





# REPORT OF THE DIRECTOR TO THE MARINE BIOLOGICAL LABORATORY DR. PHILIP ARMSTRONG, Director

As you probably well realize from the Agenda of this year's meeting, there has been a change in the procedure as compared with the preceding years. The Chairmen of the various Committees are reporting directly to the Board of Trustees emphasizing the various problems which each committee has had to deal with and including recommendations as a basis for action on the part of the Trustees. It is our hope that the overall reports of the President of the Corporation and the Director to the members of the Corporation in this meeting will give a more significant picture of the operations and problems of the Laboratory. This is frankly experimental and its demerits and virtues might well be discussed at the close of this meeting.

I would like to commend at the outset the work of the various committees which play such an important role in the functioning of the Laboratory and if I do not refer to all of the Committees it is only because the reports bring up details which can be handled or require action by the Trustees. However, the chairmen of the various committees are here and I hope the members of the Corporation will feel free to raise any questions which can be referred to the proper committee chairmen.

There are certain grant arrangements of the Marine Biological Laboratory which I would like to bring to your attention. The Office of Naval Research anticipates a cut in the funds it will have available for research grants. However, Dr. Reynolds, who was here a couple of weeks ago, emphasized that the Office of Naval Research would be in

a position to continue support to marine biological projects which puts this Laboratory in a rather fortunate position. Our present grant will continue next year. The selection of projects will be handled by a joint committee of the Marine Biological Laboratory and the Office of Naval Research. Naturally marine projects will be favored. The Office of Naval Research is not going to set up any categories which they will favor. Insofar as possible they want to select projects on their merits. Ten projects will be selected and I hope it may be possible to set it up so the recipient investigators will receive funds to cover either research space or a research assistant. However, the amounts available under the grant for each investigator will not cover the full cost of his space so if the recipient can also obtain for the Marine Biological Laboratory from his home institution the regular laboratory rental fee, the full cost of the space would be covered to the benefit of the Marine Biological Laboratory. As many of you know, the regular laboratory rental fee covers less than 1/3 of the cost of operation of a laboratory. Early in January the Corporation members will receive the regular space application blanks and, in addition, information and blanks for application for support under our O.N.R. grant.

In addition, we are receiving a grant from the Atomic Energy Commission which in the past has provided funds for special apparatus, for the purchase of radioisotopes and for research assistants but not for research space. I have talked with Dr. Pearson and Dr. Plough and also they are particularly

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# TRUSTEES OF THE MARINE BIOLOGICAL LABORATORY, AUGUST 11, 1953

SECOND ROW: E. G. Ball, A. C. R. T. Kempton, L. V. Heilbrun. Brover Row: W. C. Allee, E. S. G. Barron, C. L. Claff, W. R. Amberson, R. G. Harrison, G. H. A. Clowes, A. P. Mathews, G. Svope, Jr. J. S. Rankin, J. Redeld, M. H. Josok, C. Patzaid, P. B. Armstrome, T. Huno Row, F. A. Brown, Jr. G. Wald, P. Goldsuf, C. L. Prosser, H. B. Skinholt, W. C. Curtis, Back Rows, L. Kleinholl, R. Righ, Ehiel B. Harvy, D. Mazia, A. K. Epapar, A. M. Chase, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, W. C. Curtis, Back Rows, L. Kleinholl, R. Righ, Ehiel B. Harvy, D. Mazia, A. K. Epapar, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, W. C. Curtis, Back Rows, L. Kleinholl, R. Righ, Ehiel B. Harvy, D. Mazia, A. K. Epapar, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, W. C. Curtis, Back Rows, L. Kleinholl, R. Nagh, Kather Structure, D. Mazia, A. K. Epapar, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, W. C. Curtis, Back Rows, L. Kleinholl, R. Righ, Kather Structure, D. Mazia, A. K. Epapar, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, W. C. Curtis, Back Rows, L. Kleinholl, R. Righ, Kather Structure, D. Mazia, A. K. Epapar, E. G. Bulte, L. Rigs, K.S. Gole, D. P. Coxello, M. Structure, C. Matter, M. K. Kather, Kather Structure, D. Kather Structure, D. Kather Structure, D. Kather Structure, Rows, L. Kather Structure, M. Kather Structure, K. Kather Structure, D. Kather Structure, D. Kather Structure, D. Kather Structure, L. Kather Structure, D. Kather Structure, Structure, D. Kather Structure, D. Kather Structure, D. Kather Structure, L. Kather Structure, D. F. Kather Structure, D. Kather Structure, Structure, D. Kather Structure interested in seeing this program concentrated on problems involving marine material. A number of research assistants can be obtained under this Atomic Energy Commission grant.

Representatives of both of these agencies favored the selection of research assistants who are candidates for advanced degrees thus giving the program educational advantages and in a sense setting up research fellowships.

Drs. Ellis and Huttrer from the National Institute of Health were here the first week in August and asked me to bring to the attention of the Corporation the possibility of research support in basic biology from that agency. The National Institute of Health is keenly aware of the great importance of advance in basic biology to the medical sciences. The National Institute of Health has had an increase in its budget for research grants so will be in a better position than the Office of Naval Research. Dr. Huttrer made several suggestions regarding They are particularly interested in applications. grants to able young people from institutions which have limited resources for research. Continuing grants can be made up to five years. The application should be set up on a thorough going scientific basis as they are reviewed by panels of scientists. Fund applications should be realistic in line with the objectives and duration of the project and should avoid overgageteering. A contract made through the applicant's home institution can include provision for a summer technician at the M. B. L. and also the payment of the laboratory. Both Dr. Ellis and Huttrer claimed that the full cost of running the laboratory by the M. B. L. could be included. Dr. Huttrer was going to check on this in order to clarify this point. I have alluded to the costs of operating our laboratories. We will have more exact information on this in the fall when an operations analysis of the Laboratory is completed. This is being carried out by Dr. Richard Parmenter who is Coordinator of Research at Cornell University. He is making an exhaustive survey of our operations including the financial one. He will be visiting a number of you this week and next week in order to obtain information on the various fields of research under investigation here.

We have been encouraged by one of the Foundations to make application for the support of two or three visiting foreign investigators here at the Laboratory next summer. If this plan goes through the Foundation would provide transportation, living costs and laboratory costs for these investigators who would be selected by the Laboratory. Before the summer is out we will set up meetings of representative groups from our various fields of research and select the individuals whom we would like to bring to the Laboratory.

One piece of information we are going to solicit from you are the sources of support you have for your research aside from that coming from your home institutions. Dr. Frank Fremont-Smith, the Medical Director of the Macy Foundation suggested that, if granting agencies realized the limited benefits accruing to the Marine Biological Laboratory from investigator's grants and the large contribution the M. B. L. makes in supporting research, that some of them might be induced to assist the Laboratory.

It is planned for this next summer to prearrange the Tuesday Evening Seminars in order to develop consistant programs. A complete list of the prospective investigators for next summer will be mailed out in April to 8-10 to the representatives of various fields of research and they will be asked to set up seminars at appropriate times in the summer in physiology, biochemistry, biophysics and botany during the first half of the summer and in general zoology and ecology during the latter part of the summer when the prospective courses are in session. Time will be reserved for general seminars. Also if any investigators care to make suggestions for the Friday Evening Lectures, these should be handed in within the next ten days since the Friday Evening Lecture Committee will develop this program at a meeting in the last week of this month.

