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BIOLOGICAL POSITIONS IN THE DIVISION OF FISHERY BIOLOGY

It is the function of the Division of Fishery Biology to carry on such investigations as may be necessary to determine whether or not the fisheries of the United States are diminishing and, if so, to recommend measures for their conservation. Rational conservation of the fisheries implies a full knowledge of the state of the supply and the life history, habits, ecological, and systematic relationships of the economically important aquatic animals, as well as the plants and animals upon which they depend for food, and knowledge of their relationship to the physical environment. The work is divided into four major divisions.

1. Commercial fishery investigations.
2. Shellfish investigations.
3. Experimental fish culture and management of sport fishing waters.
4. Investigations of the water quality and pollution.

Research facilities. - To carry on this work properly the division maintains biological stations at Woods Hole, Mass., Milford, Conn., College Park, Md., Beaufort, N. C., Pensacola, Fla., and Seattle, Washington. They are marine laboratories and in addition to general laboratory equipment have gear and materials for the study of oceanography and fishery biology. Three experimental fish cultural stations are operated for aquicultural investigations and the improvement of fish cultural practices. They are located at Spearfish, S. D., Leesport, N. Va., and Cortland, N. Y. The latter is operated cooperatively with Cornell University and the State of New York. Field headquarters are also maintained at Harvard and Stanford Universities and at the Universities of Maryland, Michigan, and Missouri, and at various other points.

The Service maintains various small craft chiefly attached to the biological stations for the conduct of its fishery, oceanographic, and limnological investigations. At Washington a highly specialized technical library of fifty thousand volumes is maintained; besides its facilities, an extensive loan system to field investigators is furnished by the other great libraries of Washington.

Scientific and technical work. - The work of the Service includes many branches of biology, physics, chemistry, and mathematics. Because of the highly specialized nature of the work, it is sometimes difficult to obtain adequate training in colleges.

In preparation for employment with the Division of Fishery Biology, it is recommended that undergraduate university training include a major in biology and in addition as much physics, chemistry, and mathematics as possible. The application of statistical methods to the study of the fisheries has made training in statistical work of utmost value to investigators.

Training in the Service. - The work affords an excellent opportunity for original research in fishery science and in many phases of fresh-water and marine biology, particularly embryology, ecology, physiology, limnology, and oceanography.

Mode of entrance. - All positions on the staff of the division are subject to the competitive requirements of the Civil Service rules and regulations. Only those candidates can be considered who have passed appropriate examinations and who are certified by the U. S. Civil Service Commission among the three highest eligibles on the register as vacancies arise.

Entrance salary. - All appointments are made at the entrance salary of the grade for which eligibles have qualified through the Civil Service examination. Promotions may be made without further examination. Advancement is made on the basis of the employee's ability insofar as permitted by salary appropriations.

Duties. - No definite statement can be made as to the specific nature of the duties of a particular grade or position prior to offer of appointment. Employees entering in the lower grades are required to serve under the direction of trained investigators until such time as they may be able and opportunity offers to carry on independent work.

Needs of service. - Due to the highly specialized nature of the methods employed in fishery research, the demand is always greatest for junior assistants, vacancies in the higher grades being filled by promotion, except where specific conditions require the employment of a more highly trained assistant.

Application. - Application to take an examination for any position must be made on standard forms as prescribed and issued by the Civil Service Commission.

Examination. - Written examinations for positions in the lower grades are held at intervals throughout the country in practically every city of considerable size. Applicants are rated on the basis of college training, practical experience, and thesis or publications. Persons who desire to be notified of the announcement of an examination for positions of any grade may place their names on file for that purpose with the U. S. Civil Service Commission, Washington, D. C.

Physical examination. - In view of the benefits granted employees under employees' compensation and retirement legislation, persons appointed will be required to pass a physical examination by a physician in the Federal Government before entering on duty. The importance of robust physical health of fishery investigators cannot be overemphasized. Field service in remote regions and at sea, frequently entailing exposure to the elements,

long hours, and other hardships, necessitates more than the usual physical stamina. While women are by no means excluded, the opportunities for employment in laboratory, clerical, or statistical work free from the exposure incident to field investigations, are naturally limited in number.

Temporary appointment. - A certain number of temporary appointments are made as the needs of the service require. Such appointments are made subject to the usual requirements of the Civil Service Commission for permanent employment. Since most of the investigations continue throughout the year, very few summer appointments are made. The Service's operations are conducted under a budget providing for fairly uniform maintenance of its work and staff throughout the year. Furthermore, most of the work requires a considerable amount of experience before it can be carried on independently. The time required from experienced members of the staff in instructing and supervising new appointees makes their employment for short periods uneconomical. In view of all these conditions, it is necessary to limit rather closely the number of summer appointments made.

Trial period. - All Civil Service appointees are required to serve a trial period of one year, after which time the appointment becomes permanent if the work and conduct of the employee have been satisfactory.

Qualifications required for entrance. - Aquatic Biologist, Grade 1: Graduation with a bachelor's degree from a college or university of recognized standing; a major must have been taken in some branch of biology.

Aquatic biologist, Grade 2: In addition to the preliminary requirements for the junior professional grade, applicants must have had at least two years of subsequent experience of a practical or professional character. One year of graduate work in biology with a recognized college or university may be substituted for one of the two years of required experience.

Aquatic Biologist, Grade 3: In addition to the preliminary requirements for the junior professional grade, applicants must have had at least three years of subsequent professional experience of a practical nature. Applicants may substitute one or more years of post-graduate work for each year of required experience, but in order to qualify entirely on the basis of academic work, the applicant must possess a doctor's degree.

Aquatic Biologist, Grade 4: In addition to meeting the preliminary requirements for the junior professional grade, applicants must show that they have had at least three years practical and professional experience subsequent to graduation. Training and experience must have been sufficient to demonstrate ability to perform highly specialized, independent, investigative work, and in addition, a capacity for administrative duties.

Higher professional grades: Vacancies in the higher professional grades are usually filled by promotion, and it is seldom necessary to make appointments in these classes.

Subprofessional grades: A limited number of persons are employed in the various grades of the biological aid series. These positions require that the appointee be a high school graduate with courses in biology and that he be familiar with the more important laboratory methods of biology and with simple laboratory equipment. Duties include the performance of simple, routine, technical tasks largely of a mechanical or manual nature involved in biological laboratory work or field operations, and to perform related work as assigned.

Grade	Descriptive Title	Entrance Salary	Grade	Descriptive Title	Entrance Salary
1	Aquatic Biologist	2,000	3	Biological Aid	1,440
2	" "	2,600	4	" "	1,620
3	" "	3,200	5	" "	1,800
4	" "	3,800	6	" "	2,000
5	" "	4,600			
6	" "	5,600			
7	" "	6,500			
8	" "	8,000			

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