

# RESOURCE NOTES

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CARTOGRAPHY/  
MAPPING SCIENCES



FIRE



FORESTRY



GIS AND GPS



HAZARDOUS  
MATERIALS



HUMAN/SOCIAL/  
HISTORICAL



HYDROLOGY



NEPA COMPLIANCE



OTHERS



PUBLIC AFFAIRS



RANGE



RECREATION/  
INTERPRETATION/  
VISUAL RESOURCES



RIPARIAN



SOILS/GEOLOGY



THREATENED &  
ENDANGERED  
SPECIES



WILDLIFE BIOLOGY



LIBRARIES/RECORDS  
MANAGEMENT



CADASTRAL/  
LAND RECORDS

## ***Echinacea: How Much is Enough?***

*by Phil Dittberner,  
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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 subspecies 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.

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Thank you for your interest in RESOURCE NOTES.

We recommend the following steps be taken to protect *Echinacea* species/populations from being unduly reduced in viability, distribution, and production.

1. Check Federal and State laws and regulations and be sure they are adhered to; e.g., the National Environmental Policy Act, Endangered Species Act, state protected species or products, etc.
2. Determine the quantity the requestor wants to collect, species to be collected, method of harvesting, locations of harvesting, and time of harvesting.
3. Before any collecting is allowed, inventory the populations and approximate number of individuals or density in each population.
4. Do not allow collecting on small populations where collections may reduce the sustainability or viability of that population.
5. Permit only 10-20 percent collection on any one site or

population annually. If unsure, err on the conservative side.

6. Monitor the sites where plants are being collected to ensure that more are not being collected than were permitted.
7. Monitor all known sites to ensure adequate reproduction and growth to replace collected individuals so that the population and distribution of the species do not decline in the long term.
8. If unacceptable reductions in populations or distribution are noted during monitoring, cancel the permits.

*For a more detailed discussion of steps to consider and follow and forms that may be adapted to your situation, see Handbook 5400-2, Special Forest Products Procedure Series, BLM Manual Supplement Handbook, Oregon State Office.*