I would like to pass on to you some information regarding the accidental death of Mr. Babb while driving the squid truck. There have been current a number of rumors regarding the cause of the accident particularly the safety of the truck. Mr. Smith and I have been assured by Mr. Whittermore, the State Inspector of Motor Vehicles who investigated the accident, that there was no reason to attribute the accident to any fault in the truck which was in excellent condition and had a proper load distribution. Mr. Robert Lehy who had driven the truck for the two preceding years prefers it to our new larger truck which does not handle as satisfactorily.

The Laboratory attendance is continuing at a high almost saturation point. The library reading facilities are in full use. We are somewhat bothered by unannounced transient readers who come for short periods of time, many I suspect, for vacation purposes which should be discouraged as it is actually disadvantageous to the Laboratory which is not a vacation spot. The applications for the courses are up sharply in physiology, embryology and invertebrate zoology. The heads of the courses are alienating down some well recommended students which is unavoidable.

The Apparatus Committee, Dr. Steinbach, Chairman, has made some excellent recommendations for increasing our cold-room facilities and for improving apparatus service. The Building and Grounds Committee, Mr. Claff, Chairman, reports progress

# The Collecting Net

An independent publication devoted to the activities of biologists at the laboratories in Woods Hole.

#### Edited by Ware Cattell

Entered as second class matter, July 11, 1935, at the U.S. Post Office at Woods Hole, Massachusetts, under the act of March 3, 1879 and re-entered July 23, 1938.

THE COLLECTING NET WOODS HOLE MASS.

## Trustees In The Ascendancy

The Marine Biological Laboratory is the property of the Corporation of the Marine Biological Laboratory; it elects the Trustees. In view of these facts the increasing tendency of the Trustees to by-pass the Corporation is ill-advised. Two incidents at the annual meeting on August 11 demonstrate their unwillingness to share its problems and accept suggestions:

(Î) Without obtaining approval from the Corporation it was announced that the chairmen of the various committees would not, as has been the custom, report to the Corporation this year, but only to the Trustees.

(2) The attitude of the administration evinced in the discussion at the recent meeting demonstrated again that the Trustees apparently want the Corporation members to act only as a "rubber stamp." Several individuals at the meeting expressed their disapproval of existing restrictions that prevent the free use of the library to qualified visiting biologists. They sincerely sought an expression of opinion. A motion was made and seconded that the members favored a more liberal policy; this was modified by an amendment proposed by a cautious administrationist, blunting the motion from a request to a suggestion. The trustee who rose and asked that even this mild motion be tabled was fearful of an expression of opinion. Why? The answer is obvious. He knew full well that the vote might not endorse present library policies. He did not wish the Library Committee to be faced with the possibility of a vote of semi-censure. The opinion of the group was not wanted.

## Library Restrictions

The library in its persent form was made possible by a large gift from the Rockefeller Foundation. We do not believe that this benefactor intended use of the library restricted to registered workers at the Laboratory. Qualified scientists visiting Woods Hole should have access to its books. The situation becomes untenable when a tax-free scientific library supported by gifts is administered for the convenience of a limited group. This is especially true in the case of the library of the Marine Biological Laboratory because it is never crowded, and the assigned space is, in general, little used.

Local, national and international custom dictates a more liberal policy. We do not believe that the Library Committee can conscientiously solicit gifts until they decide to admit all serious students of biology who want to consult the books that it contains.

We made the statement that the library is "little used" advisedly. There are 30 assigned desks, about 24 unassigned tables, 400 feet of table-space along the walls, and 12 tables in the reading room. With out crowding the library can seat 186 readers. Beginning on August 17 the use of the space was examined for five week days at eleven o'clock in the morning and three in the afternoon. The average number of seated people at these times was 23: the number "in the stacks", 3. These 3 may have come from assigned or unassigned tables. Counting them as seated, the average number of seated individuals was 26.\* This is about one-seventh of the seating capacity. Yet there are those who say the library would be crowded if more visiting biologists were admitted. To those we would ask "Why, then, was so much money squandered on working space for the extra 160 individuals.

Either the present Library Committee is mistaken in maintaining that the Library is crowded or an early Committee made a gross error in the design of the Library. We believe the present Committee to be at fault.

\*The maximum was 38 on a Monday morning; the minimum, 13, on a Thursday afternoon.

## The Directory Issue

Factors beyond our control prevented publication of THE COLLECTING NET Directory early in July. These factors were avoidable, but the administrative offices of the Marine Biological Laboratory denied us the privilege of obtaining the required information from the space application blanks. Its attitude was that it was too much trouble—other administrations in other years (nineteen) had thought it worthwhile—to let us use official records, or to have one of the office secretaries prepare the list for us. We were told that the Directory was not wanted by the laboratory workers, that if it were needed the business manager would get it out himself.

The seven weeks delay in publication, the large amount of extra time and money we were forced to spend unnecessarily, and the trouble we caused each investigator by having him fill out a special card are all unfortunate. The fact that the investigators voluntarily provided the information indicates their widespread approval of our Directory. We trust that the laboratory will take this factor into consideration next year when we ask for the necessary information from its official records.

We thank the Highfield Theatre for donating tickets for the benefit of THE COLLECTING NET Scholarship Fund. Sensitive performances of Chekov's 'The Sea Gull' and Shakespeare's ''King John'' won an enthusiastic response from Woods Hole patrons on the two benefit nights.

# M.B.L. Represented At Dedication

Several Woods Hole biologists, including Drs. E. Newton Harvey, Eric Ball, E. G. Butler, Paul S. Galtsoff and others, attended the dedication of the new John Thompson Dorrance building in June. The new building houses the departments of Biology and Food Technology of the Massachusetts Institute of Technology. The new nine-story structure, made of glass and steel, somewhat resembles the United Nations Building in New York City.

Dr. Detlev W. Bronk (Penzance Point, Woods Hole), President of the National Academy of Sciences and newly appointed Director of Rockefeller Institute for Medical Research, was the principle speaker. In discussing the role of biology in our industrial civilization, he developed the idea that machines and gadgets are made for human beings who use them, and that the understanding of the nature of man is therefore essential to engineers.

The new building is well equipped for teaching and research in quantitative biology, especially in biophysics, biochemistry, micro-biology, and food technology. Guests were invited to inspect all nine floors of the building and admired many excellent and new instruments among which the two electron microscopes and a large spectrophotometer attracted the greatest attention.

The afternoon session of Scientific Symposia was organized under two general topics, Perspectives in Quantitative Biology and Global Concepts of Food Technology. The following papers were read at the biological symposium: Dr. Paul A. Weiss of Chicago University, Engineering principles in Tissue Growth and Repair; Dr. George W. Beadle of the California Institute of Technology, The Place of Genetics in Biology; Dr. John T. Randall, Kings College, University of London, The Structure of Nucleic Acid and Some Biological Implications, and Dr. A. Baird Hastings, Harvard Medical School, Changing Frontiers of Bio-chemistry. Each one, except Dr. Randall, has conducted research at the Marine Biological Laboratory.

# New Oceanographic Building

Two new buildings now under construction on the Woods Hole waterfront will more than double the facilities of the Woods Hole Oceanographic Institution. The front three-story building which is being joined to the existing shop building of the Oceanographic Institution has a steel frame with block and brick walls, and rests on a concrete foundation. Pre-cast concrete is being used for floors.

The old shop building, formerly the Penzance Garage, has been modernized and considerably extended.

A second building, an L-Shaped hydraulics laboratory, is being constructed between the old shop building and the Eel Pond entrance channel. Although the property and buildings are owned by the U.S. Navy, the buildings will be operated by the Woods Hole Oceanographic Institution which conducts an extensive research program for the U.S. Navy Bureau of Ships and Office of Naval Research. It is anticipated that the buildings will be completed in April, 1954.

