

**SHENANDOAH NATIONAL PARK VEGETATION MAPPING PROJECT
ACCURACY ASSESSMENT FIELD FORM**

I. IDENTIFIERS AND LOCATION DATA

1. AA Point Code _____ 2. Park Code: SHEN 3. Date (y/m/d): 2004 / /
4. Observer(s) _____
5. GPS unit (*circle*): Garmin GPSMap76 / Garmin GPSMap76s
6. DATUM (*circle*): WGS84 / other (*specify* _____) 7. GPS file name _____
8. Estimated accuracy _____ m 9. Number of satellites fixed _____
10. Receiver status (*circle*): 2D / 3D / 2D WAAS / 3D WAAS / no signal (*estimated location marked on DRG*)
11. Field UTM X _____ m E Y _____ m N
- OR Lat _____ Long _____
12. AA sample size (*circle*): 0.5 ha circular area / 20 X 100 m quadrat / 100 sq. m quadrat (*specify dimensions* _____)

II. ENVIRONMENTAL DESCRIPTION

1. Elevation (*from DRG*) _____ ft 2. Aspect _____ (*degrees*) 3. Slope inclination (*degrees*) _____
4. Unvegetated Surface Substrate (*estimate percentage of applicable covers; should total 100%*):
- _____ bedrock
 - _____ loose boulders and stones
 - _____ leaf litter / organic matter
 - _____ decaying wood
 - _____ water
 - _____ mineral soil / sand
 - _____ other (*specify*)
5. Environmental Comments (*if site is a wetland, indicate type of hydrology, e.g., seepage wetland, temporarily flooded stream bottom, seasonally flooded pond, etc.*)

III. VEGETATION DESCRIPTION

1. Prevalent vegetation association within 0.5 ha sample site, based on field key:

2. Other vegetation associations within 0.5 ha sample site:

3. Representativeness: is the vegetation within the 0.5 ha sample site representative of vegetation in the surrounding map polygon? If vegetation of the sample point is an anomalous inclusion in the polygon, please note

4. Approximately what percentage of the mapped polygon did you observe?

VI. ADDITIONAL COMMENTS *(use this space to provide additional comments about vegetation structure or composition)*

VII. CLASSIFICATION COMMENTS *(use this space to provide additional comments about problems or ease in applying the vegetation key at this site, rationale for choice of association if there was doubt, etc.)*

INSTRUCTIONS FOR SHENANDOAH NATIONAL PARK ACCURACY ASSESSMENT FORM

This accuracy assessment (AA) field form is customized for the Shenandoah National Park vegetation mapping project. Its purpose is to generate concise data to document the accuracy assessment field procedure and to compare these data to the mapped data. AA sites will be selected using randomly located samples stratified according to the extent of each mapping unit. The general procedure you will follow is to navigate to the pre-selected AA point using a Garmin GPSMap76 or GPSMap76s GPS unit. Try to navigate as close as possible to the pre-selected point (within 10-20 meters). Once at the AA site, you will record your location by collecting a waypoint with the GPS unit, define (in most cases) a 0.5 hectare circular area (radius = ca. 40 m), and record the required data in the order that it appears on the field form. In the case of larger linear polygons (*e.g.*, forested wetlands, floodplains), you will collect data from a 0.2 hectare quadrat 100 meters long by 20 meters wide. In the case of a very small polygon (*e.g.*, a rock outcrop), you will collect data from a 100 m² quadrat; you will determine the dimensions (*e.g.*, 10 X 10 m, 5 X 20 m) in order to keep the quadrat positioned in homogeneous environmental conditions and vegetation.

The materials you should have before you begin are 1) plots of the 7.5' DRG showing the polygon boundaries, but no information about polygon attributes; 2) pre-selected AA point coordinates loaded into your GPS unit; 3) the field key to vegetation types, and 4) vegetation type descriptions. You should also carry a compass and clinometer. Once you have navigated to an AA site, you should closely observe the vegetation within the prescribed data collection area, which in most cases will be a circular 0.5 ha area (radius = ca. 40 m). You can simply pace one or more radii of 40 meters from the point to assist in gauging the extent of the observation area.

In cases where an AA sample area falls in an ecotone, or contains two distinctly different vegetation types, describe the type that covers the larger area and provide notes (see section III3) on the second type. In the rare instance where an AA sample area is equally divided between two vegetation types, you will have to complete AA field forms for each type. During navigation to and from a point, generally observe the vegetation in the mapped polygon so that you can answer section III2 (see below).

Specific Instructions for completing the AA field form:

I.1-4. Self explanatory

I.5-11. Indicate GPS unit used and record the file name for the location data that you collect. Record the number of satellites, accuracy, and either UTM or Lat/Long coordinates displayed by the GPS unit. In the event that GPS locational data cannot be obtained, mark your estimated location on a 7.5' USGS quad or DRG.

1.12. Circle the sample size at the AA point.

II.1. Record elevation to the nearest contour line using the DRG.

II.2. Use a compass to record aspect of the AA site to the nearest azimuth degree (0 to 360). If the site is flat or has a variable aspect, write in "flat" or "variable."

II.3. Use a clinometer to record the slope inclination of the AA site to the nearest degree. If the site is flat, write in "flat." If slope at the site varies greatly, take several measurements and average them.

II.4. Estimate the percentage of the ground surface covered by the listed substrates. Note that these should add up to 100%.

II.5. Make note of any other environmental characteristics that might assist in interpreting the site. Also use this space to record general information on hydrology, if the site is a wetland.

III.1. Use the field key to determine the vegetation type prevalent at the AA site.

III.2. If one or more additional vegetation types occur within the AA sample site, record them.

III.3. To the extent possible, and based on general observations made navigating to and from the AA point, note whether the prevalent vegetation of the AA sample site is representative of the larger polygon in which it is located. It is especially important to note instances where the vegetation of the AA site is an anomaly or local inclusion within the polygon.

III.4. Provide a rough estimate of the percentage of the larger polygon that you observed (*e.g.*, 10%, 20%, etc.).

IV. Check the maximum cover class for each vertical vegetation stratum indicated on the table. The heights in the left column indicate the maximum height of each stratum. The lowest stratum contains all woody plants < 0.5 m tall and all herbaceous plants, regardless of height.

V. List species you would consider to be characteristic of the vegetation at the AA site. These generally include dominant species and less abundant species that are indicative of specific site conditions such as soil chemistry or hydrologic regime. Write the species in the left column and note its status in the appropriate layer(s) using the symbols "D" for dominant, "P" for present, and "R" for rare (1-3 individuals).

VI. Use this space to record any additional information or comments about vegetation structure or composition that would assist in interpreting this site.

VII. Use this space to record any additional information about vegetation classification. It is especially important to note if problems were encountered applying the field key or interpreting the vegetation.