

CBMN Survey Protocol

The Colorado Butterfly Monitoring Network follows a modified Pollard Walk protocol. Volunteer monitors walking the same route at least 6 times throughout the butterfly monitoring season (May 15 – October 15th) and recording every butterfly seen in a 6 meter radius (see Fig. 1 below). It is recommended that the monitor visit their route at least 4 times before July 20th, as this distributes data throughout the season. The butterfly season dates are based on the average first snow and average last frost of the Front Range region in Colorado; surveys occurring outside of the above official season will be flagged as “pre-season” or “post-season” by program leaders.

During a survey, only one monitor observes butterflies at a time, however monitors are advised to work in pairs. This allows one monitor to conduct the survey while the other keeps notes and aids with identifications. At the beginning and end of each monitoring session, monitors record the time, the temperature, the cloud cover conditions (clear, mostly clear, partly cloudy, mostly cloudy, overcast, or hazy) and the wind conditions (calm, relatively still, moderately windy, wind, or very windy). The monitors then walk the route at a steady pace, recording every butterfly seen inside their 6m “bubble”. Any pauses in observations longer than 3 minutes are recorded as breaks.

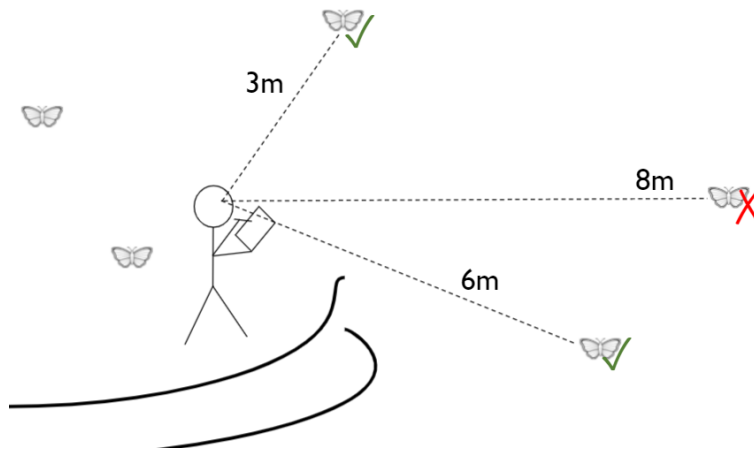


Figure 1: Image from 2021 CBMN Monitor training illustrating the modified Pollard Walk protocol used by CBMN monitors

If an unknown butterfly is seen, monitors are encouraged to identify the butterfly as far as possible but no further than they are confidently able to identify it. A butterfly ID of “Unknown Butterfly” or “Unknown Swallowtail” is preferable to an incorrect but more precise identification. If monitors manage to take a picture, they are instructed to email it to a program leader for identification or submit it to the [iNaturalist Project Group](#). If no butterflies are observed during the survey, monitors still report the results in PollardBase as “No Butterflies Observed”.

Monitors are encouraged to use the provided field form to record data. The field form is available in two versions, one with [common species](#) of the Colorado Front Range (where most program routes are concentrated) and another that is a [blank version](#), allowing monitors to fill in species as they are observed and identified.