

Drought-Tolerant Trees for Colorado Landscapes

Keith Wood, Colorado State Forest Service

When planning or starting a new landscape, or replacing plants that have not held up to the rigorous climate and other harsh environmental conditions found in Colorado, consider using more drought



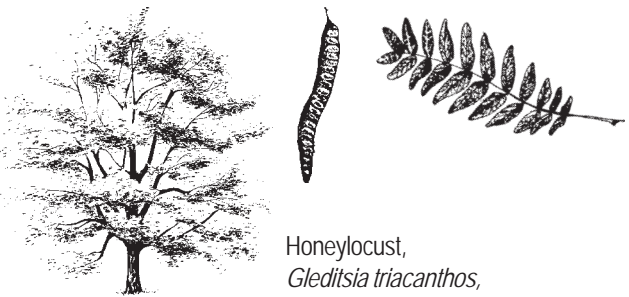
Concolor (White) Fir,
Abies concolor,
moderately drought tolerant



Japanese Pagoda Tree,
Sophora japonica,
moderately drought tolerant

tolerant and/or native plant materials. Once established, drought-tolerant tree species can withstand Colorado's dry climate and drought conditions.

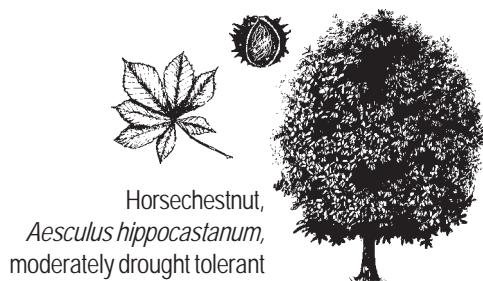
Trees that can withstand dry conditions are often termed drought "tolerant." However, it may be more appropriate to say that a majority of tree species that escape damage during dry periods are drought "avoiders." Most of the species listed below avoid damage during drought due to certain adaptations they are able to make. Adaptations include the ability of roots to extract large amounts of water from the soil due to a higher root-to-shoot ratio; reduced leaf surface area due to rolling, folding and shedding of leaves; limited transpiration



Honeylocust,
Gleditsia triacanthos,
drought tolerant

significant water depletions in their leaves and stems before damage occurs. However, most species possess some genetic adaptation that allows them to survive drought by retaining water within their leaf and stem tissues.

The tree species listed below have demonstrated the ability to avoid and tolerate dry conditions and should be considered when replacing trees or adding new trees to the landscape. For a more complete list of species and cultivated varieties, please visit the web site www.watersaver.org.



Horsechestnut,
Aesculus hippocastanum,
moderately drought tolerant

Drought-Tolerant Species

Scientific Name

Common Name

Celtis occidentalis

Hackberry

Crataegus spp.

Hawthorn

Gleditsia triacanthos

Honeylocust Cultivars

Gymnocladus dioica

Kentucky Coffeetree

Juniperus spp.

Upright and Spreading Junipers

Pinus aristata

Bristlecone Pine

Pinus cembroides var. edulis

Pinyon

Pinus flexilis

Limber Pine

Pinus mugo

Mugo Pine

Pinus ponderosa

Ponderosa Pine

Prunus americana

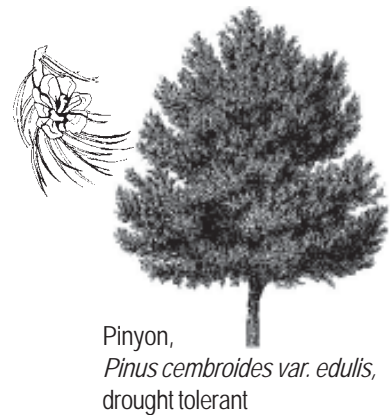
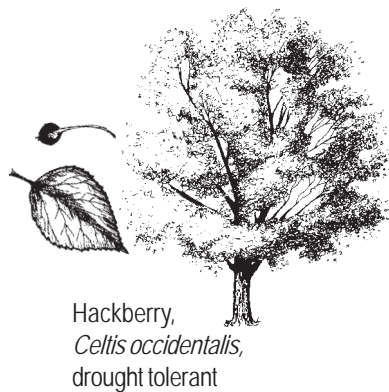
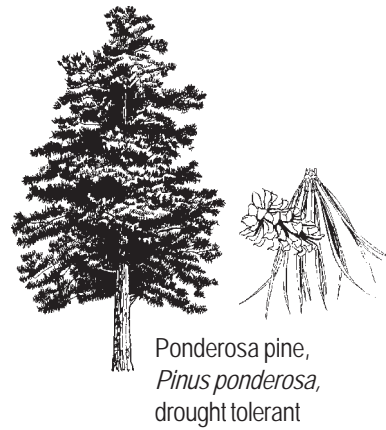
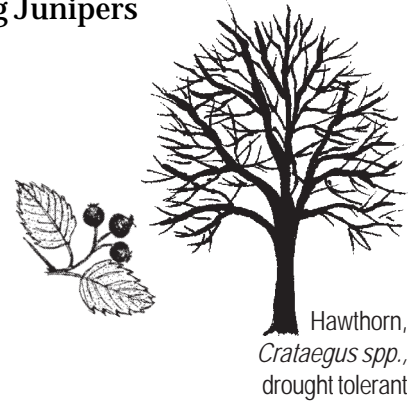
American Plum

