

Invasive Plant Species: What are they and what impacts do they have?

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For Release: March 1, 2021

With increasing concerns about invasive plant species, what are these and how can they cause harm?

Invasive species are non-native plants whose introduction causes or is likely to cause harm to the economy, environment, or human health.

While some people choose to plant only native plants, know there are non-native plants not considered to be invasive. These are sold and used in gardens and landscapes with less concern of harm.

And then there are noxious weeds. Invasive plant species may or may not be designated a noxious weed by the Nebraska Department of Agriculture. This designation is based on the impact of the plant in its new environment.

For example, purple loosestrife is an invasive species that has been designated a Nebraska noxious weed. As such, it is illegal to sell or plant and people that have it growing on their property are required to destroy it.

Plants considered to be invasive species, but which have not been designated a noxious weed by a county or state, can still be sold and planted. However, because of the harm they cause, knowing which plants are on a states invasive species and watch list is wise.

For Nebraska, these lists can be found at <https://neinvasives.com/plants>. They include some plants found in landscapes like callery or ornamental pear (*Pyrus calleryana*), tatarian honeysuckle (*Lonicera tartarica*), Tree-of-heaven (*Ailanthus altissima*) and St. Johnswort (*Hypericum perforatum*).

It is important to know both the genus and species name of plants listed as invasive species. For example, while oriental bittersweet (*Celastrus orbiculatus*) is listed, American bittersweet (*Celastrus scandens*) is not.

Why the concern about invasive species and what harm can they cause? When a non-native species is introduced, it is freed from natural predators or competitors from its native habitat. This gives the non-native species an advantage, allowing it outcompete native species for available water, light, and space.

This reduces diversity in a plant community leading to ecosystem disruptions. For example, purple loosestrife, in a wet setting, rapidly outcompetes native plants that provide food for songbirds and other local fauna. Purple loosestrife has no food value for wildlife..

In the case of ornamental pear, these support fewer insects, such as caterpillars, needed as food for songbirds. Ornamental pear, once a sterile species, is no longer sterile in all cases and these trees are beginning to outcompete native plants in natural settings.

Invasive plants may add significantly to the fuel load of an area, either in mass or because it contains volatile compounds. This can mean fires burn hotter and faster than native plants would.

Invasive species can damage or contaminate crops, increasing costs to agricultural and, in turn, to the public for food and other products. Industries such as the cattle industry can be affected when invasive plants that are inedible by cattle, infest ranges or contaminate forage.

Other services such as electricity have cost increases resulting from the management and control of invasive species, such as money spent by power companies to keep invasive plants from growing in right of ways, up poles, or along power lines.

Source: eXtension; a national Cooperative Extension resource