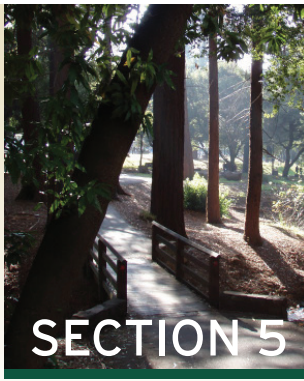


Photo: UC Berkeley



Campus Policy & Planning with Wildlife and Climate in Mind

Although it may seem obvious, it is important to ensure that college and university natural areas, tree canopies, and other places for wildlife are secured and protected for future generations. If the campus wild is a valued part of the student experience—important both for education and campus ambiance—then advocates for “the wild” should always have a seat at the planning table.

Whether public or private, schools generally retain the right to develop their land as they choose, sometimes resulting in campus expansion at the cost of once-wild acres. Establishing formal policies for preservation, and making sure campus green places become visible and valued campus assets, can help guarantee the long-term protection and survival of those places. Protection can be achieved through a variety of mechanisms, including campus master plans, conservation easements, LEED requirements, and state protection programs.

The **University of Nevada Las Vegas**¹⁰⁵ (NV), featured above in Section 1, has a campus policy stipulating that all new landscaping around buildings be xeriscape, much of which includes native species. **Duke University**'s¹⁰⁶ (NC) Master Plan calls for strategies to maintain its “University in the Forest,” such as preserving campus natural areas and limiting construction in such areas, and using infill development to preserve open space.

At the **University of Arizona**¹⁰⁷ (AZ), a comprehensive set of Guiding Principles helps protect its Arboretum, a campus-wide collection of trees and shrubs. One guideline makes the Office of Campus and Facilities Planning responsible for preserving and supporting the care of campus trees, ensuring their continued use as an educational resource. And a policy at the **University of Cincinnati**¹⁰⁸ (OH) requires that all new construction—and renovations, when possible—be built to LEED Silver requirements or higher. Wildlife-friendly landscaping and features are often part of projects with high environmental standards.

FEATURED CAMPUSES

Franklin Pierce University¹⁰⁹ (NH)

Most of the main campus of Franklin Pierce University is a mosaic of natural forests and wetlands, including the shoreline along Pearly Pond. Of the campus total of 1,200 acres, 1,000 are undeveloped and used extensively for education, research, and recreation. Selective logging is permitted in designated areas. As noted on its website, FPU is one of only a few colleges and universities to place permanent, legal restrictions on a portion of the undeveloped land within its campus borders. In 2005, a 46-acre parcel of wetlands and upland forest was protected with a conservation easement, held by the Monadnock Conservancy Land Trust, creating a wildlife corridor linking Pool Pond and Pearly Pond.



View of the scrub-shrub wetland in the conservation easement at Franklin Pierce University.
Photo: Catherine Coning

Conservation Easement

This voluntary legal instrument, formed between a landowner and a government or nonprofit organization, permanently restricts certain kinds of development on a parcel of land. Conservation easements are written to promote specific conservation objectives for water, wildlife, and ecological communities while limiting or precluding roads, buildings, traditional agriculture, and other non-compatible uses. Once an easement is signed, its restrictions apply to current and future owners of the land.

The protected area at Franklin Pierce not only connects two lakes, but also encompasses a headwater stream corridor surrounded by several types of wetlands, as well as upland forests of hemlock and mixed hardwoods dominated by sugar maple, yellow birch, and red oak. Native understory plants include wild sarsaparilla, wintergreen, and partridgeberry. Despite their close proximity to athletic fields and residence halls, these ecosystems support abundant wildlife, with recent sightings of moose, white-tailed deer, black bears, fishers, pileated woodpeckers, yellow warblers, spotted salamanders, and others, as documented by tracking, camera traps, and direct observation.

“The campus is our outdoor learning laboratory, and not only is it stunningly beautiful, it is chock full of wildlife. We use it to stimulate students’ abilities to ask good ecological questions and to conduct long-term research on important topics related to conservation of biodiversity, climate change, and water quality. What is particularly special about the place is the quintessential New England look of it—old farming roads and stone walls winding through sugar maple forest, pockets of wet meadows and streams dotting the landscape. Just walking through the area is a treat for the senses.”

