



## Guidelines for Taking Repeat Photography



The Tusk on Another River/ © Stephen R. Capps, 1928



The Tusk in Lake Clark National Park and Preserve / NPS, 2004

Repeat photography is the art of locating the actual site of an old photograph, duplicating the position of the original camera, and taking a repeat image of the same scene. It can be a challenging game, like geocaching, but it is also a useful technique for comparing landscape changes occurring over time. This project provides an opportunity for you to become involved in your national parks by contributing data to the scientific community while having fun and exploring at the same time.

### Prior to Going into the Field

#### 1. Print

Print the photos you would like to repeat from the website: <http://go.usa.gov/bhBY>.

#### 2. Mark

Using a ruler, draw a vertical line along the photograph's exact center line. Then draw at least one vertical orientation line on each side of the centerline that passes through both background and foreground features that can be identified in the field (in this case, the distant glacier and a nearby rocky outcropping topped by bushes).

#### 3. Describe

Write down any information that accompanies the original photo. This may help you locate and retake a new one.

#### 4. Gather

Equipment you will need in the field includes the printed photographs you want to repeat, the photo information & coordinates, a GPS unit, a camera, extra batteries & memory cards, a tripod, a notepad, pens or pencils, a map, and a compass.

#### 5. Locate

Enter the latitude and longitude coordinates of the photographs you would like to repeat into your GPS unit. Compare the location that appears in your GPS to a map to ensure the general vicinity of the photos seems accurate prior to going into the field.



Bear Glacier in Kenai Fjords National Park/ circa 1909

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## On Location

### 1. Navigate

Utilize coordinates plotted into your GPS and/or maps to navigate to the vicinity of the photo-point you would like to replicate.

### 2. Center

Once you have arrived in the vicinity of the photo-point in the field, identify foreground, background, and centerline features marked on the original photograph in the landscape. Adjust your position left and right so that these features are exactly in line as seen in the original photograph. Accomplish this before adjusting your position forward & backward.



NPS photo

### 3. Distance

Begin the process of moving forward or backward such that the features are oriented in the same way as in the original photograph. For close-up photography, adjustment of camera height on the tripod will be necessary; in such cases, horizontal orientation lines will facilitate precise duplication of original camera height.

### 4. Adjust

Set ISO at 100, use an F-stop setting of f/8.0, and a minimum shutter speed of 1/100. High resolution settings are best. If visibility is low and waiting is an option, try another day. If your time at the photo location is limited, a foggy photo is better than no photo.

### 5. Describe

Take notes of the landscape or feature you are photographing as well as of your photo shoot. Information noted may include your photo file names, the site ID, the geographic location (nearest landmark), GPS location (latitude and longitude), date, time of day, the accuracy of your GPS unit, elevation, camera height, camera type, vegetation cover, and/or other general notes.

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## Back in the Connected World

**1. Log Into** or set up an account with Flickr.

**2. Join** one or more of the groups associated with the Southwest Alaska Repeat Photography Database:

Aniakchak [flickr.com/groups/2165857@N25/](http://flickr.com/groups/2165857@N25/)

Katmai [flickr.com/groups/katmainps\\_photos/](http://flickr.com/groups/katmainps_photos/)

Kenai Fjords [flickr.com/groups/kenaifjordsnps\\_photos](http://flickr.com/groups/kenaifjordsnps_photos/)

Lake Clark [flickr.com/groups/lakeclarknps\\_photos/](http://flickr.com/groups/lakeclarknps_photos/)

**3. Upload** your photos to the appropriate group in Flickr.

**4. Include** additional information with each photo such as GPS coordinates, location name, direction facing, etc...

**5. View** your photos on our embedded slide show.

For more information about the repeat photography project, please visit Southwest Alaska Network (SWAN)'s website at <http://science.nature.nps.gov/im/units/swan/monitor/repeatphoto/RepeatPhotography.cfm>

Or you can type in this shortcut link to get to the same page: <http://go.usa.gov/bhBY>