

Reference Guide for Researchers and Educators

Cornell Orchards, Ithaca

This document provides essential information for faculty, staff and students conducting work at the **Cornell Orchards** in Ithaca or Lansing, NY, one of nine farm operations managed by The Cornell University Agricultural Experiment Station (Cornell AES). It is **highly recommended that you review this document** for farm-specific information, and, to be aware of farm-specific safety and compliance requirements, emergency procedures, general cultural requirements and the availability of labor.

Farm Staff - Contact Information:

- **Orchard Address:** 709 Dryden Road (Rt. 366), Ithaca, NY 14850
Sweazey Road, Lansing, NY 14882 (halfway down Sweazey Road)

- **Orchard Manager:**


Eric Shatt
Cell Phone: 607-793-1428
Email: ecs222@cornell.edu
- **Back-up Orchard Contact:**


Eric Anderson
Orchard Worker
Cell Phone: 607-283-1749

- **Back-up Orchard Contact:**


Brian Lader
Orchard Worker
Cell Phone: 607-342-2747
Email: bml9@cornell.edu
- **Back-up Orchard Contact:**


Cathy Crispell
Technician
Cell Phone: 702-755-2623

- **Back-up Orchard Contact:**


Mike Munroe
Field Assistant
Cell Phone: 607-738-5424

Facility Information:

- Cornell Orchards consists of two orchard facilities. In Ithaca, 46 fenced acres contain plantings of apples, grapes and small fruits. One acre is in certified organic production. The orchard in Lansing contains 100 acres with 40 acres in production growing apples, pears, wine grapes, peaches, plums and cherries.

- Facility resources include a diverse collection of **tractors and implements** for small tree fruit and grape research. The facility includes spaces for **equipment storage, research lab and offices, large coolers (some with climate control capability), pesticide storage, fueling stations, meeting space, drying ovens, and a mechanic shop.**
- **Soil nutrient and pH information** are available for each field, and can be obtained by contacting the farm manager.
- **Soils** at the Ithaca Orchards are predominately either Hudson or Collamer silt loam. The soils at the Lansing Orchards are Hudson silt loam and Hudson clay loam.
- **Weather data** for the orchards is available in print at the farm office and here:
Ithaca: <http://newa.cornell.edu/index.php?page=weather-station-page&WeatherStation=ith>
Lansing: <http://newa.cornell.edu/index.php?page=weather-station-page&WeatherStation=lan>
- **Irrigation** is possible for most fields via the use of drip lines.

Map of Facility and Fields:

- A **map of the farm**, including fields, can be found at: <http://cuaes.cals.cornell.edu/farms/maps>.

Expectations:

- **Sustainability is a cornerstone** of how we operate research farms at Cornell. Please work with Cornell AES farm staff to encourage sustainable practices within your program and to be good stewards of the resources at your disposal. We are always open to ideas to make sustainable improvements.
- **Be considerate of fellow faculty, staff and students.** Fields, facilities and equipment are shared resources.
- Timing in agriculture is critical. Please consult with the farm manager regarding the start and end dates of your research project(s), and needs.
- Requests for **use of orchard plantings for research, teaching and outreach** should be directed to the farm manager. The Researcher and Educator Checklist (link) is recommended to guide the collection of key information and establish shared expectations.
- **Once a project ends**, research plantings will be returned to their original state at the expense of the research unit, unless approved by the farm manager.

General Requirements:

- **Vehicle parking** is available behind the orchard store facility in Ithaca and in the gravel parking lot in Lansing.
- Use of **shared building spaces, equipment and shop tools** must be coordinated by the farm manager.
- After use, **equipment and implements must be cleaned of soil and debris** at the wash station located next to each farm's pesticide building.
- **Special rules apply for organic field operations.** Equipment to be used on the organic fields must be clean of soil, prohibited materials and crop/pesticide residues prior to entering organic fields. Field operations and equipment clean outs/washing must be recorded in the **Organic Field Book located in the farm office.** Please direct any questions to Betsy Leonard, 607-423-8366 or bai1@cornell.edu.
- **Safe use of farm equipment is mandatory.** All technicians and faculty using Cornell AES farm equipment must attend an **annual on-farm tractor safety course** to be offered each spring, in cooperation with the N.Y. Center of Agricultural Medicine and Health (NYCAMH). To become certified to drive tractors, **new operators must first pass a written and an in-the-seat tractor exam** demonstrating their ability to operate a tractor

capably and safely. **Experienced and certified program technicians and/or faculty are then responsible for the proper training of all necessary equipment operators for their program.** Learn more about the [Tractor Certification Process](#). The Farm Manager has the authority to prohibit or restrict on-farm tractor usage by any individuals that are found to operate equipment in an unsafe or reckless manner. **If you are not comfortable with the operation or function of a piece of equipment, stop and see the farm manager or farm staff.** If something seems faulty with a piece of equipment, stop and see the farm manager or staff immediately.

