
CERTIFICATION TABLE OF CONTENTS

DEFINITIONS	64
POLICY AND PROGRAM OBJECTIVES	65
AUTHORITIES	65
RELATIONSHIP TO OTHER GUIDANCE	65
PROGRAM GUIDANCE	66
I. Certification Standards for Natural Resource Management Personnel and NPS and Cooperating Researchers	66
ROLES AND RESPONSIBILITIES	71
I. Park	71
II. Region	72
III. Washington Office	72

CERTIFICATION

The purpose of this section is to delineate programs for which certification is required and/or is available for NPS natural resource management personnel, NPS and cooperating researchers and scientists, and other NPS personnel involved in natural resource management or resource protection activities or involved in specialty fields. Certification requirements are outlined for the following fields related to natural resources management: firearms use, chemical immobilization, pesticide application, wildland fire, SCUBA, aircraft use, and operation of boats. Certification in first aid is referenced in Relationship to Other Guidance, below.

DEFINITIONS

Aircraft Light or heavy, single, or multi-engine airplanes and helicopters.

Certification Receiving documentation stating that one has completed minimum requirements and/or training to practice a field of work.

Controlled substance A drug or other substance or immediate precursor included in Schedules I, II, III, IV, or V, or Part B of the Controlled Substance Act (21 USC 812).

Firearms Any pistol, rifle, shotgun, or other weapon that is designed to, or may be readily converted to, expel a projectile by the ignition of a propellant, compressed gas, or spring-powered pistol or rifle, bow and arrow, or crossbow, including capture and immobilization weapons and net-guns used in the restraint and capture of wildlife. Paint pistols or rifles (designed to expel paint pellets using compressed gas or by the ignition of a propellant) are not to be defined as firearms/weapons.

First aid The provision of emergency medical care administered to sustain a patient until advanced life support is available.

Immobilization agent Any substance that demonstrates the ability to tranquilize, immobilize, anesthetize, paralyze, or sedate any species of invertebrate or vertebrate animal.

Pesticide Any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any defined pest, or intended for use as a plant regulator, defoliator, or desiccant.

Practitioner A physician, dentist, veterinarian, scientific investigator, pharmacy, hospital, or other person licensed, registered, or otherwise permitted in the U.S. or the jurisdiction in which such a person practices to distribute or possess a controlled substance in the course of professional practice.

SCUBA An underwater diving mode independent of surface air supply in which the diver uses open circuit self-contained underwater breathing apparatus.

Sterilization agent Any substance (as opposed to a surgical procedure) that has been demonstrated to effectively render plants or animals incapable of successfully producing offspring, either temporarily or permanently.

POLICY AND PROGRAM OBJECTIVES

The National Park Service encourages employees involved in natural resource management to maintain the highest standard of training and performance in all their fields of endeavor. The basis for certification is to ensure that personnel are adequately trained in specialty fields, and that there is a recognizable **minimum** level of training and performance to be expected from each participant in those fields. It is not implied that all resource managers should attain certification in each of these fields; however, if resource management staff perform duties in fields where there are required certification standards they must obtain and maintain qualification commensurate with those standards. In many fields, standards relating to resource management application are specified in other guidelines; these are herein referenced and must be adhered to by all NPS personnel.

Professional certification is offered by scientific societies in various scientific disciplines (e.g., fishery biology, forestry, ecology, etc.). It is occasionally useful regarding NPS testimony in litigation proceedings and is generally taken as evidence of an employee's competence and professional growth.

AUTHORITIES

Specific authorities supporting certification requirements in fields that pertain to natural resource management include 29 CFR Part 1960 and Executive Order 11752 (Pesticide Application Program); Departmental Manual 910 (Wildfire Suppression); DEA Regulation 21 CFR 1301.71 to 1301.75, 21 CFR 1304, and 36 CFR 2.35 (Use of Chemical Immobilization Agents that are Controlled Substances); 41 CFR 114-38.5508 (Watercraft Training), and Departmental Manual 350-354 (Aviation Management). In addition, the Hazardous Waste Operations and Emergency Response rule (29 CFR 1910.120), issued by the Occupational Safety and Health Administration, requires that persons that handle hazardous waste, including oil spills, receive appropriate training based upon their area and level of responsibility.