– Catherine Owen Koning, Professor of Environmental Science

FPU’s wild places are used extensively for student independent research, as well as for field laboratory portions of courses including Wetland Ecology, Forest Ecology, Ecosystem and Wildlife Conservation, and Place, Community, and American Culture. These labs teach skills in wetland hydrology, water quality management, carbon sequestration analysis, exotic species control, aquatic invertebrates as water quality indicators, and many other topics.



Yellow warblers are one of the more colorful of the neotropical migrants to return each spring.
Photo: Kathy Rowland

Currently, FPU faculty are working with the university administration to explore placing a similar conservation easement on a 350-acre parcel of land on nearby FPU property in the town of Rindge. This site would be earmarked for more outdoor “learning laboratory” experiences that have been so valuable on the first conservation easement. The main campus has also benefited from recent efforts to improve wildlife habitat in areas directly adjacent to the developed parts of campus—removing turf grass and invasives, and planting native shrubs and other plants to attract insect pollinators, birds, and other wildlife.

“For our classes, we go out into the wetlands, learn their ecology, identify plants, learn the chemistry of the wetlands. There’s plenty of time to spend outside, which is ideal. It’s hands-on learning and it’s more interesting.”

– Patrick Freeman, Environmental Studies major

Butte College¹¹⁰ (CA)

When Butte College was established in 1973, its Board of Trustees designated the entire 928-acre campus a Wildlife Refuge. Currently, the developed parts of campus occupy 207 of those acres, including an 85-acre farm. Butte lies in the dry foothills just east of the Sacramento Valley, where the refuge serves as an outdoor laboratory for degree programs in agriculture, natural resources management, environmental studies, biology, and other fields.

All wildlife is protected on campus. No hunting is allowed, though certain species may be relocated; for example, rattlesnakes can be moved away from populated areas. The refuge harbors healthy numbers of deer, turkeys, mountain lions, California quail, golden eagles, several bat species, and Swainson's hawks, a species listed as threatened in California.

The college's Land Use Committee plays a key role overseeing the refuge. With a dozen faculty, staff, and student members, the committee addresses issues and ideas related to campus land management. A recent topic was removal of turf grass areas, to be replaced with native plants—a step that would decrease water use and attract even more wildlife to campus.

A recent demonstration of how Butte College protects its wild landscapes was when the college modified a proposal for an array of solar electric panels. The original plan was to put the array on wild land, which would have required cutting down mature blue oak trees (*Quercus douglasii*) and disturbing wildlife and other native plants. Faculty and staff came together to propose a better solution: mount the arrays on existing buildings and parking lot structures. The modified proposal was accepted by the college president and trustees, and the solar array now provides both electricity and shade to parked cars, an added benefit.

The wildlife refuge provides many opportunities for learning. Guided by faculty, students have been assisting facilities staff use GIS (Geographic Information System) technology to map Butte's natural landscapes and buildings. Not only do students get to apply skills they are learning in class, but the project also is helping achieve the goal of mapping the campus. Another effort is the Wood Duck Box program, which increases nesting sites for wood ducks at ponds and riparian habitats in the refuge. Students participate in all phases of the project, including cleaning the nest boxes in winter, counting hatchlings, and assisting staff from the California Department of Fish and Wildlife to put leg bands on the birds. Annually, wood ducks on campus have fledged an average of 300 ducklings.