- Use of the farm forklift requires completion of **forklift training and obtaining forklift certification**.
- **Department of Transportation (DOT) regulations impact all drivers** intending to use the Ford F450 flatbed truck. **Additional driver testing and compliance measures are required;** please see farm manager for details. Orchard pickup trucks can be signed out and used with farm managers approval and are subject to the mileage fee structure.
- Excess fruit that is grown in accordance with **Good Agricultural Practices (GAP)** and without the use of restricted testing agents may be directed to the orchard store or donated via the farm's relationship with the Food Bank of the Southern Tier. The farm manager will oversee all fruit sales and donations. More information on GAP training can be found at: <http://www.gaps.cornell.edu/>.
- **All individuals supporting research at the orchard facilities, where crops may be treated with pesticides, must have completed Worker Protection Standard (WPS) training. In addition, all individuals applying pesticides must also be licensed as a NYS applicator or working under the direct supervision of a NYS applicator.** More information is available at: <http://oeh.cals.cornell.edu/pesticides/>.
- Individuals cleared to **use shop areas must comply with all applicable EH&S regulations**, including demonstrated competency with tool operation, proper eye and ear protection and completion of hot work permits (if applicable).

Emergency Procedures:

- **In case of a life safety emergency, call 911** from the nearest land or cellphone. Land lines are present in the orchard store facility in Ithaca and in the break room at the Lansing orchard. The farm manager should be informed ASAP of all on-farm emergencies/accidents, including non-critical incidents.
- **Fire Extinguishers** are present in all facilities, fixed to the wall in prominent locations.
- Projects are responsible to carry **first aid kits** for their use while at the farm. A first aid kit is also located in the orchard store in Ithaca and in the breakroom in Lansing, as a backup option.
- Projects are responsible for supplying and carrying appropriate **personal protection equipment (PPE)** to their staff and students. Individuals operating equipment, including hand tools (e.g. hoes) must wear closed-toe footwear.
- **Essential postings** for the Ithaca orchard, including **information on recent pesticide applications and labor regulations**, can be found on the bulletin boards just outside the office of the farm manager. For the Lansing orchards, the information is posted outside the Lansing equipment barn, in the main parking area.
- The farm complies with Spill Prevention, Control, and Countermeasure (SPCC) Rules, specifically in regards to petrol tanks. **Individuals using farm fueling stations must be aware of the location of spill kits and what to do in case of an accidental spill.** More information on SPCC requirements can be found at: <http://www.epa.gov/oem/content/spcc/>. All spills should be immediately reported to the farm manager.

Cultural Practice Requirements:

- **Pest management is critical** to avoid negative impacts to your and other projects. **Active scouting for pests – insects, diseases and weeds – is the responsibility of each project.** Projects should have a management plan in place for common pests and work closely with the farm manager.
- Research on **regulated genetically-modified organisms (GMOs); heavy metals; planned disease and insect releases, or; involving the use of radioactive isotopes, animals, or aerial drones,** must be pre-screened for strict compliance with Cornell policy and to assure that such work will not impact the safety of other farm users or the robustness of neighboring research. The Cornell policy library is available online at <https://www.dfa.cornell.edu/tools-library>. More information and contacts for Cornell Environmental Health & Safety can be found at <http://sp.ehs.cornell.edu/Pages/Home.aspx>
- **Irrigation tracking:** The Lansing Orchard is part of the NYSDEC Great Lakes Water Shed. Annually reporting of all irrigation water withdrawal is required at this location. The Farm Manager will provide each program with irrigation water usage recording sheets, and collect completed sheets at season’s end to generate an annual irrigation report. The Ithaca farm irrigation water is metered and contracted from the Bolton Point Municipal water source.

Labor Availability:

- Farm staff at the orchards include the farm manager, four field assistants, and a farm mechanic. **The farm staff endeavor to meet all requests for general horticultural services and support.** Our aim is to provide world-class support of the applied research, teaching and outreach goals of Cornell faculty. **Labor is not, however, infinite.** As such, farm staff may occasionally have to decline or delay the provision of services which fall outside their scope of duties or when available labor is simply insufficient.