

In the field: IDEC cohort samples conservation careers



On a humid August morning with a heat index reaching the mid-90s, six college students outfitted with work boots, hand nets and collection jars made an exciting discovery on a private conservation easement in Hennepin County.

A bumblebee with a distinctive brown section on its back droned among tall grasses and native forbs. The students quickly identified it as a rusty patched bumblebee, the federally endangered species that was named Minnesota's state bee in 2019.

The rare sighting was made during an Aug. 6 field day organized by the Minnesota Board of Water and Soil Resources (BWSR) and hosted by Hennepin County for the state's Increasing Diversity in Environmental Careers (IDEC) program.

Hennepin County staff took the

Top: IDEC fellows used hand nets and jars to collect insects while learning about habitat diversity at an Aug. 6 field day hosted by Hennepin County. Fellows toured four conservation easements totaling 89 acres.

Photo Credit: BWSR

Inset: IDEC fellow Lauren Beck, who is studying data science at Winona State University, held a collection jar containing a rusty patched bumblebee, the federally endangered species that was named Minnesota's state bee in 2019.

Photo Credit: DNR

students on a tour of four conservation easements totaling 89 acres. The easements permanently protect privately owned land for conservation purposes via Hennepin County's Habitat Conservation Program, a collaboration with the Minnesota Land Trust funded by the Outdoor Heritage Fund. Hennepin County aims to protect 6,000 acres by 2040 and plant 1 million trees by 2030. Hennepin County staff monitors easements on a rotating basis



to determine which wildlife species are present and to analyze habitat-related trends.

By the end of the day, the group had made another exhilarating find: they observed a blue-spotted salamander on the ground near an ephemeral wetland. According to Hennepin County wildlife biologist Nicole Witzel, who assisted students with species identification, habitat loss and decreasing water quality are contributing to a decline in blue-spotted salamander populations.

"These students were extremely respectful of the resources that we

shared with them,” said Kristine Maurer, Hennepin County natural resources specialist. “I was really impressed with the level of intentionality and curiosity they brought. They really took advantage of the space and time they had with these professionals who could someday be their colleagues.”

IDEC is a strategic partnership among BWSR, the DNR, the Minnesota Pollution Control Agency (MPCA) and Conservation Corps Minnesota & Iowa. Funded by the state’s [Environment and Natural Resources Trust Fund \(ENRTF\)](#), the program is designed for under-represented undergraduate students attending accredited colleges or universities in Minnesota, and involves a multi-year experience in three different components: fellowship, mentorship and internship.

IDEC fellows are organized into cohorts; however, during their second and third summer internships, they typically work independently, supported by program staff as needed. Each cohort spends its first summer completing a rotational internship at participating agencies to gain exposure to the mission, operations and key initiatives of each. In their second and third summers, fellows select a specialized internship at one of the three state agencies, based on their career interests and the availability of agency funding.

“This initiative is designed to cultivate the next generation of environmental and natural resources professionals and advocates,” said May Yang-Lee, career pathways program coordinator for the DNR, who oversees IDEC. “By the time they graduate, fellows have gained extensive



Top: IDEC fellows examined a blue-spotted salamander during an Aug. 6 field day in Hennepin County. **Bottom:** Dakota SWCD Manager Ashley Gallagher discussed drinking water supply management areas during an Aug. 4 field day that included several stops to hear about district projects. Fellows learned about water-quality monitoring at Vermillion Falls, visited a perennial crop field, and stopped by an agricultural weather station just south of Hastings.

Photo Credits: BWSR



professional experiences, built strong networks and developed the skills necessary to succeed in the environmental field.”

The Hennepin County easements field day was part of a weeklong series of activities in early August that BWSR staff organized for the IDEC cohort. The week featured a mix of field

days and job shadowing. In addition to the Hennepin County easements visit, field days included a morning spent touring Capitol Region Watershed District projects, and a trip to a Lawns to Legumes community garden project in St. Paul’s Frogtown neighborhood.

The cohort also visited [Gibbs Farm](#) in Ramsey County

and took a guided tour focused on the traditional and cultural lifeways of the Dakota of Heyáta Othúnwe (The Village at the Side) at Bdé Makhá Ska as a precursor to a presentation about Tribal-state relations by BWSR Tribal Liaison Melissa King.



