

# The Natural Lands & Sustainable Agriculture at St. Olaf College



MONARCH BUTTERFLY ON BLAZING STAR Photo by K.L. Shea

- 300 acre (122 ha) campus
- 350 acres (142 ha) dedicated to natural habitat
  - 150+ acres of restored native prairie
  - 200+ acres of restored and existing forests
  - 15 wetlands (12 restored)
- 444 acres (180 ha) of no-till agriculture
- Student and faculty independent research
- Bluebird trail of 64 nest boxes
- <http://wp.stolaf.edu/naturallands/>  
or Contact Charles Umbanhowar, Jr., Professor of Biology & Envir. Studies, Director of Natural Lands, [ceumb@stolaf.edu](mailto:ceumb@stolaf.edu), or Natural Lands Manager, Wes Braker, [brakerw@stolaf.edu](mailto:brakerw@stolaf.edu)

## RESTORATION

St. Olaf College is richly endowed in land holdings. In addition to the 300 acre (122 ha) campus, the college owns approximately 350 acres (142 ha) dedicated to natural habitat and 444 acres (180 ha) in sustainable agriculture. Over the past 25 years, principally through members of the Biology and Environmental Studies Departments, the college has conducted extensive natural habitat restoration projects on former farmland. These projects provide a wealth of learning experiences for our students, from casual observations to independent research. The Natural Lands also provide aesthetic and recreational resources for the entire Northfield community. The value of these areas will only increase as the habitats mature. Listed below are some highlights of these efforts.

## FORESTS

Over 100 acres of trees have been planted as tree seedlings or by direct seeding in an effort to re-establish the dominant maple-basswood forest type found in this area. Tree species used are primarily local hardwood species such as oaks, maples, ash, basswood, cherry and walnut. A seven-acre parcel with native pines, spruce, fir, tamarack and aspen was planted to establish a representative northern Minnesota habitat. Norway Valley is maintained as an example of mature maple-basswood forest.

## PRAIRIES

Over 150 acres of native prairie were restored from 1989 to 2004. The diversity in these plantings includes 10 species of native grasses and many species of wildflowers. Maintenance of the prairies requires regular burning, which is a fun way to express the “pyromania” in all of us.

## BLUEBIRD TRAIL

A bluebird trail of 64 houses has been established along the trails. Successful bluebird nesting has occurred every year, with tree swallows, black-capped chickadees and house wrens using the boxes as well. As part of a long-term population study, the trail is monitored each year by students. We fledge 50-80 bluebirds each year in addition to over 150 tree swallows and house wrens.



TREES REFLECTED IN POND

Photo by Knute Gundersen '12

## WETLANDS

We have over a dozen wetlands with most of them being restored since 1992. On Big Pond, the largest wetland (nine acres), over 400 waterfowl have been observed at one time during spring migration. Everything from ruddy ducks to tundra swans have been observed on our wetlands. Many species of waterfowl nest here including hooded mergansers, green herons, pied-billed grebes, woodcock and soras in addition to the more common mallards, teal, wood ducks and Canada geese.

## SUSTAINABLE AGRICULTURE

Starting in 2004, all the remaining farmland was converted from conventional tillage to no-till or strip-till agriculture to provide for better care of our soil. Our studies show that we have reduced chemical use, soil erosion and fossil fuel consumption, all without significantly changing yield.

## PREVIOUS CURATORS AND SUPPORT

Kathleen Shea, Professor of Biology, was Curator from 2009-2021. Gene Bakko, Professor Emeritus of Biology and the first Curator of Natural Lands, provided initial leadership for the restorations. Support for the Natural Lands comes in part from The Henry and Agnes Nelson Family Endowment for Natural Lands and Environmental Science, The Morton and Thelma Egeland Endowment for Environmental Science, and the U.S. Fish and Wildlife Service Conservation Programs.