

LAMONT CREATURE FEATURE

The Eastern Tiger Swallowtail, *Papilio glaucus*, is a butterfly native to eastern North America.

Common in New York, this showy butterfly requires wild black cherry, ash, and tulip poplar trees as host plants for its caterpillar stage – all tree species found on the Lamont campus!

The adult stage - butterflies – feed on nectar-rich native flowers like Joe Pye weed, purple coneflower, and bee balm (*Monarda*).



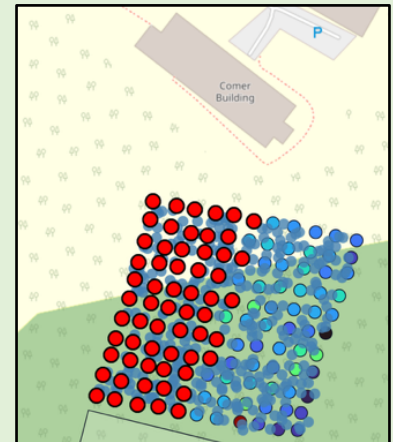
This male Eastern Tiger Swallowtail was enjoying the *Monarda* in the pollinator garden on the eastern side of New Core Lab.

Photo credit: Sheean Haley

THE LAMONT SANCTUARY FOREST: A Living Laboratory

If you walk to the southeastern corner of Comer and step into the woods you will find yourself in a living laboratory! Here, instead of flasks and graduated cylinders you will see pink flags and metal tree tags. This 1-hectare plot in the Lamont Sanctuary Forest is now a permanent site of long-term data collection to assess forest soil health, moisture conditions, and belowground carbon sequestration potential. Parameters being surveyed include:

- Tree species, dendrometer readings, and measurements of tree dimensions to evaluate aboveground carbon storage and tree health.
- Soil moisture and gas flux to assess how likely that soil is to store carbon and support forest regeneration.



Map of 1-hectare plot in the Lamont Sanctuary Forest. Visit the [website](#) to learn more and check out the interactive map!

TAKE COVER: What's happening outside Geoscience?

The replacement of the retaining wall on the south side of Geoscience/NCL created bare soil on a steep slope. To prevent erosion without planting water- and nutrient-greedy turf grass, our Buildings & Grounds crew planted a cover crop of buckwheat (*Fagopyrum esculentum*)! A cover crop is any crop grown to cover soil, which may then be tilled into the soil later for enrichment.

The **benefits** are:

- Erosion control
- Weed suppression
- Reduced soil compaction
- Increased moisture retention
- Improved nutrient content
- Attracts pollinators
- Provides habitat for beneficial insects



A cover crop of buckwheat in 25 days!

Photo credit: Sheean Haley

Cover crops used for seasonal soil coverage and conservation include various types of grasses (e.g., rye) and legumes (e.g., crimson clover). We chose buckwheat for a summer crop for its fast growth, ability to build organic matter, and attract pollinators. It will be cut back before it sets seeds and a winter cover crop will be sowed in its place. Spring will bring a new planting of native perennials (grasses and flowering plants) to the amended soil!