RELATIONSHIP TO OTHER GUIDANCE

Other guidelines that pertain to certification programs include NPS-4, the Diving Management guideline; NPS-9, the Law Enforcement guideline; NPS-18, the Fire Management guideline; NPS-51, the Emergency Medical Services guideline; NPS-44, the Personal Property Management guideline; Special Directive 88-2, First Aid and CPR Certification Requirements; NPS-60, the Aviation Management guideline; and DM 350-354, Aviation Management.

See also in this Guideline, Chapter 2, Native Animal Management, Integrated Pest Management, and Fire Management; and Chapter 5, Employee Development and Training.

PROGRAM GUIDANCE

I. Certification Standards for Natural Resource Management Personnel and NPS and Cooperating Researchers

A. Aircraft

Resource management personnel often need to use aircraft to perform their duties, whether it be for fire monitoring and management, aerial surveys of wildlife, mapping, radio-telemetry, animal capture, or pesticide application. The Department of the Interior has established an Office of Aircraft Services (OAS) that is responsible for aviation safety in the agency. The primary objective is the elimination of risks associated with the use of aircraft in the execution of Interior programs.

All NPS units and their resource management staff must comply with regulations and training standards documented in DM 350-354 and the associated OAS Operational Procedures Memorandum. Aircraft, pilots, observers, and gunners must comply with certification, qualifications, and training specified in DM 350 and in NPS-60, the Aviation Management guideline.

B. SCUBA

NPS units with suitable aquatic resources may have diving management programs, either for visitors or staff or both. Dives undertaken by employees, regardless of their purpose, must be conducted in a manner most likely to minimize accidental injury or occupational illness.

NPS-4, the Diving Management guideline, specifies that each affected unit have a diving safety plan and also maintain a list of qualified divers on the staff. Training and certification requirements for divers are specified and outlined in NPS-4.

C. Boating

In NPS units using and operating boats, **minimum** training and certification requirements consist of either:

1. completion of the U.S. Coast Guard Basic Seamanship Course, or
2. completion of the U.S. Power Squadron Course, or
3. completion of a 40-hour equivalent boating course.

Superintendents may require additional training for the operation of boats in their respective units.

D. Pesticides

NPS personnel may need to apply pesticides in the course of solving park pest management concerns. NPS policy (Management Policies 4:14) states that pesticides will be used only where feasible alternatives are not available or acceptable, and that, regardless of who the applicator is, all use shall be approved by the Director on an annual basis. It is Department policy to use pest management research, control, education, and assistance programs to develop, support, and adopt integrated pest management (IPM) strategies.

Resource management personnel involved in IPM programs and application must be qualified as, or supervised by, a certified pesticide applicator. See Chapter 2, Integrated Pest Management, for details on certification of pesticide applicators.

E. Wildland Fire

NPS units are required to have fire management plans that outline resource objectives of that unit through preventing human-caused wildfire, minimizing negative impacts from wildfires that occur, and guiding the use of prescribed fire in a manner that minimizes risk to the lives and property of employees, visitors, and park neighbors. To accomplish fire management objectives requires the use of personnel trained and certified according to the National Interagency Incident Management System (NIIMS). The NPS Wildland Fire Qualification System provides and certifies NPS employees with training and experience to fill positions in the Incident Command System.

Specific training and certification requirements for suppression fire management positions are detailed in NIIMS Publication 310-1, Wildland Fire Qualification Guide, as enhanced by NPS. Each park must determine and document its position needs and schedule training as required for personnel to meet the NIIMS and NPS qualifications. For example, if a resource management specialist is also designated as a prescribed burn boss, then the resource management specialist must be qualified and trained to meet the NPS standard for that fire position.

Regional and park managers may require additional training and certification for personnel involved in wildland fire duties.

F. Firearms and Ammunition

Within the natural resource management program employees may be required to use firearms as a tool during official management activities such as live capture, destruction, sterilization, marking, or other wildlife activities; or for the general safety of the resource manager. In fulfilling these resource obligations requiring the use of a firearm, employees must keep visitor and employee safety paramount. The wearing, carrying, using, and protection of firearms placed in an employee's care is a tremendous responsibility. In addition, the employee and the NPS are liable for any misuse of a firearm, for whatever reason (accidental discharge, lack of training, inexperience, etc.). Considering the hazards and the potential element of danger inherent in the use of firearms, all

persons engaged in natural resource management activities requiring the use of a firearm must be properly trained, qualified, and equipped. This includes the use of capture and immobilization weapons used in the course of research or management activities within any unit of the System. These standards apply to all persons operating or using weapons (firearms) in any unit of the System, including volunteers, students, state wildlife wardens, scientists, or other cooperative employees sanctioned to work within the park.

