

PhenoCam Workshop for Teachers: Icebreaker/Intro Activity

Workshop Date: September 11-12, 2021

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Write-up by Andrew Richardson

Objective:

This activity is designed to help you learn how to navigate the PhenoCam web page, using the map feature to access sites near you, and the image browse feature to find an image you find compelling.

Assignment:

1. Explore the PhenoCam mapping feature to find a camera near where you live.
2. Use the image browse feature to find a recent picture that resonates with you in some way.
3. Save the image to your computer or copy it into a PowerPoint file to share with the group.
4. As part of introducing yourself to the other workshop participants, be prepared to tell us:
 - a. Your name and where you teach
 - b. The camera site you chose and the kind of ecosystem it is
 - c. What this site would be like at this time of year – use your five senses!
 - i. what you see (or not see – maybe animals are hiding!)
 - ii. what you hear (birdsong? insects? wind? city sounds?)
 - iii. what you smell
 - iv. what you could touch on the ground
 - v. what (if anything) you could taste (in the air... or if there are edible plants)
 - d. Whose indigenous homeland this is (if you know)

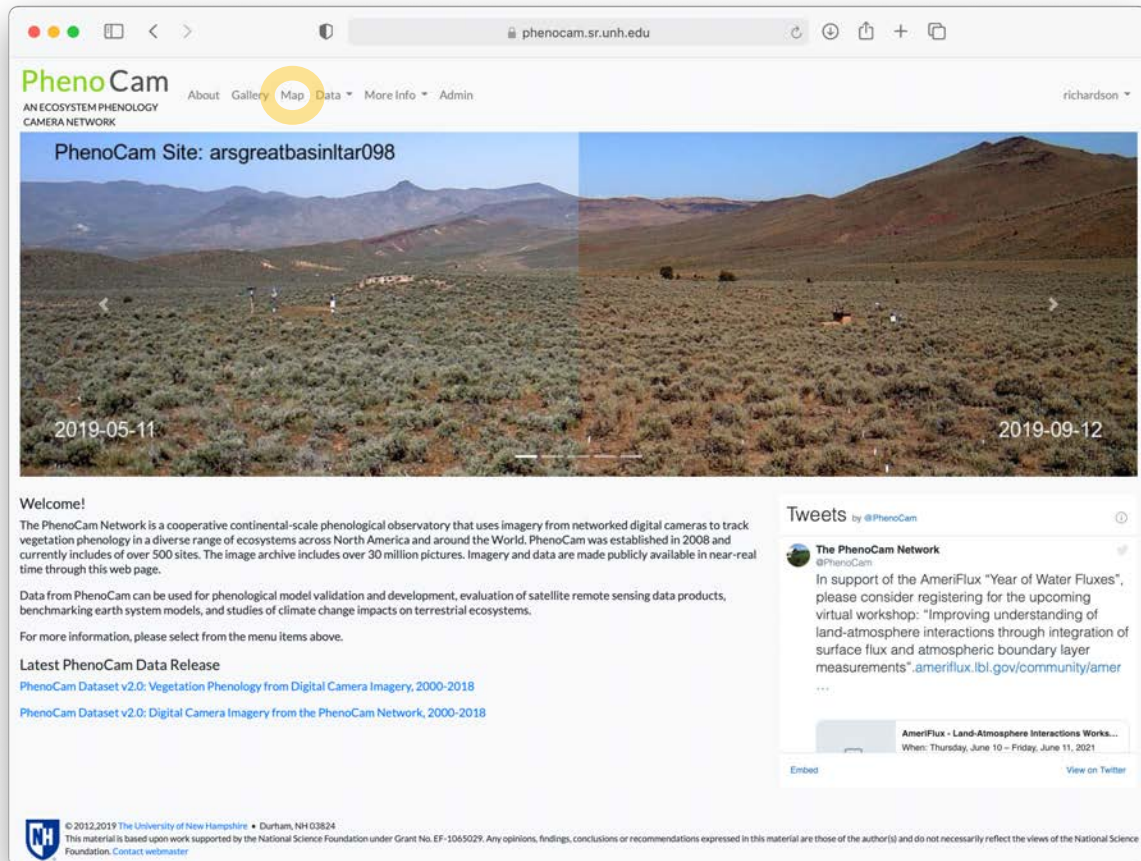
Screen-by-screen instructions are provided on the following pages!

