
SOME OF THE FACTORS AFFECTING THE CALIBRATION NUMBER OF THE CLARKE-BUMPUS QUANTITATIVE PLANKTON SAMPLER.
LIMNOL. OCEANOGR.
1 /4/ 268-273.

YENTSCH, CHARLES S. 929
GRICE, GEORGE D.
HART, ARCH D.
/1962/
SOME OPENING-CLOSING DEVICES FOR PLANKTON NETS OPERATED BY PRESSURE, ELECTRICAL AND MECHANICAL ACTION.
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER
153 /9/ 59-65.

ZACHARIAS, OTTO 930
/1907/
DER PLANKTONSEIHER -ETMOPHOR-.
ARCH. HYDROBIOL.
2.

ZACHARIAS, OTTO 931
/1909/
DAS PLANKTON ALS GEGENSTAND DER NATURKUNDLICHEN UNTERWEISUNG IN DER SCHULE. EIN BEITRAG ZUR METHODIK DES BIOLOGISCHEN UNTERRICHTS UND ZU SEINER VERTIEFUNG.
II. BESCHRIEBUNG DES PLANKTONNETZ, P. 24-34.
III. WELCHES LEHRMATERIAL LIEFERT UNS DIE FISHEREI MIT DEM PLANKTONNETZ, P. 35-63.
THEOD. THOMAS, LEIPZIG.
DESCRIPTION OF PLANKTON NETS AND SAMPLING ERROR.

ZAITSEV, IU. P. 935
/1959/
K METODIKE SBORA PELAGICHESKOI IKRY I LICHINOK RYB V RAIONAKH MORYA, NE PODVERZHENNYKH ZNACHITEL, NOMU OPRESNENIYU.
/ON THE METHODS OF COLLECTION OF PELAGIC EGGS AND FISH LARVAE IN THE REGIONS OF THE SEA UNEXPOSED TO CONSIDERABLE FRESHENING./
ZOOL. ZH.
38 /9/ 1426-1428.
DISCUSSION OF THE PROBLEMS OF SURFACE SAMPLING.
IN RUSSIAN WITH ENGLISH SUMMARY.

ZAITSEV, IU. P. 937
/1961/
PRIPOVERKHOSTNYI PELAGICHESKII BIOTSENOZ CHERNOGO MORYA.
/SURFACE PELAGIC BIOCOENOSE OF THE BLACK SEA./
ZOOL. ZH.
40 /6/ 818-825.
DESCRIPTION OF THE P. N. 5 NET, CONSISTING OF FIVE RECTANGULAR NETS ARRANGED ONE ABOVE THE OTHER AND SUPPORTED BY FLOATS.
IN RUSSIAN WITH AN ENGLISH SUMMARY.

ZAITSEV, IU. P. 939
/1962/
ORUDIIA I METODY IZUCHENIIA GIPONEISTONA.
/APPARATUS AND TECHNIQUE FOR STUDYING HYPONEUSTON./
VOP. EKOL. BIOTSENOLO.
4/ 107-110.
IN RUSSIAN.

ZOPPI, E. 941
/1961/
DISTRIBUCION VERTICAL DEL ZOOPLANCTON EN EL GOLFO Y EXTREMO ESTE DE LA POSA DE CARIACO.
BOL. INST. OCEANOG. UNIV. ORIENTE
1 /1/ 219-247.

