SPECIES FIELD SURVEY FORM

SURVEY INFORMATION

Survey date _____ - _____ - _____ (YYYY MM DD) | Time: from _____ am pm to _____ am pm | Weather conditions _____

Surveyor(s) (first & last name[s], principal surveyor listed first) _____

_____

Revisit needed? Y N if Y, explain _____

Previously sought at this location? Y N if Y, date of last survey _____ Previously found at this location? Y N if Y, date last observed _____

IDENTIFICATION

Scientific name _____ Occ # (if known) _____

Common name _____

Identification problems? Y N if Y, explain _____

Photo/slide taken? Y N Where has photo/slide been deposited? _____

Specimen/voucher collected? Y N Collection # _____ Repository _____

LOCATIONAL INFORMATION

DIRECTIONS: Provide detailed directions to the observation (rather than the survey site). Include landmarks, roads, towns, distances, compass directions.

_____

_____

_____

_____

_____

Landowner _____ Landowner comments _____

Site name _____ Managed area _____

County(ies):	USGS quadrangle name(s), and code(s), if known:	If using a GPS unit:
_____	_____ _____	Latitude _____
_____	_____ _____	Longitude _____
_____	_____ _____	Type of unit _____
		File name _____

UTM Zone _____	Elevation: Minimum _____ m / ft	Notes:
Northing _____	Maximum _____ m / ft	
Easting _____		

TOPOGRAPHIC MAP -- MANDATORY

1. Attach a photocopy of the appropriate part of a USGS topographic map (1:24,000 scale if available) and write the map scale on the photocopy. Please do NOT enlarge or reduce the map.
2. Indicate on the map the exact location of the observation(s):
   a. When the observed area is ***no larger than a pen point*** on the map (i.e., only a small number of individuals or extremely small patches), place small points on the map indicating the location(s) of the individuals or patches, and label each point with an arrow so they are more easily seen.
   b. When the observed area is ***larger than a pen point*** on the map, (e.g., a population of plants, foraging birds):
      (1) Draw a thin solid boundary line showing the extent of the observed area occupied by the individuals.
      (2) Indicate disjunct patches (polygons) by drawing the boundary for each patch separately.
      (3) If the boundary follows the edge of a lake, stream, road, marsh or other feature, draw the boundary precisely on the edge of the feature.
      (4) Where needed, add notes to the map with instructions on where the boundary line is located or if the boundary is shared with other observations.
3. A hand drawn sketch may be included for finer details.

LOCATIONAL CERTAINTY

Is your depiction of the observed area on the map within 6.25 m (approximately 20ft) of its actual location on the ground? Y N
If **N,** complete the following:

a. Estimate of uncertainty distance: based on landmarks, elevation, etc., the location of the observed area on the map is accurate to within _____ meters kilometers feet miles of its actual location on the ground.

b. Is the observed area known to be located within some feature(s) on the map (e.g., wetland boundary, lake, road, trail, highway, contour lines)? Y N
If Y, indicate the boundary within which the observed area is known to be located on the map with a dashed line, and if applicable, identify the feature _____ (e.g., marsh).

FIELD DATA FOR THE ELEMENT

CONFIDENCE EXTENT

Indicate whether there is confidence that the observed area represents the full extent of occupied habitat or area for the Element at that location.
Y N ? (Y = confidence that the full extent is known; N = confidence that the full extent is not known; ? = uncertainty whether full extent is known)

Animals

AGE STRUCTURE

by type of individuals observed, if known
(e.g., pair, adult, male, female, juvenile, chick, nest, hatchling):

observation type	*actual # observed*	*# estimated*
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Census technique _____

_____

Basis for estimate_____

_____

_____

Kind of observation: sight song/vocalization road kill trapped
other (explain)_____

Location use class, if appropriate (e.g., breeding, nonbreeding)

_____

Site use (e.g., foraging, roosting) _____

Feature label (e.g., den, tracks) _____

Plants

PHENOLOGY

indicate # (or use checkmark to indicate presence if # unknown)

in leaf _____
in bud _____
in flower _____
immature fruit _____
mature fruit _____
seed dispersing _____
dormant _____
seedling _____

Color of flowers (if observed) _____

Do other members of this genus or look-alike plants co-occur at this survey site? Y N if yes, explain

_____

_____

Animal pollinators_____

_____

Density description (e.g., scattered, dense clumps, evenly distributed)

_____

_____

Feature label (e.g., deme)_____

SIZE - a quantitative measure of the area and/or abundance of the Element at the observed location. Components of size are 1) area of occupancy, 2) population abundance, 3) population density and 4) population fluctuation.