Ready? Let's go!

How to do it:

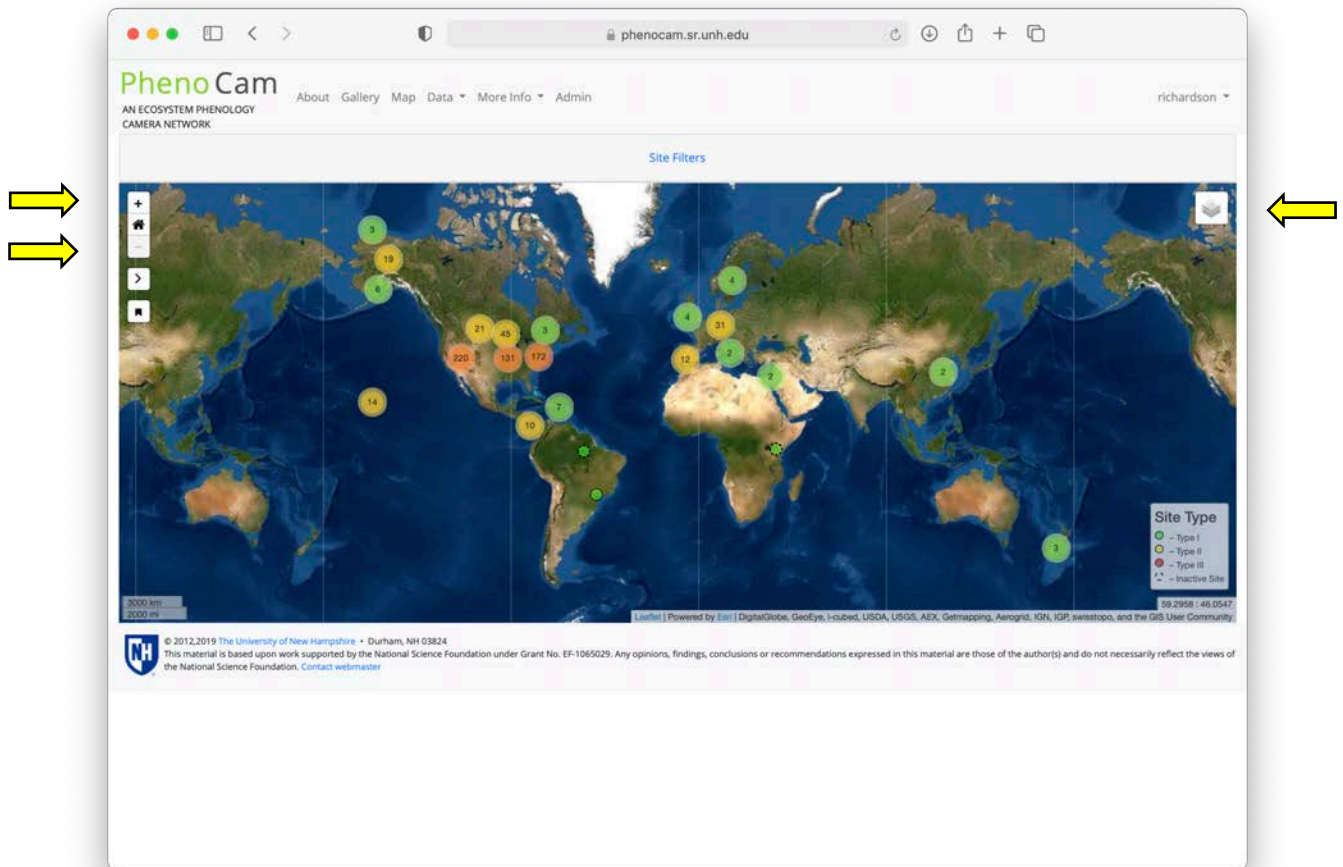
Point your browser to the PhenoCam Network web page:

