Data to Understand Changing Ecosystems



What is NEON?

The National Ecological Observatory Network (NEON) is a longterm, continental-scale observation facility of the National Science Foundation and operated by Battelle.

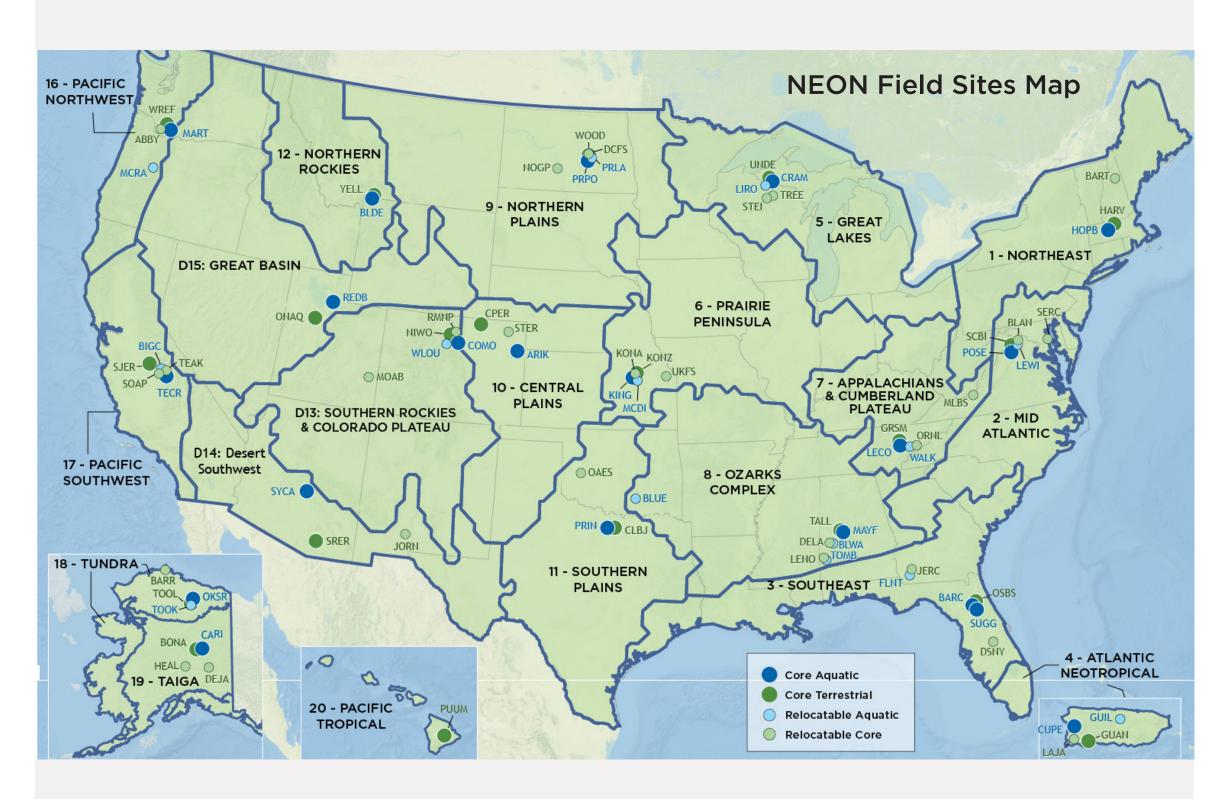
Once NEON enters full operations in 2019, it will provide standardized, consistent data at unprecendented spatial and temporal scales, as well as, resources and infrastructure for the scientific community. The observatory is planned to collect data for 30 years and is already providing open access data and archival samples. NEON infrastructure may also be used for additional research studies through the NEON Assignable Assets program.

Strategically placed field sites

Understanding the changing health of an ecosystem is a complex and costly challenge. NEON is designed to collect standardized data at 81 field sites across the U.S. that will quantify ecological change over time.

Field sites are strategically located in many different types of terrestrial and aquatic ecosystems enabling scientists to study and forecast ecological change over time at the local, regional and continental scales.

Terrestrial field sites and aquatic field sites are often colocated to support understanding of linkages across atmospheric, terrestrial and aquatic ecosystems.



Freely accessible big data

NEON empowers a large and diverse user community to tackle new questions at scales not accessible to previous generations of ecologists. Freely accessible data and learning resources are available to download online. Researchers can also request to use NEON infrastructure for additional ecological studies.

