
**RECOMMENDED COORDINATION PROCEDURES FOR
BOG TURTLE SURVEYS IN NEW JERSEY
May 2009**

Bog turtles (*Clemmys muhlenbergii*) may be assumed present and surveys are likely unnecessary if the wetlands in question are known to support bog turtles (according to the State Landscape Project mapping and/or correspondence from the New Jersey Department of Environmental Protection [NJDEP] or the U.S. Fish and Wildlife Service [Service]), or are contiguous with an area known to support bog turtles. Contact the Service to develop appropriate site-specific conservation measures prior to any activities that may affect¹ bog turtles or their habitat; see the document *Bog Turtle Conservation Zones* for more information and examples of activities that may affect this species. The Service will work cooperatively with project proponents to determine the need for consultation under Section 7 of the Endangered Species Act (ESA), or a Habitat Conservation Plan under Section 10 of the ESA.

Some areas of New Jersey have not been thoroughly surveyed for endangered and threatened species. If present in the action area² of a proposed activity, bog turtles could be adversely affected by any impacts to wetlands (temporary or permanent, direct or indirect) including clearing, filling, draining, shading, and changes in erosion, sedimentation, water quality, or surface or groundwater hydrology. Therefore, the Service or the NJDEP may request surveys to determine the presence or absence of suitable habitat and/or bog turtles. This document provides recommended procedures for coordinating survey efforts with the Service to ensure reliable results.

1. A Phase 1 (habitat) survey may be requested to determine the presence or absence of suitable habitat within the action area if scrub/shrub or emergent wetlands may be directly or indirectly affected by a proposed activity. Phase 1 surveys should be performed in accordance with the Service's *Guidelines for Bog Turtle Surveys* by a recognized, qualified surveyor (a list of recognized, qualified surveyors is available from the Service). Surveyors must avoid stepping on the tops of hummocks because this can destroy turtle nests and eggs. The results of any survey, whether showing presence or absence of bog turtle habitat, must be forwarded to the Service for review; please include photographs and the relevant qualifications of all members of the survey team.

Phase 1 surveys may be performed prior to initiating coordination with the Service. However, Service review of a draft Phase 1 survey work plan is recommended if (a) scrub/shrub or emergent wetlands in the action area exceed two acres, extend off the project site, or include atypical cover types or hydrologic conditions (*e.g.*, invasive or woody vegetation, mainly surface water hydrologic sources); (b) the full extent of the action area is not clear; and/or (c) the survey team does not include a recognized, qualified surveyor.

2. Upon submission of a negative Phase 1 survey finding (*i.e.*, no suitable habitat within the action area), no activities should proceed that may affect the wetlands in question until the Service concurs in writing (usually within 30 days).

¹ "May affect" is a preliminary determination when a proposed action may pose any effects, adverse or beneficial, on listed species. When a "may affect" situation exists, further coordination with the Service is needed to determine the need for consultation under Section 7 or a Habitat Conservation Plan under Section 10 of the ESA.

² The "action area" includes all areas to be affected directly or indirectly by a proposed action, not merely the immediate area ("footprint") involved in the action.

3. Submission of a positive Phase 1 survey finding (*i.e.*, suitable habitat within the action area) should be accompanied by either:

- indication of the project proponent's desire to assume bog turtles are present and develop necessary conservation measures in cooperation with the Service,

OR

- a draft work plan for a Phase 2 (visual) survey to determine the presence or absence of bog turtles.

The draft Phase 2 survey work plan should include:

- name(s) of the recognized, qualified surveyor(s) and proposed role of such individual(s) in personally overseeing the survey effort;
- relevant qualifications of all members of the survey team, including valid Scientific Collecting Permits for bog turtles (recognized, qualified surveyors DO NOT need to resubmit a full resume or CV);
- estimated survey dates, hours, and methods consistent with the Service's *Guidelines for Bog Turtle Surveys*;
- a map showing the locations and acreages of the action area, the Phase 1 survey area, the total area of suitable habitat (on and off the project site), and the proposed Phase 2 survey area;
- a proposal for handling any contiguous, suitable habitat that extends off the project site; and
- indication if a Phase 3 (trapping) effort may be necessary due to the size or characteristics of the habitat, proximity to a known site, and/or the presence of inaccessible habitat extending off the project site.

Phase 2 surveys may commence prior to receiving Service concurrence with the draft survey work plan (usually issued within 30 days) ONLY IF:

- proceeding with a Phase 2 survey is necessary to meet the survey windows in the Service's *Guidelines for Bog Turtle Surveys*;
- the Phase 2 survey will be personally overseen by a recognized, qualified surveyor and performed in accordance with the Service's *Guidelines for Bog Turtle Surveys*;
- the survey area is two acres or less;
- all suitable habitat extending off the project site is included in the survey area; and
- no need for a Phase 3 (trapping) survey is anticipated.

4. No Phase 3 (trapping) effort should commence until the Service has concurred in writing with a draft survey work plan. The Service may be contacted for draft trapping guidance. Phase 2 and 3 survey work plans should be submitted concurrently for Service review if visual and trapping efforts may be carried out during the same field season.

The draft Phase 3 survey work plan should include:

- reasons why trapping is or may be necessary;
- name(s) of the recognized, qualified surveyor(s) and proposed role of such individual(s) in personally overseeing the trapping effort;
- qualifications of all members of the survey team relevant to trapping, including valid Scientific Collecting Permits for trapping bog turtles;
- estimated survey dates, hours, and methods consistent with the Service's draft guidelines;
and
- a map showing the proposed Phase 3 survey area.