<https://phenocam.sr.unh.edu/>

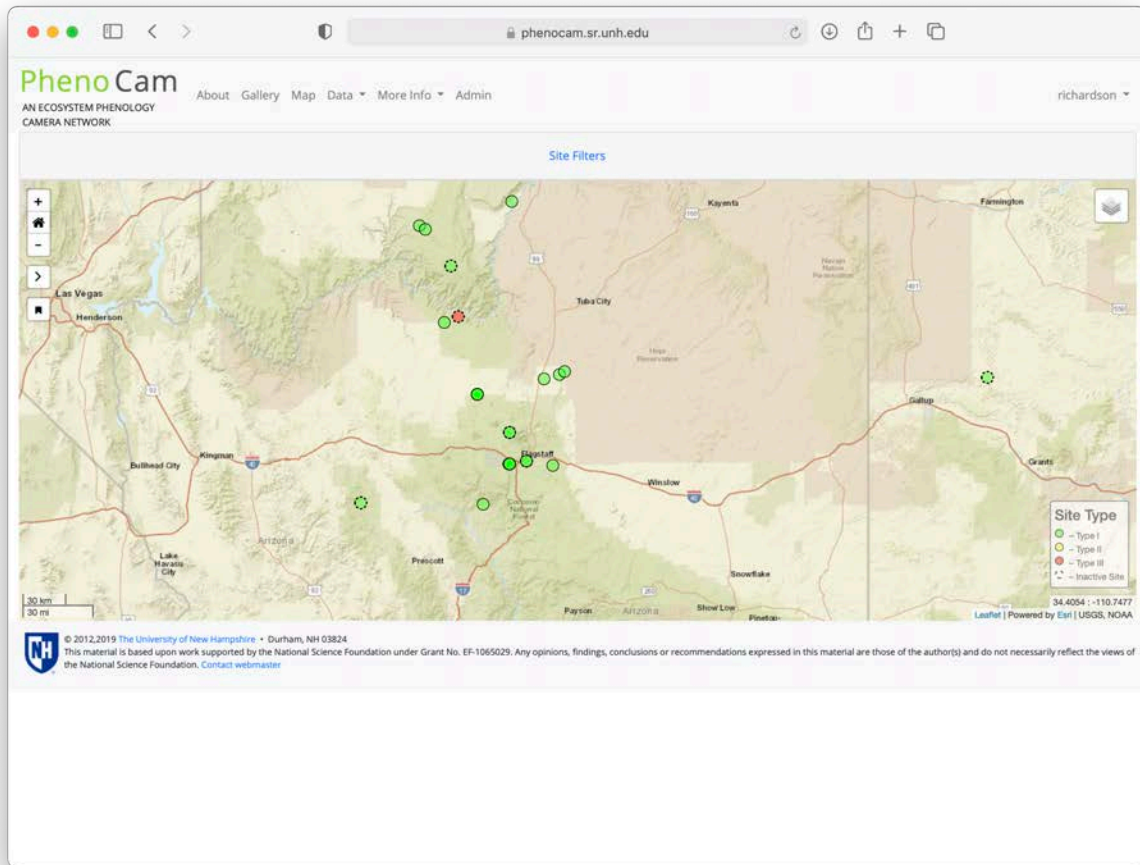


The screenshot shows a web browser window displaying the PhenoCam Network website. The browser's address bar shows the URL phenocam.sr.unh.edu. The website header includes the PhenoCam logo, the text "AN ECOSYSTEM PHENOLOGY CAMERA NETWORK", and navigation links: "About", "Gallery", "Map", "Data", "More Info", and "Admin". The "Map" link is highlighted with a yellow circle. A user name "richardson" is visible in the top right corner. The main content area features a large image titled "PhenoCam Site: arsgreatbasinltar098" showing a landscape with mountains and sparse vegetation. The image is split into two panels: the left panel is dated "2019-05-11" and the right panel is dated "2019-09-12". Below the image, there is a "Welcome!" section with a paragraph of text, a "Latest PhenoCam Data Release" section with two links, and a "Tweets" section featuring a tweet from @PhenoCam. The footer contains copyright information for The University of New Hampshire and a disclaimer.

Then click on the Map tab, highlighted with a yellow circle in the screen shot above.

