

U.S. Fish and Wildlife Service (Service) and New Jersey Endangered and Nongame Species Program (ENSP) Minimum Criteria to Be Recognized as a Qualified Surveyor for the Federally Listed (Threatened) Bog Turtle (*Clemmys muhlenbergii*) in New Jersey

Education:

- Secondary education (BS, BA, MS, MA, or Ph.D.) in one of the biological sciences preferred.

Ability to find bog turtles:

- Surveyor has independently found at least 20 bog turtles in at least 5 different sites within the past 5 years (or 100 bog turtles in the past 20 years) using Phase 2 survey techniques. The term “site” refers to a discrete wetland occupied by bog turtles. This level of field experience (*i.e.*, 20 bog turtles found at 5 sites over the past 5 years) should be maintained at all times to ensure surveyor is maintaining search skills.
- Bog turtles found dead (*e.g.*, dead-on-road), found live crossing roads, in traps or using radio telemetry equipment do not count toward this criterion.

Experience conducting surveys using bog turtle survey protocols:

- Must have at least two field seasons of conducting bog turtle survey work. A field season is defined as at least 20 working days during the active season of the bog turtle (*i.e.*, April – September).
- **Phase 1 Range-wide** – Within the past 5 years, surveyor has participated in at least ten Phase 1 surveys (including any surveys in New Jersey), accurately determining whether or not potential bog turtle habitat was present.
- **Phase 1 New Jersey** – Surveyor has participated in at least two Phase 1 surveys in northern New Jersey (Sussex, Passaic, Morris, Warren, Hunterdon, Union, Somerset, Middlesex, and Mercer Counties) and at least two Phase 1 surveys in southern New Jersey (Monmouth, Ocean, Burlington, Camden, Gloucester, Salem, Cumberland, Atlantic, and Cape May Counties).
- **Phase 2** – Within the past 5 years, surveyor has conducted at least five Phase 2 surveys in the capacity of principal investigator or, if new to the list, at least ten Phase 2 surveys as an assistant.

Written communication:

- Demonstrated ability to produce professional quality, accurate, comprehensive, well-organized written documents, such as survey reports, master’s thesis, or professional manuscripts. *Writing sample required as part of the agency review process.*

Ethics. Surveyors are expected to:

- Have current permits to conduct surveys in New Jersey and other States where they are working.
- Follow all provisions of State Scientific Collecting Permits.
- Ensure proper care and handling of turtles.
- Contact ENSP and the Service immediately (by close of business day) if a turtle is killed or injured.
- Survey only those bog turtle sites requested or approved by ENSP and/or the Service.
- Maintain the confidentiality of bog turtle sites.
- Report bog turtle findings to the Service and the ENSP within 48 hours.
- Maintain field notes documenting their work and provide copies of field notes upon request.
- Obtain landowner permission before accessing land.
- Conduct surveys and studies in a manner that ensures the safety of bog turtles.
- Refrain from removing any turtles from the field or holding them in captivity unless specifically authorized by a Scientific Collecting Permit.