

# Colorado Natural Heritage Program Protects Imperiled Species

By Mary Klein



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**T**here is a small community near the foothills of Colorado's Front Range that is coping with change. The individuals in this community are native to Colorado and have developed a lifestyle in harmony with the surrounding landscape. But their lifestyle is potentially threatened by the ever-expanding urban boundaries of nearby cities and towns.

The individuals I am talking about are not, however, human. They are plants of the species called Bell's twinpod, which is known to exist in about 25 sites in the whole world. All of the sites are located on shale outcrops in north central Colorado. Because of its extremely limited range and vulnerability to development along the Front Range, the Colorado Natural Heritage Program classifies Bell's twinpod as an imperiled species.

Luckily, the Larimer County Open Lands Department has been working with the Natural Heritage Program to identify areas that are occupied by Bell's twinpod and share that information with landowners in hopes of providing good stewardship for the species. For example, within the last year a developer submitted a proposed project for review to the Larimer County Planning Department. Great Outdoors Colorado compared the site to a GIS overlay map that the Natural Heritage Program delivered to the county as part of a countywide planning grant supported in 1997. This comparison showed that the develop-

ment site contained a population of Bell's twinpod.

To address the issue, Daryl Burkhard of the Larimer County Open Lands Department, Steve Kettler, a Natural Heritage Program ecologist, and the developer visited the site to view the situation. The developer was very receptive to this review and thought new homeowners would be excited about helping take care of these special plants. The final development plan incorporated open space and building envelopes designed to locate the houses on the far side of the lots away from the Bell's twinpod plants.

Burkhard is a big fan of the Natural Heritage Program, and in addition to her work with the county planners, she uses GIS data to evaluate potential open space acquisitions. She considers the information about Larimer County's rare natural resources to be an important component to include in open space grants. Demonstrating that open space will protect globally rare species or habitats adds value to the projects and increases the appeal for many grantors. In addition, Burkhard continues to work closely with

Natural Heritage Program staff to develop management strategies for key open lands such as the area around Horsetooth Reservoir.

"When lands are acquired that contain a rare species, it is important to address the needs of the species in the management plan," she says. "We have found it to be very important to contact and work with the Natural Heritage Program to identify approaches that ensure long-term success."

## Helping Counties Meet their Goals

To date, the Natural Heritage Program has partnered with 21 of Colorado's 63 counties to conduct baseline, biological surveys. It is common for us to double the amount of information that a county has regarding its vulnerable natural resources as a result of these studies. The resulting maps and data sets serve as valuable tools in helping county commissioners, planners and local stakeholder groups make key decisions about land use and open space priorities.

In Mesa County, information from the 1996 Natural Heritage survey is kept in the county's GIS system alongside other natural resource information from the Division of Wildlife and federal agencies. All departments in the county including transportation and engineering, as well as the public can access these data. The Planning Department also reviews proposed development projects using the Natural Heritage Program data identi-

fying situations in which recommendations for addressing natural resource issues are appropriate.

"We can't make a rational decision if we don't know what resources are there," says Michael Warren, Mesa County Long Range Planner.

Two cases from Mesa County illustrate the point. In the first case, the Uinta hookless cactus, a globally vulnerable species known from less than 100 populations in Utah and Colorado, had been documented on either side of a proposed project. The developer of the project hired a retired Mesa State College professor as a private consultant to perform a survey of the project site for the cactus, which turned up negative. In the second case, the corn snake was recorded adjacent to a proposed gravel pit site. Although the species is not endangered globally, it is vulnerable in the state of Colorado. As a result, the developer agreed to reclaim riparian habitat at the site to help support the snake.

In Mineral County, information developed in the 1998 Natural Heritage

survey will be used as a component of the county's soon-to-be-revised master plan. Les Cahill, the county's land use administrator, is pleased the information about where rare plants and animals are located in the county is already available. This type of information is invaluable to the planning process. According to Cahill, plans do not take long to develop as long as the information has already been collected. In the case of the Natural Heritage survey, a team of biologists and local stakeholders worked on gathering and analyzing the data for a full year. Once planning begins, there is not enough time to create new data sets. But, says Cahill, "If you don't know what you have, you may not know where you are going."

#### **Status of Colorado's Natural Heritage**

The Colorado Natural Heritage Program has been working to gather, manage and deliver information about the state's rare plants, animals and natural habitats for 20 years. During that time, the Natural Heritage Program has worked with a wide variety of partners

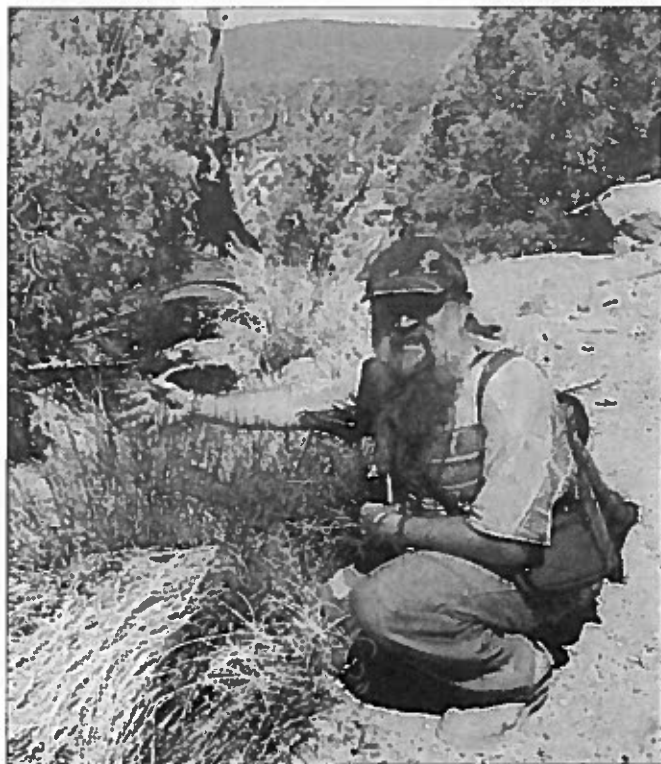
including the Division of Wildlife, state parks, local governments, private consultants and non-profit land trusts to serve as a central clearinghouse for these data. Last year, in cooperation with The Nature Conservancy, the Natural Heritage Program published the 1999 Species Report Card for the state. The report card contains a comprehensive review of the status of more than 4,000 of Colorado's native species.

The good news is that our native plants and animals, as a whole, are doing better than species in many other parts of the United States. About 76 percent of our state's species appear to be relatively secure at present. Unfortunately, 10 percent of the species are considered vulnerable or imperiled; the remaining 14 percent are not well enough known and require more research before they can be classified. While the number of species that are relatively secure encourages us, we are also committed to raising awareness of the needs for many species and habitats that can use our help. The Colorado Natural Heritage Program is a unit within the College of Natural Resources at Colorado State University (CSU), and our goal is to work in partnership with Colorado's citizens to create the objective, scientific foundation that can be used to inform land use decisions. We believe good stewardship of the state's natural resources will result when county commissioners, administrators and planners like you have the information they need at their fingertips. We look forward to hearing from you. **CCCI**

*Mary Klein is currently the director of the Colorado Natural Heritage Program at Colorado State University. She has worked for the past 11 years building partnerships between Natural Heritage Programs and government programs throughout the western U.S. She can be reached at 970.491.1150.*



*ABOVE: Bellows Creek in Mineral County contains some of the world's largest populations of two rare plant species. This information will be valuable in developing the county master plan.*



*RIGHT: San Miguel County Commissioner Art Goodtimes with vulnerable plant, San Rafael Milkveitch*