



Endangered, Threatened, Rare and Protected Species Sampling Almanac

Survey Period	Species	Survey Tasks	Considerations
April 1 – April 30	Tiger Salamander (<i>Ambystoma tigrinum</i>) *NY State Listed Species*	Phase I (qualitative) Population Survey	Vernal pool (ephemeral) surveys for egg masses and breeding individuals (migrating) during active breeding season.
April 1 – April 30	Mole Salamanders (<i>Ambystoma</i> spp.) *Locally Rare NY Species & CT State Listed Species*	Phase I (qualitative) Population Survey	Vernal pool (ephemeral) surveys for egg masses and breeding individuals (migrating) during active breeding season.
April 1 – October 1	Bog Turtle (<i>Clemmys muhlenbergii</i>)	Phase I Habitat Surveys	Walking survey of wetland habitats to identify vegetative communities and favorable hydrology. Identify presence of sympatric turtle communities. *USFWS/NYSDEC approved surveyor is required*
April 15 – June 15 (4 site visits required)	*Federal and NY & CT State Listed*	Phase II Population Surveys	Walking survey of wetland habitats to locate individuals. Constraints arise from the mature development of vegetative communities in the preferred wetland habitats. *USFWS/NYSDEC approved surveyor is required* *Endangered/Threatened Species Permit is required*
April 1 – October 1	Blanding's Turtle (<i>Emydoidea blandingii</i>)	Phase I Habitat Survey	Walking survey of wetland habitats to identify vegetative communities and favorable hydrology.
May 15 – June 15	*NY State Listed Species*	Phase II Population Surveys	Live trapping (hoop net traps) to locate individuals. Generally follow survey guidelines prepared by Hudsonia, Ltd. *Endangered/Threatened Species Permit is required*
April 30 – May 20	Timber Rattlesnake (<i>Crotalus horridus</i>)	Den Survey	Walking survey to observe basking activity as individuals thermal regulate during emergence from winter hibernacula, dispersal from hibernacula prevents confirmation of denning site at later dates. *NYSDEC approved surveyor is required*
September 20 – October 20	*NY & CT State Listed Species*		Walking survey to observe basking activity as individuals thermal regulate and prepare to return to winter hibernacula (return from summer dispersal areas). *NYSDEC approved surveyor is required* *Endangered/Threatened Species Permit is required*

Survey Period	Species	Survey Tasks	Considerations
May 1 – July 20	Northern Cricket Frog (<i>Acris crepitans</i>) *NY State Listed Species*	Phase I (qualitative) Population Survey	Frog call survey during active breeding season.
May 15 – July 15	Karner Blue Butterfly (<i>Lycaeides melissa samuelis</i>)	Phase I Habitat Survey	Survey for wild blue lupine habitat. Identify wild blue lupine patches and associated areas with nectar species present.
May 15 – June 15 (5 surveys) July 15 – August 15 (5 surveys)	*Federal and NY State Listed*	Phase II Presence / Absence Surveys	Walking transects through suitable habitat to identify butterfly presence. *Endangered/Threatened Species Permit is required*
May 15 – July 15	Frosted Elfin (<i>Callophrys irus</i>)	Phase I Habitat Survey	Survey for wild blue lupine habitat. Identify wild blue lupine patches and associated areas with nectar species present.
May 1 – May 31 (5 surveys)	*NY & CT State Listed Species*	Phase II Presence / Absence Surveys	Walking transects through suitable habitat to identify butterfly presence. *Endangered/Threatened Species Permit is required*
May 20 – October 1	Freshwater Mussels (various species) *Federal and NY & CT State Listed*	Phase I (qualitative) and Phase II (quantitative) Population Surveys	Visual surveys of in-stream habitats to locate live individuals, and of bank-side habitats to locate shells of dead mussels. Constraints arise from cool water temperatures that cause mussels to burrow deeply into substrate, severely limiting efficient in-stream location. *USFWS/NYSDEC approved surveyor is required* *Endangered/Threatened Species Permit is required*
May 20 – July 20	Breeding Birds (various species) *Federal and NY & CT State Listed*	Phase I (qualitative) Site Use Surveys	Song surveys, nest surveys to identify actively defended nesting territories.
All Year	Indiana Bat (<i>Myotis sodalis</i>)	Phase I Habitat Surveys	Habitat- based survey of potential roosting trees and preferred vegetative communities.
June 15 – August 15	*Federal and NY & CT State Listed*	Phase II Site Use Surveys	Mist netting to identify occupied habitats used for roosting and foraging. Sampling activities completed at height of annual activity cycle. *USFWS/NYSDEC approved surveyor is required* *Endangered/Threatened Species Permit is required*

Listed species represent only a partial sample of the Endangered, Threatened and Rare or Special Concern species that may be present in Hudson River Valley and western Connecticut habitats. Complete species lists may be obtained from the New York State Department of Environmental Conservation, Connecticut Department of Environmental Protection, and United States Fish and Wildlife Service websites.

Note that the time frames for the surveys are approximate and most appropriate to habitats in the lower Hudson Valley. Some survey times may vary by as much as 3-4 weeks from year to year and/or site to site due to weather, elevation, and locality (latitude).

The Chazen Companies would be happy to help you evaluate your project's need for on-site investigations of Endangered, Threatened and Rare species habitat and populations. Please contact Chazen's Director of Ecological Services, Dr. Karl Strause at (845) 486-1555 or via email at compass@chazencompanies.com if you have questions about a protected species or to request personalized assistance with ETR issues at a specific project site.