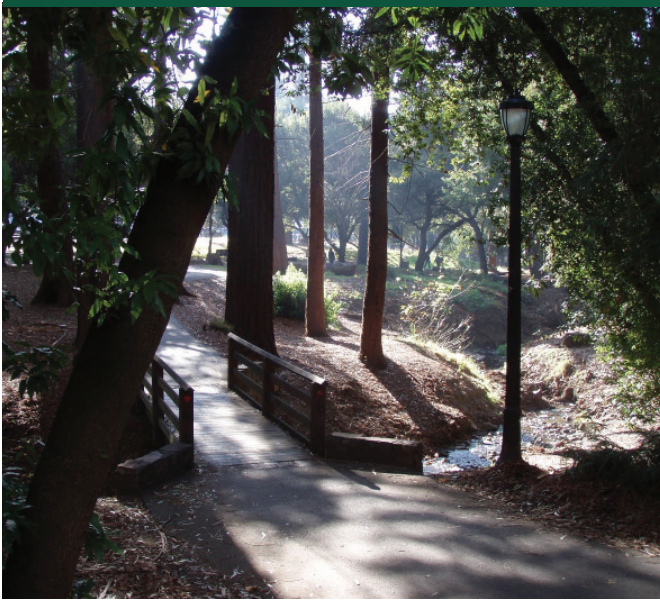
Students install a nest box for wood ducks near a pond at Butte College.
Photo: Butte College

Facilities Director Ken Albright is committed to connecting facilities management activities to the classroom. “Although working with students takes a little extra time,” he observed, “if you divide projects into smaller bites that are doable in a semester, you will have better success. Students become empowered and are more likely to stay engaged.”

University of California, Berkeley¹¹¹ (CA)

In 2009, the University of California, Berkeley (UCB), created its first Campus Sustainability Plan which “defines a vision of long term sustainability and describes steps being taken to achieve the vision.” The plan, which was updated in 2013, guides work on campus to ensure continuous improvement to the campus relationship with the environment. UCB's Landscape Master Plan, a separate document, is integrated into the sustainability plan and focuses on management of the university's landscape with an emphasis on supporting the educational mission.

Included in the Campus Sustainability Plan is a set of sustainability goals in nine broad categories, with Land Use among them. The Land Use goal is straightforward: “Plan every new project to serve as a model of resource conservation and environmental stewardship.” There are several strategies to address that goal, two of which relate directly to wildlife. One strategy is to “revise and implement the Strawberry Creek Management Plan.” Strawberry Creek provides an east-west greenway and wildlife corridor across the campus. The other is to “manage UCB's natural preserves based on ecological



Grinnell Natural Area along Strawberry Creek on the University of California, Berkeley campus.
Photo: UC Berkeley

principles, including replacing invasive exotic plants with native plants ... and preserving and enhancing their habitat value.” The creek runs through three designated campus wild places, the Grinnell, Goodspeed, and Wickson Natural Areas.

Decades ago, in response to the degraded state of Strawberry Creek on campus, a UCB graduate student, Robert Charbonneau, proposed and undertook a comprehensive study of the creek. The resulting 1987 *Strawberry Creek Management Plan* guided systematic clean-up efforts, water quality improvements, and elimination of invasive plants. Within a few years, populations of native fish were reestablished in the creek, including the three-spined stickleback, Sacramento sucker, and California roach minnow. The plan continues to guide work today through the Strawberry Creek Restoration Program, operating with volunteer labor and donated funds. Among other efforts, students built a native plant nursery in 2011 to propagate species to be planted in the riparian corridor. The program also provides hands-on training in restoration for students at the university and local schools.

Saint John's University¹¹² (MN)

The main campus of Saint John's University (SJU) occupies a small portion (80 acres) of the 2,700 acres that surrounds it. The land—made up of woods, wetlands, several ponds and lakes, and a restored prairie—is owned by Saint John's Abbey and was designated the Saint John's Abbey Arboretum in 1997. The arboretum serves as a valuable living laboratory for SJU students for hands-on learning and research experiences in sustainable forestry, prairie restoration, sustainable land use, and more.

The Abbey Arboretum is located in Minnesota's ecological transition zone between the tallgrass prairies to the south and west and the hardwood forests to the northeast, and thus is home to a great variety of native flora and fauna. Online lists of animal species recorded on the property include common wood nymph and white admiral butterflies, green-winged teal, northern shrike, plains pocket gopher, northern flying squirrel, beaver, short-tailed weasel, porcupine, white-tailed jackrabbit, blue-spotted salamander, Cope's gray tree frog, red-bellied snake, western painted turtle, and prairie skink.