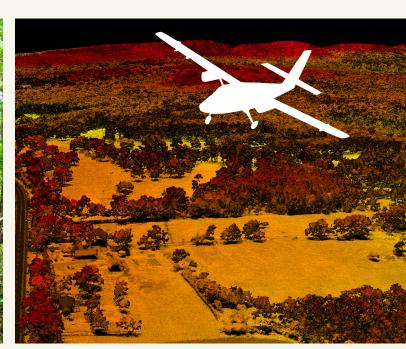
www.neonscience.org

A variety of standardized methods are used at NEON sites to collect long-term ecological data



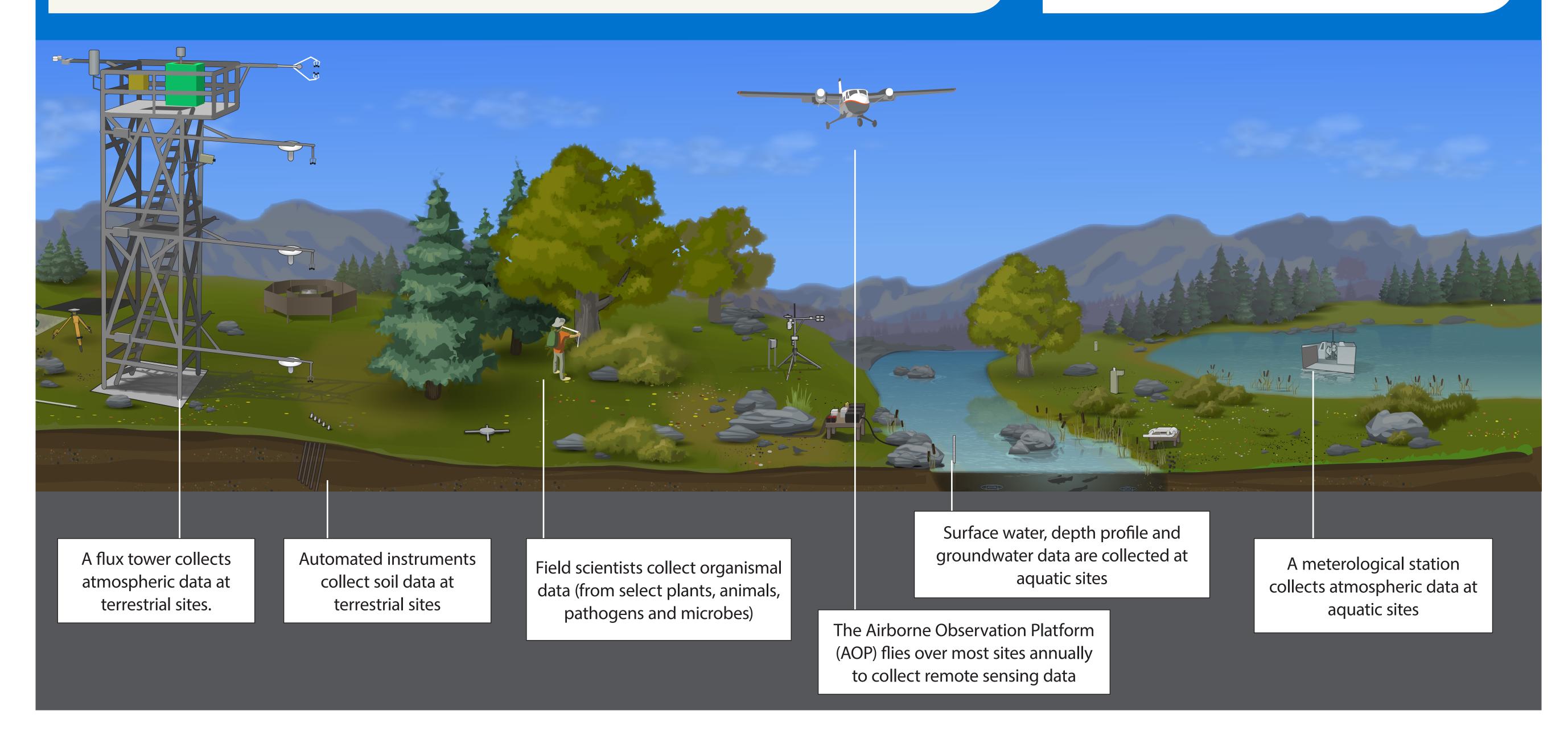






Types of data collection include:

- ✓ Automated instruments
- ✓ Observational sampling
- ✓ Airborne remote sensing surveys



Various ways you can use NEON All NEON data, protocols **NEON** serves as infrastructure for the and samples will be openly PRINCIPAL INVESTIGATO PROJECTS available via the NEON community to conduct web portal and specimen continental-scale research and experiments. archives. **SENSORS** ATA SKILL **TRAINING** Additional relocatable Resources and programs AIRBORNE BSERVATIO PLATFORMS sensor platforms and one INTERNSHIP focused on continental-PROGRAMS airborne platform will be scale ecology that engage available for the community the general public, to deploy. educators and students.

Empowering an ecologically-informed society Resources & programs include: Science Engaging scientists with continental-scale **NEON DATA** Building a more informed Society community

- Open access data
- Open access methods/protocols
- Self-paced online tutorials
- Science videos
- Teaching modules
- Teaching data subsets
- Workshops and courses
- Internship programs