

Community Sustainability Laboratory (CS-Lab)

Summary: The Berea College Community Sustainability Laboratory promotes collaborative problem-solving by students and faculty from several disciplines in partnership with citizens from throughout Kentucky and the Appalachian region. CS-Lab develops innovative technologies, buildings, businesses, and energy and food systems to help communities adapt to global economic, energy and environmental challenges. The SENS House complex at the Berea College Ecovillage, the Dead Horse Knob parcel at the College farm, assorted workshops and labs in Technology and Industrial Arts, and the Appalachian Gallery provide the primary infrastructure for the Laboratory's teaching, research, and demonstration projects.

The concept of the Community Sustainability Laboratory emerged during Summer 2010 from a faculty study group exploring ways of restructuring the College's academics. The goal was to enhance student learning by facilitating student, faculty, and citizen efforts to solve real-world problems through actions at the household and community level. The primary inspirations for the concept of CS-Lab were the innovative and successful programs of Auburn University's Rural Studio (<http://apps.cadc.auburn.edu/rural-studio>) and MIT's D-Lab (<http://d-lab.mit.edu/>). More recently, Richard Heinberg's concept of a Community Economic Laboratory (<http://energybulletin.net/stories/2010-08-23/community-economic-laboratories-cels>) has been influential.

The founding members of CS-Lab are programs whose curricula emphasize applied experiential learning – Sustainability and Environmental Studies (SENS), Technology and Industrial Arts (TEC), and Agriculture and Natural Resources (ANR). Longer-term, the Entrepreneurship for the Public Good program and the Brushy Fork Institute are among the many potential participants. The Appalachian Center will act as the umbrella organization for the Laboratory, grounding it in a regional context with connections to place-based problems, and providing an established framework for integrating efforts of additional programs and community groups.

The primary infrastructure of the Community Sustainability Laboratory will be comprised of existing Berea College facilities:

1. The SENS House, an ecologically-designed research and demonstration house with associated food forest, gardens and edible landscapes, and an aquaponics facility.
2. Dead Horse Knob, a 30-acre parcel of the College Farm providing basic utilities and ample space for construction and demonstration projects.
3. Several well-equipped machine shops, laboratories and computer facilities of the Technology and Industrial Arts Program.
4. Office, programming and classroom space in the Appalachian Center.

Specific projects undertaken through the Laboratory will be determined through a collaborative process with Appalachian communities and citizens to identify opportunities to increase community resilience, vitality, and sustainability.