Options for Maintaining Riparian Cover as Ash Declines

By George Kral

In mixed woodlands along streams (like Gales Creek, the Tualatin and Willamette Rivers) where there are generally better-drained soils, we have several native species that can fill in gaps left by ash, including oak, maple, white alder, cottonwood and conifers. Unfortunately, three of the best — red alder, Western redcedar and grand fir — are dying likely due to climate stress. Nevertheless, we have options for canopy cover and can perhaps find others in these settings to our south, maybe including California black oak, Umbellularia and others.

The most limiting sites are bottomland clays where ash now predominates. The good news is that oak and ponderosa pine can thrive on many of these sites. Prior to European settlement, a lot of what are now ash stands were oak (and sometimes pine)-dominated savanna-wet prairie complexes and ash has invaded them. A great place to see this phenomenon is in and around Camille Park in Beaverton. Generally, if you see a stand of ash on wet ground, you are likely to find oaks mixed in as well.

In the wettest clay sites, though, we really have very little to work with. None of the willows except maybe Piper willow will be happy there, and then only if the ground holds water all the way through the summer. White alder and crabapple can hang in on moderately sticky ground, but if it's really heavy and really wet, we only have a couple of shrubs that will take it (spiraea, dogwood), a couple of small trees, and no big trees at all. We are working on some selections with black hawthorn to get better performance because the Willamette Valley population is also in serious decline. Otherwise, this species is, along with oak and pine, among our best hopes for canopy maintenance.

Conversion to savanna/wet prairie is a great option, given the rarity and diversity of this once-common habitat. To do this effectively in the long-term, we need to restore grazing and burning as viable tools. We need these tools, but as long as agencies and policies are pyrophobic and antilivestock, no one on the private side can do much.

This chart incorporates soil moisture, groundwater seasonality, soil texture and other variables that influence what grows where. These variables occur at landscape and microsite scales, so folks need to use this kind of information with caution when pinpointing planting locations for each species.