YOUR Clean Water Fund AT WORK

IDEC is supported by the Outdoor Heritage Fund, which is part of Minnesota's Clean Water, Land and Legacy Amendment.

On Aug. 4, Dakota County Soil and Water Conservation District (SWCD) staff took the fellows on a tour of several district projects, starting with a morning stop at Vermillion Falls in Hastings to learn the basics of using water monitoring equipment. The group then stopped at a nearby field to view perennial Kernza and alfalfa crops and take soil samples. Perennial cover crops can help improve soil health and filter water, which is important for protecting drinking water.

Dakota County SWCD Manager Ashley Gallagher said she and her staff



The Increasing Diversity in Environmental Careers (IDEC) Program is funded by a one-time \$1.28 million appropriation from the state's Environment and Natural Resources Trust Fund. Funding is available through 2028.

organized the day to showcase different types of field work and the related equipment used to perform it.

“We focused on field work to give students a chance to see if they like it,” Gallagher said. “I hope they saw the depth of what the conservation field can offer. If you like field work, you can do that — but if you don’t, there’s still a place for you in the environment and conservation world.”

The day finished with a stop at an agricultural weather station south of Hastings, which the Dakota County SWCD established with funding from the Minnesota Department of Agriculture. The station collects data about rainfall and evapotranspiration to help inform farmers’ decisions about when and how to irrigate. Watershed-Based Implementation Funding from BWSR supports staff time and irrigation scheduling tools.

Gallagher said she would be interested in working again with IDEC cohorts.

“The energy students bring is always fun,” Gallagher said. “Problem-solving is more successful when you involve people of various backgrounds and ideas. You get better solutions that way.”

BWSR Organizational Development & Diversity, Equity and Inclusion Coordinator Mandy Duong, who helped plan the week of activities, said BWSR emphasized field days that paired IDEC fellows with local government partners, since they are the professionals who implement conservation initiatives on the ground.

“Our goal was to provide a



Top: IDEC fellows visited Gibbs Farm in Ramsey County, where they took a guided tour focused on the traditional and cultural lifeways of the Dakota of *Ĥeyáta Othúnwe* (the Village at the Side) at *Bdé Makhá Ska* as a precursor to a presentation about Tribal-state relations by BWSR Tribal Liaison Melissa King. **Photo Credit:** DNR

diversity of experiences and perspectives from LGU (local government unit) partners so that students can get a more holistic understanding of what BWSR is, what we do and the different partners that make our work possible,” Duong said.

BWSR Legislative Coordinator Mike Nelson, who assisted with planning and attended several field days, agreed.

“BWSR works through partnerships, so we recognize the value of the partners and the work they do at all levels of government. Many BWSR employees have also worked at the local level,” Nelson said. “We thought, ‘Let’s really highlight the partnerships, because that’s how things happen in our world.’”

The decision to focus on conservation at the local level resonated with fellows.

“The most helpful aspect of this week’s presentations and activities was introducing us to their partners and possible career opportunities,” said Jessica Haase, an IDEC fellow studying fisheries, wildlife and conservation biology at the University of Minnesota’s Twin Cities campus. “I feel like BWSR was not so set on convincing us to work for them, but rather they were very excited to introduce us to some of their partners that do interesting work. This week gave me a lot more ideas for places I may want to work at someday.”

The IDEC program is funded through fiscal year 2028, and discussions regarding its future are ongoing. Regardless of whether the program concludes or continues, Yang-Lee said each state agency is committed to applying the lessons learned to enhance future career

pathways and internship opportunities to support the development of Minnesota’s next-generation workforce and advancing representation across the state. A total of \$1.28 million in ENRTF appropriations has supported activities across six cohorts; the final cohort of 16 IDEC Fellows is currently underway.

Duong said she hoped the work would continue.

“We want a state workforce that represents the people who live and work here,” Duong said. “Having a diverse workforce adds creativity, a wider range of ideas, and new ways of thinking that can lead to better problem-solving and innovation.”

BWSR staff members write and produce *Snapshots*, a monthly newsletter highlighting the work of the agency and its partners.