Ptelea trifoliata

Hoptree

Quercus gambelii

Gambel Oak



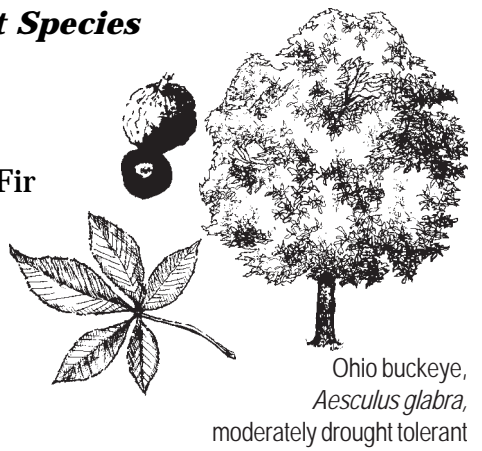
Moderately Drought-Tolerant Species

Scientific Name

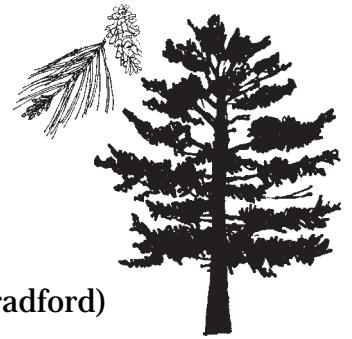
- Abies concolor*
- Acer ginnala*
- Acer tataricum*
- Acer grandidentatum*
- Aesculus glabra*
- Aesculus hippocastanum*
- Catalpa speciosa*
- Corylus colurna*
- Koelreuteria paniculata*
- Malus spp.*
- Pinus nigra*
- Pinus strobiformis*
- Prunus virginiana*
- Prunus virginiana 'Schubert'*
- Pyrus spp.*
- Quercus macrocarpa*
- Quercus muehlenbergii*
- Sophora japonica*

Common Name

- Concolor (White) Fir
- Amur Maple
- Tatarian Maple
- Canyon Maple
- Ohio Buckeye
- Horsechestnut
- Western Catalpa
- Turkish Filbert
- Golden Raintree
- Apples and Crabapples
- Austrian Pine
- Southwestern White Pine
- Chokecherry
- Canada Red Cherry
- Ornamental Pears (Avoid Bradford)
- Bur Oak
- Chinkapin Oak
- Japanese Pagoda Tree



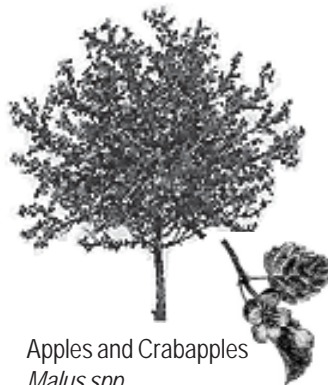
Ohio buckeye,
Aesculus glabra,
moderately drought tolerant



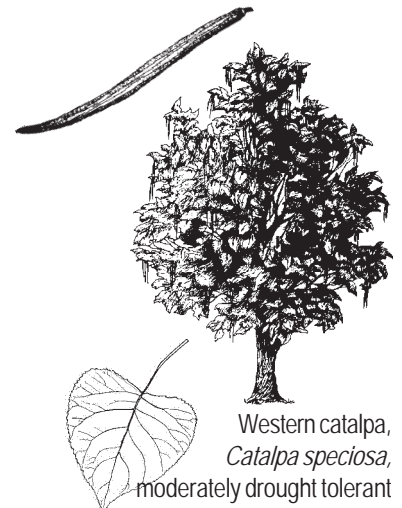
Southwestern White Pine,
Pinus strobiformis
moderately drought tolerant



Golden raintree,
Koelreuteria paniculata,
moderately drought tolerant



Apples and Crabapples
Malus spp.,
moderately drought tolerant



Western catalpa,
Catalpa speciosa,
moderately drought tolerant