COLLECTING BUTTERFLY DATA
2010

Setting up the Viewing Area

1. Measure a viewing area. Total area should equal 500 m² (we recommend 25 m x 20 m).
2. Place flags as guides along the four sides.
3. If your property is small or irregularly shaped, then use whatever shape insures that you attain a 500 m² viewing area, or you may have to combine your property with a neighbor’s.
4. Fill out the property description data sheet. In addition to answering the questions, describe your study area, (e.g. does it include a garden? Is it open or forested? Is it a mowed lawn or abandoned field?) Provide us with your location (911 address) and GPS coordinates (if you have a GPS unit) and contact information (mailing address, phone, email) in case we have any questions.

Walking the Viewing Area

1. Survey the viewing area once a week for 1 hour between 10am-5pm. Try to survey on the same day each week, but optimal weather is more important than exact date. Optimal conditions are 70-90 °F, little to no wind, and partial (>50%) to full sunlight.
2. Before beginning the survey, record the date, start time, temperature, and approximate cloud cover (sunny, partly sunny) on the Butterfly Checklist. (SEE “example butterfly datasheet”)
3. Look for butterflies by scanning either side of you. Be sure to only record butterflies that are within your sample boundary.
4. Walk the viewing area as slowly as possible to give yourself time to notice and identify the butterflies. You can sit down after your initial transit but continue to observe the area and walk it periodically during the hour.
5. Survey your study area 6 times over the season, 3 times in July and 3 times in August. It is OK to skip a week if necessary, as long as 6 surveys are completed across the period.

Identifying the Butterflies

Prior to Start of Survey
1. Look at website with potential species
   (http://www.virginia.edu/blandy/ClarkeCountyLandUseSurvey/ccmapping.htm)
2. Download summary sheet of identifying features which you will use to place the butterfly in a group such as swallowtails, brush-foots, blues, whites, fritillaries, sulphurs, etc.
   (http://www.virginia.edu/blandy/ClarkeCountyLandUseSurvey/ccmapping.htm)

Once you start the survey:
1. Note the butterfly’s color, pattern, and size and make tentative field identification. Record any characteristics for future reference.

After each survey session:
1. Use your species list, or any other resources to confirm your identification.
2. You can use a butterfly net, if available, to examine a species more closely, but do obtain proper instruction from a trained naturalist, so as not to damage the butterflies.

Recording the Data

1. Please only record butterflies when you are confident in your identification.
2. If you cannot confidently identify a butterfly, but you can place it within a subfamily, then record that subfamily on the checklist including any notes for possible identification.

3. If you are completely uncertain about a butterfly you saw, write down any characteristics you noticed such as color, shape, location, etc. in the field notes.

4. If you observe a butterfly that you can identify but it is absent from the checklist be sure to write it in under the “other” categories or highlight your find in the field notes.

5. This year we are not asking for the total number of each species you see, but rather the group size of each species. There are three categories for group size:
   - + **1 individual.** Use this mark if you only see single butterflies and can’t verify that they are different individuals. (e.g. If you see 4 similar individual monarchs during your hour, mark down “+” once in the monarch box).
   - ++ **2-5 individuals.** Use this mark if you see a group of 2-5 butterflies together, or if you see individuals at different times that you are sure are distinct individuals (You may be able to tell them apart due to wing tears, distinct coloration, etc.)
   - +++ **>5 individuals.** Use this mark if you see more than five butterflies (in a group or as a combination of distinct individuals).

6. As a last resort, you can try photographing the individual in question.

**Reporting the Data**

Mail Butterfly Checklist and Property Description data at the end of the survey period to:

Butterfly Mapping Project  
c/o Bill Mc Shea  
Smithsonian CRC  
1500 Remount Road  
Front Royal, VA 22630.

If you have questions please call us at 540-622-8419 or email crcecology@si.edu; email submissions are also welcome. We will try to have your data online within 1 month of your submission (http://www.virginia.edu/blandy/ClarkeCountyLandUseSurvey/ccmapping.htm).

*THANKS FOR ALL YOUR HELP!*