To guide preservation and maintenance of these rich natural areas, Saint John's has a number of policies in place. The Lands and Trails Policy lists activities not allowed within the arboretum, such as harvesting plants, animals, and fungi, and operating off-road vehicles. The Invasive Species Policy protects against introduction of invasive plants and animals. It requires that all plantings within the prairie, for example, occur under the direction of the Abbey Land Manager, and that no firewood be brought from off-campus sources, which might contain fungus or invasive insects harmful to the forest. The Lakes and Waters Policy stipulates rules for fishing and requires removal of any visible aquatic plants and animals (mussels, snails, worms, etc.) from boats or trailers before entering and after leaving water access points. In addition, the arboretum has posted land stewardship methods and guidelines to direct long-term management efforts of its varied habitats. Controlled prairie and woodland burns in fall and spring, for instance, are used periodically to help control woody and invasive species and to encourage native plants, insects, and wildlife.

Butler University¹¹³ (IN)

Wildlife-friendly landscaping practices at Butler University in Indianapolis include the Butler Prairie, which was established in 1987 and serves as an outdoor laboratory for ecology classes. More recent projects include two rain gardens on campus that have been planted with native species. To guide landscape management decisions, staff at the university implemented a Sustainable Landscape Plan.

Butler was recognized by the Indiana Wildlife Federation (IWF), an affiliate of the National Wildlife Federation, for sustainable landscaping. The IWF sponsors a voluntary program—Landscaping the Sustainable Campus (LSC)—whose aim is to encourage greater conservation-minded landscape practices. Specifically, the LSC program promotes campus plans that are designed to manage surface runoff,

reduce excessive nutrient pollution, and add quality habitat space for wildlife on university and college properties in Indiana. Emphasis is placed in five areas: sustainable lawn maintenance and landscaping, pesticide/herbicide use reduction, invasive species eradication, native plant species selection, and water conservation. Efforts to engage students in the planning and practice of sustaining natural resources and conservation are strongly encouraged.

On the strength of its record, Butler achieved the Conservation Champion Gold Level certification through the LSC program. To reach this status, the university created a timeline and plan detailing current campus practices, long-range goals, and incorporation of new projects and sustainable practices on campus. Other campuses recognized through the LSC program in Indiana are **Purdue University (IN)** and **Indiana State University (IN)**.

5A LEED DESIGN STANDARDS LEAD TO WILDLIFE-FRIENDLY BUILDINGS

by Dagmar Epsten¹¹⁴

A prominent leader in technological change, the academic community has rapidly embraced sustainable design in its buildings and landscapes. Colleges and universities have long recognized the importance of a physical environment that promotes long-term human and environmental health. Thus, campuses nationwide are adopting an increasingly accepted set of standards and green building certification program in the construction industry, the LEED¹¹⁵ (Leadership in Energy and Environmental Design) rating systems. Developed in 1999 by the U.S. Green Building Council, LEED promotes sustainable design, construction, and operations in the built environment.

LEED standards cover various building types, interiors, campuses, and even entire neighborhoods. (*See box for LEED rating systems and a guidance document commonly used for a campus.*) Building projects have to document compliance with mandatory prerequisites, and projects can earn optional credits or points from among several credit categories, including water efficiency, energy and atmosphere, and

sustainable sites. LEED Platinum, Gold, Silver, or Certified status is awarded based on the total number of points achieved, with Platinum as the highest rating. Some point-worthy features of construction projects help protect wildlife, preserve trees, and make waterways healthier.

While LEED is focused primarily on buildings, it also encourages design features that favor resident and migratory wildlife. For example, it rewards innovative solutions for managing storm and surface water, for maximizing open space and green roofs, and for including trees and landscaping that provide shade and shelter. And indirectly, LEED supports wildlife on a much larger scale. Better energy performance, for example, reduces the greenhouse gases that contribute to climate change, which affects wildlife globally. The campus examples below highlight LEED-inspired elements of building projects that promote green space and wildlife habitat. They also call attention to the systemic interaction between the built environment and natural environment.

LEED Rating System¹¹⁶

- **LEED for Building Design and Construction**

Covers the development of a new green building or renovation of an existing building to ensure a holistic green structure. Includes the Master Site approach to prerequisites/credits for a campus or a partial campus site.

