American Elm  

**Ulmus americana**

**Description**
American elm occurs throughout the eastern US and is an important component of forest communities in southeast Michigan, particularly on flats and bottomlands. American elm grows in a wide range of soil moisture conditions. Historically occurring in much higher densities, Dutch elm disease has severely diminished the number of elms throughout its range. This fast growing, hardy, tolerant tree was a favored street tree until Dutch elm disease pushed planners to use a more diverse street tree plan.

**Change Maps for American Elm**

<table>
<thead>
<tr>
<th>Current Abundance</th>
<th>Modeled Abundance – Low Emissions Scenario</th>
<th>Modeled Abundance – High Emissions Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Map" /></td>
<td><img src="image2.png" alt="Map" /></td>
<td><img src="image3.png" alt="Map" /></td>
</tr>
</tbody>
</table>

**LEGEND**

- < 1
- 1 - 3
- 4 - 6
- 7 - 10
- 11 - 20
- 21 - 30
- 31 - 50
- > 50

Abundance change maps for serviceberry showing current (1961-1990) range and importance of the species and predicted future (2071-2100) range and importance using an average of three low emissions climate models. The Importance Value ranges from 0 to 100 and gives a measure of the abundance of the species.

**Implications of Climate Change**
Climate models indicate American elm will continue to be a part of forest communities in southeast Michigan. Its ability to tolerate a wide range of environmental conditions and habitat types will help the elm adapt. The predicted warmer, drier summers and increased threat of disease and pests may negatively impact the species. Disease and susceptibility of ice damage may lead to declines in its use as a street tree.

**Vulnerability of Natural Communities**

- **Wet-mesic flatwoods** and **mesic southern forest**. Subcanopy species in southern hardwood swamps.

**Natural Communities Associations**

- Canopy dominant in floodplain forests. Canopy associate in poor conifer, rich tamarack and hardwood-conifer swamps, wet-mesic flatwoods and mesic southern forest. Subcanopy species in southern hardwood swamps.

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2. Michigan Natural Features Inventory. www.mnfi.anr.msu.edu/communities

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**Contact Information**

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