

Associated Site Conditions (wetness, Sun, other species, impacts, etc.) Continued

List any invasive exotic species seen on site during visit. Note degree of infestation as low (L), medium (M) or high (H).

	Species	Invasiveness		Species	Invasiveness
1			6		
2			7		
3			8		
4			9		
5			10		

Note any disturbance seen affecting, or potentially affecting the rare plants. Record details in the comments, and, if indicated, record the portion of rare plants affected:

Trampling:	None	Trace	Some	Most	Trail maintenance?	Yes	No	Unsure
Browsing:	None	Trace	Some	Most	ATV tracks?	Yes	No	Unsure
Insect damage or disease:	None	Trace	Some	Most	Social trails?	Yes	No	Unsure
Competition/ succession:	None	Trace	Some	Most	Campsite?	Yes	No	Unsure
Drought?	Yes	No	Unsure		Plant collection?	Yes	No	Unsure
Erosion?	Yes	No	Unsure		New development?	Yes	No	Unsure
Other disturbance (please describe) and disturbance specific comments, if any:								

Photo Log (record additional on back)

Photo Number	Photo File Name	Feature Photographed (e.g., flower , juvenile, unknown, insect)	Location and Direction of Photo (e.g., from center of colony looking North)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Time spent (minutes): Monitoring: _____ Travel (to and from trailhead): _____ Hiking (to and from occurrence): _____

Certification

Monitor: I certify that **ALL** data entered on this form are complete and accurate and that I have personally reviewed all entries

Monitor Name (signature): _____ Date: _____

Reviewer: I have reviewed **ALL** data on this form and certify them to be complete and accurate.

Name (printed): _____ Signature: _____ Date: _____

Purpose	Date	Initials
Entered into Spreadsheet		
100% Check		
10% Check		
Validation		

Please submit completed form to your monitoring coordinator within 3 weeks of your visit.

Thank you for your help!

Field forms must be filled out completely. DO NOT assume that if you enter your name, site, and date for one occurrence you do not need to do the same for other nearby occurrences. Every form is independent of all others, and incomplete forms will be rejected.

- 1) Date: Month, Day and Year of the observation in the following format: MM/DD/YYYY
- 2) Site name: If you know the name, record it. If you do not know the name, enter "Unknown."
- 3) Site number: Site codes ordinarily start with a 2 letter state acronym (e.g., VT for Vermont) followed by a 2 digit sequence number (e.g., 01 – 99).
- 4) Occurrence ID: All occurrences are assigned a number (e.g., CT-01 or CT-01-12). If you do not know the Occurrence ID, you must determine this information BEFORE monitoring the site. Data sheets without a valid Occurrence ID will be rejected.
- 5) Monitor Name: Enter names of up to 5 monitors last name first (Lastname, Firstname).
- 6) Email & Phone: Enter your preferred method of contact (or both). Full email including provider name (e.g., email_address@fictitious.com), or phone with areas code.
- 7) Common name: If you know the common name enter it here, if not enter "Unknown."
- 8) Scientific Name: Record the name as accepted when the monitoring was conducted. If you do not know the scientific name of the species, obtain it BEFORE monitoring the occurrence.
- 9) NPS GPS Unit: Record the number of the NPS GPS unit and its accuracy. "N/A" if using a non-NPS unit.
- 10) Coordinate system/Datum: Decimal degrees / WGS-84 are the default values. Do NOT use another system. Entries that are not in decimal degrees (dd.ddddd, -dd.ddddd) and/or not in the WGS-84 datum AND that are not justified by a valid explanation will be rejected.
- 11) GPS coordinates: Record the location of the occurrence based on a central point (using care not to trample the species in the process).
- 12) Area covered by rare species: Record the area covered by the occurrence. Circle the appropriate values (acres, ft² or m²).
- 13) Found: Circle one, Yes, No, or Unsure. If "Unsure," record your reasons for uncertainty. Use the "Comments" section for additional space.
- 14) Count unit: Select only one – stem, clump, or rosette. The values for plant count, estimate, or % cover will be in the selected units. Occurrence data without units shall be rejected.
- 15) Plant count: The number of "count unit" items. If > 250, estimate. If the number of items counted exceeds 250 after completing the count, record the actual number.
- 16) Count time: Record the number of minutes needed to complete an actual count.
- 17) Estimate: Circle the appropriate range 251-500, 501-1,000, > 1,000.
- 18) % Cover: An estimate of the area, in percent (%), the species covers the monitoring location. This method is only used in very specific circumstances. For example, this method may be used for non-vascular or matted plants, or when the occurrence is extensive in size and possibly discontinuous and accurately estimating or counting individuals is impractical.
- 19) % Vegetative: Select the category that accurately describes the portion of the occurrence that is in vegetative condition (live leaves on during the growing season).
- 20) % Flowering: Select the category that describes the portion of the occurrence that is flowering.