# **Directors' Report**

(Continued from Page 3)

in the rehabilitation of our plant with, however, much more to be done. Reporting for the Supply Department Committee, it would appear that the service rendered by this department has been reasonable but I always fear some of the investigators may not have brought their problems to our attention. If we do not know the problems, we cannot solve them. Arbacia still presents one of our difficult collection. The nearest sizable bed that has been explored is off Stonington, Connecticut on the outside of Fisher's Island. This is a sixty mile trip each way, being on the ocean side of the island it is very susceptible to the vagaries of the weather. Also it is the impression of Mr. Schweidenback, the skipper of the NEREIS that the bed is being somewhat reduced. There is a nice question here. Are our future collections from this bed going to be dictated by the needs of conservation or experimentation. Many investigators have been returning spent urchins to the Supply Department for replanting which is highly desirable. Possibly Dr. Rankin might comment on this problem.

The Laboratory has made a grant request to the Office of Naval Research to construct four concrete tanks 10 x 15 feet for holding living marine material. This is practicable on the basis of experiments carried out in the Fish and Wildlife seal pool this summer. We hope it may be possible to overcome the lack of materials that sometimes occurs during bad weather with reserve material.

Most of the comments on the modified operation of the Mess have been favorable. If the patronage is any criterion, it must be satisfactory. There were 5,000 more meals served this July as compared with July, 1952. It is anticipated that with self-service we should wind up financially in the black.

May I emphasize once more that in its operations the Laboratory is a service institution. Our success will be determined by the success of the services. We want your comments and criticisms. Without them we cannot make necessary changes and improvements. We have our personnel and equipment failures, there are certain limitations on what we can do with our set-up, there are conditions beyond our control which are disrupting. However, we do want to do the best job possible.

## Poliomyelitis in Woods Hole

There have been three recent cases of poliomyelitlis in the scientific community at Woods Hole. One, Larry Collins—an aereonautical engineer, worked for THE COLLECTING NET. Both he and Mr. Watson are hospitalized; the third patient has recovered sufficiently to return to his home in New York.

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# DIRECTORY FOR 1953

# KEY

Laboratories				
Botany Building Bot	Fisheries Laboratory F			
Brick Building B				
Lecture Hall Lib	Rockefeller Bldg Rock			
Library Desk Lib	Supply Dept S			
Residences				
Apartment A	Homestead Ho			
David House Da	Hubbard H			
Dormitory D	Kahler Ka			
Drew House Dr	Kidder K			
Elliot House E	Whitman W			

# MARINE BIOLOGICAL LABORATORY

THE STAFF

ZOOLOGY

Senior Staff of Investigation

Mathews P prof emer biochem Cincinnati. Parker GH prof emer zool Harvard

Consultants

Brown FA Jr prof biol Northwestern Hyman, Libbie H American Museum Nat Hist. Redfield AC Woods Hole Oceanographic Inst Instructors

Kleinholz LH prof biol Reed, in charge Lochhead JH assoc prof zool Vermont Meinkoth NA assoc prof zool Swarthmore Moore GM prof zool New Hampshire Rattenbury, Jaon C zool McGill Riser NW biol Fisk Sandeen, Muriel zool Duke. Laboratory Assistants

Dossel WE Johns Hopkins Paulsen, Elizabeth Rutgers

# CONSULTANTS

## EMBRYOLOGY

Instructors Rose SM assoc prof zool Illinois, in charge Berg WE asst prof zool California Edds MV assoc prof biol Brown Shaver JR asst prof zool Missouri Trinkhaus JP asst prof zool Yale

Zwilling E assoc prof emb Connecticut

# Laboratory Assistants

Ito, Susumu Western Reserve Youngs, Lillian M teach asst zool North Carolina PHYSIOLOGY

## Consultants

Barron ESG assoc prof biochem Chicago Jacobs MH prof phys Pennsylvania Loewi O prof pharm New York Med Parpart AK prof biol Princeton Szent-Gyorgyi A director Inst for Muscle Research (WH) Instructors Mazia D assoc prof zool California, in charge Kuffler S assoc prof ophthal Johns Hopkins Med Stanier RY prof bact California Steinbach HB prof zool Minnesota Wald G prof biol Harvard

Laboratory Assistant

Bernstein P zool Washington (St. Louis)

## MARINE BOTANY

#### Consultants

Doty MS assoc prof bot Hawaii

Taylor WR prof bot Michigan

#### Instructors

Haxo FT asst prof mar bot Scripps Inst, in charge Silva PC instr bot Illinois Starr RC instr bot Indiana

Lecturers

Lackey J res prof Florida Patrick, Ruth cur. limno. Acad Nat Sci (Philadelphia) Collector

Jennings P Drew

Laboratory Assistants

Allen, Ann Indiana.

#### MARINE ECOLOGY

Consultants

Allee WC prof biol Florida

Redfield AC Woods Hole Oceanographic Inst

Instructors Jenner C asst prof zool North Carolina

Ketchum BH marine microbiol Woods Hole Oceanographic Inst, in charge

Moul ET asst prof bot Rutgers

## INVESTIGATORS AND ASSISTANTS

Abolghassem A phys Nebraska, OM217 Dr11. Allee WC prof biol Florida. B329 Heilbrunn School.

Allen, M Ann grad asst bot Indiana. Bot H6.

Allen, M Jean asst prof zool New Hampshire. B115 H8.

Anderson DG grad biochem Chicago. B125 Backus High. Anderson JD instr phys Illinois. B226 Ho.

- Anderson RS prof phys South Dakota Med. B312 Silva West.
- Alscher, Ruth P assoc prof biol Manhattanville (NY). A304.

Andrus W B218.

Armstrong PB prof anat Syracuse Med. B318 MBL Main.

Atwood KC sr biologist Oak Ridge Nat'l Lab. L. Agassiz.

Baker, Alice S res assoc phys Florida State. B311 Pendergast Park.

Baker G res asst cytochem Western Reserve, B332 Rohmeling Pleasant.

Baker HD assoc prof psych Florida State. L21 Park.

Bang FB prof parasit Johns Hopkins. B330. Barlow, HB instr phys Johns Hopkins. B211 E3.

Barnes LJ res asst emb Missori. OM5 Dr10.

Bennett, Miriam F grad biol Northwestern. B211 H9.

Berg WE asst prof zool California. OM2 D213.

Bergman RA res asst phys Illinois, B226 Turner Millfield. Berman M physicist Sloan Kettering Inst. B302 A108.

Bernstein MH memb cytochem Carnegie Inst. (N.Y.). B234 D107.

Bernstein M S zool Drew. OM109 Da5. Bernstein PW grad zool Washington (St. Louis). OM109 Da5

Bloch R res assoc bot Pennsylvania. L

Bodansky O prof biochem Cornell Med. L20 Oyster Pond. Boettiger EG assoc prof zool Connecticut. B324 Brooks. Booth, Elisabeth A res asst radiobiol Columbia. B344 H7.

Borei HG prof zool Pennsylvania, B343 Metz Hyatt.

Borenfreund, Ellen grad res asst biochem Columbia Med. Bornman I asst prof anat George Washington, B223.

B217 Condon West.

Bosler RB electronic eng Johns Hopkins. OM211 A209. Bowes DW grad zool Catholic. Bot Mendel High.

