

## **How can you help?**

It would be unfeasible to immediately replace all of the pear trees that currently exist in our community. Instead, as these trees deteriorate or become unhealthy, they should be promptly removed to eliminate a source of pollen and seed.

The solution to this invasive issue ultimately lies in the hands of homeowners, landscapers and developers. Please consider one of many non-invasive alternatives to Callery pear trees when undertaking new landscaping projects or large community developments. A decrease in the number of Callery pear cultivars and hybrids would be beneficial for our entire community to potentially reduce power outages, save costs of trimming and tree removal, and create a more ecologically balanced community forest.

For a list of non-invasive native alternatives to ornamental pears go to [www.gocolumbiamo.com](http://www.gocolumbiamo.com). To view these alternative trees growing under typical landscape conditions, visit the *Stop the spread!* exhibit planting at Louisville Park, 806 Louisville Drive.

For more information, call Parks and Recreation at 874-7201.

### **Acknowledgements**

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### **References:**

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# ***Stop the spread!***

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**Help Columbia manage the threat  
of invasive ornamental pear tree hybrids**

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The abundance of ornamental pear trees being planted within our community is of critical concern. There has been a recent phenomenon of ornamental pear cultivars crossing and creating an invasive wild population of hybrid Callery pear trees.



These hybrid pear trees hold the potential to create a substantially negative economic and ecological impact on our community forest. There is already evidence that the spread of invasive pears is gaining a foothold in our community and parks.

Columbia Parks and Recreation, in cooperation with the Missouri Department of Conservation, is launching a *Stop the spread!* educational campaign. The focus is to encourage the community to stop planting Callery pear trees in order to help protect and improve Columbia's urban forest.

### **The universal landscape tree**

Bradford pear (*Pyrus calleryana* 'Bradford') and other similar Callery pear cultivars could be called the "universal landscape tree." They have been a frequently planted tree species of many community urban forests throughout the United States and Missouri since the Bradford pear was first developed and introduced by the USDA in Glenn Dale, Maryland in 1960.

Recognized for their ornamental appeal, the popularity of these Callery pear cultivars has grown rapidly due to their attractive appearance, ease of care and availability.

There are now nearly 26 genetically differing Callery pear cultivars, including such well known selections as Aristocrat, Bradford, Redspire and Chanticleer.

### **Unforeseen consequences**

In the past, the potential for self-fruiting had generally been minimal because cultivars of *Pyrus calleryana* were considered to be self-incompatible, unable to self-pollinate or produce fertile fruit from a genetically identical cultivar.



However, by the late 1990s, it became apparent in communities with large numbers of ornamental pear trees that many cultivars had unexpectedly begun to interbreed fairly readily. The hybrid fruit is eaten by starlings and other birds. The seeds are then dispersed into nearby fields, right-of-ways, parks or other natural open areas. Highly variable, many of the seedlings show characteristics such as thorniness that had been purposely bred out of their parent cultivar.

The Callery pear progeny are now aggressively invading fields and other open areas, much like other introduced exotic plant species such as Amur honeysuckle. These consequences can occur as a result of this interbreeding:

- Ecological damage caused by displacing native plant communities.
- Increased economic costs due to vegetation management problems near transportation corridors or under power line right-of-ways.
- Potential threat to electrical and transportation services from falling branches or toppled trees because of these notoriously fast-growing, weak-wooded trees.