

Should Endangered Plants Be Reintroduced?

Extinction is a natural and necessary part of biological evolution. Natural selection requires less competitive species to make way for better adapted species. Throughout the history of life on Earth, millions of species have evolved and then become extinct as their environment changed. However, human activity has greatly accelerated the pace of extinctions. One way humans have caused species to become extinct is by introducing organisms into ecosystems in which they do not naturally occur. The introduction of exotic species upsets the balance of many ecosystems, and thousands of species have become extinct as a result.

In many cases, humans had no intention of upsetting the natural balance. When immigrants arrived in the Americas from Europe, they brought familiar plants with them. Many of these species were agricultural plants like onions and turnips, but the immigrants brought other plants as well. These plants included flowers and even weeds that were accidentally carried in the immigrant ships. Some of these plants thrived in their new environment and began to spread.

As more people arrived in the Americas, more new plant species arrived as well. Ornamental shrubs, flowers, and trees were brought from all over the world. Some of these plants were able to grow well in American soil—better, in fact, than the native plants.

As a result, introduced plants have become a serious threat to native plants in the United States. Although they are not native, plants such as dandelions and ragweed can be found throughout the Americas in many different habitats. Both of these species were introduced by European settlers. The dandelion has been especially successful, and has spread from the east coast of North America to Mexico, California, and Canada in only a few hundred years. The success of

the dandelion has come at the expense of native plants. Each year, many Colorado wildflowers lose large parts of their range to the encroaching dandelion.

Introduced tree species have also had a negative impact on native plants. Although eucalyptus trees are common in California today, there were no eucalyptus trees in California until a few hundred years ago. Eucalyptus trees are native to Australia, and were introduced to California by humans. European grasses have also had great success in California. As a result, California ecosystems have changed radically, and many native California plants have disappeared or survive only in small, relict populations.

As if competition with introduced species was not enough, native plant species are also faced with the destruction of their habitat. As humans develop land for their own uses, much of the habitat of native plants has been destroyed. Native plants are caught between encroaching, non-native plants on one side, and a bulldozer on the other. It is not surprising that many of these plants are endangered.

Scientists and conservationists are attempting to save many of the plant species that have suffered from human activity. Seeds of endangered plants are stored in seed banks, and some are introduced back into the wild. Reintroducing endangered plants seems like a good idea, but reintroduction has its problems.

One problem is that reintroduction is not always successful. A survey of plant relocation projects in California showed that only four of the projects were completely successful. Fifteen of the projects were partially successful, and ten were complete failures. A similar study performed in England showed that only 22 percent of 144 plant relocations were successful. The rest were failures or probable failures.

Plant species continue to be displaced by encroaching non-native plants and by habitat destruction. People may attempt to reintroduce these plants into other areas, but they

are not addressing the real problem, which is the destruction of the plants' natural habitats. The best way to protect any endangered organism is to preserve its habitat.

REVIEW *On the lines provided, answer the following questions.*

1. Name two factors that threaten native plant species.

2. Explain why reintroduction is not the best way to save endangered plant species.

CONSIDER THIS *On the lines provided, answer the following questions.*

1. Should plant species be reintroduced? Explain your reasoning.

2. Do you think that it is important to save every species of plant from extinction? Give reasons supporting your answer.