KEYWORD IN CONTEXT (KWIC) INDEX

JOURNAL TITLES WITH ABBREVIATIONS

Abbreviation	Full Title
ACTA ADRIATICA	ACTA ADRIATICA
AMER. J. SCI.	AMERICAN JOURNAL OF SCIENCE
ANN. BIOL. LACUSTRE	ANNALES DE BIOLOGIE LACUSTRE
ANNEE BIOL.	ANNEE BIOLOGIE
ANTARCTIC DEP. SMITHSONIAN OCEANOGR. SORT. CENT. WASH., D.C., UNPUBL. MANUSC.	ANTARCTIC DEPARTMENT, SMITHSONIAN OCEANOGRAPHIC SORTING CENTER, WASHINGTON, D.C., UNPUBLISHED MANUSCRIPT
ARCH. HYDROBIOL.	ARCHIV FUR HYDROBIOLOGIE
ARCH. NATURWISS. LANDES-DURCHFORSCH.	ARCHIV FUR DIE NATURWISSENSCHAFTLICHE LANDES-DURCHFORSCHUNG VON BOHMEN
ARCH.NEER. ZOOL.	ARCHIVES NEERLANDAISES DE ZOOLOGI
ARK. ZOOL.	ARKIV FOR ZOOLOGI
ATTI SOC. VENETO-TRENTINA SCI. NATUR.	ATTI DELLA SOCIETA VENETO-TRENTINA DI SCIENZE NATURALI
AUST. J. MAR. FRESHWATER RES.	AUSTRALIAN JOURNAL OF MARINE AND FRESHWATER RESEARCH
BENTHOS, INC., NORTH FALMOUTH, MASS.	BENTHOS INCORPORATED, NORTH FALMOUTH, MASSACHUSETTS
BER. DEUT. WISS. KOMM. MEERESFORSCH.	BERICHT DER DEUTSCHEN WISSENSCHAFTLICHEN KOMMISSION FUR MEERESFORSCHUNG
BIOL. ABSTR.	BIOLOGICAL ABSTRACTS
BIOL. BULL. /WOODS HOLE/	BIOLOGICAL BULLETIN. MARINE BIOLOGICAL LABORATORY, WOODS HOLE, MASSACHUSETTS
BIOL. JAAR.	BIOLOGISCH JAARBOEK
BIOL. ZENTRALBL.	BIOLOGISCHES ZENTRALBLATT
BIOMETRICS	BIOMETRICS
BLAKISTON CO., PHILADELPHIA	BLAKISTON COMPANY, PHILADELPHIA
BOL. INST. OCEANOGR.	BOLETIM DO INSTITUTO OCEANOGRAFICO
BOL. INST. OCEANOGR. UNIV. ORIENTE	BOLETIN DEL INSTITUTO OCEANOGRAFICO, UNIVERSIDAD DE ORIENTE
BRIT. COLUMBIA DEP. FISH.	BRITISH COLUMBIA DEPARTMENT OF FISHERIES
BULL. FAC. FISH. HOKKAIDO UNIV.	BULLETIN OF THE FACULTY OF FISHERIES, HOKKAIDO UNIVERSITY
BULL. HOKKAIDO REG. FISH. RES. LAB.	BULLETIN OF THE HOKKAIDO REGIONAL FISHERIES RESEARCH LABORATORY
BULL. ILL. STATE LAB. NATUR. HIST.	BULLETIN OF THE ILLINOIS STATE LABORATORY OF NATURAL HISTORY
BULL.INST. OCEANOGR. /FORMERLY DE MONACO/	BULLETIN DE L'INSTITUT OCEANOGRAPHIQUE (FORMERLY DE MONACO)
BULL. JAP. SOC. SCI. FISH.	BULLENTIN OF THE JAPANESE SOCIETY OF SCIENTIFIC FISHERIES
BULL. KOBE MAR. OBSERV.	BULLETIN. KOBE MARINE OBSERVATORY
BULL. MAR. ECOL.	BULLETIN OF MARINE ECOLOGY

