

Wildlife Habitat Evaluation Summary Sheet

Project Name: _____

Location: _____

Date: _____

Size of Area Being Assessed: _____

Assessment Areas (linear feet, square feet, or acres for each of the assessment areas within the site)

	Name	Stream	Wetland	Upland	Total Area
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____

Sketch map of the Assessment Areas:

Wildlife Habitat Evaluation Field Data Form

Instructions for Completing the Wildlife Habitat Field Data Form

The time required to complete a habitat evaluation varies according to the size and complexity of the site. A typical assessment of one acre with a mix of wetland and upland resource areas should require a day or less for data collection and another half to full day to prepare the narrative. Additional time will be needed if site plans, restoration or mitigation plans are required.

The field data form consists of five sections: general information, site description, important habitat features, landscape context, and habitat degradation.

General Information

In this section provide the project name and location, date or dates of field data collection, date the form was completed, and the person completing the form. It is generally expected that the person who completes the form and writes the narrative will be the same person who collects the field data. To verify this, a statement is included on the form that "the information on this data sheet is based on my observations unless otherwise indicated" with a place for the signature of the person completing the form.

Site Description

Wetlands should be described according to the Cowardin classification for "system," "subsystem," "class," and "hydrological modifiers."

Soils should be characterized according to information presented in the most recent soil survey for the area, supplemented, as needed, by field data. Include information on soil survey unit, drainage class, texture in the upper part, and soil depth. In this section also note whether or not small mammal burrows are present in the evaluation area.¹

Vegetation should be characterized by estimating percent cover for trees (>20'), shrubs (<20'), woody vines, herbaceous plants, mosses, and aquatic plants (submergent, floating and floating leafed plants). Plant species that comprise 10 percent or more of the vegetative cover in each stratum should be listed and dominant species identified.

Important Habitat Features

This section provides an extensive checklist of habitat features that might occur on a site along with references to wildlife that depend on each particular feature. When a particular feature is present, additional information should be recorded, on the back of the sheet or a separate sheet of paper, describing the habitat feature, quantifying the feature, and listing wildlife species that are likely to utilize the feature as it occurs on the site. For some habitat features it may be necessary to estimate seasonal hydrology from indicators that may be present during a site visit.

Landscape Context

The section on landscape context is divided into two subsections, habitat continuity and connectivity with adjoining natural habitats. It may be necessary to consult aerial photographs² or maps to accurately characterize the landscape context for an assessment area.

¹ Such burrows indicate soil suitability for small mammals and are important habitat features for salamanders and snakes.

² A variety of aerial photographs are available from the Earth Science Information Office, Blaisdell House, University of Massachusetts, Amherst, MA 01003, (413 545-0359).

Habitat continuity is related to the size of habitat patches or interrelated mosaics of habitat on the landscape. Patch size is an important characteristic affecting whether or not an area provides suitable habitat for some wildlife species. Although size thresholds differ from species to species, large blocks of unfragmented habitat are essential to these area-sensitive wildlife species.

Many wetland-dependent birds that are of conservation concern in New England (waterfowl, waders, and water birds) require relatively large areas of emergent marsh habitat. The larger the marsh, the more species it can support. Likewise, it is known that some species of forest nesting birds are area-sensitive, requiring relatively large blocks of unfragmented forests (upland forest, forested wetland or a combination of the two). In addition to the actual size of a forest patch, the ratio of forest interior to edge is an important characteristic affecting the abundance and composition of forest birds utilizing an area. Other wildlife, such as waterfowl, large mammals and turtles, utilize a variety of wetland types arranged in relatively close proximity to each other. These wetland complexes are better able to meet the varied habitat requirement of these species than could any single wetland type.

The field data form provides a section for recording the size classes of emergent marsh, wetland complex, and contiguous forest habitat associated with the assessment area. The lowest size categories are large enough to have value for area-sensitive species. The larger the size class of habitat involved, typically the more “area-sensitive” species it will likely support. Thus, patch size itself is an important habitat characteristic for some areas. For habitat blocks and wetland complexes in any of the size classes listed on the form, applicants should include in the narrative an evaluation of the project's likely impacts on “area-sensitive” wildlife species.

Habitat connectivity within a landscape is important for providing migratory habitat for wildlife as well as for maintaining regional population dynamics that are essential for the long-term viability of local wildlife populations. The field data form includes a section for use in characterizing the landscape context of a proposed project site. Five options are available to choose from to characterize the relationship of the site to surrounding habitats. These include:

1. No direct connections to adjacent areas of wildlife habitat
2. Connectors numerous or assessment area is imbedded in a large area of natural habitat
3. Assessment area contributes to a limited number of connectors to adjacent areas of habitat
4. Assessment area serves a part of a sole connector to adjacent areas of habitat
5. Assessment area serves as the only connector to adjacent areas of habitat

Habitat connectivity issues should be addressed in the narrative portion of wildlife habitat evaluations.

Habitat Degradation

The last section of the field data form provides an opportunity to record evidence of significant habitat degradation, including chemical contamination, dumping, erosion or sedimentation problems, invasive exotic plants or animals, road or highway disturbance, and other human disturbance. A detailed study of potential habitat degradation is not required. However, if degradation is evident and will likely affect the habitat value of the area, it should be noted on the form, and described and discussed in the wildlife evaluation narrative.

