

Connecticut College Arboretum

Research Policy

The Connecticut College Arboretum Mission Statement specifies seven topics or areas of activity: Teaching, Research, Conservation, Plant Collections, Cultural Resource Stewardship, Public Education and Recreation. Policies provide history, context, management guidance and goals for Arboretum staff, College community and others. The portion of the mission related to research is:

“To support and conduct research in a broad range of subjects including ecology, field biology, conservation and natural history. Arboretum research emphasizes long term studies.”

The first documented research in the Connecticut College Arboretum was a 1940 publication by Arboretum Director George Avery and two colleagues in the botany department on annual ring growth in a natural population of hemlock trees blown down in the great hurricane of 1938. In the early 1950s, Director Richard Goodwin initiated a long-term vegetation survey (which has been repeated every ten years) and a regular breeding bird census in the Bolleswood Natural Area. Professor William Niering supervised these projects and also initiated a vegetation survey on the Mamacoke salt marsh shortly after the property was acquired in 1955. These three studies are still ongoing, and many shorter term research projects have been conducted. These range from undergraduate studies for classes, to senior honors, master’s theses and PhD dissertations.

Arboretum research is not restricted to field biology or ecological subjects. For example, Archaeological research was begun by the Anthropology Department in the early 1970s and has continued. Plant specimens from the native plant collection were used in an undergraduate summer internship to learn to use a scanning electron microscope. Psychology students have surveyed Arboretum visitors. Students in the Geographic Information Systems courses frequently use the Arboretum for spatial analysis projects.

The Arboretum welcomes outside researchers to utilize the facility for appropriate projects. Recent examples include a Yale graduate student used an Arboretum meadow as one site to study insect and spider populations, a Yale post-doctoral researcher collected water in pitcher plant leaves from the Arboretum bog to study the microorganism communities in the leaves, and a Wesleyan University paleobotanist collected leaves from our collections to compare with fossil samples.

Arboretum Bulletins have been regularly used as a way to make faculty and student scholarship accessible to the general public. Many Arboretum research projects through 1990 were documented by individual tract locations in Arboretum Bulletin 32, which contains a detailed history of Arboretum property surrounding the main campus. Since that year research projects and publications have been documented in Arboretum public and administration reports.

The Arboretum financially supports research in a number of ways. Richard Goodwin established an endowment for the Bolleswood Vegetation Survey that funds four summer research students and a faculty advisor every ten years. The William Niering student research endowment can support one student every year doing research that at least in part takes place in the Arboretum. There is flexibility in the annual budget and various discretionary “budget enhancing” accounts to periodically support additional projects. Beyond the Arboretum Department there are a number of college funds that are available to support faculty-student research.

GOALS

- Continue to support existing Arboretum long-term studies
- Continue to welcome researchers from Connecticut College and other institutions
- Continue to support the collection of and access to Arboretum geospatial data.
- Maintain an up to date Arboretum research bibliography
- Continue to feature faculty and student research in Arboretum Bulletins