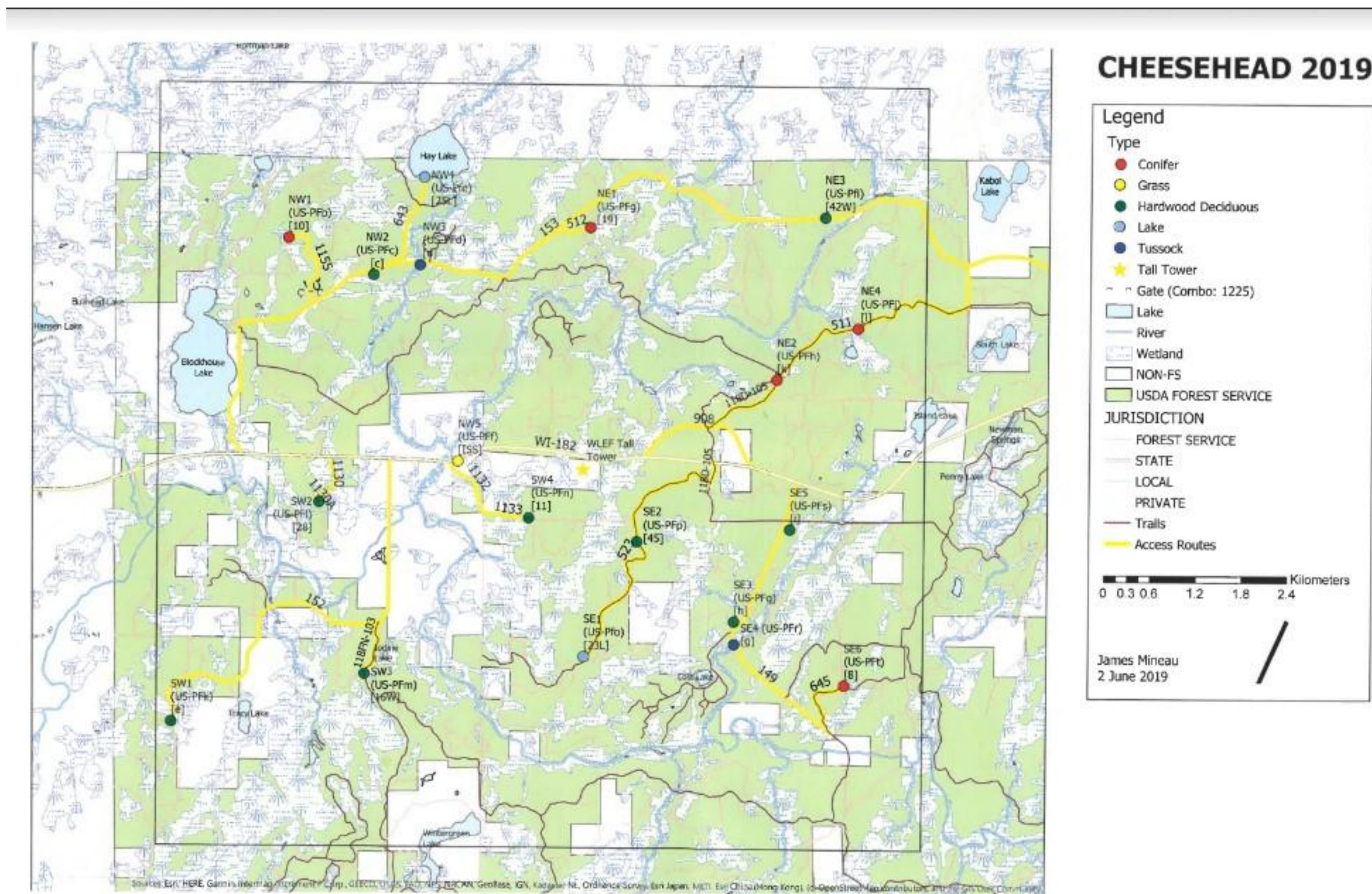


Pedosphere Data and CHEESEHEAD19

- On 7/22/19 and the 7/23/19 we collected data on the soil Ph. of 5 sites to the east of Park Falls, Wisconsin.
- We found the soil Ph. and other data using Globe Pedosphere protocols.



Process

[Video Link](#)

- NE1 NW2, NW3, NW4, NW5, were the sites we went to.
- We took the temperature of the soil and the air at each site along with other data.
- Using the GLOBE Plant Color Guide sheet we found the color of the grass.
- Using The Globe Soil Color Book we found the color of the soil.
- Using Globe protocol we found the soil Ph.