BULL. MAR. SCI. GULF CARIBBEAN	BULLETIN OF MARINE SCIENCE OF THE GULF AND CARIBBEAN
BULL. MUS. COMP. ZOOL., HARVARD COLL.	BULLETIN OF THE MUSEUM OF COMPARATIVE ZOOLOGY AT HARVARD COLLEGE
BULL. MUS. OCEANOGR. MONACO	BULLETIN DU MUSEE OCEANOGRAPHIQUE DE MONACO
BULL. PLANKT. SOC. JAPAN	BULLETIN OF THE PLANKTON SOCIETY OF JAPAN
BULL. SEIKAI REG. FISH. RES. LAB.	BULLETIN OF THE SEIKAI REGION FISHERIES RESEARCH LABORATORY
BULL. SOC. ZOOL. FR.	BULLETIN DE LA SOCIETE ZOOLOGIQUE DE FRANCE
BULL. TOKAI REG. FISH. RES. LAB.	BULLETIN OF THE TOKAI REGIONAL FISHERIES RESEARCH LABORATORY
BULL. U. S. FISH COM.	BULLETIN OF THE UNITED STATES FISH COMMISSION
BUR. COMMER. FISH.	UNITED STATES BUREAU OF COMMERCIAL FISHERIES
BUR. COMMER. FISH. BIOL. LAB. WASHINGTON, D.C.	BUREAU OF COMMERCIAL FISHERIES, BIOLOGICAL LABORATORY, WASHINGTON, D. C.
CALIF. COOP. SARDINE RES. PROG., PROGRESS REP. ST. PRINT. SACRAMENTO	CALIFORNIA COOPERATIVE SARDINE RESEARCH PROGRAM, PROGRESS REPORT, STATE PRINTER SACRAMENTO
CALIF. FISH GAME	CALIFORNIA FISH AND GAME
CAMBRIDGE UNIV. PRESS	CAMBRIDGE UNIVERSITY PRESS
CENTRE NATIONAL DE LA RESERCHE SCIENTIFIQUE, PARIS	CENTRE NATIONAL DE LA RESERCHE SCIENTIFIQUE, PARIS
CHESAPEAKE SCI.	CHESAPEAKE SCIENCE
COMMER. FISH. REV.	COMMERCIAL FISHERIES REVIEW
COMMONW. SCI. IND. RES. ORGAN. DIV. FISH. OCEANGR. TECH. PAP.	COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION, DIVISION OF FISHERIES AND OCEANOGRAPHY, TECHNICAL PAPER
COMPAR. BIOCHEM. PHYSIOL.	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY
CONS. PERMA. INT. EXPLOR. MER	CONSEIL PERMANENT INTERNATIONAL POUR L'EXPLORATION DE LA MER
CONS. PERMA. INT. EXPLOR. MER. PUBL. MIMEOGR.	CONSEIL PERMANENT INTERNATIONAL POUR L'EXPLORATION DE LA MER. PUBLICATION MIMEOGRAPH (AUTOCOPISTE)
CORNELL UNIVERSITY, GRADUATE SCHOOL	CORNELL UNIVERSITY, GRADUATE SCHOOL
C. R. ACAD. SCI. PARIS	COMPTE RENDU DE L'ACADEMIE DES SCIENCES
C. R. CONGR. INT. ZOOL.	COMPTE RENDU DU CONGRESS INTERNATIONAL DE ZOOLOGIE
C. R. SOC. BIOL.	COMPTE RENDU DE LA SOCIETE DE BIOLOGIE
DANA REP.	DANA REPORTS
DEEP SEA RES.	DEEP SEA RESEARCH
DEEP-SEA RES. OCEANOGR. ABSTR.	DEEP-SEA RESEARCH AND OCEANOGRAPHIC ABSTRACTS
DENKSCHR. AKAD. WISS.	DENKSCHRIFTEN DER AKADAMIE DER WISSENSCHAFTEN
DEP. FISH. STATE WASH., FISH. RES. PAP.	DEPARTMENT OF FISHERIES, STATE OF WASHINGTON, FISHERIES RESEARCH PAPER
DEUT. TIEFSEE-EXPED.	SCHILDERUNGEN VON DER DEUTSCHEN TIEFSEE-EXPEDITION
DISCOVERY REP.	DISCOVERY REPORTS

DOKL. AKAD. NAUK SSSR	DOKLADY AKADEMII NAUK SSSR
DOKL. AKAD. NAUK SSSR, NEW SER.	DOKLADY AKADEMII NAUK SSSR, NEW SERIES
EAST AFR. AGR. FOREST. J.	EAST AFRICAN AGRICULTURAL AND FORESTRY JOURNAL
ECOLOGY	ECOLOGY
EDINBURGH	EDINBURGH
ERGEB. ATL. OZEAN PLANKTONEXPED.	ERGEBNISSE DER IM ATLANTISCHEN OZEAN PLANKTONEXPEDITION DER HUMBOLT-STIFTUNG, 1889
F.A.O. FISH. BIOL. BR.	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, FISHERIES BIOLOGY BRANCH
FAO (FOOD AGR. ORGAN. U. N.)	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, FISHERIES BIOLOGY BRANCH
FISH. PUBL. COLON. OFF.	FISHERY PUBLICATIONS. COLONIAL OFFICE
FISH. RES. PAP. DEP. FISH. STATE WASH.	FISHERIES RESEARCH PAPERS. DEPARTMENT OF FISHERIES, STATE OF WASHINGTON
FORSCHUNGSBER. BIOL. STA. PLON	FORSCHUNGSBERICHTE AUS DER BIOLOGISCHEN STATION ZU PLON
GEOL. SOC. AMER. MEM.	GEOLOGICAL SOCIETY OF AMERICA. MEMOIR
GESAMMELTE SCHRIFTEN DES FURSTEN ALBERT I VON MONACO	GESAMMELTE SCHRIFTEN DES FURSTEN ALBERT I VON MONACO
GT. BRIT. MIN. AGR., FISH. FOOD, FISH. INVEST.	GREAT BRITAIN MINISTRY OF AGRICULTURE, FISHERIES, AND FOOD, FISHERY INVESTIGATIONS
HOLDER, WIEN	HOLDER, WIEN
HOUGHTON MIFFLIN CO. BOSTON	HOUGHTON MIFFLIN COMPANY, BOSTON
HULL BULL. MAR. ECOL.	HULL BULLETINS OF MARINE ECOLOGY
HYDROBIOLOGIA	HYDROBIOLOGIA
ICES-SCOR-UNESCO	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA, SCIENTIFIC COMMITTEE ON OCEANOGRAPHIC RESEARCH, UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION
INFORM. BULL. PLANKTOL. JAP.	INFORMATION BULLETIN ON PLANKTOLOGY IN JAPAN
INT. COM. NORTHWEST ATL. FISH. SPEC. PUBL.	INTERNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC FISHERIES. SPECIAL PUBLICATIONS
INT. CONGR. ZOOL. PARIS	INTERNATIONAL CONGRESS OF ZOOLOGY, PARIS, 1889
INT. MAR. SCI.	INTERNATIONAL MARINE SCIENCE
INT. REV. GESAMTEN HYDROBIOL. HYDROGR.	INTERNATIONALE REVUE DER GESAMTEN HYDROBIOLOGIE U HYDROGRAPHIE
IZV. GOS. GIDROL. INST.	IZVESTIYA GOSUDARSTVENNOGO GIDROLOGICHESKOGO INSTITUTA
J. ANIM. ECOL.	JOURNAL OF ANIMAL ECOLOGY
J. CONS.	JOURNAL DU CONSEIL
JENA. Z.	JENAISCHE ZEITSCHRIFT
J. FISH. HAKODATE COLL. FISH.	JOURNAL OF FISHERIES. HAKODATE COLLEGE OF FISHERIES
J. FISH. RES. BOARD CAN.	JOURNAL OF THE FISHERIES RESEARCH BOARD OF CANADA

