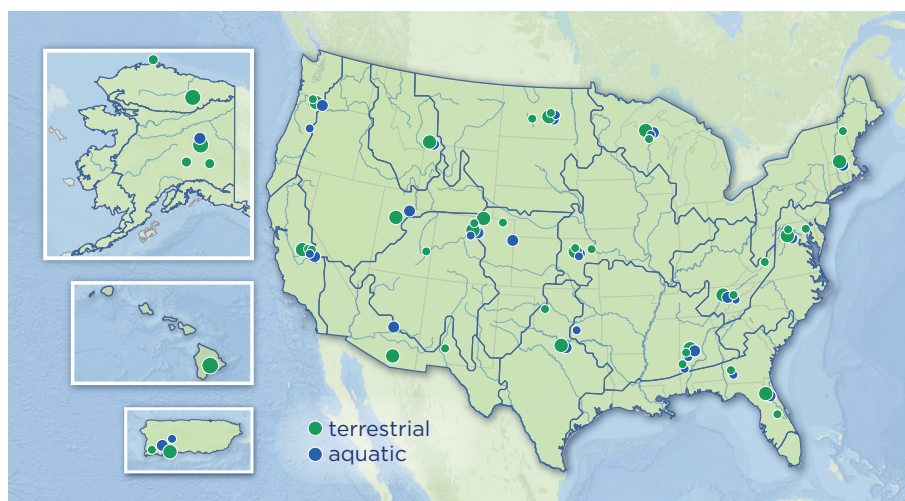


# National Ecological Observatory Network



The National Science Foundation's National Ecological Observatory Network (NEON) is a continental-scale observation facility operated by Battelle and designed to collect long-term open access ecological data. The Observatory's comprehensive design supports greater understanding of ecological change and enables forecasting of future ecological conditions in the United States.



NEON statistically partitioned the continental U.S., Hawaii, and Puerto Rico into 20 ecoclimatic Domains that represent distinct regions of vegetation, landforms, and ecosystem dynamics to capture the full range of U.S. ecological and climatic diversity. In each Domain, NEON collects data on plants, animals, soil, nutrients, freshwater, and the atmosphere using sensor measurements and field observations. Airborne remoted sensing data combined with local, site-level data capture contiguous site-level information and can be combined with existing satellite data to support regional to continental characterization of ecological processes.

**81** Field Sites  
47 terrestrial  
34 aquatic

**20** Ecoclimate Domains

**24** States +1 territory with sites

## Consistent, comparable, high-quality data

NEON assures high-quality, comparable data through standardized and quality-controlled data collection and processing methods. The Observatory employs multidisciplinary experts to design and implement infrastructure that provides high-quality data and associated documentation to the community.

## Integrated data collection

NEON collects integrated biological, physical, and chemical measurements and samples at all of its field sites using a combination of field-based protocols, as well as in situ and remote sensing methods and technologies, to support the study of complex ecological processes. This coordinated data collection strategy uniquely addresses ecosystem level questions in several key themes, such as biogeochemistry and ecohydrology.



Tick sampling, D19  
Healy, Alaska

## Open data and samples

All NEON data are free and open data to everyone. Our data products are downloadable in standard formats that are in general use throughout the scientific community. NEON also provides documentation and tutorials to support understanding and interpretation of our data products. The NEON Biorepository is built to house millions of samples collected at our field sites over the course of NEON's lifetime. These samples are available to be loaned to researchers for study, including for destructive purposes.

*to learn more and explore the resources, visit [NEONScience.org](https://neonscience.org)*

# NEON by the Numbers

## PEOPLE

**~600** total staff

**320+** full time

**250-290** SEASONAL  
Domain techs

**180+**  
data products

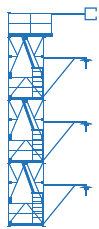
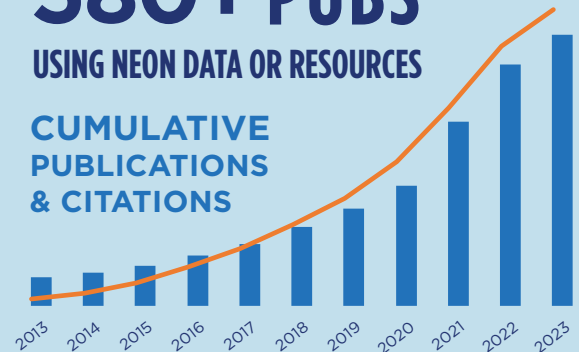
**100,000+**  
added samples  
per year

**400,000+**  
samples to date

## 580+ PUBS

USING NEON DATA OR RESOURCES

CUMULATIVE  
PUBLICATIONS  
& CITATIONS



airborne observation platforms.. **3**

mobile deployment platforms.... **5**

flux towers..... **47**

water quality stations..... **57**

meteorological stations..... **89**

groundwater wells..... **197**

soil sensor arrays..... **235**

## A 30+ Year NSF Observatory

As ecosystems in the United States change, NEON plays a fundamental role in our ability to sustainably manage natural resources and support science related to climate resilience. Battelle is proud to manage NEON, one of the most ambitious ecology programs of all time. Since Battelle assumed management for NEON from the National Science Foundation (NSF) in 2016, we:

- Completed the construction of the entire Observatory.
- Transitioned all 81 field sites to successful operation.
- Established NEON as a crucial source of knowledge in our understanding of the dependencies between life and environment.
- Helped the entire program navigate COVID-19 while maintaining all personnel.



**Battelle's expertise in large research infrastructures has proven to be invaluable to the successful launch and continuation of NEON. Our unique knowledge is critical to ensure the longevity of one of the world's most ambitious ecological data endeavors.**