

PART I	DEPARTMENT OF PERSONNEL SERVICES	5.111
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	for the	
	<u>FISHERY AID AND TECHNICIAN SERIES</u>	

This series includes all classes of positions which supervise or perform nonprofessional technical and specialized work in programs of management, conservation, development, utilization, and protection of aquatic resources, or in research functions related to such programs. Grade-controlling knowledge and skills are related to research, conservation, and management of fishery resources, or the determination, establishment and application of biological facts, methods, techniques and procedures necessary for research, conservation and management of fishes and other aquatic animals, such as crustaceans and mollusks.

This series includes all positions of technicians who assist professional aquatic biologists by performing related or supportive technical fishery work. The technician is characterized by his skill and practical knowledge usually acquired by experience and on-the-job training. The work requires application of (a) knowledge, methods and techniques of a limited range of fishery work; (b) practical knowledge of characteristics and limitations of established fishery practices and techniques; and (c) incidental, instrumental, laboratory or manual skills. This work does not require professional knowledge of the scientific theories and assumptions on which fishery techniques are based.

The grade levels of technicians are determined by application of the following two basic classification factors taken together:

1. Difficulty of assignments. This factor is reflected by the following elements:
 - a. type of tasks performed or steps taken, whether they are simple and repetitive or complex and varied.
 - b. knowledge and abilities required, whether a

Distinguishing Characteristics:

This is the entry level in the Fishery Aid and Technician series, and is limited to positions which are part of a career ladder to positions of higher level in the fishery support series. Thus, duties are assigned as part of a developmental process acquainting the incumbent with some of the processes, terminology and techniques of the various fishery research and management areas, by providing an opportunity to participate in a variety of operations at an elementary level. The work is performed under immediate and continual supervision; detailed instruction in work methods and procedures is provided, and review is made during all phases of work.

Examples of Duties:

Under close supervision, assists with such tasks as collecting, counting, and recording data on biological specimens on field trips, and data on physical, chemical and biological aspects of streams on various islands in limnological surveys; conducts interviews and creel censuses with fishermen; collects and transports aquatic animals to various locations throughout the State for experimental planting.

Performs simple, repetitive manual tasks such as cleaning and scrubbing aquaria and outdoor rearing tanks; grinding, mixing and/or otherwise processing certain proportions of ingredients to prepare fish food; caring for and feeding fishes and crustaceans; removing dead fishes from tanks; and washing boats, fishing gear and equipment after each use. May receive training in work typical of higher level fishery aid positions.

Knowledge and Abilities Required:

Knowledge of: Arithmetic.

Ability to: Follow oral and written instructions; learn to dive using self-contained underwater breathing apparatus; make simple field observations; keep simple records; make simple oral and written reports.

FISHERY AID II

5.113

Duties Summary:

Under close to general supervision, performs routine tasks in support of fishery research and management functions; and performs other duties as required.

Distinguishing Characteristics:

Positions at this level perform simple operations under close to general supervision and following prescribed procedures. The supervisor provides detailed instructions for accomplishing assignments; work is checked frequently in progress and upon completion. Work is characterized by learning to identify Hawaiian freshwater and marine fishes and to use the standard fishing methods such as spear fishing, hand lining, trapping, seining and netting, and to use self-contained underwater breathing apparatus. Guidelines exist in the form of policies and procedures, technical directives, handbooks, manuals, and manufacturers' catalogs.

Work assignments are of frequently recurring nature where detailed procedures are established. More independence in identifying aquatic life is expected to be exercised and marked deviations are referred to the biologist.

Person-to-person contacts are usually with fellow workers, except in the case of field positions requiring more contact with the public to answer questions regarding work being done.

The factors of originality and responsibility for commitments and decisions are not significant at this level.

Examples of Duties:

Assists in collecting biological specimens and weighing, measuring, and recording data on various species of fish, crustaceans and mollusks; engages in diving activities using SCUBA for the purpose of assisting in the enumeration of fish populations and making observations on fish habitats; assists in limnological surveys to collect data on physical, chemical and biological aspects of streams and other bodies of water on

various islands; assists in the conduct of fisherman interviews and creel censuses; assists in the collection and transportation of aquatic animals to various locations throughout the State for experimental planting; assists in the operation, maintenance and repair of certain aquarium equipment such as water pumps, air compressors, filters, tanks, pipes and valves; fabricates various types of gear used in the fishery program such as holding cages and nets, oyster spat collectors, fish tags, tagging plates, and clam-sifting sieves.