J. IMP. FISH. EXP. STA.	JOURNAL OF THE IMPERIAL FISHERIES EXPERIMENTAL STATION
J. MAR. BIOL. ASS. U. K.	JOURNAL OF THE MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM
J. MAR. BIOL. ASS. U. K., NEW SER.	JOURNAL OF THE MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM, NEW SERIES
J. MAR. RES.	JOURNAL OF MARINE RESEARCH
J. OCEANOGR.	JOURNAL OF OCEANOGRAPHY, KOBE
J. OCEANOGR. SOC. JAP.	JOURNAL OF THE OCEANOGRAPHICAL SOCIETY OF JAPAN
J. TOKYO UNIV. FISH.	JOURNAL OF THE TOKYO UNIVERSITY OF FISHERIES
J. WILDL. MANAGE.	JOURNAL OF WILDLIFE MANAGEMENT
KIEL. MEERESFORSCH.	KIELER MEERESFORSCHUNGEN
KURZE MITT. INST. FISCHEREIBIOL. UNIV. HAMBURG	KURZE MITTEILUNGEN AUS DEM INSTITUT FÜR FISCHEREI-BIOLOGIE DER UNIVERSITAT HAMBURG
LIMNOL. OCEANOGR.	LIMNOLOGY AND OCEANOGRAPHY
LIMNOL. SOC. AMER. SPEC. PUBL.	LIMNOLOGICAL SOCIETY OF AMERICA. SPECIAL PUBLICATION
LIPSIUS UND TESCHER, KIEL	LIPSIUS UND TESCHER, KIEL
MACMILLAN CO. LTD., LONDON	MACMILLAN COMPANY LIMITED, LONDON
MACMILLAN CO., N. Y., AND GEO. ALLEN AND UNWIN LTD., LONDON	MACMILLAN COMPANY, NEW YORK, AND GEORGE ALLEN AND UNWIN LIMITED LONDON
MAR. BIOL.	MARINE BIOLOGY. INTERNATIONAL JOURNAL ON LIFE IN OCEANS AND COASTAL WATERS
MAR. SCI. INSTRUM.	MARINE SCIENCE INSTRUMENTATION, INSTRUMENT SOCIETY OF AMERICA
MEDD. KOMM. DAN. FISK. HAVUNDERS.	MEDDELELSER FRA KOMMISSIONEN FOR DANMARKS FISKERI OG HAVUNDERSOGELSER
MEM. CHALLENGER SOC.	MEMOIRS OF THE CHALLENGER SOCIETY
MEM. COLL. AGR. KYOTO UNIV.	MEMOIRS OF THE COLLEGE OF AGRICULTURE, KYOTO UNIVERSITY
MEM. FAC. FISH. HOKKAIDO UNIV.	MEMOIRS OF THE FACULTY OF FISHERIES, HOKKAIDO UNIVERSITY
MEM. FAC. FISH. KAGOSHIMA UNIV.	MEMOIRS OF THE FACULTY OF FISHERIES, KAGOSHIMA UNIVERSITY
MEM. IST. ITAL. IDROBIOL. DOTT.	MEMORIE DELL'INSTITUTO ITALIANO DI IDROBIOLOGIA DOTT. MARCO DE MARCHI
METEOROL. GIDROL.	METEOROLOGIYA I GIDROLOGIYA
MICROPALEONTOLOGY	MICROPALEONTOLOGY
MITT. NATURFORSCH. GES. LUZERN	MITTEILUNGEN DER NATURFORSCHENDEN GESELLSCHAFT IN LUZERN
MITT. ZOOL. STA. NEAPEL	MITTEILUNGEN AUS DER ZOOLOGISCHEN STATION ZU NEAPEL
NAT. ACAD. SCI. NAT. RES. COUNC. PUBL.	NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL PUBLICATION