- **LEED for Building Operations and Maintenance**

Assesses the ongoing process—through prescriptive and performance strategies—of providing operational benefits throughout the life of the building. Includes the Master Site approach to prerequisites/credits for a campus or a partial campus site.

- **LEED for Neighborhood Development**

Assesses the creation of a neighborhood that combines environmental and social benefits to foster community with open spaces, access to parks, and community gardens. The campus or partial campus site would need to meet LEED criteria for a neighborhood.

- **LEED Campus Guidance for Projects on a Shared Site**

This guidance document is for projects on a shared site under the control of a single entity; for example, a corporate or educational campus, government installation, or commercial development. Can be used in conjunction with LEED for Building Design and Construction, or LEED for Building Operations and Maintenance.

Wildlife and LEED® v4 Rating System most applicable for campus developments:

		BD+C NC	BD+C Schools	HOMES Multi-Family Midrise	ID+C CI	O+M EB	O+M Schools	ND
	BD+C Building Design & Construction, including Campus Approach							
	NC New Construction and Major Renovation							
	Schools							
	HOMES Multi-Family Midrise (for Dormitories and Apartments)							
	ID+C Interior Design & Construction: CI Commercial Interiors							
	O+M Building Operation & Maintenance, including Campus approach:							
	EB Existing Buildings							
	Schools							
	ND: Neighborhood Development Plan and Neighborhood Development							
General, no category	<i>Integrative Process</i>	X	X	X	X			
LEED CATEGORY	Location and Transportation (LT)/ ND: Smart Location and Linkage (SSL)							
	LEED for Neighborhood Development Location	X	X	X	X			
	ND Smart Location							X
	ND Impaired Species and Ecologic Communities Conservation							X
	ND Wetland and Water Body Conservaton							X
	ND Agricultural Land Conservation							X
	ND Floodplain Avoidance			X				X
	ND Preferred Locations							X
	ND Brownfield Remediation							X
	ND <i>Access to Quality Transit/HOMES: Access to Transit</i>	X	X	X	X			X
	ND <i>Bicycle Facilities</i>	X	X		X			X
	ND <i>Housing and Jobs Proximity</i>							X
	ND Steep Slope Protection							X
	ND Site Design for Habitat or Wetland and Water Body Conservation							X
	ND Restoration of Habitat or Wetlands and Water Bodies							X
	ND Long-Term Conservation Management of Habitat or Wetlands and Water Bodies							X
	Sensitive Land Protection	X	X					
	High-Priority Site	X	X					
	Surrounding Density and Diverse Uses	X	X		X			
	Reduced Parking Footprint	X	X		X			
	<i>Green Vehicles</i>	X	X					
	Site Selection			X				
	Compact Development			X				
	<i>Community Resources</i>			X				
	<i>Alternative Transportation</i>					X	X	
LEED CATEGORY	ND: Neighborhood Pattern & Design (NPD)							
	ND <i>(Various credits encouraging density, mixed use, and alternative transportation.)</i>							X
	ND Local Food Production							X
	ND Tree-Lined and Shaded Streets							X

