





Visitor Use Management Protocol

Leash Compliance for Parks with Dogs

Troy E. Hall, Ashley D'Antonio, & Madeline Aberg Department of Forest Ecosystems & Society, Oregon State University



Overview

The leash compliance measure uses observation to determine the extent of visitors' compliance with regulations requiring dogs to be leashed wehre they are in effect. This measure relies on a stationary or roving observer to document instances of dogs on and off leash.

Considerations

- 1) Does the park require a specific length of leash? For example, no more than six feet in length. If so, will you consider only leashes under six feet as in compliance? Or will you consider a dog attached to a leash of any length to be in compliance? Your decision might be informed by the issue that most concerns the park. There is also a trade-off between trying to precisely determine compliance (on a < 6 ft leash or not) and being able to collect data efficiently and reliably. For instance, trying to determine the length of a leash from a distance may lead to errors.
- 2) Will you randomly sample locations? An alternative to this approach that may make data collection more efficient is to use indicator locations which are sampled repeatedly.
- 3) What are the laws and policies of your agency related to dogs? Ensure that your desired conditions and indicators are consistent with these.

Definitions

- Dog containing party: Any group of one or more people visiting with one or more dogs.
- Leash: A chain, rope, cord, or strap with a clip or snap that attaches to a choke chain, collar, or harness that is attached to a dog for the purpose of controlling and walking the dog.
- Off-leash: Includes both dogs without leashes and dogs on a leash not held or restrained by the guardian (i.e., running free with a leash attached).
- Stationary group: In a picnic area, you will observe groups using picnic tables or any other groups that are "parked" in the area (e.g., picnicking on blankets or sitting on chairs in the grass). These are considered stationary groups. You will not count groups traversing through the area.

Protocol

- Arrive at the predetermined stationary observation point or the first picnic table as described in the Applicable Sites section below.
- 2) Record the following information in the associated fields on a **Leash Compliance Data Sheet.** If multiple data collection sheets are required for an observation session, complete this information on every sheet. In the list below, the fields are bolded, followed by the definitions of the type of information to record:
 - Unit: The park unit in which you are monitoring
 - Monitoring Location: The monitoring location you are observing. Some units will have more than one
 monitoring location.
 - Name: Your first and last name.
 - Date: The date of your observation.
 - **Sky Cover**: Check one, "Sunny," "P Cloudy" (partly cloudy) or "Overcast," depending on the predominate precipitation during the data collection event.
 - **Precipitation**: Check one, "present" or "absent," depending on the predominant precipitation during the data collection event.
 - **Temperature**: Check one (Check boxes are provided in 10-degree Fahrenheit increments from 40°F to 90+ °F) that represents your best estimate of the predominant temperature during the data collection event.

For Observations at Thresholds

- This approach documents entries of groups into a predefined space (i.e., groups that cross a threshold into the observation area). Multiple observation sessions will occur during a single monitoring day. Each observation season will last 10 minutes and have its own start and end time. Data will be recorded continuously during this time. To begin an observation, record the start time (HH:MM, 24-hr clock) in the **Observation Start Time** filed on the data sheet. When an observation session has ended, record the end time in the End Time field on the data sheet.
- 2) Observe each group that crosses the threshold and enters the observation area. Tally the number of groups within each category of visitor as explained below. Do your best to distinguish between groups (people visiting together); sometimes a group may have members spread out in a site. If you cannot tell for certain if people are in the same group, consider them to be separate groups. Count each group only once (e.g., if a group enters the zone, returns to their car, and then reenters the zone, record them only once).
 - For groups without dogs, record a tally in the Groups w/o Dog field. A single tally represents a single group, regardless of the number of people in that group.
 - For groups with one or more dogs, observe all dogs to determine whether any dog is off leash.

- If all dogs in the group are on-leash, record a tally in the Groups w/ Leashed Dog(s) field. Record one tally per group, not the number of dogs leashed.
- If at least one dog is off leash, record a tally in the Groups w/ 1+ Unleashed Dog(s) field. Record one tally per group, not the number of unleashed dogs.
 - Example: If a group of three people crosses the observation threshold with 5 dogs on leash and one dog off leash, the group would be counted as one "Group w/ 1+ Unleashed Dogs."
- Continue tallying groups, by group type, until the observation session is over.
- At the end of the observation session, total the number of groups in each category. Record the value in the **Total** cell under each category.
- Record any relevant comments about the observation session in the Comments block on the data collection form. This should include references to any problems (e.g., blocked view, distractions, inability to see dogs, etc.).
- 3) Once the 10-minute observation session has ended, take a 2-minute break, then begin another 10-minute observation session.

