Kristin Reed and Associate Professor Julie Etterson.

Seeds and Climate Change

Julie Etterson's newest initiative, Project Baseline, will prepare a living seed bank that can be resurrected in the future to study how natural selection has changed wild plant populations. Etterson, associate professor, Department of Biology, was recently awarded $1.2 million from the National Science Foundation to collect seeds for a massive seed bank.

The four-year project will fund the collection of millions of seeds from a variety of wild plant species in the U.S. "In 10, or even 50 years, we'll be able to grow ancestral seeds side-by-side with contemporary collections, showing how a species reacts to drought, insect invasion, or other changes," Etterson said.

Etterson will orchestrate dozens of volunteers, as they collect seeds across the country. Seeds will be frozen in liquid nitrogen at a germplasm facility in Fort Collins, Colo. "It's important to do this now so future evolutionary biologists can examine how differences, including climate change, have affected these species," Etterson says. Etterson and UMD will manage $816,200 of the funding for the acquisition of seed samples from the Midwest for the next four years.