NAT. ANTARCTIC EXPED. 1901-1904	NATIONAL ANTARCTIC EXPEDITION 1901-1904
NAT. INST. OCEANOGR.	NATIONAL INSTITUTE OF OCEANOGRAPHY, WORMLEY, GODALMING, SURREY, ENGLAND
NATURE /LONDON/	NATURE (LONDON)
NATURE /PARIS/	NATURE (PARIS)
NORG. FISK.	NORGES FISKERIER
N. Z. J. SCI.	NEW ZEALAND JOURNAL OF SCIENCE
OCEAN IND.	OCEAN INDUSTRY, GULF PUBLISHING COMPANY, HOUSTON
OCEANOGR. MAG.	OCEANOGRAPHICAL MAGAZINE
OCEANOGR. REP. JAP. METEOROL. AGENCY	OCEANOGRAPHIC REPORT. JAPAN METEOROLOGICAL AGENCY
OKEANOLOGIYA	OKEANOLOGIYA
OST. FICHZTG.	OSTERREICHISCHE FISCHEREIZEITUNG
PAC. SCI.	PACIFIC SCIENCE
PRENTICE-HALL, INC., NEW JERSEY	PRENTICE-HALL, INCORPORATED, NEW JERSEY
PROBL. ECOL.	PROBLEMS OF ECOLOGY
PROC. COLLECT. NEBR. STATE HIST. SOC.	PROCEEDINGS AND COLLECTIONS OF THE NEBRASKA STATE HISTORICAL SOCIETY
PROC. FIFTEENTH PAC. TUNA CONF., LAKE ARROWHEAD, CALIF.	PROCEEDINGS OF THE FIFTEENTH PACIFIC TUNA CONFERENCE, LAKE ARROWHEAD, CALIFORNIA
PROC. INDO-PAC. FISH. COUNC.	PROCEEDINGS. INDO-PACIFIC FISHERIES COUNCIL
PROC. INT. ASS. THEOR. APPL. LIMNOL.	PROCEEDINGS OF THE INTERNATIONAL ASSOCIATION FOR THEORETICAL AND APPLIED LIMNOLOGY
PROC. LIVERPOOL BIOL. SOC.	PROCEEDINGS OF THE LIVERPOOL BIOLOGICAL SOCIETY
PROC. NAT. SHELLFISH. ASS.	PROCEEDINGS. NATIONAL SHELLFISHERIES ASSOCIATION
PROC. ROY. IRISH ACAD.	PROCEEDINGS OF THE ROYAL IRISH ACADEMY
PROC. ROY. PHYS. SOC. EDINBURGH	PROCEEDINGS OF THE ROYAL PHYSICAL SOCIETY OF EDINBURGH
PROC. SIXTH CONF. GREAT LAKES RES., ANN ARBOR MICHIGAN	PROCEEDINGS OF THE SIXTH CONFERENCE. GREAT LAKES RESEARCH, ANN ARBOR MICHIGAN
PROC. TRANS. LIVERPOOL BIOL. SOC.	PROCEEDINGS AND TRANSACTIONS OF THE LIVERPOOL BIOLOGICAL SOCIETY
PROC. ZOOL. SOC. LONDON	PROCEEDINGS OF THE ZOOLOGICAL SOCIETY OF LONDON
PUBBL. STA. ZOOL. NAPOLI /NOTE TECH./	PUBBLICAZIONI DELLA STAZIONE ZOOLOGICA DI NAPOLI
PUBL. CIRCON. CONS. PERMA. INT. EXPLOR MER	PUBLICATIONS DE CIRCONSTANCE. CONSEIL PERMANENT INTERNATIONAL POUR L'EXPLORATION DE LA MER
PUBL. CONS. SCI. AFR. SUD SAHARA	PUBLICATIONS. CONSEIL SCIENTIFIQUE POUR L'AFRIQUE AU SUD DU SAHARA
PUBL. SETO MAR BIOL. LAB.	PUBLICATIONS OF THE SETO MARINE BIOLOGICAL LABORATORY
PUBL. STATE OCEANOGR. INST.	PUBLICATION OF STATE OCEANOGRAPHIC INSTITUTE
PUBL. UNIV. SYDNEY, DEP. ZOOL.	PUBLICATIONS OF THE UNIVERSITY OF SYDNEY, DEPARTMENT OF ZOOLOGY

