

**Biological Science Technician (Fisheries),  
GS-404-7**

**INTRODUCTION**

The incumbent of this position assists one or more professional biologists in completing all phases of a fishery biological study or project of significant scope and duration (generally one year or more) including: project planning, logistical arrangements, field work, correlation and analysis of data, and completion of reports or other documents related to the project. Typical, but not all inclusive duties of the position are illustrated by performance of the following:

**MAJOR DUTIES**

The employee assists in the planning and conducts biological surveys of waters for the conservation and rehabilitation of the fishery resources on Federal land areas, Indian reservations, treaty-ceded territories, etc. Assists in planning multifaceted fisheries studies by contributing ideas, determining research methods, establishing practical procedures for accomplishing and reporting the work and determining other needs, such as costs, equipment and personnel.

Conducts surveillance to detect new colonization by aquatic nuisance species. Assists in planning the operation of aquatic nuisance species control, and working with cooperators to monitor aquatic nuisance species and impacts on vulnerable native species.

Assists biologists in studying and preparing reports on developmental proposals of local, state, and Federal government organizations engaged in designing and constructing such structures as roads, bridges, dams, irrigation systems, and water treatment facilities to determine long term effects on fish and/or other wildlife. Uses specialized techniques and methods to collect biological and water resources data from field investigations and reports findings to determine actual and potential impact on fishery and/or wildlife resources from water development projects, wetland restoration projects or habitat improvement projects on private lands.

Work includes locating, capturing, censusing, marking and tagging fish.

Employee develops and uses automated databases to enter, organize and perform preliminary analysis of collected field data, using standard statistical methods in preparation of fisheries reports. Enters and retrieves data from geographic information systems and/or other information management systems

Employee may also prepare segments of recurring reports such as monthly activities and progress reports on individual projects, as assigned

Employee will operate a variety of field equipment commonly used in fishery studies, including small watercraft, fish sampling gear (such as trawls, gillnets, fyke nets and electrofishing equipment from boats 16 to 22 feet in length.) generators, cars and trucks, and cameras.

Provides work direction and guidance to lower graded technicians, volunteers, or YCC enrollees in gathering field data, including safe handling of tools and operation of motorized vehicles and water craft.

May conduct outreach and provides information on fish and wildlife resources and the Fish and Wildlife Service to groups and individuals. Assists in preparing drafts of news releases for area media, and presenting informational or educational programs to individuals, local organizations, and schools.

## FACTORS

### 1. Knowledge Required by the Position

750 POINTS

Technical knowledge of principles, practices and terminology related to fishery biology and fisheries management and a working familiarity with related disciplines.

Practical knowledge of agricultural and construction practices in order to recognize probable effects on and/or relationship to fishery/wildlife resources.

Knowledge of FWS laws, and regulations, and polices pertaining to the protection of fish and their habitat.

Knowledge of basic statistical analysis methods.

Ability to use computer technology to maintain and retrieve information from automated data systems, develop spreadsheets, and use word processing and statistical software programs in order to develop reports.

Ability to capture, handle, and tag or collar species of fish studied.

Familiarity with geographic information system..

Ability to communicate orally in order to meet and deal effectively with peoples of different backgrounds including representatives of state, Federal, Tribal resource agencies and private agencies and organizations.

Ability to operate cars, trucks, small watercraft, and equipment used for isheries studies such as electrofishing gear, fish sampling and limnological equipment for open water systems.

Ability to collect scales and otoliths from fish and use standard laboratory techniques for aging samples collected.

Knowledge of Service safety guidelines, including boat safety.

### 2. Supervisory Controls

275 POINTS

For work previously performed by the unit and covered by precedent, the supervisor defines direction on priorities, objectives, and deadlines. The supervisor is available to assist with new or unusual assignments.

The employee identifies work to be done to fulfill project objectives, plans and carries out the procedural and technical steps required, coordinates with outside parties, and turns in a completed product. The employee exercises initiative in resolving problems and deviations in assignments.

Employee keeps the supervisor informed on progress and advises when controversial matters develop.