What is CHEESEHEAD19?

- CHEESEHEAD stands for Chequamegon Hetero-geneous Ecosystem Energy-balance Study Enabled by a High-density Extensive Array of Detectors.
- The array of detectors are the 19 sites with towers ranging from 30 to 110 feet collecting atmospheric data.
- Dr. Ankur Desai is the lead scientist of CHEESEHEAD19.



Results

- We put all of this Data into a spreadsheet that was sent to Dr. Desai.
- He took it and added it to all the data he has collected thus far.

| | Date | Time | Air temp. | Lat. | Long. | Elevation | Plant Color | Cloud Cov. | PH of Soil (10 cm) | Soil Color | Soil Temp. (10 cm.) |
|-------|---------|------------|-----------|--------------|---------------|-----------|-------------|------------|--------------------|-------------|---------------------|
| N W 5 | 7/22/19 | 9:30 A.M. | 22.4°C | 45° N 56.753 | 90° W 17.642' | 1524 ft. | 5GY 4/8 | 0% | 7.0 | 7.5YR 4/4 | 22°C |
| N W 3 | 7/22/19 | 11:05 A.M. | 25.75°C | 45° N 58.132 | 90° W 18.061' | 1534 ft. | 5GY 7/12 | 25-50% | 5.6 | 7.5YR 2.5/3 | 17°C |
| N W 4 | 7/22/19 | 11:40 A.M. | 21.6°C | 45° N 58.755 | 90° W 18.028' | 1581 ft. | 5GY 5/10 | 20-50% | 5.0 | 7.5YR 3/4 | 19°C |
| N E 1 | 7/23/19 | 11:25 A.M. | 22.2°C | 45° N 58.396 | 90° W 16.408' | 1653 ft. | 5GY 4/8 | 15-25% | 4.7 | 5YR2. 5/5 | 17°C |
| N W 2 | 7/23/19 | 11:50 A.M. | 19.35°C | 45° N 58.061 | 90° W 18.526' | 1568 ft. | 5GY 6/10 | 15-25% | 5.3 | 7.5YR 5/4 | 21°C |

Authors: Joee Engel,
Jakob Mareno

-CHEESEHEAD Data-

Characteristics of Sites:

| | Date | Time | Air temp. | Lat. | Long. | Elevation | Plant Color | Cloud Cov. | PH of Soil (10 cm) | Soil Color | Soil Temp. (10 cm.) |
|-------------|---------|------------|-----------|----------------------|------------------|-----------|-------------|------------|--------------------|----------------|---------------------|
| N W 5 | 7/22/19 | 9:30 A.M. | 22.4°C | 45° N 56.753 , | 90° W 17.642' | 1524 ft. | 5GY 4/8 | 0% | 7.0 | 7.5YR 4/4 | 22°C |
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| N W 2 | 7/23/19 | 11:50 A.M. | 19.35°C | 45° N 58.061 , | 90° W 18.526' | 1568 ft. | 5GY 6/10 | 15-25% | 5.3 | 7.5YR 5/4 | 21°C |

Pictures:

NW5:

NW5 is located at the corner of East Rd. and WI-182 approximately 7.8 miles east of Park Falls. It's been a cut field and has short grass. This site's terrain is primarily open field. However, it is fairly close to trees. This is the central place of research and there were parked vehicles and equipment close by the site. Site type grass



East



South



West

NW3:

NW3 is located on 153 and you go a little farther from the turn on 643 to go on Hay Lake. NW3 is right next to a river so the land is soft and swamp like. Trees surround the site along with a bridge very close to the site. It had long tall grass around the site. Site type Tussosck.



North



East



South



West

NW4: NW4 is right next to Hay Lake. it is at the end of 643. The area is completely surrounded by trees with the lake to the West. the area is close to a drive in spot to the lake. Land was surprisingly quite dry though being next to Hay Lake. It had shorter grass. Site type lake



North



East



South



West

NE1: NE1 is past NW3 and you keep driving on that road until you hit and intersect where you can start to drive down but then you have to walk down this trail until you hit the site. It is in the middle of a conifer forest and is completely surrounded by trees in every direction. There were many mosquitos surrounding the site. Site type conifer



North



East



South



West

NW2: NW2 is on 153 right before the intersection to go to Hay Lake. It's right on the edge of the forest. It was surrounded by trees and was placed in this small open patch. It had long tall grass and dry ground. Site type Hardwood Deciduous



North



East



South



West