QUART. J. FLA. ACAD. SCI.	QUARTERLY JOURNAL. FLORIDA ACADEMY OF SCIENCES
RAPP. PROCES-VERBAUX REUNIONS COMM. INST. EXPLOR. SCI. MER MEDITER.	RAPPORT ET PROCES-VERBAUX DES REUNIONS. COMMISSION INTERNATIONALE POUR L'EXPLORATION SCIENTIFIQUE DE LA MER MEDITERRANEE
RAPP. PROCES-VERBAUX REUNIONS CONS. PERMA. INT. EXPLOR. MER	RAPPORT ET PROCES-VERBAUX DES REUNIONS. CONSEIL PERMANENT INTERNATIONAL POUR L'EXPLORATION DE LA MER
REC. S. AUST. MUS.	RECORD OF THE SOUTH AUSTRALIAN MUSEUM
REC. TRAV. STA. MAR. ENDOUME, FAC. SCI. MARSEILLE	RECUEIL DES TRAVAUX DE LA STATION MARINE D'ENDOUME, FACULTE DES SCIENCES DE MARSEILLE
REP. DAN. BIOL. STA. BOARD AGR.	REPORT OF THE DANISH BIOLOGICAL STATION TO THE BOARD OF AGRICULTURE
REP. DAN. OCEANOGR. EXPED. 1908-1910 MEDITERR.	REPORT ON THE DANISH OCEANOGRAPHICAL EXPEDITIONS, 1908-1910, TO THE MEDITERRANEAN
REP. JAP. SEA REG. FISH. RES. LAB.	REPORT. JAPAN SEA REGIONAL FISHERIES RESEARCH LABORATORY
REP. NORW. FISH. MAR. INVEST.	REPORT ON NORWEGIAN FISHERY AND MARINE INVESTIGATIONS
REP. SCI. RESULT VOYAGE H.M.S. CHALLENGER	REPORT ON THE SCIENTIFIC RESULTS OF THE VOYAGE OF H.M.S. CHALLENGER, 1873-76
REP. SCOR OF ICSU UNESCO	REPORT OF THE SCIENTIFIC COMMITTEE ON OCEANOGRAPHIC RESEARCH OF THE INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS, UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION
REP. U. S. COM. FISH FISH.	REPORT OF THE UNITED STATES COMMISSION OF FISH AND FISHERIES
RESULT. COMPAGN. SCI. PRINCE ALBERT I VON MONACO	RESULTATS DES CAMPAGNES SCIENTIFIQUES ACCOMPLIES PAR LE PRINCE ALBERT I VON MONACO
REV. BIOL. NORD FRANCE	REVUE BIOLOGIQUE DU NORD DE LA FRANCE
REV. MAR. BRASIL	REVISTA MARITIMA BRASILEIRA
RYB. KHOZ.	RYBNOE KHOZYAISIVO
SCHR. NATURFORSCH. GES. DANZIG	SCHRIFTEN DER NATURFORSCHENDEN GESELLSCHAFT IN DANZIG
SCHR. NATURWISS. VER. SCHLESWIG-HOLSTEIN	SCHRIFTEN DES NATURWISSENSCHAFTLICHEN VEREINS FUR SCHLESWIG-HOLSTEIN
SCHR. VER. GESCH. BODENSEES UMGEBUNG	SCHRIFTEN DES VEREINS ZUR GESCHICHTE DES BODENSEES UND SEINER UMGEBUNG
SCIENCE	SCIENCE
SCIENCE, NEW SER.	SCIENCE, NEW SERIES
SCI. INST. MAR. FISH. OCEANOGR.	SCIENTIFIC INSTITUTE OF MARINE FISHERIES AND OCEANOGRAPHY, MOSCOW
SCI. REP. GREAT BARRIER REEF EXPED.	SCIENTIFIC REPORTS OF THE GREAT BARRIER REEF EXPEDITION
SCI. REP. TOHOKU UNIV.	SCIENCE REPORTS OF THE TOHOKU UNIVERSITY
SIBOGA EXPED.	SIBOGA EXPEDITIE
SITZUNGSBER. PREUSS. AKAD. WISS. BERLIN	SITZUNGSBERICHTE DER PREUSSISCHEN AKADEMIE DER WISSENSCHAFTEN ZU BERLIN
SKR. KOMM. DAN. FISK. HAVUNDERS.	SKRIFTER UDG. AF KOMMISSIONEN FOR DANMARKS FISKERIOG HAVUNDERSOGELSER