**Wildlife Habitat Evaluation
Field Data Form**
(For each wetland type or upland floodplain/riverfront area)

Project Name: _____ **Location:** _____

Assessment Area (number/name): _____

Date(s) of site visit(s) and data collection: _____

Date this form was completed: _____

Person completing form: _____

“The information on this data sheet is based on my observations unless otherwise indicated”

Signature: _____

SITE DESCRIPTION

System: _____

Subsystem: _____

Class: _____

Soils

Soil Survey Unit: _____

Drainage Class: _____

Texture (upper part): _____

Depth: _____

Depth to Water Table _____

Hydrology/Water Regime:

- Permanently flooded
- Intermittently exposed
- Semi-permanently flooded
- Seasonally flooded
- Saturated
- Temporarily flooded
- Intermittently flooded
- Artificially flooded

Plants

%Cover: _____ **Trees (>20')** _____ **Shrubs (<20')** _____ **Woody Vines** _____ **Mosses**
 _____ **Herbaceous** _____ **Aquatics (submergent, floating & floating leafed)**

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; “*” designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Project Name: _____

Assessment Area: _____

IMPORTANT HABITAT FEATURES

If the following habitat characteristics are present, describe & quantify them on the back of this sheet

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

Abundant Present Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

Abundant Present Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

Present Absent

Shrub and/or herbaceous vegetation suitable for veery nesting Present Absent

Number of trees (live or dead) > 30" DBH: _____

Number (or density) of Standing Dead Trees (potential for cavities):

_____ 6-12" dbh _____ 12-18" dbh _____ 18-24" dbh _____ >24" dbh

Number of Tree Cavities in trunks or limbs of:

_____ 6-12" diameter (tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

_____ 12-18" diameter (hooded merganser, wood duck, common goldeneye, mink)

_____ >18" diameter (hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows Abundant Present Absent

Cover/Perches/Basking/Denning Habitat

Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

Rock piles, crevices or hollow logs suitable for:

otter mink porcupine bear bobcat turkey vulture

Live or dead standing vegetation overhanging water or offering good visibility of open water (osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools: present absent

Standing water present at least part of the growing season, suitable for use by:

breeding amphibians non-breeding amphibians (foraging, rehydration)

spotted turtle foraging waterfowl

Sphagnum hummocks or mats, moss covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander): present absent

Project Name: _____

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IMPORTANT HABITAT FEATURES (*If present, describe & quantify them on the back of this sheet*)

Medium to large (> 6”), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders) present absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders) present absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter) present absent

Undercut or overhanging banks (small mammals, mink, weasels) present absent

Vertical sandy banks (bank swallow, kingfisher) present absent

Areas of ice-free open water in winter: present absent

Mud flats present absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting present absent

WILDLIFE DENS/NESTS (*If present, describe & quantify them on the back of this sheet*)

Turtle nesting sites: present absent

Bank swallow colony: present absent

Nest(s) present of: Bald Eagle Osprey Great Blue Heron

Den(s) present of: Otter Mink Beaver

Project area is within:

100' of beaver, mink or otter den, bank swallow colony or turtle nesting area

200' of Great blue heron or osprey nest(s)

1400' of a bald eagle nest

EMERGENT WETLANDS (*If present, describe & quantify them on the back of this sheet*)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, King rail, Virginia rail, Coot)

Flooded > 5 cm present absent

Flooded > 25 cm (pied-billed grebe) present absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm present absent

Flooded > 25 cm (least bittern, common moorhen) present absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) present absent

Flooded > 25 cm (least bittern, common moorhen) present absent

Fine-leafed emergent wetland vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm present absent

Flooded > 25 cm (least bittern, common moorhen) present absent

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LANDSCAPE CONTEXT

Habitat Continuity (*If present, describe the landscape context on the back of this sheet and its importance for area-sensitive species*)

Is the assessment area part of an emergent marsh at least 1.0 acres in size? yes no
(marsh and waterbirds) 2.0 acres in size? yes no

5.0 acres in size? yes no

10.0 acres in size? yes no

Is the assessment area part of a wetland complex at least 2.5 acres in size? yes no
(turtles, frogs, waterfowl, mammals) 5.0 acres in size? yes no

10.0 acres in size? yes no

25.0 acres in size? yes no

Is the assessment area part of contiguous forested habitat at least

(forest interior nesting birds) 50 acres in size? yes no

100 acres in size? yes no

250 acres in size? yes no

500 acres in size? yes no

Connectivity with adjoining natural habitats

- No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- Connectors numerous or assessment area is imbedded in a large area of natural habitat (limited connectivity function)
- Assessment area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- Assessment area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- Assessment area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

HABITAT DEGRADATION (Describe degradation and wildlife habitat impacts on back of the sheet)

- Evidence of significant chemical contamination
- Evidence of significant levels of dumping
- Evidence of significant erosion or sedimentation problems
- Significant invasion of exotic plants (e.g. purple loosestrife, *Phragmites*, glossy buckthorn)
- Disturbance from roads or highways
- Other human disturbance

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Quantification Table for Important Habitat Characteristics

(For each important habitat characteristic identified within the assessment area, describe amount/extent and distribution of that characteristic under current and post-construction conditions)

Habitat Characteristic	Amount Impacted in Assessment Area	Current (entire site)	Post-Construction (entire site)
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Project Name: _____

Assessment Area: _____