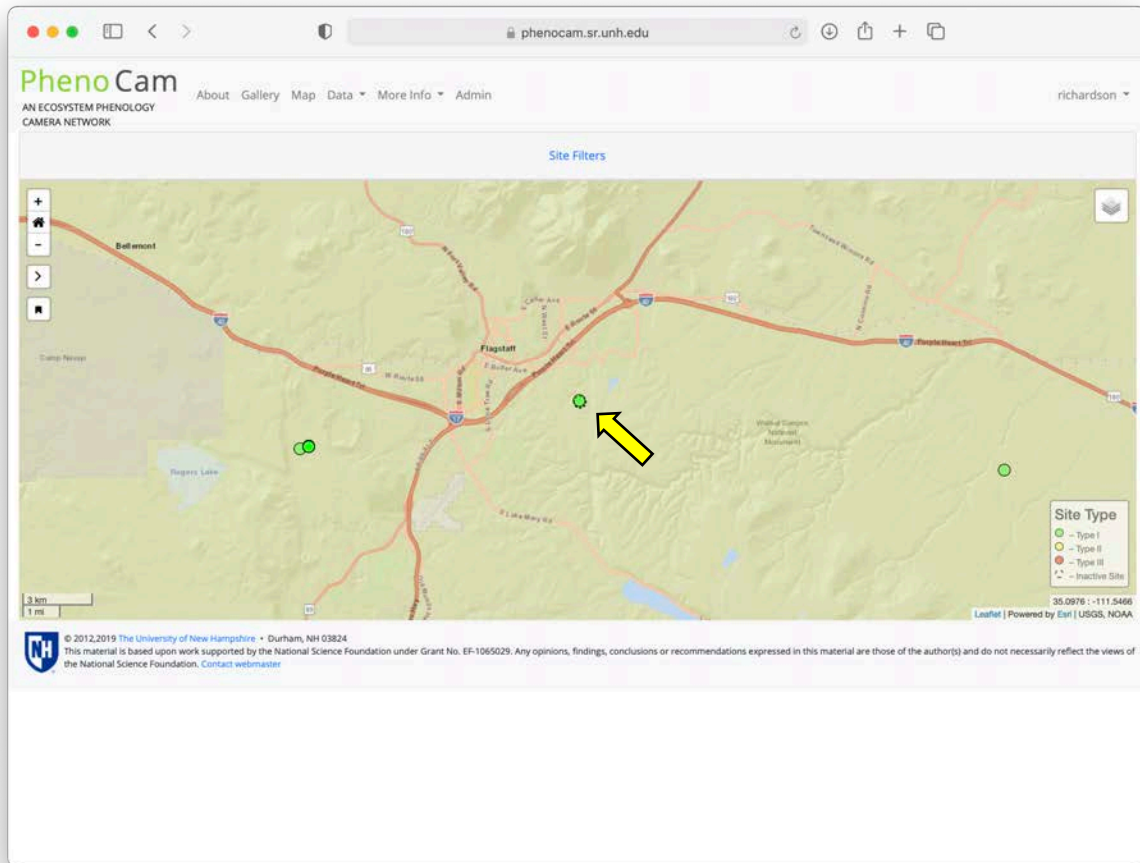


Use the + and – buttons (indicated with the yellow arrows) to zoom in, and use your mouse to drag the map to show the area near where you live. You may want to use the map layers option in the upper right (it looks like a stack of cards) to change the background map. “Streets” can help make it easier to locate familiar surroundings.

