

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.

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

1. Current contact information including mailing and electronic mail addresses and telephone and fax numbers.
2. Consent for the Service to post the list with your contact information on our web site.
3. A point-by-point assessment that you meet the minimum criteria.
(<http://www.fws.gov/northeast/njfieldoffice/pdf/BogTurtleSurveyorCriteriaNJ.pdf>)
4. A current CV or resume summarizing education and work experience.
5. Your reason for wanting to be on the bog turtle surveyor list.
6. A log of bog turtles you have personally found using Phase 2 methods, with representative photos of turtles and site descriptions (see attached template).
7. A detailed description of your field experience with bog turtles and their habitat (see attached Phase I and II templates).
8. A writing sample.
9. At least two references including at least one not currently affiliated with your current employer, mailed directly from the references and/or names and contact information (e-mail preferred) for references. (Staff from ENSP and the Service's New Jersey Field Office will not serve as references for inclusion on the New Jersey list.)
10. A signed statement of adherence to the ethics standards that are listed on the criteria
(<http://www.fws.gov/northeast/njfieldoffice/pdf/BogTurtleSurveyorCriteriaNJ.pdf>)

The above information can be submitted at any time to:

Jeremy Markuson, Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
New Jersey Field Office
4 East Jimmie Leeds Road, Unit 4
Galloway, New Jersey 08205
phone: (609) 382-5266 fax: (609) 646-0352
jeremy_markuson@fws.gov

Recognized, qualified surveyors are responsible for submitting documentation to the Service by December 31 of each year to verify that they continue to meet all the minimum criteria for New Jersey.

Both new and previously recognized surveyors can obtain additional bog turtle experience by volunteering for the New Jersey Wildlife Conservation Corps (<http://www.state.nj.us/dep/fgw/wcchome.htm>). In order to minimize impacts to bog turtle habitat and generate information useful to bog turtle recovery, please coordinate all non-contract (*i.e.*, not project related) bog turtle surveys with Brian Zarate at the ENSP (brian.zarate@dep.state.nj.us). A Scientific Collecting Permit from the New Jersey Division of Fish and Wildlife is required to handle bog turtles. Bog turtle locations disclosed in the course of contract or volunteer work must be kept strictly confidential, and all ethical standards upheld at all times.