STATE PRINTER SACRAMENTO	STATE PRINTER SACRAMENTO
STUD. AUTOECOL. COMPILED BY LAB. ENTOMOL. FAC. AGR. KYOTO UNIV.	STUDIES ON AUTOECOLOGY, COMPILED BY THE LABORATORY OF ENTOMOLOGY, FACULTY OF AGRICULTURE, KYOTO UNIVERSITY
SVENSKA HYDROGR.-BIOL. KOMM. SKR. NEW SER.	SVENSKA HYDROGRAFISK-BIOLOGISKA KOMMISSIONENS SKRIFTER, NEW SERIES
TEUBNER, LEIPZIG UND BERLIN	TEUBNER, LEIPZIG UND BERLIN
THEOD. THOMAS, LEIPZIG	THEOD. THOMAS, LEIPZIG
THE TSURUMI-SEIKI KOSAKUSHO CO., LTD.	THE TSURUMI-SEIKI KOSAKUSHO COMPANY LIMITED
TRANS. N. AMER. WILDL. CONF.	TRANSACTIONS OF THE NORTH AMERICAN WILDLIFE CONFERENCE
TRANS. OCEAN SCI. OCEAN ENG. CONF.	TRANSACTIONS OF THE JOINT CONFERENCE AND EXHIBIT, OCEAN SCIENCE AND OCEAN ENGINEERING, MARINE TECHNOLOGY SOCIETY, WASHINGTON, D. C. 1965.
TRANS. PROC. ROY. SOC. N. Z.	TRANSACTIONS AND PROCEEDINGS OF THE ROYAL SOCIETY OF NEW ZEALAND
TRANS. WIS. ACAD. SCI. ARTS LETT.	TRANSACTIONS OF THE WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS
TR. BALT. NAUCHNOISSLEDOVATEL'SKOGO INST. MORSK. RYB. KHOZ. OKEANOGR.	TRUDY BALTIISKOGO NAUCHNOISSLEDOVATEL'SKOGO INSTITUTA MORSKOGO RYBNOGO KHOZYAISTVA I OKEANOGRAFII
TR. INST. OKEANOL. AKAD. NAUK SSSR	TRUDY INSTITUTA OKEANOLOGII. AKADEMIYA NAUK SSSR
TR. PROBL. TEMAT. SOVESHCH. ZOOL. INST.	TRUDY PROBLEMNYKH I TEMATICHESKIKH SOVESHCHANII. ZOOLOGICHESKII INSTITUT, AKADEMIYA NAUK SSSR
TR. VSES. GIDROBIOL. OBSHCHEST.	TRUDY VSESOYUZNOGO GIDROBIOLOGICHESKOGO OBSHCHESTVA
TURTOX NEWS	TURTOX NEWS
UMI TO SORA	UMI TO SORA
UNDERSEA TECHNOL.	UNDERSEA TECHNOLOGY
UNESCO	UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION
UNESCO INTERGOVT. OCEANOGR. COM.	UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION, INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
UNESCO MONOGR. OCEANOGR. METHODOL.	UNESCO-MONOGRAPHS ON OCEANOGRAPHIC METHODOLOGY
UNIV. BRIT. COLUMBIA INST. OCEANOGR.	UNIVERSITY OF BRITISH COLUMBIA, INSTITUTE OF OCEANOGRAPHY
UNIV. CALIF. PRESS	UNIVERSITY OF CALIFORNIA PRESS
UNIV. CALIF. PUBL. ZOOL.	UNIVERSITY OF CALIFORNIA PUBLICATIONS IN ZOOLOGY
UNIV. CALIF. SCRIPPS INST. OCEANOGR.	UNIVERSITY OF CALIFORNIA, SCRIPPS INSTITUTION OF OCEANOGRAPHY
UNIV. MIAMI MAR. LAB. TECH. REP.	UNIVERSITY OF MIAMI MARINE LABORATORY, TECHNICAL REPORT
UNIV. WASH. APPL. PHYS. LAB.	UNIVERSITY OF WASHINGTON, APPLIED PHYSICS LABORATORY
UNIV. WASH. DEP. OCEANOGR.	UNIVERSITY OF WASHINGTON, DEPARTMENT OF OCEANOGRAPHY
UNIV. WASH. DEP. OCEANOGR. TECH. REP.	UNIVERSITY OF WASHINGTON, DEPARTMENT OF OCEANOGRAPHY, TECHNICAL REPORT