Boyarsky LL assoc prof biol Northwestern. B211 A202. Brown FA Jr prof biol Northwestern. B211 A202. Brownell, Katherine A instr phys Ohio State. OM216 A 306

Bruner, Joyce A res assoc endocrin Iowa, B340 North.

- Burr, Mary Jo grad phys Florida State. B311 Park.
- Butler EG prof biol Princeton. B321 Oyster Pond.
- Cantoni GL assoc prof pharm Western Reserve Med. B125.
- Chaet AB grad zool Pennsylvania. B1411 School,
- Chalfin D grad phys Princeton. B228 Ka1.
- Chang JJ grad phys Princeton. B122A Dr14
- Chapman KM grad biophysics Minnesota, B217E K1.
- Cheney RH prof phys Brooklyn, B312 Smith, North.
- Clarke, Edith C grad biochem Harvard Med. B313.
- Clay MM res asst phys Ohio State. OM216 McInnis Quisset.
- Clowes GHA res dir, emer Lilly Res. Labs. B328 Nobska Pt.
- Cohen AI res fel phys California, B206 Ka.
- Cohen MJ grad zool. California (LA). OM213 D309.
- Cohen SS assoc prof phys chem Pennsylvania. L Ward Park
- Cole KS tech dir med res Naval Med Res Inst, DC. B217
- Collier JR grad zool No. Carolina, B217M E5.
- Cooper, Ocatvia res asst biochem Harvard Med. B313 A305.
- Cooperstein SJ asst prof anat Western Reserve Med. B332 D201.
- Cornman I asst prof anat George Washington. B223.
- Couillard P grad phys Pennsylvania. B111 Dr attic.
- Crowell S asst prof zool Indiana. OM207 West.
- Csapo A memb emb Carnegie Inst. B116 Jessup Millfield.
- Curtis WC prof emer zool Missouri. L24.
- Denny D instr emb Dillard. B323 Dr4.
- deTerra, Noel zool Barnard, B110 Ho.
- deVillafranca GW instr phys Smith, B110 D315.
- Dikshit PK asst res officer Nutrition Research Labs (India). B332 Rohmeling Pleasant.
- Diller IC assoc memb Inst Cancer Res. (Pa.). L24 D310.
- Diller WF asoc prof zool Pennsylvania, L24 D310.
- Dixon FJ prof path Pennsylvania Med. L22 Millfield.
- Dossel WE grad biol Johns Hopkins. OM208K.
- Dowling JA biol Harvard. Bot Blanchard Millfield.
- DuBois EF prof emer phys Cornell Med. L Penzance Rd.
- Dunn A grad phys Pennsylvania. B219 Dr attic. Edds MV Jr assoc prof emb Brown. OM4 A302
- Eichel HJ res assoc biochen Hahnemann Med. B341 D212.
- Fraenkel GS prof ento Illinois. B225 Dr2
- Fried GH res fel phys New York. B328 Walker Millfield.
- Gabriel ML asst prof biol Brooklyn. L9 Harbor Hill. Gabrieli ER res asst radiobiol Yale Med. Lib20 Nanninga
- Oyster Pond.
- Gall JG instr cyt Minnesota. B217 K15.
- Gasteiger EL assoc phys Harvard Med. B122d.
- Gevirtz NR biochem Chicago. B110 Da.
- Ghiretti F fel Cancer Inst. OM K10.
- Gibbs Jr. RH grad fel ichth Cornell. B318 Fuglister, Juniper Point.
- Ginter, Eileen L res asst biochem Hahneman Med. B341 H6.
- Gnade, Alla genetics Pennsylvania, L23.
- Goldman AS grad emb Brown. B314 Ka3.
- Goldstein L res fel National Cancer Inst. B111 D305.
- Gould E res asst phys Cornell. D14.
- Grant P res fel emb Columbia. B307 Hilton Main.
- Graves RC grad teach asst biol Northwestern. B211 Dr1.
- Greene PH grad Chicago. F212 Da4.
- Griffin DR prof zool Harvard. B9 Ketchum Buzzards Bay.
- Grosch DS assoc prof genetics North Carolina State. B1 Minot.
- Gross PR grad Pennsylvania. B219.
- Guttman, Rita asst prof phys Brooklyn. L25 D307.
- Guyselman JB asst prof zool Carleton. B210 K8.
- Hajdu S res assoc phys Muscle Research Inst. (WH). B315 Stuart.
- Hamer D res fel biochem Birmingham (Eng). B110 D306.
- Hammond WS assoc prof anat Syracuse Med. B216.
- Harrison JR asst prof emb Miami (Ohio). B326 D206.
- Hartman FA prof phys Ohio State. OM216 A104.
- Harvey, Ethel B invest biol Princeton. B117 Penzance.

- Harvey EN prof phys Princeton, B117 Penzance.
- Haubrich RR grad biol Florida, B329 Heilbrunn School.

7

- Haxo FT asst prof bot Scripps Ocean Inst. Bot D217.
- Hayashi T assoc prof zool Columbia. B204 A101. Hayward HR fel phys Rochester Med. B218 Orchard.
- Hempling HG grad phys Princeton. B213 D207.
- Henshaw PS dir of res Planned Parenthood Fed. L. Hild W anat Kiel (Germany). B217h A105.
- Hillis LW grad bot Michigan. Ho 17.
- Hodge, Mary instr biol Simmons. OM206 Ho 8.
- Hohns, Elsie D tech asst phys New York. B328 D313.
- Hunter FR prof phys Florida State. B311 Zinn Gardiner.
- Huxley AF asst dir res phys Cambridge (Eng). B110 E8.
- Hyman C assoc prof phys Southern California. B328 Nelson Whitman.
- Jacob, Miriam I teach asst hist New York Dental. B217 H2.
- Jaeger, Rita C stud biochem Vassar. B339 Ho4.
- Jeffries WB grad proto North Carolina. OM Ka21.
- Jenkins GB prof emer anat George Washington Med. L28 Gardiner.
- Jennings PR grad fel plant Purdue. S E6.
- Johnson TN asst prof phys Michigan State. OM211 Da9.
- Jones ER prof biol Florida. B329 Oyster Pond.
- Kalckart HM prof biochem Copenhagen (Denmark). B110 D104.
- Kanwisher, Joan T Oyster Pond.
- Kao C phys Cornell Med. B320 Chadwick Millfield.
- Kao, Priscilla MN res asst genetics North Carolina State. B1 Ho13.
- Karlin A Swarthmore. B219 Ho. Karrer HE bact Johns Hopkins. B330\_Dr7.
- Kaye AM res asst phys Pennsylvania. B219 Simeneau Falmouth.
- Keosian J prof biol Rutgers. B122B Juniper Pt.
- Kiebel, Geraldine grad phys New York.
- Kinersly T res fel phys Yale Med. L27. Nanninga Oyster Pond.
- Klein M grad anat George Washington Med. B223 Kenvon.
- Klotz IM prof biochem Northwestern, OM210 Howes Falmouth.

(Formosa), L8 D211. Linshitz H assoc prof chem Syracuse. D.

Pleasant.

BD.

Brooks.

Smith North.

Landau JV res fel phys New York. B109 Ka22

Lochhead JH prof zool Vermont. OM10 A201.

Maroney SP Jr grad zool Duke. OM215 E2.

Mavor JW prof emer biol Union. North.

Mazia D prof zool California. OM105 A103.

Lorand L asst prof phys Wayne Med. B107 A106.

Marshall HG grad ecol Western Reserve. Bot Ka4.

Marsland D prof biol New York, Bacon Nobska.

Lauffer MA prof biophysics Pittsburgh. OM108 E7.

