Identifying Ash Trees

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Dormant Season Characteristics

- Ash (*Fraxinus* spp.)
  - Opposite branched
- Shield-shaped leaf scar
- Tall, pointed bud
- Pitchfork like limb tips
- Long and narrow clustered winged seed
- Continuous bundle scars inside leaf scar
“Pitchfork”
Opposite branching
Opposite Branching Pattern

All ash trees (Fraxinus sp.)
Twig Structures

- The Terminal Bud: Bud on the tip of every twig where growth occurs.
- The Lateral Buds: These are buds on each side of the branch.
- The Leaf Scar: When the leaf drops, a scar is left just under the bud;
  - **Ash have shield shaped scars**
- The Lenticel: Pores that permit the living inner bark to breath.
- The Bundle Scar: Scars within the leaf scar; supply the leaf with water.
  - **Ash: Continuous bundle scars**
- The Stipule Scar: Scar of a leaf like attachment just off the leaf stem.
- The Pith: The pith is the soft inner core of the twig.
Ash Twig Structure

- Terminal bud: Brown, pointed, fuzzy
- Leaf scars: “shield shaped”
- Leaf scars: “Opposite” sides of twigs
Leaf Arrangement & Composition

- Oval leaf blades
- Pinnately compound leaves
- Opposite leaves and twigs
Ash Compound Leaves

- 5-13 blades on compound leaf
- Single winged fruit (Samara)
Ash Bark

• Forms diamond-shaped furrows on main bole
Ash Trees in Oregon

<table>
<thead>
<tr>
<th>Name</th>
<th>a</th>
<th>Wild</th>
<th>Urban</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fraxinus latifolia</em></td>
<td>Oregon ash</td>
<td>Yes</td>
<td>Yes</td>
<td>OR, WA, CA</td>
</tr>
<tr>
<td><em>Fraxinus americana</em></td>
<td>White ash</td>
<td>No</td>
<td>Yes</td>
<td>Eastern U.S.</td>
</tr>
<tr>
<td><em>Fraxinus angustifolia</em></td>
<td>Narrow-leaf ash</td>
<td>No</td>
<td>Yes</td>
<td>Eurasia</td>
</tr>
<tr>
<td><em>Fraxinus excelsior</em></td>
<td>European ash</td>
<td>No</td>
<td>Yes</td>
<td>Europe</td>
</tr>
<tr>
<td><em>Fraxinus pennsylvanica</em></td>
<td>Green ash</td>
<td>No</td>
<td>Yes</td>
<td>Eastern U.S.</td>
</tr>
</tbody>
</table>

*Six additional species may occur in small numbers in urban landscapes.*
Oregon Ash

- Wetland edges up to 3,000’ elevation
- Green flowers, no petals
- Leaf underside covered in dense velvet
- 80’ H, 12 30” DBH
- Leaves 5 13” long, 5 9 blades per leaf
- Blades 3 7” long, 1 1.5” wide
- Samaras 1 2” long
## Other Ash Species

<table>
<thead>
<tr>
<th>Trait</th>
<th>White Ash</th>
<th>Green Ash</th>
<th>European Ash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buds</td>
<td>Brown or Red</td>
<td>Brown or Red</td>
<td>Jet Black</td>
</tr>
<tr>
<td>Leaves</td>
<td></td>
<td>Slightly Hairy</td>
<td></td>
</tr>
<tr>
<td>Leaf Color</td>
<td>Lower Side Lighter</td>
<td>Both Sides Green</td>
<td></td>
</tr>
<tr>
<td>Twigs, Petioles</td>
<td>Smooth, Glossy, Flaky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf Scars</td>
<td>Deeply Curved on Top</td>
<td>Straight on Top</td>
<td></td>
</tr>
<tr>
<td>Leaf Length</td>
<td>8-15”</td>
<td>6-12”</td>
<td>7-14”</td>
</tr>
<tr>
<td># Blades per Leaf</td>
<td>5-9</td>
<td>7-9</td>
<td>7-13</td>
</tr>
<tr>
<td>Blade Length</td>
<td></td>
<td>2-6”</td>
<td>2-5”</td>
</tr>
<tr>
<td>Samara Length</td>
<td>1-2”</td>
<td>1-3”</td>
<td>1-2”</td>
</tr>
<tr>
<td>Height</td>
<td>50-80 Feet</td>
<td>50-80 Feet</td>
<td>65-115 Feet</td>
</tr>
<tr>
<td>DHB</td>
<td>Up to 2 Feet</td>
<td></td>
<td>6 Feet</td>
</tr>
</tbody>
</table>
Ash Leaf Scars

- Opposite
- “Shield” shaped
- Top of shield can be flat or deeply indented
Look Alike: Box Elder
(Acer negundo)

- Also ‘Opposite’ twigs and leaves, but…
- 3-5 blades on compound leaf
- Samaras in pairs
Other Oregon Trees with ‘Opposite’ Arrangement:

- Amur cork *
- Amur maple *
- Bee-bee *
- Bigleaf maple
- Bigtooth maple
- Black elderberry
- Boxelder
- Brown dogwood
- California buckeye

- Horse chestnut *
- Mexican elder
- Northern catalpa *
- Ohio buckeye *
- Pacific dogwood
- Red elderberry
- Red maple *
- Rocky Mountain maple *
- Silver maple *

*Not native to Oregon. Landscaping tree or escaped & weedy
Other Oregon Trees with Compound Leaves but Alternate Branching:

- Amur maackia *
- Black walnut *
- English walnut *
- European mountain ash *
- Honey locust *
- Greene’s mountain ash
- Western mountain ash
- Yellowwood *

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