

# PLANT MATERIALS TODAY

A newsletter from the USDA-NRCS Montana-Wyoming Plant Materials Program for those interested in Plants and Conservation



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## Important Reminders

\*Field Offices – Keep an eye out for targeted seed collections as you travel the countryside.

## Feature Topic

### Tree and Shrub Special Edition!

We are dedicating this issue of Plant Materials Today to our often under-appreciated and overlooked vegetative tools, trees and shrubs. As we move into the summer months our attention often shifts to herbaceous plants and their timing-critical maintenance and harvesting needs. Maintaining successful woody plantings also requires regular monitoring and timely maintenance over the growing season. Enclosed are a few observations and suggestions for maintaining and using woody plants.

#### Tree and Shrub Problems

In the Bridger area, some long standing woody plant problems persist. **Oystershell scale** *Lepidosaphes ulmi* is still common, and landscape quaking aspen *Populus tremuloides* have been particularly hard hit and are in decline. In many low elevation areas, quaking aspen is a marginal choice. This species prefers acidic forest soils and suffers from a lack of iron availability when grown on our high pH soils. Less than ideal conditions keep this species in a

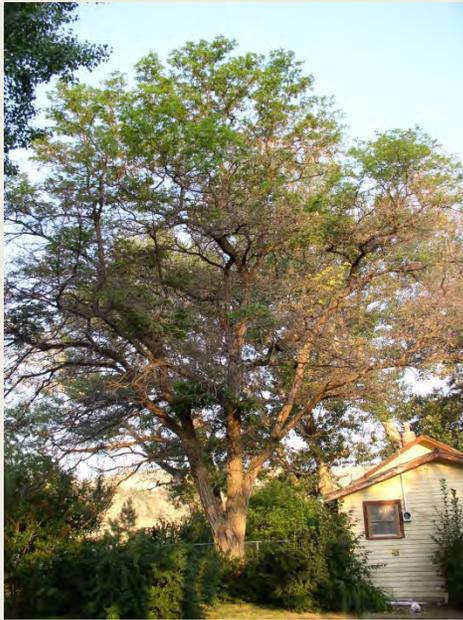
state of stress, and susceptible to numerous insects and diseases. To control oystershell scale, pruning and burning of infested branches, in conjunction with timely application of dormant or summer oil, seems to be the favored recommendation. Scale can even be scrubbed off of small trees with a vegetable brush. Various insecticides are also effective.



Oystershell scale on quaking aspen

Another common pest in Carbon County is **locust borer** *Megacyllene robiniae* attacking black locust *Gleditsia triacanthos*. Black locust is

often used in urban areas as a street tree, favored for its ability to tolerate low fertility and high pH sites. Symptoms begin with shoot tip and branch dieback in the lower canopy, but progresses upwards over several growing seasons. Affected plants often die after several years.

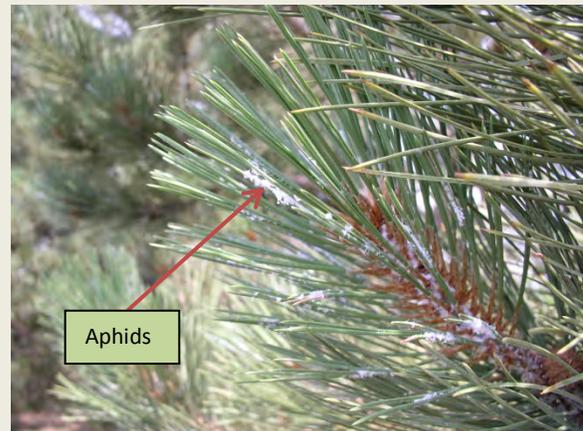


Black locust showing signs of locust borer injury.

Borers, because their damaging larvae are protected by wood, can be very difficult to control. Chemical products are only considered marginally effective. Cultural advice includes planting black locust on good sites to maintain vigor, and to remove and destroy infested branches early. Heavily infested and declining trees should be completely removed and destroyed to prevent insect spread.

A third insect problem we see in the Bridger area is an aphid on ponderosa pine *Pinus ponderosa*, most probably the [giant conifer aphid](#) *Cinara* species. A tell-taled sign of aphids is high fly, bee, and ant activity on the affected plant. These insects feed on the undigested sugars in aphid excretions.

Aphids are relatively easy to control, and beneficial pests can often keep modest infestations under control without human intervention. When aphid populations get high, insecticidal soap or summer or dormant oil are low toxicity options. Contact your local county Extension office for positive identification of pests and recommended insecticidal control options.



Aphids on ponderosa pine needles.

A new development in the northern Great Plains, that may warrant monitoring, impacts a species having virtually no problems in Montana and Wyoming, bur oak *Quercus macrocarpa*. Reports from the Schutter Lab at Montana State University and North Dakota State University Extension Forestry have identified woodpecker injury to young bur oak trees, presumably in search of [wasp larvae](#) of *Callirhytis flavipes*. The main leader of heavily infested trees can be killed, which must then be removed. Pruning of dead/infested branches is the only suggestion at this time. University Extension is monitoring the problem and we'll keep readers informed of any new findings.

### Promising Plants

On a more uplifting note, here are a couple of woody species worthy of use. The first is

littleleaf linden *Tilia cordata*. Although not a true conservation species in terms of drought and general hardiness, it is an excellent street or landscape tree where a little extra moisture and better soils are available. This species is incredibly pollinator-friendly, and is loaded with bees, wasps, flies, and other insects during the daytime, and moths during the night.



'Greenspire' littleleaf linden.

A second woody plant worth using is skunkbush sumac *Rhus trilobata*. The common name refers to the aromatic somewhat skunky odor when the stems, leaves and fruit are bruised or crushed. Skunkbush sumac is a valuable conservation species – drought tolerant, winter hardy, with few insect or disease problems. It makes an excellent living snowfence,



Skunkbush sumac foliage and fruit.

outside row in a multi-row windbreak, or Xeriscape® plant. Provide extra moisture and good soil nutrition and this species can easily reach 12 feet in height. 'Big Horn' is the cultivar of choice in Montana and Wyoming, a selection from the Los Lunas Plant Materials program.



'Big Horn' skunkbush sumac hedge with green ash volunteers

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