Knowledge and Abilities Required:

In addition to the knowledge and abilities required at the previous level, a practical knowledge of standard terminology, techniques, practices and equipment used in the area of fishery work assignments.

Must have the ability to carry out under general supervision, simple or routine tasks; begin to independently identify aquatic life and refer marked deviations to supervisor; and exercise some tact when in contact with the general public.

FISHERY TECHNICIAN III

5.115

Duties Summary:

Under general supervision, performs fairly complex sub-professional duties and/or supervises fishery aids in support of higher-level professional fishery activities; and performs other duties as required.

Distinguishing Characteristics:

Positions at this level are responsible for carrying out a sequence of standardized or prescribed operations requiring practical background knowledge of fishery research management methods and practices. Recurring routine technical problems are resolved on the basis of previous experience without reference to the supervisor; such work is reviewed on completion for technical adequacy. On problems involving unfamiliar conditions and methods, instructions are provided by the supervisor, and work is reviewed in progress and on completion for technical accuracy and adequacy.

Available guidelines are similar to those at previous levels. Work requires the exercise of judgment in interpreting and applying applicable portions of standard guides and related reference material.

Originality and judgment are required in determining the best of standard methods for accomplishing assignments, recognizing deviations in the behavior of aquatic animals, and recommending minor changes in methods and procedures.

Supervisory positions at this level are typically working supervisors, instructing and directing the work of fishery aids performing routine tasks typical of those levels.

Examples of Duties:

Performs a variety of tasks in accordance with established methods in propagating, rearing and feeding marine and freshwater fishes and animals; observes for unusual behavior and takes corrective actions; treats diseased fish when necessary in prescribed manner; prepares special fish diets for experimental purposes; cultures food organisms, such as brine shrimp and daphnia in special culture media; operates, maintains, repairs and fabricates experimental fishing gear, aquaria, hatchery equipment and accessories; makes work assignments, giving instructions as to work methods and procedures, and reviews work in progress and on completion for accuracy and adherence to instructions.

Knowledge and Abilities Required:

Knowledge of arithmetic as applied to area of assignment; Hawaiian freshwater and marine fishes; methods, practices, tools, equipment and supplies used in the operation and maintenance of aquaria, and standard fishing methods.

Must have ability to perform arithmetical computations; make accurate observations and maintain neat and accurate records; plan and direct the work of others; exercise tact; and deal effectively with others.

FISHERY TECHNICIAN IV

5.117

Duties Summary:

Under general supervision, performs a variety of complex, sub-professional duties in support of professional fishery activities; and/or supervises a small group of fishery aids and technicians; and performs other duties as required.

Distinguishing Characteristics:

Positions at this level require the ability to understand thoroughly the purposes, objectives and the requirements of entire projects--initial phase through completion. A variety of complex tasks are performed and successful performance depends on the required understanding of the problem area¹ which is based on extensive practical experience and knowledge involved. An example of an assignment at this level is that of a technician working on projects involving breeding, propagation and management studies of the development of a new fishery for Hawaii (e.g., commercial culture of the giant prawn).

Standard guides and related reference materials are required to be interpreted and adapted to meet new or unusual situations. Judgment and resourcefulness are required in applying a practical knowledge of biological concepts and processes to assignments in the solution of problems, in selection of the most appropriate guides, and in independent planning of details within established procedures. Responsibility includes improving, adapting, or developing techniques, procedures, equipment, etc.; and supplementing basic plans in ways that will further assigned

¹The term "problem area" refers to work within a broad area of biological investigation that is directed toward answering specific questions or achieving certain purposes, such as determining: the effects of temperature on the incubation and development of prawn eggs; the types and amounts of food required for maximum growth at the various stages of development; the salinity, pH, oxygen, free CO₂, and copper content of water in rearing tanks to insure survival of larval and juvenile prawns.

projects.

Personal work contacts are primarily with personnel within the organization, but may extend outside the agency, such as with cooperative private fish pond owners to discuss stocking, supplemental feeding and harvesting measures and recordation of pertinent biological and environmental data. Duties do not include making commitments. Participation with biologists in planning work involves contribution of productive ideas on uses of materials and methods.

