

OFFICE USE ONLY		
REVIEWER:	DATE ENTERED:	RECORD NO:
		SITE CODE:

**\* Collection Type:**

- Seed Collection Root  
 Sample

## FIELD FORM

PLANT CONSERVATION PROGRAM

Minnesota Landscape Arboretum

3675 Arboretum Drive, Chaska, MN 55318

*Email completed form to: ArbConservation@umn.edu*

PLANTS NOT FOUND

<b>*SPECIES SCIENTIFIC NAME:</b> <i>(one species per form)</i>	<b>*SURVEY DATE:</b>	EO No.: <i>(if known)</i>
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### \*SURVEYOR INFORMATION

Name(s):	
Address:	Telephone No:
	E-mail address:

### \*SURVEY SITE INFORMATION

Macro Site:	Site
Site Name:	Address:
Town(s):	County:

**Directions** to plant population, including best parking and access points. Please attach a map with boundaries drawn around observed plant populations (or surveyed area if plants not found).

*Site GPS Coordinates (WGS84 & Decimal Degrees preferred)	*Method Used to Determine Coordinates
Latitude: _____ N	<input type="checkbox"/> GPS Unit      GPS Make/Model:
Longitude: _____ W	<input type="checkbox"/> Mapping Software      Software:
Coordinate System (e.g. NAD83, WGS84, etc.):	<input type="checkbox"/> Online Maps      Online site:

### POPULATION DATA

*Population Size	
Actual No. Observed	
Estimated No./Range	

*What was counted? (e.g. stems, clumps, floating masses, etc.)

Population Area	
Length (units)	
Width (units)	
Area (units)	

Evidence of disease, predation or injury?  Yes  No Explain: \_\_\_\_\_

Phenology			
	% In leaf		% Mature fruit
	% In flower bud		% Seed dispersing
	% In flower		% Dormant
	% Immature fruit		% Senescent

Age Structure	
	% Seedlings
	% Immature
	% Mature (established)
	% Senescent
<input type="checkbox"/>	Age structure unknown

Vigor
<input type="checkbox"/> Very feeble
<input type="checkbox"/> Feeble
<input type="checkbox"/> Normal
<input type="checkbox"/> Vigorous
<input type="checkbox"/> Exceptionally vigorous

Orchid Capsules	Capsule Ripeness (circle a number between 1-10 below) (0) 100% closed, green; (5) 50% open, brown/tan; (10) 100% open, seed dispersed										
Total No. Capsules      Estimate      Actual	0	1	2	3	4	5	6	7	8	9	10
No. Prior Year Capsules w/ seed remaining											

Comments/Notes:

*\* Required Fields; DNR Permit required to collect specimens, seed, roots, tissue, etc. of state-listed rare species*

**HABITAT** (please generalize for the entire site/population)

Aspect	Slope	Light	Topographic Position	Moisture	
<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/> Flat	<input type="checkbox"/> NE <input type="checkbox"/> NW <input type="checkbox"/> SE <input type="checkbox"/> SW	<input type="checkbox"/> 0-3% <input type="checkbox"/> 3-8% <input type="checkbox"/> 8-15% <input type="checkbox"/> 15-35% <input type="checkbox"/> 35% - vertical	<input type="checkbox"/> Open <input type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shade	<input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-Slope <input type="checkbox"/> Lower-Slope <input type="checkbox"/> Bottom	<input type="checkbox"/> Permanently Inundated <input type="checkbox"/> Seasonally Inundated/Exposed <input type="checkbox"/> Saturated (Hydric) <input type="checkbox"/> Moist (Mesic) <input type="checkbox"/> Dry-Mesic <input type="checkbox"/> Dry-Xeric
_____ ° re true N _____ ° re mag N		Measured (° or %): _____ Horizontal shape (as for next item): _____ Vertical shape (ie. Convex, concave, straight, variable): _____		<input type="checkbox"/> Other: _____	
Elevation: _____ to _____ <input type="checkbox"/> feet <input type="checkbox"/> meters					
Soil/substrate name/description(give source): _____					
Estimated # of acres of potential habitat in the immediate area: _____					
Evidence of disturbance: <input type="checkbox"/> fire <input type="checkbox"/> logging <input type="checkbox"/> disease <input type="checkbox"/> insect damage <input type="checkbox"/> windthrow <input type="checkbox"/> invasives					
Comments: _____					

Native Plant Community				Notes:
<input type="checkbox"/> Fire Dependent Forest/Woodland	<input type="checkbox"/> Wet Forest	<input type="checkbox"/> Wet Meadow/Carr	<input type="checkbox"/> Lakeshore	_____
<input type="checkbox"/> Hardwood Forest	<input type="checkbox"/> Forested Rich Peatland	<input type="checkbox"/> Wet Prairie	<input type="checkbox"/> Upland Prairie	_____
<input type="checkbox"/> Coniferous Forest	<input type="checkbox"/> Open Rich Peatland	<input type="checkbox"/> Marsh	<input type="checkbox"/> Rock Outcrop	_____
<input type="checkbox"/> Floodplain Forest	<input type="checkbox"/> Acidic Peatland	<input type="checkbox"/> River Shore	<input type="checkbox"/> Cliff/Talus	_____
Herb Layer: _____ Shrub Layer: _____ Tree Layer: _____				
_____				
_____				

IDENTIFICATION			
Photographs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date photo submitted:	To whom?
Voucher specimen? <i>(DNR permit REQUIRED for all state-listed rare species)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, provide:	Collector: Repository: Collection #:
Identification Problems?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Explain:	

CONSERVATION		
Owner Name, Address, Contact Info:		
Owner Aware of Plants? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
Owner Protecting Plants? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
<b>Threats:</b> <input type="checkbox"/> Development <input type="checkbox"/> Agriculture <input type="checkbox"/> Forestry <input type="checkbox"/> Invasives <input type="checkbox"/> Disease <input type="checkbox"/> Lack of Disturbance <input type="checkbox"/> Succession <input type="checkbox"/> Climate Change <input type="checkbox"/> Poaching <input type="checkbox"/> Other: _____	<b>Conservation/Management Needs:</b> <input type="checkbox"/> Canopy Thinning <input type="checkbox"/> Prescribed Fire <input type="checkbox"/> Mowing <input type="checkbox"/> Invasives Removal <input type="checkbox"/> Land Protection <input type="checkbox"/> Soil Scarification <input type="checkbox"/> Translocation <input type="checkbox"/> Augmentation <input type="checkbox"/> Other: _____	<b>Research Needs:</b> <input type="checkbox"/> Basic Biological Study <input type="checkbox"/> Demographics <input type="checkbox"/> Habitat Preference/Use <input type="checkbox"/> Taxonomy <input type="checkbox"/> Germination/Propagation <input type="checkbox"/> Other: _____

SEED COLLECTION DATA (see Collection Protocol for further detail)	
Permit obtained for collection? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Permit Source: _____ Permit No. _____
Total No. maternal sources available (i.e., seed bearing plants): _____	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated
Total maternal sources sampled: _____	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated
Total seed (or capsules) available: _____	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated
Total seed (or capsules) sampled: _____	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated
Evidence of disease or injury? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Comments: (Target sample %, sampling methods, issues, etc.) _____ _____ _____	