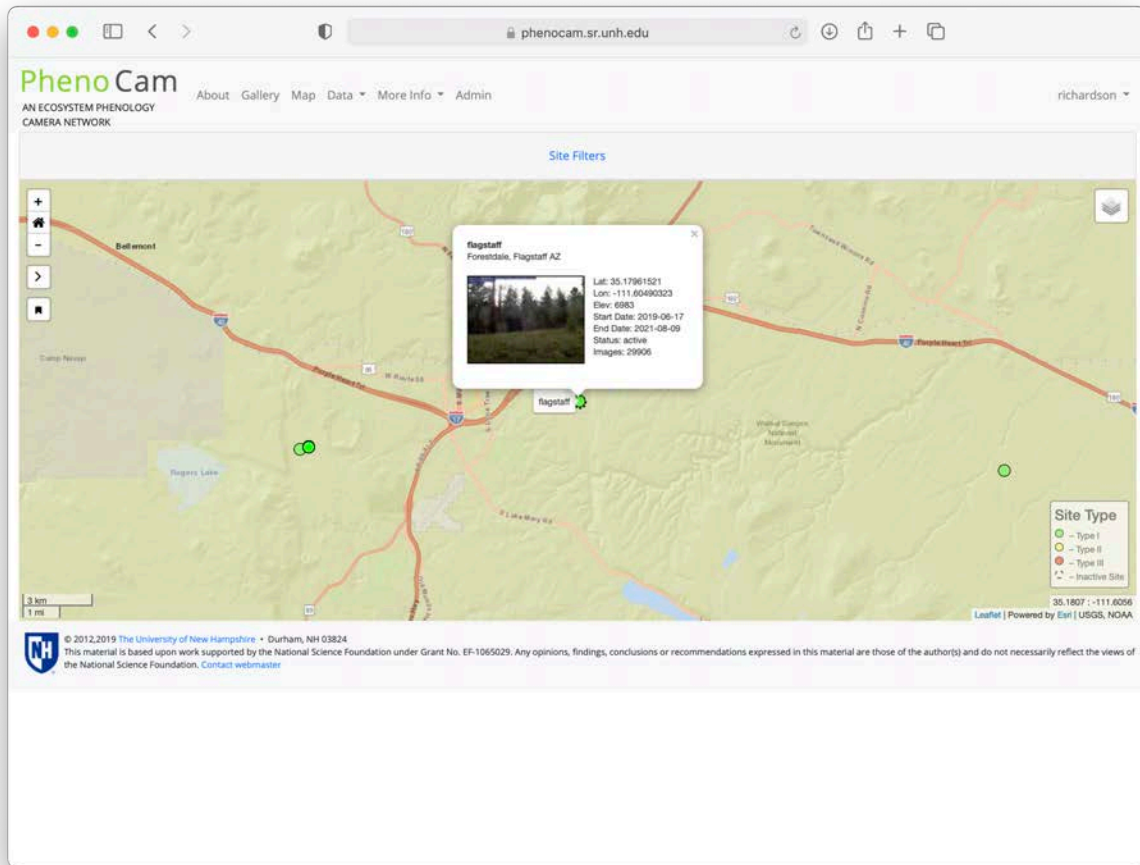


I've now zoomed in to the area near where I live, in Flagstaff Arizona. There are a lot of cameras near here!

To make it a bit easier to select the camera I want, I've zoomed in even more.



The camera just south and east of town is the one I want. This is actually a camera I have at my house, looking at the pine forest and peaks north of town.



Clicking on the plot symbol brings up a small thumbnail image, and some information about the site. If I click on the thumbnail, I'll be taken to the "site page" for that camera.

The screenshot shows the PhenoCam website interface. At the top, the browser address bar displays 'phenocam.sr.unh.edu'. The website header includes the 'PhenoCam' logo and navigation links: 'About', 'Gallery', 'Map', 'Data', 'More Info', and 'Admin'. The user name 'richardson' is visible in the top right corner.

Site information is provided below the header:

- Site Name: flagstaff
- Location: Forestdale, Flagstaff AZ
- Lat: 35.1796 Lon: -111.6049 Elev(m): 6983
- Image Count: 29906 Start Date: 2019-06-17 Last Date: 2021-08-09

