

Document Spring project protocol 2018



Figure 1. Ostrich ferns unfurling in a forest understory. Photograph 6:13 pm, May 9, 2017 by Kyle G Gill.

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1. Project Title:

Document Spring

2. Project goals:

The primary goal of the Document Spring project is to photographically document seasonal events of spring between Oldenburg House and Oldenburg Point using curiosity, photography, and creativity. The secondary goal is to improve students' ability to observe and photographically document their surroundings.

This protocol establishes project baselines to promote consistency from one year to the next. The protocol outlines broad project boundaries and adds geospatial and temporal data to the photographic data. Both of these will help to track seasonal and annual change for our area of interest. Additionally, including space and time data with each photo will ensure our data can be added to larger citizen science projects, such as [iNaturalist](#), [Nature's Notebook](#), and others.

3. Project partners

Oldenburg Arts and Cultural Community, Jay Cooke State Park (JCSP), Carlton Senior High School, Cloquet Senior High School, Wrenshall Senior High School.

4. Sampling year:

This protocol is intended for sampling year 2018.

The intent of the project is to continue as long as possible. If necessary, update the protocol with any changes for subsequent sampling years. Maintain old protocols for the life of the project in order to document maintain and protocol changes.

5. Equipment:

- Camera (ideal to have one that can collect metadata, including geolocation, with photo)
- GPS (if location data collection not available on camera)

6. Data to collect:

- Photograph
- Metadata about each photograph collected
 - Location (northing and easting GPS coordinates ideal; e.g. 46.663734N, -92.418188E)
 - Name of sampling area may be okay (e.g. Oldenburg House, Oldenburg point)
 - Time photo was collected – include day, month, year
 - Name of photographer

Additional data

Whenever possible, record additional data for each photograph that can be added as a caption. These data may include weather conditions, such as temperature (degrees Fahrenheit), cloudiness, precipitation (See Appendix 1), at time when photograph was collected and the focal species in photograph.

7. Geographic scope:

The general area in which data should be collected is between Oldenburg House in Carlton, MN and Oldenburg Point in Jay Cooke State Park (see Figure 2). It is recommended that data be collected at four focus areas:

1. Oldenburg House
2. TBD location in JCSP
3. TBD location in JCSP
4. Oldenburg Point

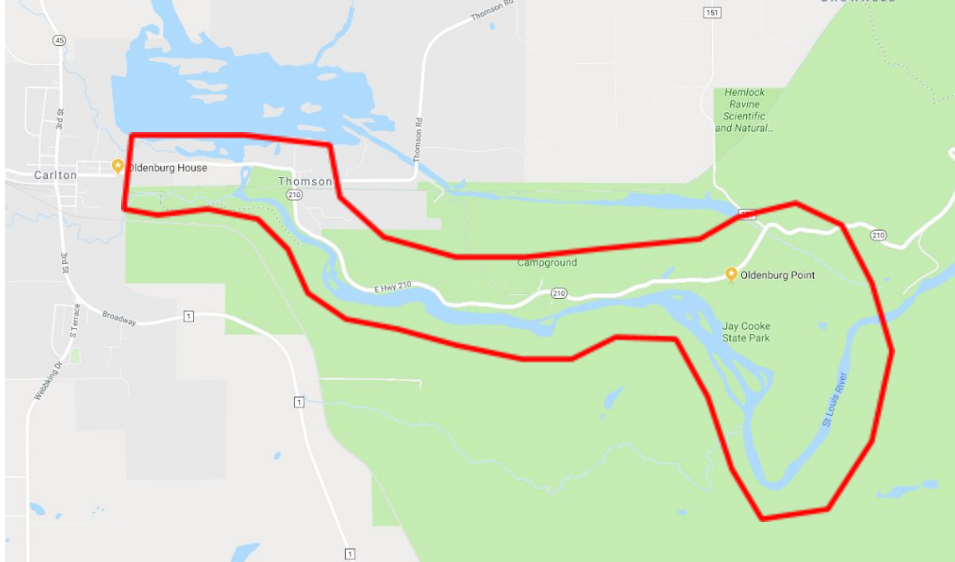


Figure 2. Rough location of area in which data should be collected for Document Spring. Focus area is outlined in red.

8. Seasonal scope:

Data should be collected anytime during April 26 through June 1. A minimum of one field data collection trip should be conducted in this window; there is no maximum number of field data collection trips.

9. Data storage/record keeping:

(Dudley, you must have a decent data storage and naming protocol/system for the thousands of images you collect. Do you have any specifics on how/where you want the students or classes to store their data for this project? My guess is that there may be “Personal, Class-wide, and Project-wide” subsections needed for this section. You might also insert an additional section, or subsection, for how/what/when you want them to share photographs with you or with others in the project).

10. iNaturalist

Photos of specific biological species can be uploaded to the Document Spring project with iNaturalist (<https://www.inaturalist.org/projects/document-spring-oacc>, last accessed April 25, 2018).

To create your user account consult the iNaturalist app or webpage

To be added to the Document Spring project, contact Glenn Swanson or Dudley Edmonson

11. Document Spring celebration

June 2, 2018, 11 a.m. at the Oldenburg Point shelter at Jay Cooke State Park.

Appendix 1: Weather observation protocol

Weather condition at time of protocol could be potentially useful information. Record one number from the “Sky Condition Code” (listed below) for each photograph.

Temperature

Record temperature in Fahrenheit at the time of photo collection.

Sky Condition Codes

- 1 – Clear or a few clouds (Less than 25% of sky has clouds)
- 2 – Partly cloudy (scattered) or variable sky (between 25 – 50% of sky has clouds)
- 3 – Cloudy or overcast (greater than 50% of sky has clouds)
- 4 – Fog or smoke
- 5 – Drizzle
- 6 – Snow
- 7 – Intermittent showers

The above codes are adapted from the National Breeding Bird Survey protocol section 12 on “Sky Condition Codes.” See full protocol for more detail (available at <https://www.pwrc.usgs.gov/bbs/participate/instructions.html>, last accessed April 25, 2018). See the the National Weather Service forecast terms for further detail (available at https://www.weather.gov/bgm/forecast_terms, last accessed April 25, 2018).