



## West Virginia White Field Survey Protocol

When encountering a wooded area or ravine containing wildflowers during April and May, please stop and look around you for the West Virginia White butterfly\*. Observe the area for 3-5 minutes and then fill out the WVW Survey Form. Please fill out the form even if you don't see any butterflies: Absence is important information as well. \* **Be aware that small white butterflies might also be Cabbage Whites.**

**Contact Information:** We might have more questions about your site or observations. We respect your privacy.

**Extent of Observed Area:** Estimate the size of the area you observed (e.g. 1/2 acre). including only as far as you can see clearly from where you stand.

**Time, Temperature, Clouds and Wind:** For Temperature with a thermometer or weather report; note the method used. For Clouds use Overcast, Passing clouds or Bright sun; for Wind use Calm, Slight breeze, Breezy or Windy.

**Habitat Description:** All are wooded areas; Woods-Wet = the soil is quite wet in some places and there may be standing water; Woods-Dry = the soil is damp to dry, no standing water; Ravine = characterized by steep slopes.

**Habitat Position:** Interior = closed canopy, open fields/meadows not visible; Gap = canopy gap present within observation area, open fields/meadows not visible; Edge = adjacent open field/meadow visible.

**\*\*Canopy Trees:** Please attempt to list common canopy trees in the area (species making up more than 25% of the canopy). Examples include sugar or red maple, beech, black cherry, sycamore, tulip, white or black oak. Most trees will not have leafed out yet. Bark patterns and bud shapes are useful, as well as the composition of the leaf litter.

**\*\*Relative abundance of target plant species:** These are the plants used by the West Virginia White to lay eggs: 0= the species is not present in area; 1= uncommon, species is limited to several individuals or a few small clumps occupying less than 25% of the observed area; 2= common, many individuals or large clumps of the species occupying more than 25% of the observed area. If the plants are not known, describe the shape of leaves and flower and flower color in the margin of the data sheet.

**Butterfly Behavior:** Mark the behavior seen and the number of butterflies observed doing each behavior. Record the total number of butterflies seen (even if it's 0) in the WVW box. Please note if they might be Cabbage Whites.

**\*\*Nectar Species:** Mark the identity of species on which the butterfly was observed nectaring, if possible.

### Disturbance/Competition

**\*\*Evidence of Deer Browse:** Evidence of deer browse includes: few wildflowers, tree seedlings and/or shrubs, peeled tree bark, missing/shredded stem tips. A browse line (very little green vegetation below 4-5 feet) and missing parts or jagged edges on herbs, seedlings and shrubs may be visible later in the year.

**\*\*Signs of Earthworm Activity:** All earthworms found in the glaciated part of North America are exotic and invasive. Their digging and tunneling damages woodland soils to the point that native wildflowers cannot survive. Signs include castings on the surface, middens and abundant leaf skeletons on the ground, very thin leaf litter, and compacted soils.

**\*\*Presence of Cabbage White butterflies:** The common cabbage white (exotic) has been invading the habitat of the West Virginia White. They compete for nectar and oviposition sites. Please note if not sure of a butterfly's identity. We welcome your photographs. Also, did you notice any interactions between WVWs and CWs?

**\*\*HELP FOR THESE TOPICS IS INCLUDED IN THE PHOTO GALLERY**

Please send your data sheets to: Renee Boronka, Cleveland Museum of Natural History, 1 Wade Oval Drive, Cleveland, OH 44106, [rboronka@cmnh.org](mailto:rboronka@cmnh.org).