

Standard Operation Procedure (SOP) #6

Collecting Stream Transect Photographs

Version 2.01 (March 21, 2022)

Change History

New Version #	Revision Date	Author	Changes Made	Reasons for Change	Previous Version #
2.0	4/12/2021	Amanda McCutcheon, Anne Farahi	Changed the name of the SOP and some minor text edits for clarification. Added the photo log datasheet created by J. Mills for WAPA.	Clarification was needed. There was no datasheet within the protocol document for photographs.	1.0
2.01	3/21/2022	Kim Weisenborn	Updated content to refer to new PACN I&M SharePoint.	PACN data is no longer stored on a networked drive (I:\ drive) and is now stored on the PACN SharePoint site.	2.0

Only changes in this specific SOP will be logged here. Version numbers increase incrementally by hundredths (e.g., version 1.01, version 1.02) for minor changes. Major revisions should be designated with the next whole number (e.g., version 2.0, 3.0, 4.0). Record the previous version number, date of revision, author of the revision, changes made, and reason for the change along with the new version number.

Purpose

This SOP describes how to collect photographs for the stream animals protocol using the Ricoh GPS camera. A [photo log datasheet](#) is included below. For specific instructions on the operation of the camera refer to the below files located in the [Vital Signs Data Management SOP Documents](#) folder in SharePoint:

- [SOP Using the Ricoh Caplio 500SE-3 GPS Camera](#)
- [Ricoh G800SE User's Manual](#)

Using the Ricoh® GPS Camera

Load camera memos onto the Ricoh® camera prior to sampling trip. See [SOP Creating Memos for the Ricoh Cameras](#), located in the [Vital Signs Data Management SOP Documents](#) folder in SharePoint, for instructions on how to load camera memos.

1. Perform compass calibration procedure each time you move the camera more than 100 miles as instructed on page 121 of the [Ricoh G800SE User's Manual](#).

2. Turn on Ricoh camera and allow enough time for the GPS (Global Positioning System) receive signals from at least four satellites. Wait until you see *3D fix* displayed on the camera's display (usually also accompanied by an audible chime); this indicates that the GPS is receiving at least four satellite signals and can accurately map your location. A GPS point of where you are standing when the photo is taken will automatically be collected when you take a picture. Wait at least 10 minutes to determine if GPS is available. The camera can be turned on upon arrival at site and left to search for satellites while other preparations are made. At many sites, receiving satellite signals will be impossible due to terrain and a thick canopy. This is okay as the memos associated with the pictures are the more important step.
3. Be careful to not block the GPS receiver when taking photos. The GPS receiver says "GPS" and has a small antenna that extends beyond the camera body.
4. Photos should be taken from the center of each transect (0 m, 15 m, 30 m) facing upstream, downstream, and towards the right and left bank (12 photos total for the site). Photos of any other noteworthy scenes should be taken (i.e., any major change at the site such as a tree fall or major bank erosion).
5. Select the appropriate field for each memo (Park, Island, Stream, Site, Direction, Transect, Photographer) by pressing the ad/memo button. Select ok to set memo. If water quality sampling is being conducted concurrently with stream animals surveys, set the transect memo to "WQ" for the water quality data photos to ensure that the photos can be easily separated from the stream animal photos for processing as they will be entered into a separate database.
6. Wait for *3D fix* on the camera's display. Take the picture. Repeat for each direction at each transect.
7. Fill out a [Photo Log Datasheet](#) (below) for each Site/Reach. Record the information for the camera used, the photo numbers corresponding to each transect, the start time at each transect, and any additional descriptions or comments that may be useful when processing the photos in the office and accurately entering them into the database.

Photo Log

Site:	Date:
Photographer(s):	

Camera(s) Used

#	Make & model <i>(e.g., Olympus TG-3)</i>	Serial # <i>(e.g., 552A3R3)</i>	Description / Comments
1			
2			

0 m Transect

Camera #:	1 2	Initials:	Start Time:
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Taken facing	Photo #	Description / Comments
Upstream		
Downstream		
Right Bank		
Left Bank		

15 m Transect

Camera #:	1 2	Initials:	Start Time:
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Taken facing	Photo #	Description / Comments
Upstream		
Downstream		
Right Bank		
Left Bank		

30 m Transect

Camera #:	1 2	Initials:	Start Time:
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Taken facing	Photo #	Description / Comments
Upstream		
Downstream		
Right Bank		
Left Bank		