

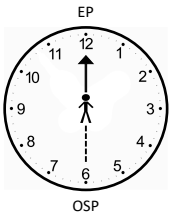
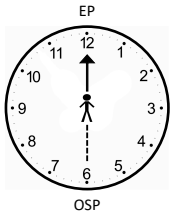
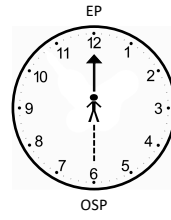



Supplementary Presentation 2

Field data form for experimental human approach trials on wild, GPS-collared wolves

Eriksen A, Versluijs E, Fuchs B, Zimmermann B, Wabakken P, Ordiz A, Sunde P, Wikenros C, Sand H, Gillich B, Michler F, Nordli K, Carricondo-Sanchez D, Gorini L and Rieger S (2022). A Standardized Method for Experimental Human Approach Trials on Wild Wolves. Front. Ecol. Evol. 10:793307. doi: 10.3389/fevo.2022.793307

Date	Wolf ID(s)	Wolf sex	Observer 1	<input type="checkbox"/> Walking <input type="checkbox"/> Jogging <input type="checkbox"/> Skiing <input type="checkbox"/> With dog <input type="checkbox"/> Other
ApproachID	Territory	Wolf age	Observer 2	
Track ID		Other disturbance		
Wolf social status Single vagrant / Single stationary / Pair / Family group of individuals (parent / offspring)				

	Waypoint #	UTM_E	UTM_N	Time
Estimated wolf start position WSP				
Observer start position OSP				
Passing position PP				
Observer end position OEP				

	Observer start position OSP	Passing position PP	Observer end position OEP
Air temperature			
Wind strength	Weak Medium Strong	Weak Medium Strong	Weak Medium Strong
Wind direction			
Precipitation	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
Vegetation cover	 Cover (%): _____ Cover (%): _____	 Cover (%): _____ Cover (%): _____	 Cover (%): _____ Cover (%): _____
Noise level	Silent Medium Noisy	Silent Medium Noisy	Silent Medium Noisy
Habitat type			

Wolf detected No Yes	Category Seen HeardVocal HeardMove	Number of wolves
Time	UTM/Waypoint	Video footage No Yes
Shortest distance	Direction (obs. clock)	Visibility P R G VG
Direct encounter No Yes	Flight distance	Flight time
Observer response before flight 1 2 3	Did observer feel threatened	
Description if heard		
Behavior if seen		
Comments:		

Waypoint list for observations of interest

UTM or Waypoint	Time	Description (use observer clock for direction relative to observer)

Post-trial concealment measurements (max. distance at which cover cylinder can be seen)

		UTM_E	UTM_N	North:	East:	South:	West:	Bed?
Flight init.	Wolf 1							
	Wolf 2							
Reset.	Wolf 1							
	Wolf 2							

Comments:

Notes to the data form:

Approach ID: Format yyyy-mm-dd_Territory. **Track ID:** Name of observer track log. **Observers 1 and 2:** Name of person(s) conducting the approach. **Other disturbance:** Other activity going on in the area that may affect the wolf behavior before or during trial, e.g. forestry workers, hunters, berry pickers; or background noise that may affect detectability. **Wolf social status:** Mark the category/categories that apply. If a family group, indicate the number of individuals and whether focal wolf is the parent or offspring. **Wind strength:** Based on Beaufort scale, measured with anemometer or using the following criteria: Calm (0-1): wind not felt on face. Leaves and twigs not moving. Weak (2-3): wind felt on face. Leaves and/or small twigs moving. Medium (4-5): Raises dust. Small branches and/or small trees in leaf move. Strong (6+): Large branches and/or whole trees in motion. **Wind direction:** Direction wind is blowing from based on the observer clock (see below), and whether direction was constant or variable. **Precipitation:** 0: no precipitation, 1: fog/dusty precipitation (damp conditions but without clothes getting wet), 2: light precipitation (clothes wet within 15-30 minutes), 3: medium precipitation (clothes wet within 5-14 minutes), 4: heavy precipitation (clothes wet within 5 minutes), 5: very heavy precipitation (clothes wet within 1 minute). **Vegetation cover:** For ground-waist and waist-top of head, estimate horizontal cover to the nearest 10%. **Noise level:** Level of noise created by moving through the vegetation. **Wolf detected:** Whether wolves were detected during the trial, how (seen, heard vocalization, heard movement), and the number of individuals. **Video footage:** Whether video camera was used. **Min. distance:** Estimated shortest distance between wolf and observer. **Direction:** Based on the "observer clock" (see below). **Visibility:** Visibility when wolf was detected. Poor, Restricted, Good, Very Good. **Direct encounter:** Whether all criteria to switch to direct encounter protocol were met: Visual observation of wolf ahead of the observer when observer is facing OEP, wolf is aware of the observer, the observer would notice the wolf in a non-trial situation, and wolf does not leave immediately. **Flight distance:** Distance between observer and wolf when wolf moved away. **Flight time:** Time between encounter and flight. **Observer response before flight:** In sequence according to protocol. 1: stop and wait for one min, 2: count to ten loudly, 3: wave arms and shout loudly. **Waypoint list (p. 2):** For observations of interest (wolf seen or heard, wolf tracks, territory markings etc.). Coordinates or waypoint registered in handheld GPS, time and description of observation. **Post-trial concealment measurements:** Place cover cylinder (60 cm tall and 30 cm diameter) at the coordinate of flight initiation/resetting. In the four cardinal directions, measure maximum distance at which the cylinder can be seen.



Observer clock: Direction indicator for wind, and wolf (or other) observations. Use the number matching the direction relative to the observer when the observer is walking in a line from the observer start position to the end position.