Kohn AJ phys Princeton. B314 K14. Kuffler SW assoc prof opthal Johns Hopkins Med. OM211 Hubbard, East. Kuntz, Eloise asst prof biochem Vassar. B339. LaChance LE grad genetics North Carolina State. B1 E5.

Laufer, Wilma res asst cytochem Tufts. B332 Rohmeling

Lazarow A assoc prof cytochem anat Western Reserve.

Levy, M prof biochem New York (Med). B309 Gardiner.

Liang HM prof biomorphics National Defense Med Cent

Lippman, Muriel M grad phys Pennsylvania. B111 Ho17.

Lower GG teach biol Upper Darby High. F8 Hilton Main.

Love WE fel biophysics Pennsylvania. B205 Quisset.

Mateyko GM res fel cancer res New York. B109 Ho15.

Maynard DM grad phys California (LA.). OM313 Ka24.

McCann, Frances V grad phys Connecticut. B324 Boettiger

McDonald, Sister E S prof biol Mt St Joseph (Ohio). L5.

- McLaughlin, Jane A res asst biochem Inst Muscle Res. B233 Millfield.
- Meinkoth NA assoc prof biol Swarthmore. OM202 D209. Menz LI grad biophysics St. Louis. L.
- Merkel JR res assoc microbiol Rutgers. B110 D304.

8

- Metz, Delilah B res assoc phys New York. B328
- Miura Y assoc prof biochem Tokyo Med. B207 D210.
- Mones B physicist Sloan-Kettering Inst. B302 A108.
- Moore GM prof zool New Hampshire, B115 A204.
- Moore JW biophysics Naval Med Res Inst. B234 D204.
- Moos C grad biophysics Columbia. B217C D111.
- Nachmanson D assoc prof neuro Columbia Med. B335 A107.
- Nanninga LB res chem Inst for Muscle Research (WH).
- Nelson L asst prof phys Nebraska. OM217 D105. Noe FF bot Drew. Bot E4.
- Ortiz, Evelina instr zool Chicago. L24 Broderick.
- Osterhout WJV memb emer Rockefeller Inst. B209 A203.
- Padykula, Helen A instr anat Harvard Med. Bot H4.
- Papaconstantinou J grad biol Temple. B122 Tawell Stuart.
- Pepper M phys Pennsylvania, Lib K9.
- Peticolas WL grad physical chem Northwestern. OM210 K15.
- Pettibone, Marian H asst prof zool New Hampshire, B115 Da2
- Potter D grad phys Harvard, OM211.
- Proctor NK assoc prof zool Morgan State (Md). F Dr15.
- Prosser CL prof phys Illinois. B226 Whitman.
- Ray DT instr genetics Howard. F212 Dr15.
- Reich P res asst phys Harvard Med.
- Reiner JM chemist Inst Cancer Res Columbia Med. Lib 30 Simoneau, Main.
- Rieger IP res assoc zool Pennsylvania. B220 D202.
- Rimmler LJ res asst anat Syracuse Med. B318 Quisset.
- Roberts JL instr phys Massachusetts. OM214 Bodman North.
- Roberts, Margaret R res asst genetics Amherst. B209 Bodman North.
- Robertson CW prof biol Evansville. B109 North.
- Robertson, Lola E res asst parasit B232 North.
- Rogers WI teach asst biochem Iowa. B336 Howes Quisset.
- Ronkin RR asst prof phys Delaware. B114 Blum Hyatt.
- Root WS prof phys Columbia Med. B204 Brooks.
- Rose, SM prof zool Illinois. OM12 High.
- Rosenbaum L asst invest phys Delaware. B114 Tawell Stuart.
- Rosenberg AM grad phys Pennsylvania. B111 Ka22.
- Rosenberg RM res fellow physical chem Harvard. OM210 Howes
- Roslansky JD grad phys California.
- Roth JS asst prof biochem Hahnemann Med. B341 E7.
- Roys C res assoc biol Tufts. B327.
- Rudolph ED grad asst bot Washington (St. Louis). Bot E4.
- Rugh R assoc prof biol Columbia Med. B344 Cross.
- Sanders, Muriel I instr zool Duke. OM211 H3.
- Sartenaer PJMJ asst paleont Inst Royal des Sci Nat (Belgium). B217J Backus Quisset. Schechter V asst prof zool New York City Med. L24
- D213
- Schleyer WL res asst neuro Columbia Med. B336 D102.
- Schub, Yonynah math Pennsylvania. B220 Ho15
- Schwartz M guest invest Kaiser Wilhelm Inst. B303 D310. Scott, Mrs. DBM assoc biochem Pennsylvania Child Hosp. B217K D302
- Scott GT prof phys Oberlin, B218 Orchard.
- Scott TFM res prof pediatrics Pennsylvania Child Hosp. L8 D302.
- Seres JL res asst phys Delaware. B114 Dr1.
- Shanes AM invest phys National Inst Health. B123 D101b
- Shanklin DR emb Syracuse Med. B206 Ka23.
- Shaver JR asst prof zool Missouri. OM5 Dr10.
- Shedlovsky T assoc mem physical chem Rockefeller Inst. B209.

Schwartzman G microbiol Mount Sinai Hosp. W H Inn, Main.

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- Silva PC instr bot Illinois. Bot D108.
- Slodki ME grad biochem Iowa. B336 Howes Quisset. /
- Smith, Charlotte A microbiol Vassar. Bot Wb.
- Sols A res fellow Washington Univ Med. B325 Dr9.
- Sonnenblick BP assoc prof biol Rutgers, B122 Cannan Gardiner
- Speidel CC prof anat Virginia. B216 Oyster Pond.
- Spratt NT prof zool Minnesota. B326. Stanier RY prof microbiol California. OM107 A105.
- Starr RC asst prof bot Indiana. Bot D108.
- Steinbach HB prof zool Minnesota, OM120 Minot.
- Steinberg MS grad emb Minnesota. B326 Da4. Stephens GC instr biol Brooklyn. OM9 Quisset.
- Stephenson PC teach asst bot Illinois. Bot Wh,
- Stephenson WK grad phys Minnesota, OM271 Dr6.
- Stern KG adj prof biochem Polytech Inst Brooklyn. L Blanchard Millfield.
- Stibitz, Mary G biol Earlham. Bot Wc.
- Stoiber, Alma M grad phys Michigan. OM213 Broderick North.
- Stunkard HW prof biol New York, B232 Buzzards Bay.
- Sulkin SE prof bact Texas Southwestern Med. L3 Ransom.
- Sullivan RL grad genetics North Carolina State. B1 K8.
- Szent-Gyorgyi A biochem Inst Muscle Research (WH).
  - B233 Penzance.
- Taussky HH res fellow Cornell Med.
- Thomas LJ Jr instr pharm Woman's Med, F212 Dr attic.
- Thrasher GC anat Virginia Med. B217 Silva Gardiner.
- Timonen KS cytologist Rockefeller Inst. L D207.
- Troll W asst prof biochem Cincinnati. B221 D311.
- Tsuboi KK boichem Columbia. B110 D301.
- Tsuchida, Martha M res asst microbiol California. OM102 Ho15
- Tsuli T assoc prof phys National Taiwan (Formosa), L26 D211.
- Tucker EL instr zool Loyola, Mendel High.
- Tunik BD grad zool Columbia, B217 Russel East.
- Tyler A prof emb California Inst. Tech. Lib.
- van Bergeijk WA res asst phys Iowa. B340 E6.
- Vernberg FJ instr zool Duke, OM215 K3.
- Villee CA asst prof biochem Harvard Med. B310 D308.
- Vincent WS instr anat Syracuse Med. B206 A308.
- Voorhees DB emb Yale. B323 Dr4.