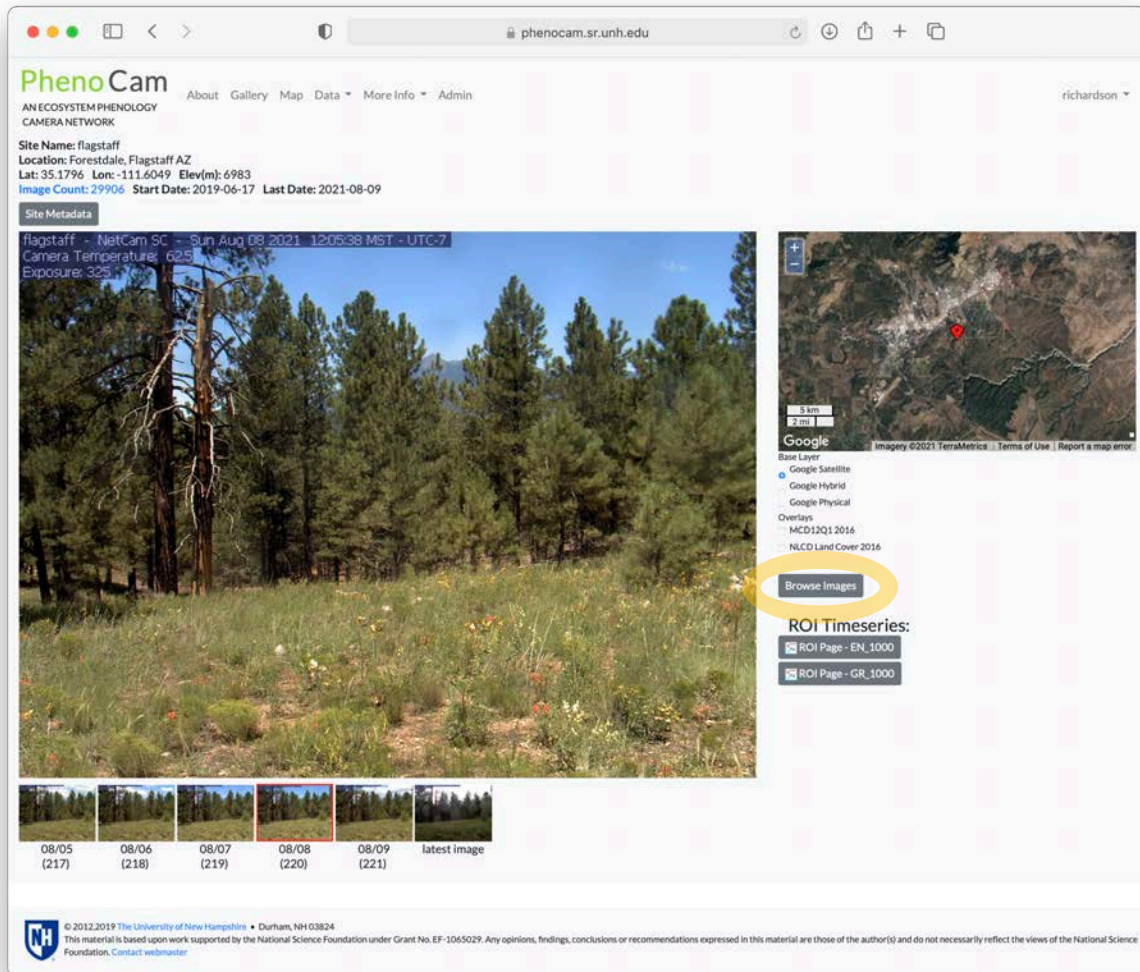
The main content area features a large live camera feed. A metadata overlay on the top left of the image reads: 'flagstaff - NetCam SC - Tue Aug 10 2021 11:35:37 MST -UTC-7', 'Camera Temperature: 53.5', and 'Exposure: 2400'. To the right of the main image is a map interface with a red location pin, a scale bar (5 km / 2 mi), and a 'Google' logo. Below the map are options for 'Base Layer' (Google Satellite, Google Hybrid, Google Physical) and 'Overlays' (MCD13Q1 2016, NLCD Land Cover 2016). A 'Browse Images' button is also present.

Below the main image is a horizontal gallery of five thumbnail images representing a time series. The thumbnails are labeled with dates and image counts:

