Butterfly Sampling: Pollard Walk

Butterfly species composition and relative abundances are sampled using transect counts, modified from Pollard (1977). Transect routes are established as appropriate for each site, typically including distinct segments near the base of a sloped habitat, mid-slope, and along ridgetops. Observers record butterflies observed within a 5 meter band on both sides of a transect, while walking at a slow and steady pace. Species identifications are made visually, using binoculars when needed. Occasionally, identification may require capture with nets, after which the insects are released unharmed. Transects are walked during midday hours (1000–1500) on at least one day during each 10-day sampling period. Sampling is restricted to relatively calm conditions and times when air temperature exceeds 13°C in sunny weather or 17°C in cloudy weather.

Recording

Record all butterflies seen w/in bounds of route (5 meter width rec'd) and w/in 5 m ahead. Helpful to imagine recorder w/in moving 5 meter box

- record all butterflies seen w/in box.

Walk at steady pace.

No special effort to record butterflies settled out of sight in dense vegetation.

Record each individual once only.

Record at least once per week.

Restrict recording to middle of day (e.g. 1000 to 1500 PST, or 1100 to 1600 PDT)

Temperature: shade temp $\geq 17.0 \, ^{\circ}\text{C}$

(or lower, e.g., 11.0 °C at northern sites where butterflies adapted to cooler temps)

Wind speed estimated using Beauford scale

References

New, TR 1997. *Butterfly Conservation*, 2nd *Edition*. Oxford Univ. Press, Melbourne, Australia. Pollard, E, and TJ Yates. 1993. *Monitoring Butterflies for Ecology and Conservation*. Chapman & Hall, London, UK.

*Pyle, RM 2002. The Butterflies of Cascadia: A Field Guide to All the Species of Washington, Oregon, and Surrounding Territories. Seattle Audubon Society, Seattle, WA.

BUTTERFLY TRANSECT DATA FORM

Site Name	Site	e ID No							
Date Observer									
Transect Location									
Transect UTMs: Start:	N	E _							
End:	N	E _							
Elevation	Aspect		Slope (%)						
Start Time	End Time								
Weather: Start Temp °C	End Temp °C	% Sun	Wind						
•	_	ES OBSERVED							
		Section							

	Section						
Species	1	2	3	4	5	Total	Notes
•							
G .:	4	2	2	4	_		
Section	1	2	3	4	5		
Sun (S or C)							