

Invasive weeds

There are weeds that are simply nuisances, like wild lettuce or dandelions. Controlling them can be difficult, as when a dandelion springs from a piece of root left in the soil. They cause problems for gardeners and farmers, who spend large amounts of money on herbicides and energy on applying them. Even so, such weeds are not usually threats to an environment.

Some plants switch from being members of a landscape to being invasive species threatening ecosystems. Not only do they thrive, but they do so at the expense of established natives. They may choke out existing plants, depriving native animals of required food. This is not only a concern of environmentalists but also of horticulturists who are in the business of finding and introducing remarkable new varieties. A plant can seem simply attractive, useful or tasty until it begins to succeed beyond the limits that humans believe they have imposed.

People have been spreading plants and animals across the globe as long as we have been migrating. Many times, the new introductions were accidental, as when an insect or a seed became stuck in dog fur or migrants' clothing. Terrible plants, such as Russian thistle

(tumbleweed), and some invasive thistles arrived accidentally. (Not all thistles are related, by the way. Frequently "thistle" is just a descriptive word for a prickly plant.)

While some problems were the result of serendipity, others were brought to a new environment deliberately, albeit with the best of intentions. Some of the most notorious invasive plants started off as horticultural introductions. Take tamarisk (salt cedar) as an example. This shrubby tree has a sturdy root system that made it an attractive choice when land planners needed something to control soil erosion. With finely divided foliage and soft pink flowers it added texture and color to a landscape. It could also survive in the salty infertile soils of the desert southwest. One might think of it as a terrific addition to the region.



Tamarisk in bloom at Lake Mead

Sadly, this is not the case. Several causes can make this pretty shrub, or any weed, problematic. The first is that the plant finds a comfortable home in the new environment. It can live with the sun, water and soil conditions. Secondly, when it was introduced, its natural enemies were probably excluded, so there are no diseases or predators to keep it in check. A third reason is that the plant produces seeds, which spread widely. Tamarisk, for instance, can produce a quarter of a million seeds per year. Green fountain grass was presumed sterile until it invaded lands around Lake Mead.

Some commentators have a different opinion about invasive plants. They state since most of the species we eat or otherwise enjoy arrived from elsewhere, it is nature's cycle. This idea would have merit if we lived without rapid transport of goods from one part of the globe to

another. That ease and speed of species introduction can devastate an ecosystem, which is why horticulturists must select plants that will not cause problems beyond the garden.

Dr. Angela O'Callaghan is the Social Horticulture Specialist for University of Nevada Cooperative Extension. Contact ocallaghana@unce.unr.edu or 702-257-5581.



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