

# A 3-Year Study of American Ginseng

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*Although many people believe American ginseng is an endangered plant species, it is generally on the increase in Kentucky.*

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American ginseng (*Panax quinquefolium*) is a much sought-after herblike plant in the forested areas of Kentucky and similar areas in several surrounding States. A survey shows that it is dug for its roots in approximately 100 of Kentucky's 120 counties. In recent years, many diggers have received \$100 or more per pound for the dried roots. The annual value of this forest plant to Kentucky is estimated to be between \$3 and \$6 million.

There are many people who believe that this much sought-after plant, which grows under a 75-percent or more shade cover, is endangered or becoming extinct. Many other Kentuckians have very strong feelings about the abundance of this plant in the wild and maintain that it would be very difficult to eliminate it. At present, American ginseng is protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

In an effort to determine if wild ginseng is becoming ex-

tinct in Kentucky forests, a study was initiated in 1978 to monitor 64 1-acre sites located in 12 counties in the State. These sites were monitored each summer through 1980.

the 3 years. There was a total decrease in number of plants in four counties in 1980 as compared to 1979 (Pike, Perry, Cumberland, and Meade Counties).

**Table 1.—Ginseng plant counts over a 3-year period**

County	1978	1979	1980	Number of plants in 1980 vs 1979	Number of plants in 1980 vs 1978
				+ or -	+ or -
Pike	100	113	89	-24	-11
Casey	224	260	286	+26	+62
Perry	46	54	53	-1	+7
Cumberland	183	407	80	-327	-103
Letcher	223	276	431	+155	+208
Leslie	1,178	1,390	2,158	+768	+980
Rockcastle	276	301	370	+69	+94
Meade	214	348	300	-48	+86
Hardin	1,560	1,821	1,893	+72	+333
Bullitt	87	132	135	+3	+48
Breathitt	83	106	114	+8	+31
Bell	59	81	142	+61	+83
Total number of plants	4,233	5,289	6,051	+762	+1,818

Results of the total plant counts by counties are shown in table 1.

Wild ginseng was found growing on 60 of the 64 sites in each of the 3 years (1978, 1979, and 1980). The data show there has been a total increase of 1,818 plants from all locations over the 3-year period, although there was evidence of digging on some plots. There has been a decrease in plants in two counties, Pike and Cumberland, over

Ginseng was found growing on almost flat land to very steep slopes and on all sides of mountains or slopes. The percent of shade was determined visually, and plants were found growing with as little as 50-percent shade to one area with only filtered light in a very dense, wooded area.

Ginseng was usually found growing in association with

*Continued on page 21*

*Continued from page 18*

maple, beech, hickory, buck-eye, and oak trees and with ginger, ferns, goldenseal, and bloodroot.

Soil samples from each location revealed ginseng growing on soils with a wide pH range from 4.55 to 7.44. Soil test re-

sults showed that 61 plots were low in phosphorus, 2 plots had a medium phosphorus level, and 1 plot showed a high phosphorus reading. Six plots tested low in potassium, 29 plots were in the medium range, and the remaining 29 plots tested in the

high range.

The population of American ginseng in the monitored plots has generally increased over the past 3 years. The plant was found growing in a variety of soil and environmental situations.