Watt DJ Columbia Med. B320 K7.

Wilber, Clare M. res asst B108 Lillie. Wilce RT teach fel bot Mich, K2

Witschi E prof emb Iowa, B340 Millfield.

(Md.). B108 Lillie.

Lib WM Inn Main.

field.

- Wainio WW assoc prof biochem Rutgers, OM 205.
- Warbasse Penzance.
- Wald G prof biol Harvard, OM219 Buzzards Bay.
- Warner RC asst prof chem New York Med. B309. Whitman Webb, H. Marguerite asst prof phys Goucher. B211 H.

Whiting PW prof emer zool Pennsylvania. L23 Minot.

Wilber CG asst chief appl phys Chem Corps Med Labs

Wrinch, Dorothy lect physics Smith. B305 Glavenette Mill-

Wichterman R prof biol Temple. B122c Buzzards Bay

Wilson IB asst prof biochem Columbia. B336 D208.

Wymenga HG res biochem NV Organon (Holland).

Wyttenbach CR res asst zool Indiana. OM207 Dr1.

Youngs, Lillian teach asst zool North Carolina. H.

Zimmerman AM res asst phys New York. B109 Ka22.

Zweifach BW assoc prof biol New York. B328 A301.

Zwilling E assoc prof emb Connecticut, OM3 A102.

Zinn DJ asst prof zool Rhode Island. Lib10 (Falmouth).

Zottermann Y prof phys Kungl. Veterinarhogskolan (Stockholm). B231 D314.

Young RS grad emb North Carolina, Bot E4.

## RECEIVED TOO LATE FOR INCLUSION

Haliban-Karasic, Atida invest. phys Pennsylvania B111. Whitman C

Hickson, Anna K res chem Lilly Res. Labs. B319.

Lybing S res asst zool Pennsylvania B343 D.

Szent-Gyorgyi AG res assoc biochem Inst Muscle Research (WH). B315 Millfield. Szent-Gyorgyi, Eva M res assoc biochem Inst Muscle Re-

search (WH). B315 Millfield.

#### ADDITIONAL NAMES

The following persons did not fill out Directory cards although ample opportunities were provided for every worker at the Marine Biological Laboratory to do so. The list is made up from one obtained July 31 which contained some names of individuals who intended to come but had not arrived by that date. So the appearance of an individual's name here does not necessarily mean that he worked at the Laboratory this summer.

Altamirino M; Amatniek E; Amberson WR; Anderson IM; Amin A, Ball EG; Bartlett JB; Bauchau AC; Berger C; Blankenhorn B; Blumenthal G; Chase AM; Claff CL; Clark AM; Clark E; Clark, Lenora; Clement AC; Colwin A; Costello DP; Curley F; Dische Z; Drake J; Eichorn JH; Fineman J; Fries EFB; Gaffron H; Green JW; Gruenberg B; Grundfest H; Haliban A; Hatzis, Chryssoula; Heilbrunn LV; Henley, Catharine; Herr EB; Hickson AR; Himmelfarb S; Hines M; Hughes IM; Ito Susumuo; Jacobs MH; James, Sarah; Kabat EA; Karush F; Kind CA; Kisch B; Kleinholz LH; Krahl ME; Lansing A; Larris P; Lecrone Patricia; Loewi O; Love, Lois; Lowenstein BE; Lucke B; Lybing S; Madden J; Marshak A; Mauro A; Mawe R; Meigs W; Mendelson P; Metz CB; Moul ET; Namias J; Neff RJ; Odum H; Parpart AR; Paulsen, Elizabeth; Person PH; Philpott D; Pierce M; Rachier E; Rafferty, Keen; Rankin JS; Riggs A; Rosenthal TB; Rosenbluth, Raja; Schwartz Nancy; Sclufer, Evelyn; Scott A; Scott, Sister Florence; Small, Jean; Stearns R; Stokey, Alma G; Sussman KE; Szent-Gyorgyi AH; Szent-Gyorgyi, Eve; Szent-Gyorgyi M; Taylor WR; Trager W; Trotter, Mildred; Trinkhaus JP; Tsuji F; Wallmar D; Walters, Patricia; Wilson WL; Woford, Peggy.

#### STUDENTS

Ambellan, Elizabeth emb grad genetics Columbia. WH Inn Ashton FT invert grad Swarthmore, K5. Atz JW invert grad zool New York. Gray Buzzards Bay. Bakemeier R phys med Rochester Med. Barsa, Mary Claire invert grad zool Fordham. Behrman EJ phys biochem California. Bendix, Selina invert grad zool California. Beskind H emb Queens. Ka2 Bibring T phys grad physics Stanford. Bierman, Sheila invert zool Cornell. W. Birks RI phys grad McGill. Bond RR ecol grad Wisconsin. K7. Borysko E emb grad cyt Johns Hopkins. K5. Boulas SH emb Brown. Ka4. Brailsford, E Susan emb grad zool Mt. Holyoke. Wa. Brill AS phys grad biophysics Pennsylvania. Bronsweig, Ruth D ecol Bryn Mawr. Wj. Brown PL invert grad zool Illinois. Ka. Cascarano J phys grad biol New York. Child FM phys Amherst. Clugston, Helen V emb zool Oberlin. Wc. Cory RL invert grad biol Delaware. F. Cumings EH invert DePauw Curry GM invert grad bot Harvard, Ka1. Dashman T emb grad Illinois. Kal. Denny D emb instr Dillard. Dr4. Doolin PF emb grad res asst zool cyt Illinois. Ka1. Dowling, Mary C invert grad biol Seton Hill. W. Drake J invert Yale. Dr4.

- Duncan JT zool emb Wabash, K5.
- Eisenman JS invert grad New York City. K2.
- Ericksen, Joan emb res asst Radcliffe.
- Febvre H phys asst Rockefeller Inst for Med Res.
- Fraser, Elizabeth F invert zool Bedford Col (London Univ). W
- Fraser, Jean F invert zool Bedford Col (London Univ). W. Frost D invert instr phys Rutgers Col of Pharm. Tawell
- Stuart.
- Gallagher JC emb zool Yale, Ka4,

Geller DM phys grad biochem Harvard.

Gonzalez, Elsa L phys res asst Columbia. We.

- Grabowski CT emb grad emb Johns Hopkins, Ka3.
- Green DM invert zool Oberlin. Ka.

Green PB invert grad asst bot Pennsylvania. Ka.

Greenberg MJ ecol grad Cornell. Hadley, Doris S invert George Washington. W.

- Hagen, Lynett invert zool tech lab asst Drew. We.
- Haggis AJ phys grad biol Rochester. Harris JD phys grad biophysics Purdue.

Hartshorne JM invert grad Cornell, Wald Buzzards Bay.

Harvey, Harriet phys asst prof zool Oklahoma.

- Harvey WR invert Harvard.
- Haubrich RR invert grad biol Florida, Heilbrunn School
- Heafitz M invert Dartmouth. Ka4.
- Hegan, Nancy A emb zool Pennsylvania Col for Women. Wf.
- Hickok JF invert grad zool California (L.A.) Gray Buzz-ards Bay.
- Hilfer SR emb Queens. Ka2.
- Hodge, Mary H emb instr biol Simmons. Wg.
- Ito S emb grad fel res emb Western Reserve. K2.
- Kowal J phys Johns Hopkins Med.
- Kuenzler EJ ecol grad Georgia, K.
- Lambert FL phys grad biol Harvard. F.
- Lappano, Eleanor R invert grad zool Fordham.
- LeTourneau DJ emb Wesleyan. Ka21.
- Leventhal DE phys grad biophysics Illinois.
- Linder HJ invert grad asst zool Cornell, Blanchard Millfield.

