

## Endangered-plant lovers unite in effort to boost U.S. protection

-By Eric Hand ST. LOUIS POST-DISPATCH Monday, Nov. 28 2005

The kodachrome bladderpod and Hoover's spurge; the fleshy owl's clover and the four-petal pawpaw; the sensitive joint-vetch, the showy stickseed, Virginia sneezeweed and Michigan monkey-flower - the total spending for all of these at-risk plants is still less than the money spent on an endangered river clam called the fat pocketbook.

It's not that easy being green.

Plants make up more than half of the 1,290 plant and animal species on the federal endangered or threatened list. But animals get 97 percent of the money, according to the 2003 U.S. Fish and Wildlife Service expenditure report, which includes money spent by all federal and state agencies.

Some call it zoo-chauvinism. Others call it plant blindness. Either way, the disparity irks the staff of the Center for Plant Conservation, a nonprofit organization at the Missouri Botanical Garden that banks rare seeds and reintroduces plants to former ranges.

On a gray day earlier this month at an aging airport hotel, the center staff tried to rally a motley crew of horticulturists, botanists and bureaucrats to invigorate a loose confederation known as the Plant Conservation Alliance.

The conference seemed low-budget. Some of the attending organizations have low budgets. Only by connecting these disparate plant lovers through collaborative efforts will greater plant awareness arise, said center director Kathryn Kennedy. Animals have plenty of advocates, she said. Plants don't.

And while the federal endangered list provides some plants protection, many more deserve it, according to NatureServe, a nonprofit organization that tracks conservation data. NatureServe says there are 16,100 native plant species in the United States. Of those, 5,474 - more than one-third - are considered at risk.

### Plant blindness

In 1998, a botanist named James Wandersee coined the term "plant blindness" to describe the way plants are neglected. He sought reasons for it.

Some of the reasons are evolutionary, he has written. The human eye notices color, movement and danger - in short, animals.

"Plants tend to be the green backdrop," Kennedy said. Bruce Rittenhouse, the center's conservation program manager, has a simpler explanation: "You can pet an animal."

And so the government has shown animals the money. Fish get the most - \$382 million - followed by mammals and birds. A few examples: The least tern, a bird, didn't get the most, but it got a lot - \$4 million. The whooping crane got a whopping \$5 million. Even the kangaroo rat got nearly half a million bucks.

By contrast, the decurrent false aster got \$97,561. It's a 5-foot-tall perennial that grows in only three spots in Missouri near the confluence of the Mississippi and Missouri rivers. The entire species was underwater during the Flood of 1993.

Not only does the government spend more on animals, but, legally, it can do more for them. In old English law, animals were the property of the king, Kennedy said. She said that attitude is embedded in the Endangered Species Act.

The government can force private landowners to maintain habitat for endangered animals. But private landowners can cut down as many endangered plants as they want.

Banking seeds

Meredith Gosejohan doesn't suffer from plant blindness. If anything, she's blinded by love for them.

A researcher for the center, Gosejohan goes to obscure locations to gather rare seed pods - sometimes wading through waist-deep water and climbing to rock overhangs.

She brings seeds back and, on her desk, counts them all with tweezers, even when there are thousands smaller than a pinhead.

Some she sends in sealed foil envelopes to the National Center for Genetic Resources Preservation in Colorado. Others, she germinates in Petri dishes, sometimes rubbing them with sandpaper to get them to sprout.

On a recent morning, she lovingly washed the leaves of an endangered Hawaiian plant to rid it of mites.

For Gosejohan, conservation is an ethical obligation. Earth is in the midst of its sixth period of massive extinction - and most of those extinctions are because of humans, she said.

"I can't make a decision which plants to save," she said.

But Kennedy says plant conservation is not just a "greeny" issue - there are plenty of practical reasons to care about them. Humans use plants for food, fibers, waxes, oils and building materials. Plants are often "keystone" species that hold together entire ecologies. And a rare plant might hold the genetic or chemical key to some future discovery.

"I would hate to say that today we could judge what uses we might need them for," she said.

Who gets the most money

Top 5 animals:

Chinook salmon: \$122,620,000  
Steelhead: \$101,449,000  
Steller sea lion: \$54,811,000  
Coho salmon: \$30,242,000  
Bull trout: \$29,296,000

Top 5 plants:

Johnson's seagrass: \$3,164,000  
Pondberry: \$1,175,000  
Western prairie fringed orchid: \$350,000  
Seabeach Amaranth: \$260,000  
Ko'oloa'ula: \$257,000

Source: 2003 U.S. Fish and Wildlife Service expenditure report