For Observations at Picnic Areas

At picnic areas, you will observe use of picnic tables and groups who are set up on blankets/chairs in the grass, not groups walking through or past the area. Data for picnic area is collected at one time. During a session, observe each picnic table and stationary groups, either from a stationary point or by walking around the site if required to see whether dogs are present.

- At the beginning of an observation period, record the time (HH:MM, 24-hr) in the **Time** column. This only 1) has to be recorded once on the data sheet for each observation period, not for each group observed.
- 2) Using a hard copy aerial image of the site, walk through the site and assign a number to each picnic table (whether occupied or not) and each stationary group using the area. You will use the same number for multiple observation sessions on a given day, but numbering does not need to be the same between days.
 - Number the tables according to the diagrams provided, beginning with Table #1.
 - If additional picnic tables are present, they should be numbered beginning after the highest previously numbered table. The location of each additional table should be described in the comments and marked on the paper diagram.
 - Picinic tables should be numbered first, before documenting groups who are set up on the ground, but away from the tables. If groups are picnicking on the ground and not at a table, they should be given a letter, starting with "A" and marked on the diagram.
- 3) Using the diagram, observe the picnic tables and stationary groups, beginning with Table #1. Record information on one row for each table occupied and each other stationary group (Table #/Grp Letter).

- Occasionally a single group will occupy two tables. In this case, all table numbers should be recorded on the same line, and the comments should indicate that the two tables are being used by a single group.
- 4) Circle "Y" or "N" for the following fields:
 - New Group: Did the group occupying the table arrive since the last observation period (i.e., are they "new" since the previous observation session?). Note: During the first observation session each day, all groups will be "new groups," so circle "Y" for every table during that session. For subsequent sessions, only circle "Y" if the previous group left and a new group with different people is now occupying the table. To assist in remembering which groups have been seen before, record helpful identifying information in the Comments column (e.g., "Group of 5 people, 3 dogs, woman wearing red baseball cap").
 - For new groups only:
 - Any Dogs Present: Does the group occupying the table have one or more dogs? If one
 or more dogs are present, circle "Y" on the data sheet. If no dogs are present, circle "N."
 - All Dogs Leashed: Are all dogs associated with the people at the table leashed? If one
 of more dogs are unleashed, circle "N"; if all dogs are leashed, circle "Y."
- 5) Record any relevant comments about the observation session in the **Comments** column. This should include references to any problems (blocked view, distractions, inability to see dogs, etc.).

Data Analysis

Possible Statistics

The proportion of dog-containing groups that have at least one dog out of compliance with on-leash regulations.

Applicable Sites

Example of a Threshold Observation Site: Muir Beach

From Hall et al. (2022).

Muir Beach.

A stationary observer will be positioned on the parking lot side of the bridge sitting on the nearby picnic tables (if available) looking toward the bridge (Figures 1 and 2).



Leash Compliance Protocol

Observer will watch the threshold of the bridge, observing all groups entering the Muir Beach trail system. Red arrow on bridge indicates direction of travel for

Figure 1. Leash compliance observation location at entry to Muir Beach boardwalk. (Source imagery left image: Aerial imagery publicly available from Google Maps; Source imagery right image: Photo taken by Susan Sidder (OSU), June 2019).

Example of a Picnic Area Observation

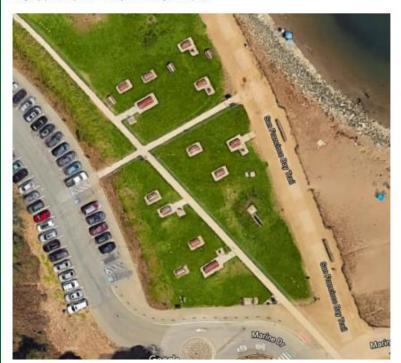
From Hall et al. (2022).

Crissy Field: West Bluff and East Beach Picnic Areas.

At the West Bluff Picnic area, an observer will walk through the picnic area, observing groups at each picnic table (Figure 8). At East Beach, there are two sets of picnic tables, and the observer will walk through both (Figures 9 and 10).



Figure 8. Leash compliance observation areas at Crissy Field Picnic Areas. (Source Imagery: Aerial imagery publicly available from Google Maps).