1ft² ≈ a large dinner plate

10 ft² ≈ a small card table (3.2' x 3.2')

100 ft² ≈ a dump truck (5' x 20'; 10' x 10')

1,000 ft² ≈ a small/medium sized house (10' x 100'; 25' x 40')

5,000 ft² ≈ a basketball court (20' x 250'; 50' x 100'; 70' x 70')

10,000 ft² ≈ ¼ acre ≈ bigger than 2 basketball courts (20' x 50'; 100' x 100')

20,000 ft² ≈ ½ acre ≈ half of a football field (20' x 1,000'; 50' x 400'; 100' x 200')

50,000 ft² ≈ 1 acre ≈ a football field (50' x 1,000'; 100' x 500'; 200' x 250')

- 21) % Fruiting: Select the category that describes the portion of the occurrence that is fruiting.
- 22) % Senescent: Select the category that describes the portion of the occurrence that is Senescent (dying at the end of the normal seasonal life-cycle).
- 23) Seedlings or immature present: Circle only one – Yes, No, or Unsure.

- 24) What is the condition of this rare plant occurrence: Describe as excellent, average, or poor based on evidence of herbivory or disease, leaf color or retention, plant or flower size, number of leaves or flowers, or evidence of disturbance, as appropriate. Please note, in the comments section, the characteristic(s) considered and what you observed. For example, "Excellent condition, no problems seen and many leaves/flowers"; or, "Poor condition, leaves with many insect holes, and few flowers." If you are unsure, circle unsure.
- 25) Associated site condition: Record as Flooded (standing water present), Wet (saturated but no standing water), Moist (feels moist but water does not emerge when soil is squeezed), or Dry (Circle one).
- 26) Sun exposure on rare plants (estimate): The amount of sun affecting this occurrence on sunny days. Ignore shading from clouds, but consider shading by vegetation and other site features.
- 27) List the most common species: Within 10 feet (3 meters) of the occurrence, record up to 3 trees, 3 shrubs and 5 understory plant species in order of declining abundance.
- 28) List any invasive exotic species: Record the scientific or common name of any invasive exotic species growing nearby. Note the degree of infestation as low, medium, or high.
- 29) Disturbance:
- a) For the following measures, trace is 1 to 5%, some is 6 to 50%, and most is more than 50%.
- i) Trampling: Estimate how many plants in occurrence are affected. Do not include any trampling that may have occurred during your visit.
- ii) Browsing: Estimate how many plants in this occurrence are affected.
- iii) Insect damage or disease: Look for and record evidence of disease or insect damage including damage to leaves, twigs, stem, buds or other plant parts.
- iv) Competition/succession: Look for evidence that other plant species are hurting this occurrence due to competition to include shading associated with plant succession.
- b) For the following measures, circle Yes or No or Unsure
- i) Drought: Do you see wilted plants or extremely dry soil that may indicate drought stress?
- ii) Erosion: Do you see patterns on the ground occupied by rare plants indicating erosion?
- iii) Trail maintenance: Do you see evidence that trail maintenance (including mowing and clipping of vegetation) has affected this occurrence?
- iv) ATV tracks: Do you see ATV tracks within or nearby (within sight) of this occurrence?
- v) Social trails: Are there unofficial "social trails" leading to or through this occurrence?
- vi) Campsite: Do you see a campsite nearby? How far away is the site (record in comments)?
- vii) Plant collection: Do you see any evidence that plants have been collected?
- viii) New development: Do you see evidence that new development nearby may be affecting this occurrence? How far away is the development (record in comments)?
- ix) Other disturbance: Do you see evidence of any other disturbance? If yes, describe on reverse of form and take a photograph.
- 30) Photo Log: Record each photograph. Include a description of what feature was photographed, and the location and direction of the photo. Use the back of the form if necessary.
- 31) Time Spent: Time spent
- a) Monitoring this occurrence (excluding travel time),
- b) Traveling to and from the trailhead.
- c) Hiking to and from the occurrence.
- 32) Certification: Forms that have not been signed and dated will be rejected.
- a) Monitors sign and date form to acknowledge that they have entered all data accurately and completely to the best of their knowledge. Forms should be sent to their coordinator within 3-weeks of completion.
- b) Reviewers sign and date the form after entering data into the import spreadsheet and promptly send to APPA Natural Resource Manager.
- 33) Management recommendations and Comments: Record any other observations about this rare plant occurrence, or information that required additional space to document. If using this as "extra space," be sure to identify the item to which this information relates.