Litman, Rose M phys res asst biochem Indiana. W.

Madden IW emb Yale, Dr4.

Mann, JD phys Brooklyn. K2.

Marko, Anita R invert grad biol Hofstra (N.Y.). W.

McDaniel, Harriet C invert instr Brooklyn. W.

- McKernan, Sally Ann invert zool Kansas. Wf.
- McKinnell RG emb grad zool Oklahoma, Ka21.
- McMurray, Virginia M emb res asst Iowa State.
- McNamara, Doris M invert grad biochem New York Wf.
- Merrill AS emb grad zool Harvard. Ka23.
- Messinger E invert biol Lafayette. Ka21.
- Midgett, Mary E ecol grad Cornell. Wj.

Milkman RD emb grad phys Harvard.

- Mills KS phys res fel Texas.
- Mizell M invert grad zool Illinois. K2.
- Moffatt, Jane L. invert George Washington. W.
- Olson JM phys grad biophysics Pennsylvania.

Park, Helen D emb biol National Inst Health. Backus

- Passaglia MA invert grad St. Louis. K.
- Patton WK invert Hamilton, K.

Perrotta, Carmie ecol grad Wisconsin, Ho15.

- Pierro L invert grad zool Marquette. K3.
- Potter DD phys grad biol Harvard. Pryor CW invert grad serology Kansas. K3.
- Rapoport SI phys chem Princeton. El4.
- Reed RR invert biophysics Purdue, Ka21.
- Renner JH invert Dartmouth. Ka24. Richards, Marie L invert grad biol Maryville. Wi.
- Rieck AF phys instr Marquette Med. Kolin Gardiner.
- Roberts, Jane C Invert zool Massachusetts. Wh.
- Robinson MA ecol Stanford, K7.
- Roeder M phys grad asst zool North Carolina. Massachu-Wf. setts.
- Roslansky JD invert phys grad phys California,

Roter, Ellen C phys grad zool California. Ho. Rothschild, Hanna A phys grad med Chicago. Da. Rowe EC invert Wesleyan, K6. Runyon, Miriam invert grad Vassar. W. Sargent, Lydia M invert grad Knox. W. Schlick, Roberta A invert Knox, W. Schlueter EA invert grad zool Wisconsin. K2. Schneiderman HA phys asst prof zool Cornell. Schreiman DE ecol Rensselaer Polytechnic Inst. Senterfit LB invert grad parasit Johns Hopkins. K6. Shaw, Evelyn S ecol grad American Mus. of Nat. Hist. Shriner, Joan invert Mt. Holyoke. Wi. Skinner, Dorothy M invert grad biol Tufts. Wi. Solano, Sister Frances phys biol Nazareth (Rochester). Stevenson JR invert grad asst biol Northwestern, K. Straus M phys med practitioner Brooklyn. Sullivan RL invert grad genetics North Carolina State, K. Swartz FI emb grad zool Western Reserve. Ka4. Telfer WH emb jr fel emb Harvard. Cunningham Glendon. Theophilus, Victoria phys grad physics Vassar. Van Laer, Helen R invert grad geol Johns Hopkins. Wd. Warwick, Anne C invert grad parasit Johns Hopkins. Wh Wendt R invert Rochester. K5. Wessells NK emb zool Yale. K3 Wolbach R phys grad Cornell Med. Youngs, Lillian M emb teaching fel zool North Carolina.

#### OFFICE OF ADMINISTRATION

Armstrong P director Burke, Audrey Burke, Marilyn Crowell, Polly Myers, Lila Shave, Nancy Smith H gen. mgr.

#### LIBRARY

Davis, Mary asst Harlow, Deborah L. librarian Rohan, Mary asst Young, Betty asst

## DEPARTMENT OF RESEARCH SERVICE Chemical Room

Cavanaugh GM teach. sci. Lawrence H.S. (Falmouth) chem. sup. mgr. D'Angelo N Harvard dyes and stains Dawson D Michigan Med chemist Gewirz N Chicago Med clerk Haynes, Norma Skidmore glassware Kowal J Johns Hopkins Med glassware Menzies D Davidson (N.C.) clerk. Menzies, Evelvn Converse (S.C.) glassware

#### Apparatus Room

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#### SUPPLY DEPARTMENT

Anderson B Harvard Med. sum. collector Anderson E Duke sum. collector \*Babb J Princeton sum. collector Black W Brown sum. collector Conway, Patricia secretary

\*Deceased

Covne G sum, collector Crowell, Ruth secretary Dearborn J New Hampshire sum, collector Gray M B captain Hapgood W Vermont sum. collector Hilton AM foreman Kahler WE captain Lehy G collector Lehy RO collector LeTourneau D Wesleyan sum, collector McInnis J manager O'Hagan R Conn. sum collector Perry R carpenter Pirnie P Bowdoin sum, collector Pistey W Conn. sum. collector Pothier A Jr. Holy Cross sum. collector Rankin IS naturalist Schweidenback CO captain Taylor J Antioch sum. collector Valois J Boston sum. collector Wagstaff HS mechanic Whitcomb J shipper

## MAINTENANCE

Adams R carpenter Beard R janitor Beskind H janitor Davidson E janitor Goldman A janitor Graves R dorm, janitor Gunning R painter Head JH head janitor Heilman R grounds Hilfer R janitor Kahler G maintenance man Kahler RW superintendent Lehy D painter Mawe R watchman Neal A grounds Pierce AJ carpenter Ray D mail boy Tawell TE library Thaver IS carpenter Tometick L watchman

# FISH AND WILDLIFE SERVICE

#### NORTH ATLANTIC FISHERY INVESTIGATIONS

Graham Dr HW Dir of lab, chief, N Atlantic Fishery Invest, 203 West

Allen DM fishery res biol, biology of tuna. 37 Fr, 302.

Blair, Kathleen J clerk, secretary and receptionist. Rte. 6A (E Sandwich) 203.

Clark JR fishery res biol, definition of haddock stocks and mesh selectivity of nets \_\_\_\_\_\_313 Depot (N Fal)

mesh selectivity of nets. 313 Depot (N Fal). Cogswell SL statistical clerk, haddock statistics. 312 Davisville Rd (E Fal).

Colton JB fishery res biol, ecology of fishing banks. 208 Nobska.

DeMello, Edith clerk, accounts. 205 Main (Teaticket).

Dreyer FA statistical clerk, haddock statistics. 303 Millfield.

Greenwood, Mary clerk, manuscript, library. 206 Barry Pl.

Kelly GF fishery res biol, variations in abundance and breeding habits of redfish. 308 off Main.

Kiernan, Helen I clerk, property and procurement. 205. 85 Marion Rd (Wareham).

Marak RR fishery aid, ecology of fishing banks. 208 Oyster Pd (Fal).

Murray, Harriett E statistical clerk, haddock statistics, library. 303 Scranton (Fal).

- Premetz ED fishery res biol. collection of haddock data, sea scallops, yellowtail flounder. 307 Bourne (Maravista).
- Ryder, Virginia clerk, personnel. 203 Ocean View (Cotuit).
- Shea JF fishery res biol, haddock population dynamics. 302. 27 Hatch (Fal).
- Taylor CC fishery res biol, haddock population dynamics. 214 Main.
- Vieira M statistical asst, haddock statistics. 309. 35 Front (Swansea).
- Walker Jr AE admin. asst, in charge of administrative office, 200 off West.
- Wigley Dr RL fishery res biol, food habits of haddock. 304. FR 50.
- Wolf RS fishery res biol, age and growth of redfish. 308. FR 55.