Completed work is reviewed to verify that deadlines were met, solutions were found to problems encountered, Service policies and accepted scientific practices were followed, and the work was complete and technically sound.

### 3. Guidelines

125 POINTS

General guidelines are available in the form of approved project plans, scientific publications, management reports, standard textbooks, results of previous projects, and memoranda. Administrative and technical guidelines include the Fish and Wildlife Service Manual and Employee's Handbook, Annual Work Plan Advices, Federal and State law, practices and techniques common to the biological field, and standard scientific or technical texts.

Selection of the proper guidelines requires considerable familiarity with the reference. Guidelines once identified, require careful study and interpretation as they relate to current conditions/situation and experience.

The incumbent exercises judgment in applying the guidelines and recognizing when to deviate from them. Incumbent often works in isolated situations and must be capable of adapting guidelines, within the original intent, to new and unusual situations. Incumbent reports problems in the guidelines and advises supervisor as to methods used to correct them.

### 4. Complexity

150 POINTS

The incumbent will be involved in a variety of technical and administrative activities which involve unrelated processes and methods. There are a number of possible courses for planning and execution of the work and the employee is given leeway in choosing among them and in making suggestions for improvement of methods and techniques. . Suggested approaches are provided on unfamiliar problems and difficult assignments. Judgement is required in applying a wide range of conventional, established approaches, methods, techniques, and solutions to new situations.

A moderate to high degree of precision is involved in performing the work. Field work may be performed at remote locations. Circumstances that cannot be foreseen may affect the project and require adaption of the activities to compensate for field conditions. The incumbent will often be working without direct supervision and may need to deviate from standard practices to accommodate specific difficulties. While working on field assignments, the incumbent will need to report to the station supervisor only if conditions exist that jeopardize the stated objectives or the safety of the employees.

The incumbent must setup, and operate instruments and equipment, e.g., fish sampling gear, including identifying and correcting malfunctions required to perform biological surveys and studies. Accuracy and attention to detail are imperative in selection and executing the proper methods and task sequences for completing the assigned work.

## 5. Scope and Effect

150 POINTS

The work involves applying conventional technical and administrative solutions and practices to a variety of problems. The employee insures that established operations criteria, rules, or methods are adhered to in a field production environment. The analyses of biological data collected affects the adequacy of long range work plans, other field investigations, or study conclusions.

Results of incumbent's work are broad in scope and affect directly the immediate and long-range fishery activities over a large area. In carrying out assignments, the incumbent is at times required to make recommendations of considerable importance to the fishery management program.

The studies carried out have the potential for influencing other agency activities and the activities of water project development agencies.

## 6. Personal Contacts And Purpose of Contacts

75 POINTS

The employee's primary contacts are with other Service employees from various organizational levels, farmers, state employees, members of conservation and education groups, other Federal, State, Tribal, local officials and the general public. The employee develops and maintains working relationships with the offices and respective representatives of project planning agencies, state fish and game departments, and other Federal, state, local, and private organizations.

Contacts are to obtain or exchange information of a factual nature, plan and coordinate work efforts, discuss assignment problems and results, and provide information to the public who are interested in results of various ongoing studies specific projects or programs i.e., aquatic species control program, wetland restorations, restoration of native fishes, etc.

## 8. Physical Demands

20 POINTS

The work requires physical exertion such as regular and recurring walking or climbing over wet, rough, uneven, or rocky surfaces; bending; crouching, stooping, lifting or reaching to observe, collect, or record field data. The duration of such physical activity might be for most of the work day. Work may also require carrying objects weighing up to 50 pounds.

## 9. Work Environment

20 POINTS

On a regular or recurring basis works indoors and out. Exposure to adverse weather conditions or weather extremes such as cold, dampness, humidity and insects are often encountered in the performance of the outdoor work. Safety precautions and protective clothing or gear are required when working around water, and with chemicals and equipment.

### Conditions of Employment

Must possess a valid State drivers license.

Boat safety training

A condition of employment is the wearing of the official U.S. Fish and Wildlife Service uniform in a manner prescribed in Part 041 of the Fish and Wildlife Service Manual.