Wildlife and LEED® v4 Rating System most applicable for campus development:								
	BD+C Building Design & Construction, including Campus Approach							
	NC New Construction and Major Renovation							
	Schools							
	HOMES Multi-Family Midrise (for Dormitories and Apartments)							
	ID+C Interior Design & Construction: CI Commercial Interiors							
	O+M Building Operation & Maintenance, including Campus approach:							
	EB Existing Buildings							
	Schools							
	ND: Neighborhood Development Plan and Neighborhood Development							
LEED CATEGORY		BD+C NC	BD+C Schools	HOMES Multi-Family Midrise	ID+C CI	O+M EB	O+M Schools	ND
	Sustainable Sites (SS)/ ND: selected credits from Green Infrastructure & Buildings (GIB)							
	Construction Activity Pollution Prevention	X	X	X				X
	<i>Environmental Site Assessment</i>		X					
	Site Assessment	X	X					
	Site Development: Protect or Restore Habitat	X	X			X	X	
	Open Space	X	X					
	Rainwater Management	X	X	X		X	X	X
	Heat Island Reduction	X	X	X		X	X	X
	Light Pollution Reduction	X	X			X	X	X
	Site Master Plan		X					
	<i>Joint Use of Facilities</i>	X	X				X	
	No Invasive Plants			X				
	Nontoxic Pest Control			X/X				
	Site Management Policy					X	X	
	Site Management					X	X	
	Site Improvement Plan					X	X	
	Minimized Site Disturbance							X
LEED CATEGORY	Water Efficiency (WE)/ ND: Green Infrastructure & Buildings (GIB)							
	Various credits re. water efficiency. Issues relate to wildlife include human water use affecting natural water cycles and requiring energy, see also Energy & Atmosphere. Credits include							
	Outdoor Water Use Reduction/ HOMES: Outdoor Water Use	X/X		X		X	X	X
	Wastewater Management							X
LEED CATEGORY	Energy & Atmosphere/ ND: Green Infrastructure & Buildings (GIB)							
	Various prerequisites/ credits that address energy performance and renewable energy.							
	Major issues directly related to wildlife include the effects of atmospheric pollution (through CO₂, greenhouse gases, and other pollutants) and fossil fuel extraction on global climate and wildlife habitats.	X	X	X		X	X	X
LEED CATEGORY	Materials & Resources (ME)/ ND: Green Infrastructure & Buildings (GIB)							
	Various prerequisites/ credits that address the entire life-cycle of materials, including during the building's life-cycle. Major issues directly related to wildlife include the sourcing of raw materials.	X	X	X		X	X	X
LEED CATEGORY	Indoor Environmental Quality/ ND: Green Infrastructure & Buildings (GIB)							
	Various prerequisites/ credits that address healthy indoor environments. Issues related to wildlife include low-emitting materials which tend to create less environmental pollution during manufacturing, daylighting which saves energy, and views which can allow for appreciation of wildlife.	X	X	X		X	X	X
LEED CATEGORY	Innovation (IN)							
	Various credits for exemplary performance or that can innovative or be selected from a list of current pilot credits, which as of 3-15-2014 include:	X	X	X		X	X	X
	Bird collision deterrence	X	X	X		X	X	X
	Local food production (ND: NPD credit, see above)	X	X	X		X	X	
LEED CATEGORY	Regional Priority (RP)							
	<i>(Extra points for achieved credits according to zip code)</i>	X	X	X		X	X	X

LEGEND

X = LEED prerequisite (mandatory) X = LEED credit (optional)

Water-related design

Greenspace-related design (may include water)

Other location/site/building decision that may help wildlife, may include policies

Other process/policy that may help wildlife

Bold = major direct impact on wildlife

Roman (non-bold, non-italic) = some impact on wildlife

Italics = minor, indirect impact on wildlife

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The LEED Platinum-certified G. Wayne Clough Undergraduate Learning Commons at the Georgia Institute of Technology. Photo: Georgia Institute of Technology

FEATURED CAMPUSES

Georgia Institute of Technology¹⁷ (GA)

In its *2004 Campus Master Plan Update*, Atlanta-based Georgia Tech established sustainability as one of three directives essential to the future of its 400-acre campus. LEED provides an important strategy to make progress toward this goal. As of May 2013, Georgia Tech had 15 LEED-certified buildings: 2 Platinum, 11 Gold, 1 Silver, and 1 Certified. Other buildings await certification or are using LEED standards as a guide.

Among the certified is the LEED Platinum G. Wayne Clough Undergraduate Learning Commons. This 220,000 square-foot building, built in 2011, has wildlife-related LEED features, including an 18,000-square foot rooftop garden and a stormwater collection system. The green roof, which reduces the urban “heat island effect” (a phenomenon in which dense, paved areas warm up to 6°F more than nearby green spaces or forested areas), contributed LEED points for stormwater management, habitat, and open space creation. Next to the Clough building, and contributing to those same LEED points, is the newly-created Tech Green. Buried below is a 1.4 million gallon cistern that collects stormwater and air conditioning condensate, which is used for watering the Tech Green and the Clough building’s rooftop vegetation, as well as to flush Clough’s toilets.