Leash Compliance Protocol

A roving observer will walk through the picnic areas at the West Bluff and East Beach picnic areas, observing each picnic table (Figures 9 and 10), as well as any stationary groups occupying space on the grass.

For each table, the observer will record whether or not the table is occupied; for tables and stationary groups, they will record if the group has one or more dogs, and if one or more dogs is off leash.

For each subsequent rove, the observer will record the same information, noting if each group is new or was present during a prior rove.

Figure 9. Leash compliance observation area Crissy Field West Bluff Picnic Area. (Source imagery: Aerial imagery publicly available from Google Maps).

Visitor Use Management Protocol – Leash Compliance

	Sheet of			
Leash Compliance Data Sheet – Picnic Areas				
Unit:	Monitoring Location:			
Name (First/Last):	Date (MM/DD/YYYY):			
Sky Cover: O Sunny O P Cloudy O Overcast	Precipitation: O Present O Absent			
Temperature : O 40 - 49°F O 50 - 59°F O 60 - 69°F O 70 - 79°F O 80 - 89°F O 90 + °F				

mments
- -

Visitor Use Management Protocol – Leash Compliance

			Sheet of		
Leash Compliance Data Sheet – Threshold					
Unit:		Monitoring Location:			
Name (First/Last):		Date (MM/DD/YYYY):			
Sky Cover: O Sunny O P Cloudy O Overcast		Precipitation: O Present O Absent			
Temperature : O 40 - 49°F O 50 - 59°F O 60 - 69°F O 70 - 79°F O 80 - 89°F O 90+ °F					
Observation Start Time:	Observation End Tim				
Groups w/o Dog(s)	Groups w/ All Dogs Leashed		Groups w/ 1+ Unleased Dog(s)		
Total:	Total:		Total:		
Comments:					
Observation Start Time: Observation End Time:					
Groups w/o Dog(s) Total:	Total:	Dogs Leashed	Groups w/ 1+ Unleased Dog(s) Total:		
Comments:	lotal:		iotai.		
Observation Start Time:	Observation End Time:				
Groups w/o Dog(s)	Groups w/ All	Dogs Leashed	Groups w/ 1+ Unleased Dog(s)		
Total:	Total:		Total:		
Comments:	·				

RESOURCES

Golden Gate National Recreation Area

- Hall, T. E., Engebretson, J. M., & D'Antonio, A. (2022). Visitor use monitoring field protocols for Golden Gate National Recreation Area. Report prepared for the National Park Service. Corvallis, OR: Oregon State University, Department of Forest Ecosystems & Society.
- Hall, T. E., Engebretson, J. M., & D'Antonio, A. (2023). Visitor use monitoring program for Golden Gate National Recreation Area. Report prepared for the National Park Service. Corvallis, OR: Oregon State University, Department of Forest Ecosystems & Society.

Dogs in Parks

- Bekoff, M., & Meaney, C. A. (1997). Interactions among dogs, people, and the environment in Boulder, Colorado: A case study. Anthrozoos, 10, 23-31.
 - https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1010&context=acwp_ca
- Jorgensen, J. G., & Bomberger Brown, M. (2014). Piping Plovers Charadrius melodus and dogs: Compliance with and attitudes toward a leash law on public beaches at Lake McConaughy, Nebraska, USA. Water Study Group Bulletin, 121, 7-12. https://ternandplover.unl.edu/download/publication/Jorgensen-Brown-2014-Piping-Plovers-Dogs.pdf
- Rutter, J. E. (2016). Bird friendly beaches: Evaluating dog and human interactions with Great Lakes piping plovers (Charadrius melodus) and other shorebirds. Masters Thesis, University of Minnesota. https://hdl.handle.net/11299/185071
- Vaske, J., & Donnelly, M. (2007). Visitor tolerance and standards for off leash dogs at Boulder Open Space and Mountain Parks. HDNRU Report No. 75. Boulder, CO: City of Boulder Open Space and Mountain Parks. https://webappsprod.bouldercolorado.gov/openspace/researchreports/docs/Vaske Jerry Visitor Tolerances and Standards for OffLeash dogs 2007-1-201307161213.pdf

SUGGESTED PROTOCOL CITATION

Hall, T. E., D'Antonio, A., & Aberg, M. (2023). Leash Compliance for Parks with Dogs. Protocol developed for the Visitor Use Management Toolkit. Corvallis, OR: Oregon State University, Department of Forest Ecosystems & Society.