

Bog Learning Network – Five Steps to Photo Monitoring

1) Select the points or areas you want to photograph, aka photo points

- Which areas will allow you to document site change? Progress toward your objectives?
- Are there areas that warrant special attention, e.g. rare species populations or habitat?

Note: It's important to carefully select photo points. They cannot be changed without losing monitoring continuity.

2) Select where you'll place your camera to capture your photo points, aka camera points

- Does the camera point allow you to adequately capture your photo points?
- Can you capture more than one photo point from the camera point?
- Are you able to mark the camera point so you can easily return to it?
- Is the camera point safe, e.g. is there poison sumac near?
- If needed, do you have landowner permission to access a camera point?

3) Mark photo and camera points

Camera Points

- Metal fence posts may work best.
- Steel rebar driven flush with the ground is another option, though it may require metal detector to locate.
- Flagging tape or pin flags are relatively short-lived and will have to be replaced frequently.
- Record GPS points if possible – not to define the points, but as a guide to find the point markers.
- Assign a number to each photo and camera point.

Photo points

You'll probably be shooting a wide swath of the bog instead of a distinct point, however, you still want to ensure you are photographing the same area of the bog. A few options:

- Mark the edges of the area you want to photograph and use these markings to frame the image in the camera.
- Carry previous photos with you to assist with aligning the image in the viewfinder. If possible, carry either the same camera used for a previous shoot, or a camera with a zoom lens to ensure you can match the photo frame. Some digital cameras offer the ability to change the aspect ratio, so you'll want to be consistent.
- Shoot at the same compass bearing and focal length. Be aware - the same focal length can provide different fields of view in different cameras – to avoid this, use the same camera or cameras with the same size film or sensor.

Maintain a map of your site identifying photo points, camera points, and site access points.

4) Determine the timing and frequency of your photographing

- What time of year would be most meaningful for what you want to accomplish with your monitoring?
- How many times per year do you need to take photos for it to be meaningful?
- How many times per year will someone be able to get out and take the photos?

4) Photographing

- If possible, shoot at the same, predetermined, height each time. Tripod is highly recommended.
- Ensure your camera is set to its highest quality setting.
- Digital cameras sometimes include the ability to alter their aspect ratio – maintain consistency.
- If using manual controls, use a narrow aperture, i.e. a higher f-stop, to ensure a wide depth of field.
- Include a placard in the photo frame with information such as date, photographer, site name, photo point number, camera point number, etc. Avoid exceptionally dark or light surfaces (like white paper) as it could alter the camera's exposure. Laminated cards that can be erased and reused or chalk boards are good options.
- You may want to record photo information such as aperture, shutter speed, ISO, etc., though with digital cameras this is likely be imbedded in the image file.

5) Data storage

- Rename your image files according to a meaningful, pre-determined convention. An example naming convention is: Year_month_bogphotopoint_photographer; e.g. 2013_07_McCluresBog_2_AdamWarwick
- Consider scanning your data sheet and storing it with your digital images

Photo monitoring data sheet

Basic information

| | |
|-----------------------|---------------------------|
| Investigator(s): | Date: |
| Site: | Camera make/model: |
| Arrival time to site: | Departure time from site: |
| Weather conditions | |

Pre-departure checklist:

| | | | |
|--|--|---|--|
| Map to camera points | | Access permissions | |
| Understanding of photo point locations | | Understanding of monitoring objectives | |
| Charged camera battery | | Memory card space | |
| Film in camera | | Camera set to highest quality | |
| Camera aspect ratio set to match previous photos | | Equipment needed to maintain markings (paint, flagging, etc.) | |
| Placard and pen/chalk | | | |

| | |
|-----------------------------------|-----------------------|
| Photo point # | Camera point # |
| Camera height: | |
| <i>Optional</i> | |
| Compass heading from camera point | f-stop |
| Focal length | Aspect ratio |
| Notes: | |
| | |

| | |
|-----------------------------------|-----------------------|
| Photo point # | Camera point # |
| Camera height: | |
| <i>Optional</i> | |
| Compass heading from camera point | f-stop |
| Focal length | Aspect ratio |
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