These standards should be considered **minimum standards**. Superintendents are encouraged to establish and require stricter training and qualifications tailored to the specific needs of the park.

1. Acquisition and Storage

The acquisition and storage of firearms and ammunition must be in accordance with regulations and requirements set forth in NPS-44, the Personal Property Management guideline. The types and calibers of firearms and special capture/restraint firearms to be acquired and maintained must be determined by the superintendent and approved by the Regional Director.

2. Training

The NPS requires firearms training for all employees authorized to possess or use firearms in the performance of their natural resource management duties. The training, however, must be relevant to each employee's assignment and duties and must include training in all types of firearms assigned to or to be used by the employee.

Firearms training must include safety, marksmanship, maintenance, storage, performance, limitations of capture and restraint firearms, accountability and control, security, and preservation measures. An appropriate amount of time should be scheduled to cover these subjects prior to qualification. The classroom portion of the training involving capture/restraint firearms may be taught by any person with the knowledge, skill, and experience to cover the subject matter adequately.

3. Qualification

All employees whose duties require the use of firearms must qualify at a **minimum** semi-annually with the type of firearm(s) to be used. Seasonals, temporaries, and cooperators appointed for less than 6 months need only qualify annually. If a firearm is to be used under reduced light conditions, qualifications shall include an additional reduced light course. Qualification standards for firearms have not been established except for law enforcement duties. Specific qualifications for firearms, excluding law enforcement, is delegated to the superintendent. Superintendents, in consultation with the park's firearms officer and wildlife program manager, must establish approved courses of fire for qualification with firearms. For firearms other than the special capture/restraint weapons, it is recommended that the **minimum** course of qualification be identical to the requirements of NPS-9, the Law Enforcement guideline. Minimum standards for the special capture/restraint firearms qualification course focus on the weapons (CO₂, compressed gas, pow-

der/cartridge detonator) used in these activities; and will vary depending on the special weapon being used. Superintendents are delegated authority to establish minimum qualification courses of firearms.

Since capture/restraint firearms and immobilization drugs should never be used in emergency situations and because of the extreme danger from accidental injections to humans, it is inappropriate for the loading of drugs to be included in the qualification course. The selection of the proper drug dosage, syringe size, and powder charge or rifle setting should be covered in the chemical immobilization training.

G. Chemical Immobilization and Sterilization Agents

1. General Information

NPS resource management and research programs may necessitate the use of chemical immobilization and/or sterilization agents to accomplish wildlife research or management objectives. Only accepted methods and techniques to capture, restrain, or handle wildlife, with the utmost emphasis on the humane treatment and welfare of both the animal and humans present are to be used.

Chemical substances should not be viewed as the only means for the capture and/or restraint of wildlife, but only as one tool that may be used to accomplish park purposes. Chemical substances and the methods used to administer them require highly specialized training and care. Almost all of these substances are regulated by other federal agencies. The Drug Enforcement Administration (DEA) regulates the use of controlled substances. The Food and Drug Administration (FDA) regulates the use of drugs in terms of their safety, efficacy, and effect on domestic and wild animals that may be consumed.

Many immobilization agents that have been and are currently used to immobilize/restrain wildlife have not been either tested or approved by FDA. However, in general they allow the judicious use of these chemical substances to immobilize or restrain wildlife when done by professionals in wildlife management. Each park should set the highest standards of training, qualification, and certification in the use of chemical substances for wildlife management programs.

2. Training and Program Standards

All NPS personnel and cooperators engaged in any activity that involves the use or the administration of chemical immobilization or sterilization agents must have documented **minimum** training standards. Completion of required training does not qualify or certify an employee or individual to use/administer chemical substances. Superintendents or their designated representative are responsible for the certification of employees or cooperators within their park. Superintendents are encouraged to establish stricter and/or additional training and qualification standards tailored to their particular needs.

