

Introduced Ornamentals: Friend Or Foe

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Invasive ornamentals are plants that were initially introduced to help stabilize the soil, were aesthetically pleasing and placed in gardens, acted as a food source and cover for wildlife, and were xeric. They are found in open space, along rivers, roadsides, pastures, and crop land. However, land stewards have discovered that these plants show signs of invasive tendencies and aggressiveness. Escaped ornamentals, plants that were originally in garden settings and have since become invasive, are found on land because: they came with the property when it was purchased, they were planted for landscaping purposes, or they were recommended for erosion control and windbreaks only to become aggressive and invasive. Many of the plant recommendations have since been rescinded because of their aggressive behavior. The landscaping industry needs to be on alert for introduced ornamentals that exhibit invasive tendencies.

Some escaped ornamentals found on the Colorado Noxious Weed Lists are still for sale and readily available through mail order and internet sales. This article will focus on escaped ornamentals; however, the other noxious weeds cause the same problems. As mentioned above, homeowners may unknowingly purchase land with noxious weeds; therefore, when selling the land the owner has an ethical obligation to disclose their presence. Most county weed departments have services that include viewing the property to identify noxious weeds and assistance in creating a management plan for the treatment of these weeds.

Invasive noxious weeds and escaped ornamental plants share three key traits:

1. They have high seed production and viability; they may also reproduce vegetatively.
2. They have a very effective dispersal mechanism: wind, water, wildlife, and root cuttings.
3. They quickly and easily become established; they grow rapidly and tolerate extreme temperatures. Some plants are also resistant to drought.

Escaped ornamentals cause serious ecological harm by destroying habitats and eliminating the presence of native plants. They out-compete the natives for space, soil nutrients and water. A prime example of an ecological problem is the excessive consumption of water by Tamarisk (*Tamarix* sp.). One mature tree can consume up to 200 gallons of water per day. It is found along the Colorado River where it has devastated wildlife habitat by depositing salt on the soil surface which makes revegetation programs extremely costly. Originally, this tree was introduced for erosion control along water ways.

An example of a plant that is no longer recommended as a windbreak is Russian olive (*Elaeagnus angustifolia*). This ornamental tree is extremely aggressive in riparian areas, pastures, and open spaces. It consumes more water than native trees, the fruit has no food value for wildlife, and it has long thorns.

Purple loosestrife (*Lythrum salicaria*), a perennial forb, is another water-loving escaped ornamental. It's found along riparian sites and a mature plant can produce approximately 2.5

million seeds per year. It also can become a woody shrub that grows to six feet tall or more. This plant is still found in garden settings and continues to be a problem.

Another example of escaped ornamentals which have caused ecological havoc are Dalmatian and yellow toadflax (*Linaria dalmatica*, *L. genistifolia*, and *L. vulgaris*). They are rapidly invading recreation areas, mountain meadows and other open spaces eliminating the diverse population of native plants. All three reproduce by seed and root fragments.

Also, there are health issues associated with some of the invasive ornamental plants. Both myrtle spurge (*Euphorbia myrsinites*) and Cypress spurge (*Euphorbia cyparissias*) have a milky sap which for some people may cause a severe dermatitis. In 2007, there were many cases reported of children playing with myrtle spurge and getting blisters on their bodies from contact with the milky sap.

The number of plants which are now listed as invasive ornamentals is steadily growing. Other ornamentals that deserve our attention but are not specifically addressed here are Mediterranean Sage, Oxeye daisy, Corn Chamomile, Dame's Rocket and Chinese clematis. The Colorado Weed Management Association has recently published a booklet: *Garden Smart Colorado*. This booklet not only provides information on the invasive ornamentals but provides suggested alternative plants, both native and cultivated, for high and lower elevations. This booklet is available in PDF format at www.cwma.org and can also be ordered for distribution to green industry and landscape clients.

Overall, invasive plants have a negative effect on our economy, environment and human health. Nation-wide, over 3 million acres are lost per year to invasive plants. Experts estimate all invasive species, both plants and animals, cost the United States \$137 billion annually and adversely effect agriculture, fisheries, forestry, recreation areas and infrastructure maintenance. Approximately half of the species protected by the Federal Endangered Species Act (both plants and animals) are on that list because invasive species have taken over their habitat.

It is imperative as professional land stewards that we diligently seek to utilize alternative plants. Some of the best alternatives available are our own native plants and we don't even need to look for them in another country, they're right here and available through your local nursery.

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