

Clean air and water ... rich soil ... open space ... gray rocks and green plants ... creatures that crawl, swim, leap and soar ... As a society we are spending less time interacting with the great outdoors learning to understand and appreciate it, and more time with the distraction of technology, electronic toys and other activities competing for our attention. Through environmental science education programs, Extension is helping Minnesotans of all ages build a relationship with Mother Nature with the hope that we will come to value and protect our state's irreplaceable natural resources.

Natural connections



Investing in environmental science education encourages future generations to value and protect Minnesota's natural resources

Mary Hedenstrom spent lots of time outdoors growing up on the family farm, but she never got to know nature as well as she wanted. Now, as a science specialist at Hancock–Hamline University Collaborative Magnet School in St. Paul, she's making sure her students learn firsthand what the world around them has to teach.

Extension is on her team. In 2003, Hedenstrom took a summer field ecology class taught by Karen Oberhauser, Extension environmental education specialist and

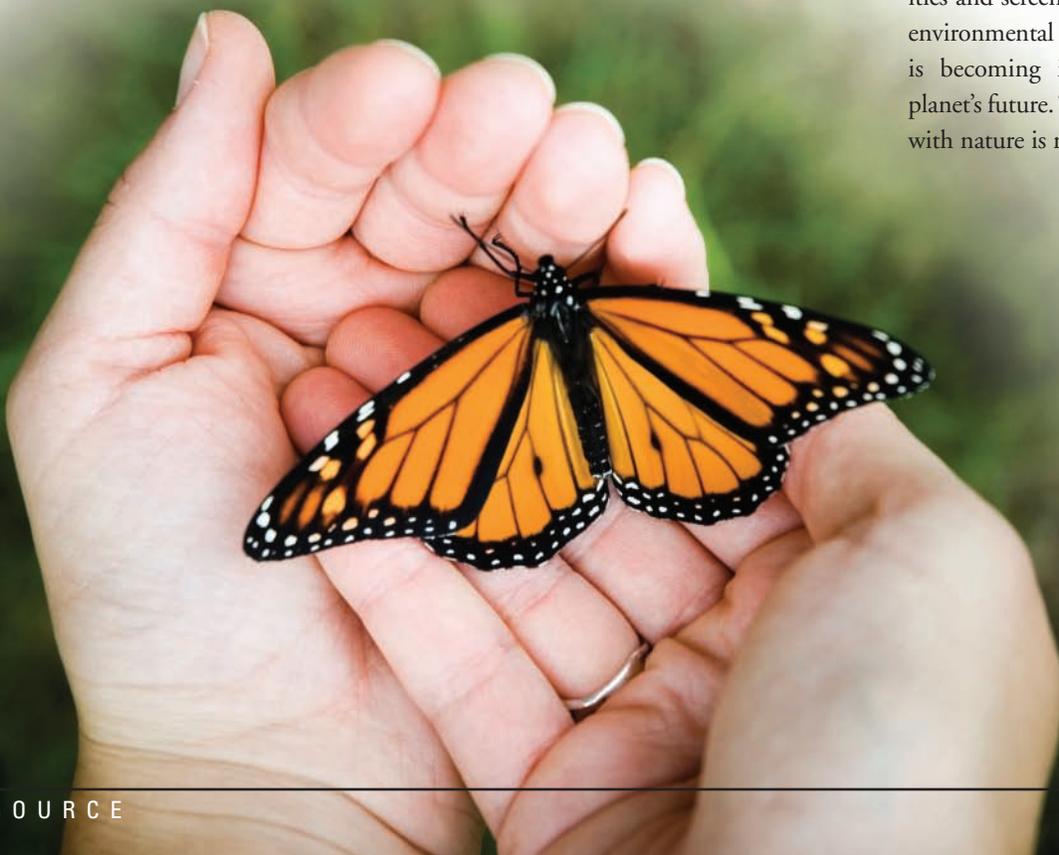


Extension environmental education specialists challenge science teachers to engage kids with the environment and teach respect for the natural world.

associate professor in the Department of Fisheries, Wildlife and Conservation Biology. Today, a schoolyard garden Hedenstrom created and the creatures that frequent it provide colorful competition for hundreds of elementary students also tempted by the latest Nintendo Wii or Xbox 360 games.

“Because we had this class, my focus was to attract birds and butterflies to my school so students would have something to study,” Hedenstrom says.

As the tug-of-war between outdoor activities and screen time intensifies, the need for environmental appreciation and stewardship is becoming increasingly critical for our planet's future. The need to forge connections with nature is more urgent than ever.



“Protecting our earth is the most important task facing each generation,” says U.S. congresswoman Betty McCollum (D-Minn.), a member of the House Appropriations subcommittee that directs education funding. “To be successful in protecting our planet, our children will need the best environmental science education to inspire them to take up the challenge of environmental stewardship,” says McCollum.

Oberhauser and Extension colleague Robert Blair, associate professor in the Department of Fisheries, Wildlife and Conservation Biology, have precious resources to offer: Monarchs in the Classroom, a butterfly-based curriculum; the Summer Ecology Institute, four workshops on insect and schoolyard ecology; grants for schoolyard gardens; and an annual insect fair. All told, they have engaged more than 500 Minnesota teachers and thousands of students in hands-on explorations of nature.

“Our programs focus on a basic ecological understanding of the world,” Oberhauser says. “All of them promote an environmental awareness and also a love and respect for the natural world.”

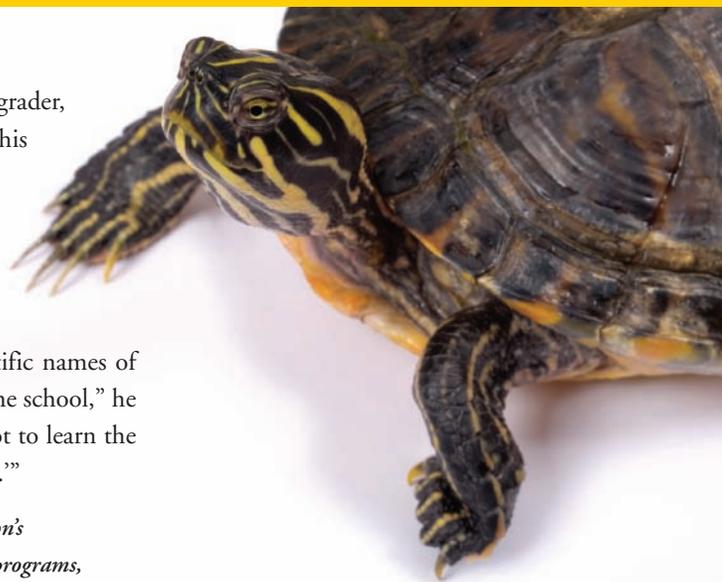


Mary Hedenstrom and her sixth-grade students get down-to-earth with science outdoors at Hancock-Hamline University Collaborative Magnet School in St. Paul.

Terrance, a Hancock sixth-grader, can speak to that. He used his experiences in Hedenstrom’s garden as a springboard to enter the insect science fair Oberhauser holds annually on campus.

“I liked learning the scientific names of the bugs we found outside of the school,” he says. “It was fun because we got to learn the silly names, too, like ‘roly poly.’”

For more information on Extension’s environmental science education programs, visit www.extension.umn.edu/EnvironEd



How can adults learn more about the great outdoors?

“Go for it!”

That’s Robin Freese’s advice to anyone thinking about becoming a Minnesota Master Naturalist volunteer. The Brooten, Minn., illustrator and designer did just that along with her husband and two friends in fall 2006.

“It just sort of opened up a whole new w,” Freese says.

In 2005, Extension and the Minnesota Department of Natural Resources created the Minnesota Master Naturalist Program to give adults an opportunity to learn about their environment while creating a corps of enthusiastic, educated volunteers.

Minnesotans tend to know a lot about birds and plants, says program director and Extension educator Amy Rager. “This is a chance for them to learn about what they don’t know ... water quality, geology, land issues,” she says. “It helps them to be better-rounded citizens.”

Volunteers spend 40 hours learning about the natural and cultural history of one of Minnesota’s three biomes—Big Woods, Big Rivers; Prairies and Potholes; or North Woods, Great Lakes. After completing their training, they perform at least 40 hours of nature-related service each year, such as



As a Master Naturalist, Robin Freese donates at least 40 hours each year to help protect Minnesota’s environment.

gathering prairie seed and helping with educational events.

On the whole, Master Naturalist volunteers have contributed some \$191,000 in services, improved more than 57,000 acres of land, and helped educate 47,000 citizens. Among other projects, Freese has rejuvenated a public butterfly garden, collected native prairie seed for planting in a state park, and hosted an advanced training session on her fourth-generation farm.

“There’s been a lot of fun,” she says. “It’s been really interesting and rewarding.”

For more information on the Master Naturalist Program, visit www.extension.umn.edu/EnvironEd and click on “Minnesota Master Naturalist Volunteer”