The landscape around the building was planted with 39 native species, including trees, which provide shelter and food for insects, birds and other wildlife. According to Howard Wertheimer, Georgia Tech’s director of capital planning, trees are considered critical to the campus master plan. A group of faculty, staff and students monitors and promotes the health of the 5,000 trees on campus, many of which surround the LEED buildings and contribute to LEED points.

Emory University¹⁸ (GA)

Also located in Atlanta, Emory University is a recognized national leader for LEED-certified buildings, with 25 on its campus and more in progress. Many of these certifications were earned from upgrades to existing buildings. Beginning in 2001, a campus policy requires that all new construction and major renovations must achieve LEED Silver certification or higher. In addition, any building project must conform to Emory’s Land Use Plan, which requires 50% of the university’s 700-acre campus to remain as undeveloped open space. Currently, the university is maintaining 54% of its campus as protected greenspace. The plan also pledges no net loss of forest canopy. Any trees removed due to construction must be replaced.

The story of Emory’s green buildings includes a wildlife challenge that reshaped the university’s design standards. The LEED-Certified Math and Science Center, completed in 2002 as an early campus LEED project, has a three-story system of reflective glass walls facing the adjacent Harwood Forest. The walls proved deadly to migrating birds. The birds could not tell that the trees and sky they saw in the glass walls were reflections. As a result, large numbers of birds collided with the building. Reconstruction was considered but proved prohibitively expensive. Instead, campus managers opted to erect protective bird netting over the glass during fall migration.

The design of all new campus buildings now addresses this concern by using small panes of glass and avoiding reflective glass coatings, according to John Wegner, senior lecturer in Emory’s Department of Environmental Studies. He mentioned Cornell University’s pioneering designs with downward-tilted glass that reduce the reflective effect, which also has proven to be an effective strategy. LEED now offers an Innovation Point for Bird Collision Deterrence, thanks to awareness raised by early pioneers such as Emory.



The Math and Science Center at Emory University.
Photo: Kay Hinton, Emory University

Wegner also said, “As we have added more buildings on campus, we have not noted any decline in wildlife.” Emory’s commitment to sustainability and its many LEED-certified buildings—with their collective achievement of LEED credits that encourage open space, habitat restoration, and stormwater management—contributed greatly to this outcome.

Oberlin College¹¹⁹ (OH)

Oberlin’s 14,000-square-foot Adam Joseph Lewis Center for Environmental Studies (AJLC) was designed in the 1990s, just as the U.S. Green Building Council was finalizing its first LEED standards. The structure was completed in January 2000. From 1993 to 1998, Oberlin students were integral to the building’s design process.

AJLC was conceived as an “integrated building-landscape system” with green spaces that would be modeled after natural ecosystems. Although the building’s 1.5-acre lot is not expansive, many wildlife opportunities have been created by incorporating a pond and restored wetland area into the building’s water cycles, which includes wastewater treatment. Facilities manager Sean Hayes, who oversees operation of the 14,000-square-foot building and its grounds, points to a loud chorus of frogs each spring as testament to the success of this effort.

An organic permaculture garden with fruit trees and vegetable beds on the site demonstrates that urban agriculture can also provide wildlife areas. Hayes notes that the orchard, with its 50 pear and apple trees, regularly attracts raccoons, opossums, rabbits, and many birds. The land around the

pond, wetland, and garden has been landscaped with more than 50 indigenous Ohio plant species, which help attract both resident and migrating birds. Species regularly spotted around AJLC include cardinals, robins, blue jays, crows, and finches. Rainwater is captured in a 10,000-gallon cistern and then slowly released to the pond and wetlands.

Both wastewater treatment and a native landscape with stormwater irrigation contribute LEED points to a building. Although never officially certified, AJLC incorporates many aspects of LEED and is widely recognized as an early sustainable showcase building that inspired campus projects throughout the U.S. In 2006, Oberlin adopted a policy calling for all new buildings to conform to LEED Silver design standards or higher. It now boasts five LEED-certified buildings on a campus that serves a student population of 3,000.



The innovative Adam Joseph Lewis Center at Oberlin College.
Photo: Jennifer Manna