U. S. BUR. FISH. MIMEOGR. PAP.	UNITED STATES BUREAU OF FISHERIES, MIMEOGRAPHED PAPER
U. S. COM. FISH FISH. REP. COM.	REPORT OF THE COMMISSIONER. UNITED STATES COMMISSION OF FISH AND FISHERIES
U. S. DEP. INT.	UNITED STATES DEPARTMENT OF THE INTERIOR
U. S. FISH WILDL. SERV. CIRC.	UNITED STATES FISH AND WILDLIFE SERVICE. CIRCULAR
U. S. FISH WILDL. SERV., FISH. BULL.	UNITED STATES DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE. FISHERY BULLETIN
U. S. FISH WILDL. SERV. SPEC. SCI. REP.	UNITED STATES FISH AND WILDLIFE SERVICE, SPECIAL SCIENTIFIC REPORT
U. S. FISH WILDL. SERV. SPEC. SCI. REP. FISH.	UNITED STATES FISH AND WILDLIFE SERVICE, SPECIAL SCIENTIFIC REPORT. FISHERIES
U. S. FISH WILDL. SERV., WASH., D. C.	UNITED STATES FISH AND WILDLIFE SERVICE, WASHINGTON, D. C.
U. S. HYDROGR. OFF. SPEC. PUBL.	UNITED STATES HYDROGRAPHIC OFFICE, SPECIAL PUBLICATION
U. S. NAV. DAVID TAYLOR MODEL BASIN	UNITED STATES NAVY, DAVID TAYLOR MODEL BASIN
VERH. DEUT. ZOOL. GES.	VERHANDLUNGEN DER DEUTSCHEN ZOOLOGISCHEN GESELLSCHAFT
VERH. ZOOL. BOT. GES. WIEN	VERHANDLUNGEN DER ZOOLOGISCH-BOTANISCHEN GESELLSCHAFT IN WIEN
VINBERT AND NONY, PARIS	VINBERT AND NONY, PARIS
VOP. EKOL. BIOTSENOLO.	VOPROSY EKOLOGII I BIOTSENOLOGII
WIS. GEOL. NATUR. HIST. SURV. BULL.	WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY BULLETIN
WISS. ERGEB. DEUT. ATL. EXPED. METEOR	WISSENCHAFTLICHE ERGEBNISSE DER DEUTSCHEN ATLANTISCHEN EXPEDITION AUF DEM VERMESSUNGS-UND FORSCHUNGSCHIFF 'METEOR', 1925-27
WISS. MEERESUNTERS. KOMM. WISS. UNTERSUCH. DEUT. MEERE	WISSENSCHAFTLICHE MEERESUNTERSUCHUNGEN DER KOMMISSION ZUR WISSENSCHAFTLICHEN UNTERSUCHUNG DER DEUTSCHEN MEERE
ZOOL. JAHRB. SYST.	ZOOLOGISCHE JAHRBUCHER, SYSTEMATIK
ZOOL. MAG.	ZOOLOGICAL MAGAZINE
ZOOLOGICA, STUTTGART	ZOOLOGICA, STUTTGART
ZOOL. ZH.	ZOOLOGICHESKII ZHURNAL
Z. WISS. MIKROSK. MIKROSK. TECH.	ZEITSCHRIFT FUR WISSENSCHAFTLICHE MIKROSKOPIE UND FUR MIKROSKOPISCHE TECHNIK

MS. #1647

GPO 891-798

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States -- now and in the future.

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES
WASHINGTON, D.C. 20240

OFFICIAL BUSINESS

Return this sheet to above address, if you do NOT wish to receive this material ☐, or if change of address is needed ☐ (indicate change including ZIP Code).

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR