



Lessons in the Field



By Greg Chandler

“Gone fishin’” is usually a sign of someone taking some time off, but for Hope biology students it represented serious work.

The students of Biology 315 descended on the ponds of the Outdoor Discovery Center with rods and reels—and a ruler, scale and data chart—to continue an ongoing study of how the ponds’ fish are faring.

It’s just part of the ongoing research Hope students engage in at the 120-acre Outdoor Discovery Center, located on the southern outskirts of Holland. Earlier this year, Hope and the nature center established a partnership to develop a field station that will serve as a classroom, lab facility and research station.

It may look like a moment from summer vacation, but it’s actually the first day of class. The idyllic scene had a serious purpose, with the students of Biology 315 attempting to catch fish as part of an ongoing research project at Holland’s Outdoor Discovery Center focused on the aquans’ health and growth. The center and faculty and students have connected in a variety of ways in the years, a relationship that will continue to grow through a new agreement signed this fall.

The agreement formalized what had already been a positive relationship between Hope and the ODC that dates back to the center’s founding nearly 10 years ago. “They were very welcoming to us from the very beginning,” said Dr. K. Gregory Murray, professor of biology at Hope.

Throughout the center’s history, Hope students and faculty members have used the ODC for a variety of experiences, including tagging fish, banding birds, live trapping and surveying small mammals, gathering seeds and monitoring insects and plant species through the center.

“They get hands-on experience ... like a real zoologist,” said Travis Williams ’98, ODC’s executive director. “That’s what sets people apart when they try to go and get a job.”

Dr. Murray agrees. “They learn a how a nature center runs. A lot of them are going to end up in that business, doing interpretative work, working with the public. That’s a huge opportunity for them,” Dr. Murray said.

The expanded relationship with the center reflects an emphasis on teaching students through involvement in collaborative research with faculty members that has been an educational philosophy at the college for more

than half a century. The late Dr. Gerrit Van Zyl ’18, who taught chemistry at the college from 1923 to 1964, is widely recognized for developing research-based learning at Hope in its modern sense. More than 100 years ago, biologist Dr. Samuel O. Mast had designed research laboratory space for the college’s Van Raalte Hall, which opened in 1903.

Hope has received recognition in a variety of ways for its emphasis on undergraduate research. For the past eight years, since the category debuted, the *America’s Best Colleges* guide published by *U.S. News and World Report* has included Hope on its listing of institutions that are exceptional for their emphasis on undergraduate research and creative projects. Hope ranked fourth in the nation when the category debuted in 2003; the institutions are no longer ranked, but only about three dozen are on the list each year. The guide also

includes Hope among the top 100 national liberal arts colleges in the U.S.

Among other indicators, Hope was one of only 10 liberal arts institutions nationally recognized for innovation and excellence in science instruction by the National Science Foundation (NSF) with an “Award for the Integration of Research and Education” in 1998. In addition, the bulk of the resources that support the college’s research program in the sciences come through competitive research grants from external sources such as the NSF, National Institutes of Health (NIH), Department of Homeland Security, private foundations and corporations.

Dylana Pinter ’08 did an internship at the ODC while she was a student at Hope. She says the experiences she had helped give her an edge when she interviewed for positions after graduation.

“I was able to put down (on a resume) that I’ve had experience with live animal traps, handling the animals and releasing them into the wild,” said Pinter, who now works as a weekend staff worker at ODC. “It was really practical.”

A double major in biology and studio art while at Hope, Pinter has also been able to incorporate her interest in graphic art into her

position, creating a family guide flip calendar with information on the various activities at the center.

More than 30 Hope students have either served internships or been employed at ODC over its existence, and the potential for more students to become involved in the future is likely to extend beyond those who are majoring in biology or zoology.

“There’s lots and lots of potential across all disciplines, not just the sciences,” Dr. Murray said.

Williams, who has been executive director at ODC since its inception, says student interns who work at the center not only learn through their experiences, but also get a chance to impact lives and the environment.

“We’re not only educating children and help to preserve our environment, but we’re helping people find careers in this field,” he said.

In addition to doing the research, students often have an opportunity to share what they’ve learned with local schoolchildren who visit the center for field trips. The result is a win-win for everybody involved, said Dr. Kathy Winnett-Murray, who with her husband has taught biology at Hope since 1986.

“The kids get to hear about interaction of species in the environment, and how people have changed the environment,” Dr. Winnett-Murray said. “My students get the opportunity to take their research ideas and form them into K-12 lessons.”

“They learn you can teach children every bit as effectively outdoors as you do indoors,” Dr. Winnett-Murray added. “Our students have an opportunity to see really good role models and model that behavior to children.”

Ingrid Slette, a sophomore from Holland, Mich., used the ODC for lab work when she took Biology 260 - Organismal Biology – during winter semester last academic year. She says the experience tapped into her love of the outdoors and made the lessons learned in the classroom more real.

“It was fun to get out of the class and actually see what you’re learning in nature,” Slette said. “I think it’s a real good way to do research and apply the concepts you’ve learned in class.”

Dr. Winnett-Murray says she sees part of her role as letting her colleagues at Hope know about the opportunities that are available for faculty members in all departments to use ODC for class work and research.

“I think we’ve just tapped the surface of things that are going to come,” Dr. Winnett-Murray said. “We want to see this as an extension of Hope’s campus that everyone can use, and we’re just starting to do that.”



Hope biologist Dr. Kathy Winnett-Murray demonstrates how to band a red-winged blackbird at the Outdoor Discovery Center. The new expanded relationship between the center and the college underscores and extends the center’s important role in providing hands-on lessons for Hope students even as it serves as a resource for the broader community.

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– Ingrid Slette ’12

