

By Justina Russell

Pioneer plants are those that are first to arrive, survive, and even thrive in locations considered less than ideal for other species.

These hardy and robust plants are often the first to be seen at disturbed sites in Wyoming. They flourish in denuded areas because they have the ability to readily disperse seeds and to survive in dry areas with little to no shade. Sites cleared by natural disturbances like wildfires and landslides, or man-made disturbances such as logging or road and house construction, make perfect homes for these early colonizers.

Many pioneer plants are considered



This common plant produces abundant seeds, which are easily transported by wind. Its leaves can even be used as salad greens.



This shrub is most often seen in wet areas, although it is a common pioneer on disturbed sites. It has fragrant, pink flowers and bears a fleshy, red fruit.

# PIONEER PLANTS OF THE WEST

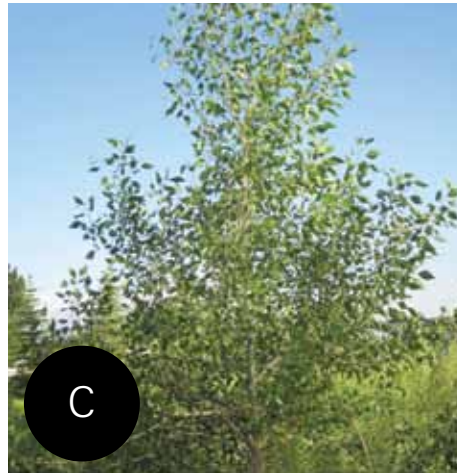
## Can you identify these hardy survivors?

weedy because of their vigorous growth and ability to take over disturbed locations. Their highly competitive nature can prohibit establishment of more desirable plants. However, pioneer plants that are not weedy change the community around them by adding organic matter to the soil when they replace leaves or dieback in the fall. Over time, this newly added organic matter adds nutrients and allows the soil to hold more moisture, making it a place where newer, slower growing, or less-resilient plants can survive.

As new plants become well-established, they out-compete the pioneers for shade, water, and nutrients, thus creating an entirely different plant community in a process known as ecological succession. This slow and highly variable process of plant die-off and replacement eventually allows a disturbed plant community to rebuild itself and return to a more stable state.

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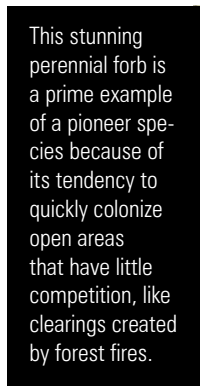
*A. Dandelion, B. Woods rose, C. Cottonwood, D. Cheatgrass or downy brome, E. Fireweed*



This tree is well-known in Wyoming because of its stately standing. It is usually seen around streams, lakes, and irrigation ditches, although it has the ability to grow in dry soils. Its cotton-coated seeds are easily dispersed through the wind making it an ideal pioneer species.



A weed, this grass is a prime example of a pioneer plant that can initially dominate a site by its ability to reproduce and thrive through continuous years of drought. However, when dry, this plant poses a severe fire hazard that can alter ecosystems.



This stunning perennial forb is a prime example of a pioneer species because of its tendency to quickly colonize open areas that have little competition, like clearings created by forest fires.

Photo by Diane Fiedler, [dfied@uwyoing.com](mailto:dfied@uwyoing.com)