

Wisconsin Green Building Project Profile

Aldo Leopold Legacy Center
E13701 Levee Road
Baraboo, WI 53913

BACKGROUND

Ecological and cultural values determined the placement of the Legacy Center. It would necessarily be above the floodplain, and it would utilize a site already disrupted by human's (an area where two houses had been) rather than disturb a natural area.

By keeping the footprint of the improvements to a minimum the remaining site could then be restored to the appropriate ecological communities: prairie, savanna, and wetland, as it once was.

The center employs a campus layout, with many points of access between indoor and outdoor spaces. Native plant gardens around the building, parking lots, and paths further emphasize the beauty of the natural heritage.

The Legacy Center meets all of its energy needs on site. Typically there are 12 employees that work 40 hours and about 85 visitors weekly.

RESULTS

The Legacy Center will use 70% less energy than a typical 12,000 square foot building built simply to code.

The Legacy Center has a 39.6 kilowatt (kW) solar electric (photovoltaic) system on its roof, the second largest in Wisconsin. The PV array consists of 198 panels and can generate 60,000 - 70,000 kilowatt hours (kWh) of electricity per year.

The concrete floor of the main building houses tubing containing liquid that regulates the temperature. The system gains or loses heat through exchange with the earth itself: nineteen geothermal wells extend 220 feet below ground, absorbing heat from the ground in the winter and dissipating it in the summer, then regulating temperature in the building through a heat exchange pump.

The footprint of all impervious areas (building and parking areas) have been kept to

an absolute minimum, allowing rain to be absorbed by the vegetation restored on the site. An aqueduct carries the storm water from the roof of the main building to a rain garden.

The native landscaping requires no irrigation. Waterless urinals, dual-flush toilets, and efficient faucets reduce water consumption by 65%. An on-site well provides potable water, and an existing septic system treats wastewater.

Thinning the Leopold forests improved forest health while providing 90,000 board feet of wood for use in the project. More than 75% of all wood used in the project was certified to Forest Stewardship Council standards, and 60% of all materials were manufactured within 500 miles of the project site.

As the first building to be recognized by LEED as carbon neutral, the Aldo Leopold Legacy Center has helped to set the standard for carbon neutrality in green buildings for the future.

PROJECT INFORMATION

Date of Completion: April, 2007
Architect: Kubala Washatko Architects
Owner: The Aldo Leopold Foundation
General Contractor: The Boldt Company
Consultants:

- Energy: Dave Bradley, Thermal Energy Systems Specialists
- Structural: Bob Gilomen, Komp/Gilomen Engineering, Inc.
- Mechanical: Brady Farrell, H & H Group, Inc.
- Landscape: Misa Inoue and Marcy Huffaker, Aldo Leopold Foundation
- Environmental: Michael Utzinger, UWM/SARUP
- Electrical: Tom Pfefferkorn, Powrtek
- Plumbing: Mark Schoeff, Schadde Plumbing
- Carpentry: Al Bachmann, Bachmann Construction Co.
- System Controls: Bob Hines, Triad Engineering
- Commissioning: Ron Perkins, Super-symmetry USA

Green Building Awards

2007: LEED-NC Platinum
2008 Top 10 Green Projects - American Institute of Architects
2007 Award of Excellence - Wisconsin Sustainability & Energy Efficiency (SE2) Leadership Awards
2007 Leadership Award for Education - US Green Building Council
2007 Designing and Building with FSC Award - Forest Stewardship Council
2007 Award of Special Distinction for Promotion of Sustainable Development
2007 Top Projects - Wisconsin Builders Magazine



For more information about the building please check out the Aldo Leopold Foundation website <http://www.aldoleopold.org/legacycenter/index.html> or the USGBC website <http://leedcasestudies.usgbc.org/overview.cfm?ProjectID=946>