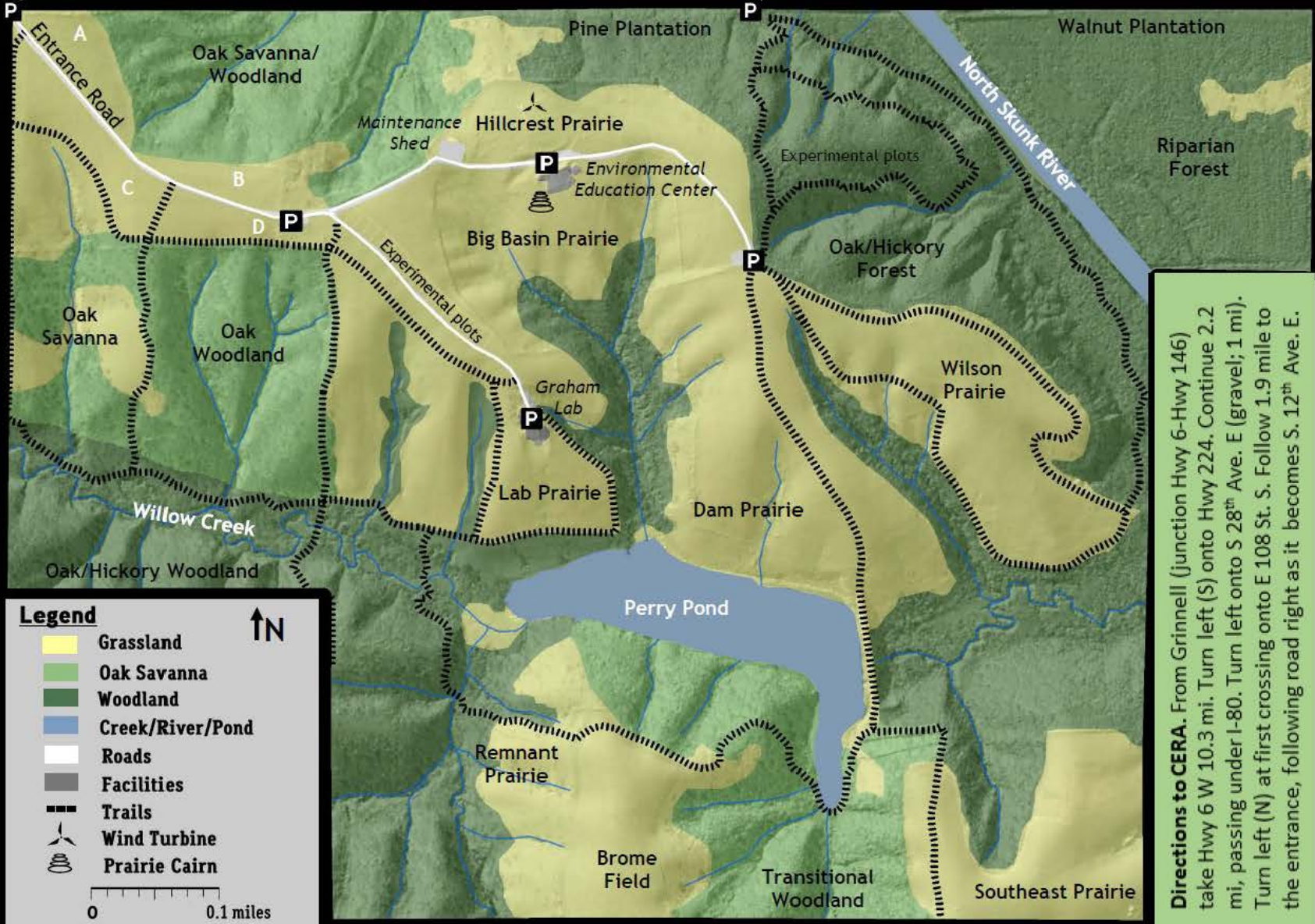


Conard Environmental Research Area (CERA)



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The Conard Environmental Research Area (CERA), named to honor Grinnell College faculty member and botanist Henry S. Conard, is a 365-acre field station used for teaching, research, and quiet enjoyment by the Grinnell College community and the public.

Mission

CERA pre-serves and, through ecological restoration, recreates a part of Iowa's vanishing natural heritage, providing a resource for the entire college, local schools, environmental groups, clubs, and the general public.

