



Butterfly Trapping Information 2006

(1) Bait preparation: Combine 2-3 over-ripe bananas, 1 cup brown sugar, 1/2 cup prune juice, and ¼ - ½ packet of yeast. Allow to ferment 1-2 days in warm place before using in a trap. You may experiment with other baits, but PLEASE USE THIS TYPE OF BAIT IN AT LEAST ONE TRAP; that will allow us to make valid comparisons among schools.

(2) Bait container preparation: Use small plastic “gladware” container. Fill the bottom with bait, place some sticks (e.g. 4” x 1”) or a lemon sized rock in the middle and then use Velcro or duct tape to attach container to trap platform. The sticks/rocks give the butterflies something to perch on while feasting.

(3) Trap preparation: Hang the trap with a string or rope so that its platform is 3.5-5 ft off the ground. You can place it anywhere that is convenient, but areas away from easy access by mammals would probably be best (e.g. not up against the side of a tree). A forest edge or open area is best. I also suggest putting a tag or other identification on it that has your school’s name and “research project – please don’t disturb” or something similar to minimize disturbance from human mammals. Add bait in the morning and check the trap as late in the afternoon as you can. **YOU MAY LEAVE THE TRAP UP OVERNIGHT, BUT PLEASE DON’T LEAVE THE BAIT UP OVERNIGHT – IT WILL MESS UP THE “TRAP HOURS” CALCULATION.** Replace bait after it has been used for 1-2 days (check if it is still smells like it is fermenting). If you are using multiple traps, number each trap so you can keep them straight on the datasheets.

(4) Data Recording:

YOU NEED TO FILL OUT INFORMATION IN 2 DIFFERENT DATA SHEETS. One sheet will record basic trap and capture data and the other is for keeping track of who you’ve marked and whether you’ve recaptured them. **YOU SHOULD FILL OUT A SEPARATE LINE FOR EACH TRAP AND TRAP DAY.**

Basic data: Check the trap once each day and try to obtain at least 7 trap days in Late August, Sept. and/or early Oct (the more the merrier). On the BASIC datasheet, record the date, the trap # (if using more than one trap), the type of bait (N = our normal bait described in (1) above; if you use another bait type, record it as other and describe it in comments), time of trap set up, time of trap check, weather data over the trapping period (e.g. from hourly records of closest weather station on accuweather.com: max/min temp, max wind speed, max/min rel. humidity, and total precipitation), and the total number of butterflies caught of each species. If any other information strikes you as possibly important (e.g. “hundreds of yellowjackets in trap”), you can record it in “comments”. **YOU NEED TO FILL OUT THIS DATA SHEET EVEN IF YOU DIDN’T CATCH ANY BUTTERFLIES.**

Capture data: You will record data for each butterfly caught (new or recapture) on the CAPTURES datasheet. For each new butterfly caught, record it as a “new capture” and list the date of capture and species. If you catch a butterfly species not on the datasheet, record it as “other species” and list the species name in the “comments” column. Mark new captures with a number on the underside of their right hindwing with a black sharpie and record the individual’s number on the datasheet. I suggest using

consecutive numbers for all butterfly species (i.e. not restarting a number sequence for each species). For each recaptured individual, record it as a “recapture” and list the date, species, and individual number. If any other information strikes you as possibly important (e.g. “missing hindwing”, “dead in trap”, etc.) you can record it in the “comments”. EACH CAPTURED BUTTERFLY GETS ITS OWN ROW IN THE CAPTURE DATA SHEET.

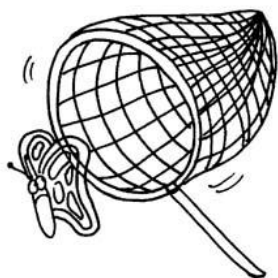
(5) Butterfly species most likely to be captured:

The butterflies you will capture are members of the family Nymphalidae (the brush-foots). Below I’ve listed the butterflies in Illinois most likely to come to fruit. To identify these species, I suggest using a good field guide (two of the best for IL are Glassberg, J. 1999. *Butterflies Through Binoculars: The East*. Oxford University Press, New York; and Bouseman, J. K. and J.G. Sternburg. 2001. *Field Guide to the Butterflies of Illinois*. Illinois Natural History Survey, Champaign) or look them up on the web. Many people have outstanding photographs of butterflies posted on the web and you may even be able to construct your own “field guide” by using photos from websites of the species I list below (see websites listed below). IF YOU ARE NOT SURE OF THE IDENTIFICATION, PLEASE TAKE A CLEAR/IN FOCUS PHOTO OF ITS TOP SIDE AND UNDERSIDE (ESPECIALLY THE UNDERSIDE OF THE HIND WING) AND E-MAIL THEM TO ME (pvswitzer@eiu.edu). Please e-mail me the photo at full resolution.

Common Fruit-feeding Butterflies of Illinois	
hackberry emperor <i>Asterocampa celtis</i>	question mark <i>Polygonia interrogationis</i>
tawny emperor <i>Asterocampa clyton</i>	eastern comma <i>Polygonia comma</i>
red-spotted purple <i>Limenitis arthemis</i>	gray comma <i>Polygonia progne</i>
viceroy <i>Limenitis archippus</i>	green comma <i>Polygonia faunus</i>
mourning cloak <i>Nymphalis antiopa</i>	northern pearly-eye <i>Enodia anthedon</i>
red admiral <i>Vanessa atalanta</i>	little wood satyr <i>Megisto cymela</i>
painter lady <i>Vanessa cardui</i>	

(6) Some websites to checkout for starters (there are many other good ones):

- <http://www.rlephoto.com/butterflies/butterflies.html> (photos)
- <http://www.duke.edu/~jspippen/butterflies.htm> (photos)
- <http://www.naba.org/chapters/nabambc/butterfly-info.asp> (photos)
- <http://www.owlsplesure.com/sculpture/butterflies/butterflies.html> (photos)
- <http://www.eiu.edu/~bflyclub/index.html> (Grand Prairie Butterfly Club; regional bfly club, some photos)
- <http://www.bfly.org/> (Illinois butterfly monitoring network; some photos)
- <http://www.wisconsinbutterflies.org/> (Wisconsin distribution info; some photos)
- <http://www.butterfliesandmoths.org/> (Illinois distribution info; some photos)



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