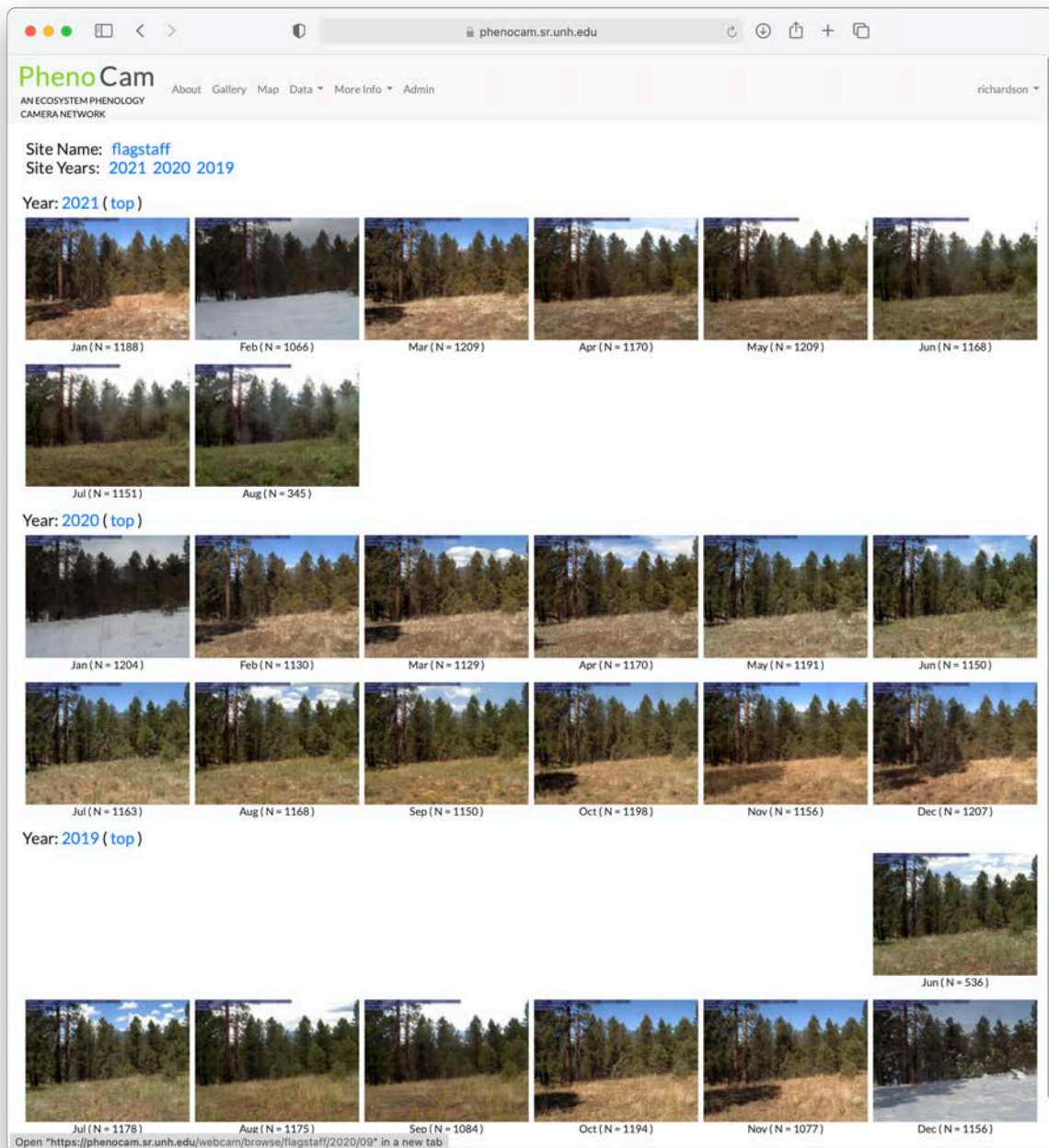
- 08/05 (217)
- 08/06 (218)
- 08/07 (219)
- 08/08 (220)
- 08/09 (221)
- latest image

At the bottom of the page, there is a copyright notice: '© 2012,2019 The University of New Hampshire • Durham, NH 03824'. A disclaimer states: 'This material is based upon work supported by the National Science Foundation under Grant No. EF-1065029. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. Contact webmaster'.

The large image displayed is the most recent picture the camera uploaded to our archive. Across the bottom you can instead select the midday image recorded on any one of the last 5 days. Today is rainy here (summer monsoon), but two days ago the weather was beautiful.



We have a full tutorial on how to use different features on the PhenoCam page, but for this exercise we're going to use the "Browse Images" feature. Click on the button highlighted in yellow on the image above.



From here you can click on a thumbnail to drill down by year, month, and day. When you find a picture you like, you use the "Save as" option under the file menu to save the image to your desktop or personal folder, or you can use the "Copy" option under the Edit menu to copy the image and then paste it into a PowerPoint file.

flagstaff - NetCam SC - Mon, Aug 09, 2021 06:05:38 MST - UTC-7
Camera Temperature: 42.0
Exposure: 1061



Here's an image recorded at 6 am, yesterday, about 15 minutes after the sun came up.

Sensory report:

See—Many different wildflowers are flowering. I don't see any elk or deer, but they are often around our house.

Hear—Birds. Traffic from the interstate a mile to the north.

Smell—It's the monsoon season, and when it rains the fragrant aroma of the Ponderosa pines is everywhere.

Touch—We have many spiky plants, and the soil is rocky.

Taste—A number of different juniper species are mixed in with the Ponderosas, and their "berries" (which are actually analogous to cones, not berries!) have a citrusy, green, flavor, somewhat like turpentine.

Indigenous Homeland:

There are more than 20 federally recognized tribes in Arizona. More than 800 years ago, the Sinagua people lived in cliff dwellings in Walnut Canyon, just south-west of where I live. The San Francisco peaks to the north of Flagstaff are sacred to many tribes, including the Hopi, Navajo, Havasupai, Zuni, and Apache.