

RESOURCE NOTES

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Echinacea: How Much is Enough?

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Recently someone phoned a BLM office requesting permission to collect Echinacea spp. from public lands in Montana. This request raises the question, "Should a permit be awarded?" How much of the species should the requestor be allowed to collect? How much of the species or population can be collected without decimating it? How much can be collected without damaging the sustainability, productivity, or viability of the population or species?

The Natural Resources Conservation Service's PLANTS data base lists 14 species or sub-species of the genus *Echinacea*. *Echinacea* is native only to North America. Two of the 14 species are most popular for herbal remedies and are found in the U.S. in substantial numbers: *Echinacea angustifolia* (purple coneflower or Blacksamson echinacea) and *Echinacea purpurea* (Eastern purple coneflower). Two species of the genus are listed as endangered in the U.S.: *Echinacea laevigata*, (smooth purple coneflower) and *Echinacea tennesseensis*, (Tennessee purple coneflower). Both species are found in the eastern U.S.

At one time *Echinacea* spp. (purple coneflower) was fairly popular as a medicinal herb. Then there was a period of time when *Echinacea* was not used much. Recently *Echinacea* has again gained popularity and is being used in substantial amounts. It currently ranks very high in sales of herbal remedies in the U.S., with annual sales of almost \$80 million. A pound of roots sells for

as much as \$21. With this much interest and value, there is bound to be increased interest in harvesting wild populations. Coneflowers are cultivated and used for medicinal purposes, but most commercial supplies are taken from the wild.

The species is easy to cultivate. However, some people suspect that the cultivated varieties are less potent when used as herbal medications than wild populations are. It is also thought that some collectors may not distinguish between species of *Echinacea* and hence may sometimes collect rare species. Collectors are also often prone to collect more individuals than a population may be able to withstand and still carry on growth, reproduction, and sustainability.

There are reports of medicinal plant gatherers taking every plant out of a 40-acre site near Bartlesville, OK, and plant poachers being escorted from The Nature Conservancy's Tallgrass Prairie Preserve near Pawhuska, OK. The FWS is cooperatively working with Clemson University and others to promote *Echinacea* species as an alternative cash crop in an attempt to thwart *Echinacea* poaching.

Echinacea was widely used by Native Americans, and pioneers used it for headaches, toothaches, swellings, insect stings, and snakebites. More recently it has been used to protect against systemic infections, colds, flu, and ear infections.

Most parts of the plants can be used in various types of extracts. The plants are somewhat prolific but the root systems (one of the more-used portions of the plants) take about three years to mature. In cultivated situations, large numbers of plants are needed to supply substantial amounts of roots. In wild settings, the roots tend to grow larger with time and produce prolifically.