Sterilizing agents and/or experimental drugs are regulated by 21 CFR 511ff, and allowed only after New Animal Drugs for Investigational Use (INAD) permits have been issued by the FDA. These agents should be used only by accredited researchers following approved research protocols. Requests for INAD permits should be directed to:

Center for Veterinary Medicine
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

3. Minimum Training Standards

Each park that has a need to use chemical immobilization or sterilization agents for wildlife research or management must develop an operational plan for such a program. NPS staff or cooperative personnel involved in such wildlife research or management programs must at a minimum attend and complete or document that they have the following training:

- a. 8 hours classroom training in drug pharmacology, symptomology, wildlife response, animal safety, monitoring;
- b. 2 hours ethics, public relations, record-keeping, and NPS policy;
- c. current CPR certification;
- d. 2 hours human safety and emergency procedures;
- e. 4 hours loading of darts, dosage calculation, handling and storage of drugs, equipment familiarization, and trouble shooting; and
- f. 8 hours of supervised field captures/immobilization.

The NPS Firearms-Chemical Immobilization training course provides an individual with the necessary **minimum** training requirements. Other training programs similar in nature may be sponsored by parks, regions, colleges, or other state and federal agencies to meet the above requirements.

Each park with a need to obtain, store, and/or use controlled substances must obtain a Park Practitioner License from DEA and designate a park practitioner. Requirements for obtaining the Park Practitioner's License are:

- a. The park must have an operational plan stating the objectives of such a program and its methodology and setting forth a training and certification program for the use of any scheduled or unscheduled drugs.

-
- b. The training and certification program must, at a minimum, require a person to have:
 - 1) 8 hours formal training in drug physiology, wildlife response, symptomology, and monitoring, and
 - 2) at least 16 hours of on-the-job training in preparation, administration, and recovery patterns of immobilization drugs.
 - c. Such person can, upon proof of having met the qualifications, be certified by the superintendent as a "practitioner," within the language of 36 CFR, subject to all other federal and state laws, regulations, and requirements.
 - d. The park must acquire a storage safe meeting the requirements of DEA's regulation 21 CFR 1301.71 to 1301.75 and must agree to fully comply with such licensing, recordkeeping, and storage requirements as might be imposed by DEA's regulations, found at 21 CFR 1304.

The park practitioner is responsible for the acquisition, storage, dispensing, and security of all controlled and uncontrolled substances used for wildlife chemical immobilization programs as well as all records relating to the use and inventory of these substances.

The park practitioner must not obtain, transfer, or dispense chemical immobilizing or sterilizing agents to unqualified park or cooperative personnel. Cooperators and/or contract personnel may be responsible for obtaining, securing, and using their own supplies of chemical immobilizing or sterilizing agents, in accordance with federal and state laws, DEA and NPS regulations, and 36 CFR 2.35. They must comply with NPS and park standards, procedures, and training requirements when working under the auspices of park research or management programs.

ROLES AND RESPONSIBILITIES

I. Park

The primary role of the **superintendent** is to ensure that guidelines are incorporated programmatically into park operations, and that staff are held accountable for complying with all standards and guidelines set by the Service for the benefit of all operations. Except where otherwise established, the superintendent is responsible for certifying his or her personnel as qualified to perform duties for which a training standard and/or certification is available.

The primary role of the **resource manager** is to plan and carry out needed natural resource management programs in a safe and effective manner. With regard to certification and training requirements guidelines, the resource manager's role is to acquire this training and/or these certifications for himself and those working under his supervision.

II. Region

Regional office program managers ensure that programs planned or supervised from the regional office use trained and certified employees to carry out resource management programs. **Regional Directors** ensure that standards are uniformly applied to all parks within their region, and that training funds and courses are available commensurate with the demands and needs for training and certification of personnel.

III. Washington Office

Washington Office program managers support the uniform application of standards and provision of training courses to meet the needs and demands of all field units. They should maintain an inventory of personnel who meet various certification qualifications in resource management and specialty fields, and further work toward increasing the overall training and qualifications of resource management personnel in the Service. Except where otherwise established, they do not directly certify personnel as qualified in various fields of specialty.

The Washington Office **Directorate** provides an atmosphere in which the various regions and parks are encouraged to adopt uniform standards and certification where appropriate, and ensures that training courses and funds are available commensurate with training requirements, needs, and demands. Required Servicewide training and certification requirements should not be implemented without considerable input from field units. They should emphasize the Servicewide benefits that may be gained by standardizing personnel requirements in resource management and specialty fields.