Regulations

- 1) CERA is open to the public for **quiet enjoyment during daylight hours**
- 2) The EEC is open 9 a.m. – 5 p.m. on weekdays.
- 3) **Motorized vehicles/ATVs are only allowed on the roads, not trails.** Please park in designated areas.
- 4) Bicycles may be on roads and mowed firebreaks, but not on the woodland trails. **Horses are prohibited.**
- 5) **Dogs on leash** may accompany hikers.
- 6) **We encourage you to hike the marked trails** or mowed firebreaks. You may leave the trails, but please do not enter the experimental plots. **Do not disturb any research equipment, flags, stakes, or markers,**
- 7) **Removal of anything is prohibited.** Please do not pick flowers or disturb plants, fungi, or animals. **Fishing and hunting are prohibited.**

Contact

Emily Klein, CERA Manager, (641) 269-4717, kleinemi@Grinnell.edu
Vince Eckhart, CERA Director/
Professor of Biology, (641) 269-4354, eckhart@Grinnell.edu

Graham Lab provides easy access to both field and lab equipment for aquatic studies, and serves as a caretaker residence.

Environmental Education Center was established in 2005 and constructed using environmentally-friendly systems and materials: geothermal heating/cooling, gray water recycling, and renewable local building materials. It contains two classrooms, restoration lab, office, kitchen, potting room, and greenhouse.

The EEC is open 9 a.m. – 5 p.m. on weekdays.

Wind Turbine (50 KWh) was built in 2007 and produces over 90% of the energy needs for the EEC, reducing CERA's carbon dioxide emissions from fossil fuel use by 200,000 lbs per year.

Prairie Cairn, a sculpture by Andy Goldsworthy, was built in 2005, as part of a larger cairn series with additional installations on the east and west coasts.

A: Fall Burn Prairie is burned each fall to demonstrate the effect of bare soil over the winter and rapid warming of the soil and growth of plants in the spring.

B: Deaner Prairie is the most diverse prairie re-construction at CERA with over 80 species of plants, and is burned every 2-3 years.

C: Perley Prairie has variable topography that supports typically mesic tallgrass prairie plants: thimbleweed, compass plant, pale purple coneflower, black-eyed susans and false boneset are abundant.

D: No Burn Prairie has not been burned since 1992. All organic material accumulates and decays naturally. The grasses are much less vigorous in this prairie, making forbs more visible throughout the summer.

Experimental prairie plots are burned each spring, summer, or fall or left unburned and are mowed or not mowed (to simulate grazing) allowing students to study and document the effects of fire on prairie organisms.

Experimental forest plots are burned or un-burned, allowing students to study and document the effects of fire on forest organisms.

Prairie is found on variable topography and supports a wide range of species: little bluestem, side-oats grama, and leadplant thrive in the infertile clay soil along the west edge; while tall grasses, sunflowers, and blazing stars are abundant along moist seeps.

Oak Savannas once formed the boundary between prairie and forest, and are now one of Iowa's rarest plant communities. Ongoing savanna restoration at CERA helps to support populations of prairie violet, bead grass, purple oxalis, New Jersey tea, cream gentian, and other plants that thrive in partial sunlight.

Oak Woodlands develop more diverse groundcover when fire-intolerant trees are removed, fire is prescribed, and sunlight penetrates the canopy. Bottle-brush grass, Virginia wild rye, bent grass, Pennsylvania and other sedges, and numerous forbs carpet the ground.

Oak-Hickory Forest was probably forested for 1000 years until a railroad company logged it in the 1860's. Over the last 140 years, an upland forest canopy of white oak, shagbark hickory, red oak, bass-wood, and ironwood naturally reestablished itself. This area now harbors a rich understory of spring ephemerals as well as an abundance of migratory song-birds.

Riparian Forests on alluvial soil along the North Skunk River consist of green ash, walnut, silver maple, cottonwood, and box elder. Ephemeral ponds where the Skunk River once meandered are spring-time breeding grounds for amphibians.

Walnut Plantation was planted in 1970 to black walnuts and white pines. Plants typical of riparian forests may be found beneath and adjacent to the tree canopy provided by the plantation, along with reed canary grass.

Perry Pond was constructed in 1972 to provide a site for study of aquatic habitat. The 14-acre pond averages only six feet deep and supports largemouth bass, bluegill, golden shiner, amphibians, and invertebrates. It is fed by three intermittent streams, including Willow Creek.