#### SHELLFISH LABORATORY

- Galtsoff Dr PS fishery res biol, chief, shellfish lab.; biology of oysters. 202 Morgan.
- Jones, Sally H clerk, secretary. 202 Prince (Marstons Mills).

## SUMMER EMPLOYEES

- Bullock Dr WL fish culturist, aquarium dir. Aq. FR 11. Cole CF fishery aid, aq. asst. Aq. FR 54.
- Kennedy D fishery aid, fish behavior. FR 5.
- St John PA fishery aid, asst to biologists. 312. FR 49. Taylor JL fishery aid, asst to biologists. 305. Albatross HI.
- Wood Jr BS fishery aid, asst to biologists. 305. Albatross III.

VISITING INVESTIGATORS

Lambert, Marie B invertebrate paleontology. 215. FR 44. Wilbur Dr K toxicity of chemicals on fish, 208.

Young Dr RL parasitology. 212. FR 53.

#### VISITORS

The following individuals registered in the guest book of the Marine Biological Laboratory but did not work at the laboratory.

- tAmberson, Margaret, Corkeysville, Md.
- Baker, France Columbia U.
- Baker, Howard Zool Lab Univ of Pa, Philadelphia, Pa.
- Baker, Samuel New Rochelle, NY.
- Benesch, Reinhold and Ruth Iowa City, Ia.
- Berman, Irwin, NY Univ.
- Briggs, Robert lecturer Philadelphia, Pa. Brown, Dugald Dept of Zool Univ of Mich, Ann Arbor.
- Bullowa, Anne N Y Med Col.
- Carroll, Benjamin and Peeder Rutgers Univ.
- Cattell, Ware, Cosmos Club, Washington, D.C. Chargeff, Erwin N Y.
- Courduno, William Washington, D.C.
- Dey, Thomas E. Princeton Univ.
- Doty, Maxwell Depart of Bot Univ of Hawaii, Honolulu
- Duggar B M c/o Lederle Lab Inc, Pearl River, N.Y.
- Duggar, Gene L 2904 Geyer Ave St. Louis 4, Mo.
- Ellis J M National Inst of Health, Bethesda, Md.
- Fass, Jerome New York Col of Med.
- Figge, Frank Univ of Maryland School of Medicine. Fox S W Ames, Ia.
- Goldfeder, Anna N.Y. City.
- Goldman, Joan Univ of Pa. Goldstein, Mimi.
- Gottschall, Gertrude, N Y SCity, N.Y.
- Gould, Harley Bio Sciences Information Exchange, Wash. D.C
- Grand C G Miami, Fla.
- Graubard, Mark Minneapolis, Minn.
- Gullberg J E Berkeley, Calif.
- Hart, Hiram N Y City.
- Hartline H K lecturer Johns Hopkins.

- Henley H Silver Springs, Md.
- Hillier, James Princeton, N.J. Howard R S New Orleans, La.
- Huttrer, Charles Bethesda, Md. Kao C Y Cornell Univ Med Col.
- Katz L N Chicago.
- Keeffe, Mary M asst prof of biol, Col of St. Thomas, Providence, R.I.

11

- King, Thomas Philadelphia, Pa.
- Lancefield R C Rockefeller Inst.
- LeTevre, Paul U.S. Atomic Energy Commission. Levin, Louis Washington.
- Levine, Ruth Boston, Mass.
- Libet, Benjamin San Francisco, Calif.
- Lloyd, David N Y City
- Lorimer, Isabelle N Y City.
- MacRae, Duncan Cambridge, Mass.
  - MacRae, Edith Cambridge, Mass.
  - Magnis, Jonathan Jerusalem, Israel.
  - Mankowski Z T Philadelphia.
  - McGrady, Pat N Y City, N.Y.
  - Mendes E Univ of S. Paulo, Brazil.
  - Park, Helen D Student of embryology.
  - Parmenter, Charles L Dept of Zool Univ of Pa.
  - Patrick, Ruth Academy of National Science, Phila, Pa.
  - Plale I B N Y City.

  - Post, Robert L Vanderbilt Med School, Nashville, Tenn.
- Rao K Pampapatin Madras, India.
- Ravner, Barbara Lake Forest, Ill.
- Redsinski C A Rockefeller Inst for Med Research, N Y C.
- Rodgers, Frances Canonsburg, Pa.
  - Rothesin, Fred Mass Inst of Technology.
- Shelswell, E Margaret Dept of Zool, Rutgers Univ. New Brunswick, N.J.
- Skiroen, Hazel C Baltimore.
- Skiroen, Madeline T Baltimore.
- Stern J R N Y City.
- Stuart, Donald Jr. New York City Dept of Health, Div of Labs and Research.
- Spear, Jack Bradenton, Fla.
- van Laer, Helen R Baltimore.
- TeWinkel, Lois Dept of Zool, Smith College, Northampton. Mass.
- Weber, Hans H Physiological Inst Univ of Tuebingen, Silchersti.

Weber, Marga Tuebingen, Silchersti.

- Wiercinski, Floyd J asst prof of phys, Hahnemann Med. Coll, Phila, Pa.
- Williams-Ashmar H G Chicago, Ill.

Zaeler, Sumner Harvard Med School.

and weighs only 21/2 tons.

# The Dome on Falmouth Road

On a knoll overlooking Little Bay Harbor twenty students of architecture are constructing a "geodesic" dome made of wooden triangles to be covered in October with poly esther roesin of three hundredths of an inch in thickness. The combination restaurant and motel is owned by Gunner Peterson, Falmouth architect. Designed by Bucgminster Fuller of Long Island,

the semi-sphere covers an area of 2,000 square feet

# In Memoriam—Babb

At the annual meeting of the Corporation of the Marine Biological Laboratory on August 11 the following Memorial was read by Professor Arthur K. Parpart:

Jeremy Babb was born on January 26, 1933, the son of Mr. and Mrs. Glenn Babb of Bedford, Virginia.

Jeremy had just completed his sophomore year as a pre-medical student at Princeton University and came directly to Woods Hole to work in the Supply Department of the laboratory. Here he proved

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himself an able, willing and conscientious worker. He took an active part in the life around him at the laboratory; his cheerful and friendly personality made him well liked by all who were associated with him.

"It was in the early morning hours of July 9, 1953, as he drove to get squid that he met accidental death.

"The members of the Corporation of the Marine Biological Laboratory record with deep sorrow the death of Jeremy Babb and they extend heartfelt sympathy to his family."

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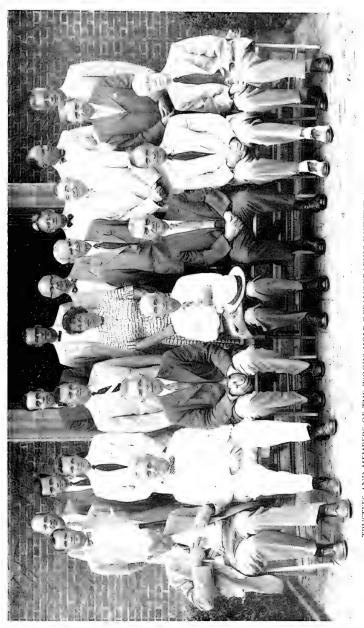
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