Observed area / area of occupancy _____ sq. meters hectares sq. feet sq. yards acres sq. miles *Type of measurement:* precise estimate

Observed length _____ meters kilometers feet miles *Type of measurement:* precise estimate

Animals	Plants
Abundance: total # of individuals _____ precise count estimate	Abundance (total size of the observation): # ramets (total # of individuals) _____ precise count estimate # genets (total # of groups) _____ precise count estimate

Census technique_____

Basis for estimate_____

Population density (if practical): #_____ per unit: sq. meters hectares sq. feet acres sq. miles

Does population fluctuate? (may be particularly relevant to invertebrates and seed banking plants) Y N ? Explain_____

_____

_____

CONDITION - an integrated measure of the quality of biotic and abiotic factors, structures and processes within the observed area, and the degree to which they may affect the continued existence of the Element at that location. Components of condition for species are: 1) reproduction and health, 2) species composition and biological structure, 3) ecological processes, and 4) abiotic physical/chemical factors. Factors to consider include evidence of regular successful reproduction, richness/distribution of species, presence of exotic species, degree of disturbance, changes to ecological processes, stability of substrate, and water quality.

Evidence of reproduction? Y N if Y, describe_____

_____

_____

Evidence of disease, predation, injury? Y N if Y, describe_____

_____

_____

List associated taxa, species, and plant communities within the observed area _____

_____

Comment on evenness of species distribution within the observed area_____

_____

List any exotics present within the observed area and describe resulting impacts_____

_____

Comment on evidence of existing disturbance (either natural or caused by humans) and changes to ecological processes (e.g., hydrologic and fire regimes) within the observed area

_____

_____

_____

General Habitat: Information on abiotic physical/chemical factors of specific habitat or micro habitat within the observed area. (circle all that apply)

Slope:	Aspect:	Moisture:	Light:	Topographic position:
flat	N NE	hydric (inundated)	open	crest
0-10	E NW	wet-mesic (saturated)	partial	upper slope
10-35	S SE	mesic (moist)	filtered	mid slope
35+	W SW	dry-mesic	shade	lower slope
vertical		xeric (dry)		bottom

Describe other abiotic factors within the observed area, including land forms, aquatic features, soils/substrate, geological formations, and water quality.

_____

_____

_____

_____

LANDSCAPE CONTEXT - an integrated measure of the quality of biotic and abiotic factors, structures and processes surrounding the observed area, and the degree to which they may affect the continued existence of the Element at that location. Components of landscape context for species are: 1) landscape structure and extent, 2) condition of the surrounding landscape (i.e., community development/maturity, species composition and biological structure, ecological processes, and abiotic physical/chemical factors.) Factors to consider include connectivity, fragmentation/patchiness, stability/old growth of communities, richness/distribution of species, presence of exotic species, degree of disturbance, changes to ecological processes, stability of substrate, and water quality.

Comment on connectivity of the observation with other surrounding occurrences of the Element, including relative fragmentation/patchiness

_____

_____

_____

LANDSCAPE CONTEXT (continued)

List taxa, species, and plant communities in area surrounding the observation_____

_____

Comment on stability/old growth of communities in area surrounding the observation _____

_____

Comment on evenness of species distribution in area surrounding the observation _____

_____

List any exotics present in area surrounding the observation _____

_____

Comment on evidence of existing disturbance (either natural or caused by humans) and changes to ecological processes (e.g., hydrologic and fire regimes) in area surrounding the observation

_____

_____

_____

_____

Slope:	Aspect:	Moisture:	Light:	Topographic position:
flat	N NE	hydric (inundated)	open	crest
0-10	E NW	wet-mesic (saturated)	partial	upper slope
10-35	S SE	mesic (moist)	filtered	mid slope
35+	W SW	dry-mesic	shade	lower slope
vertical		xeric (dry)		bottom

Describe other abiotic factors in area surrounding the observation, including land forms, aquatic features, soils/substrate, geological formations, water quality.

_____

_____

_____

_____

_____

_____

MISCELLANEOUS DATA

PAST IMPACTS on the Element, both within and surrounding the observed area (e.g., grazing, logging, mining, plantations, ATVs, dumping)

_____

_____

MANAGEMENT, MONITORING and RESEARCH NEEDS for the Element at this location (e.g., burn periodically, open the canopy, ensure water quality, control exotics, ban ATVs, study effects of browsing)

_____

_____

_____

PROTECTION NEEDS for the Element at this location (e.g., protect the entire marsh, the slope and crest of slope)_____

_____

_____

ADDITIONAL COMMENTS: _____

_____

_____

Data sensitive? Y N Sourcecode _____ Best reference _____