Supervisory positions are typically working supervisors under the supervision of a higher-level fishery technician or professional aquatic biologist who furnishes technical and administrative direction, handles personnel management functions and spot-checks work of the group for accuracy, completeness and compliance with agency and departmental policies, regulations and objectives.

Examples of Duties:

Participates with supervisors in developing plans by suggesting (1) specific treatments to be incorporated in new studies; (2) modifications of treatments, methods or equipment; (3) changes in physical and chemical content of the water, feeding and harvesting and other details; carries out field and laboratory trials for approved plans; maintains favorable water conditions for rearing of breeders; selects gravid females for breeding purposes; observes egg development and manipulates culture medium for rearing larvae or to juvenile stages; establishes feeding regime, and stocks rearing ponds and selected rivers and streams throughout the State; observes distress symptoms resulting from unknown causes and initiates collection of data for the determination of the causes; supervises a small group of technicians and aids in rearing, feeding and treating marine and freshwater fishes and animals which are fairly well established or are considered to be moderately difficult to maintain; makes work assignments, giving instructions as to work methods and procedures; carries out and directs the enumeration of fish populations and observations of fish habitats, limnological surveys, creel censuses, etc.; reviews work in progress and on completion for accuracy and adherence to instructions.

Knowledge and Abilities Required:

In addition to the knowledge and abilities required at the next lower level, a good practical knowledge of biological principles and practices based on a background of sub-professional training and experience in the area of specialization; and a basic working knowledge of regulations, policies and procedures and sources of technical information.

Must have the ability to relate and apply knowledge of fishery techniques and practices to the solution of fishery problems; conduct tests and inspections of equipment, systems and materials; and compile and evaluate data and prepare reports.

FISHERY TECHNICIAN V

5.119

Duties Summary:

Supervises and works with a small group of fishery aids and technicians, some of whom are operating at the Fishery Technician IV level, in support of professional fishery functions; and performs other duties as required.

Distinguishing Characteristics:

Positions at this level perform supervisory duties irrespective of the area of specialization or assignment. Work is usually performed under the general administrative and technical supervision of a professional aquatic biologist. Assignments are given in terms of broad, general objectives with advice and assistance as needed on unusual, critical, or highly technical and theoretical problems, such as those requiring significant deviations from standard biological methods and practices, or where distinctly new criteria or techniques are involved. Methods employed are seldom reviewed; but review is made for technical adequacy, conformance to established policies and adherence to completion and cost schedules.

The same guides are available at this level as at preceding levels, and consist of pertinent regulatory material, established policies and procedures, technical directives, drawings, manufacturers' catalogs, and precedent situations.

Originality and judgment are required to organize, plan and guide the work efforts of subordinates, and to coordinate and integrate personnel management and technical functions of the organizational unit with those of other organizational units or functions.

Personal contacts are primarily to exchange information and coordinate the work of the unit with that of personnel in related activities. Some contacts are made with persons outside the agency such as product representatives and firms to exchange information, to consider recommendations for acceptable substitutes, and to promote adherence to State standards and requirements.

Examples of Duties:

Plans and directs the work of subordinate personnel engaged in specific projects to which established methods and techniques are directly applicable, or in subordinate segments of a broader, more complex project, for which guidance is provided as required; problems of a highly technical nature are referred to professional biologists; makes work assignments, outlines requirements, furnishes general instructions and determines priorities and work schedules; reviews work in progress and on completion for technical adequacy and accuracy, and coordinates the activities of the organizational segment with the professional fishery functions of the department; performs such personnel management functions as training new employees, evaluating work performance, approving leaves, recommending personnel actions and handling disciplinary problems; may perform the more difficult and technical duties of the unit; prepares management reports and correspondence.

Knowledge and Abilities Required:

In addition to the knowledge and abilities required at previous levels, a thorough knowledge of regulatory material, established procedures and policies; pertinent precedents and sources of information related to area of assignment; and principles and practices of supervision.

Must have the ability to visualize objectives and analyze problems; independently locate, select and apply established guides, choosing the best course of action where there are several alternatives; recognize limitations of established guides

and seek guidance from professional biologists as needed; plan, coordinate, evaluate and review the work of lower-level sub-professional personnel and prepare reports and correspondence.