

## Trees of the Huron River Watershed in a Changing Climate

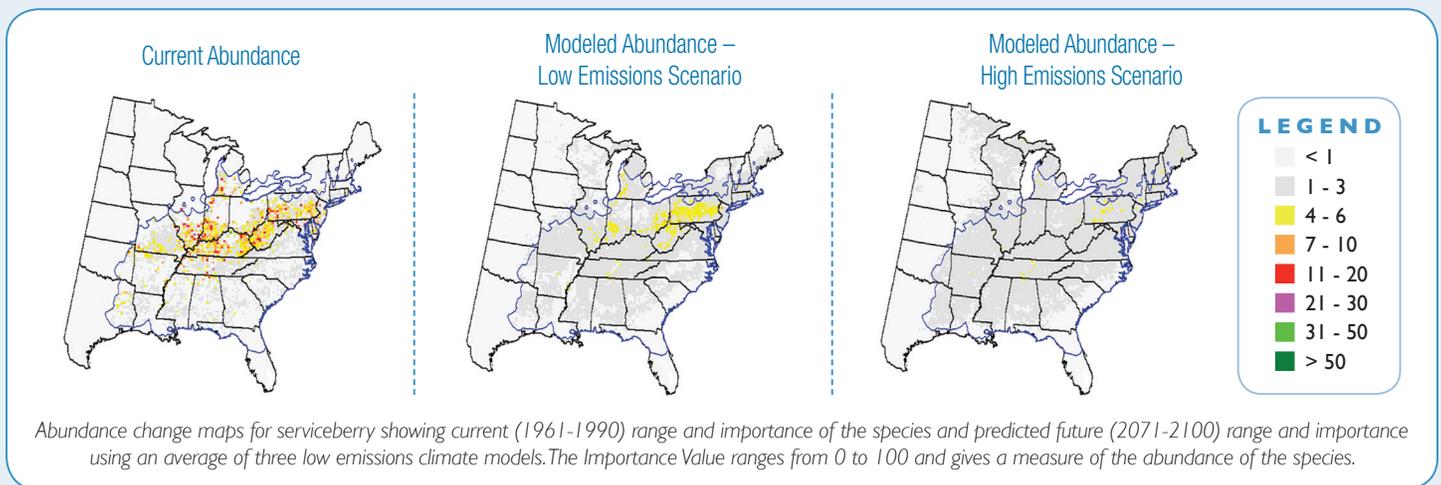
### Sassafras *Sassafras albidum*

#### Description

Sassafras is at the northernmost extent of its range in southern lower Michigan. In southeast Michigan, sassafras remains smaller in stature than in the southern portion of its range. This understory tree grows best on moist well-drained soils in open woodlands and is a common pioneer species growing quickly underground by runners forming thickets along forest edges. This species is important to wildlife as a browse food and is commercially valuable for its fragrant oils.



#### Change Maps for Sassafras<sup>1</sup>



#### Implications of Climate Change

Climate models predict a range expansion northward within Michigan. Sassafras is considered moderately adaptable and should be a species that persists and possibly becomes more common in southeast Michigan. The species is vulnerable to increased fire, shade and pest and pathogens. Its ability to colonize disturbed areas and tolerate drought will be beneficial aspects of the species as climate changes.

#### Natural Communities Associations<sup>2</sup>

Understory tree in oak barrens and dry southern forests.  
Canopy associate in dry-mesic southern forests.

#### Vulnerability of Natural Communities<sup>3</sup>

Dry southern forest systems are expected to have low vulnerability to climate change and may benefit from a longer growing season and warmer temperatures. Because these systems are widespread, there is greater potential for dispersal except in areas of significant fragmentation. The climate envelope for oak barrens will likely move out of southeast Michigan and into more northerly regions.

<sup>1</sup>Prasad, A. M., L. R. Iverson, S. Matthews., M. Peters. 2007-ongoing. A Climate Change Atlas for 134 Forest Tree Species of the Eastern United States [database]. <http://www.nrs.fs.fed.us/atlas/tree>, Northern Research.

<sup>2</sup>Michigan Natural Features Inventory. [www.mnfi.anr.msu.edu/communities](http://www.mnfi.anr.msu.edu/communities)

<sup>3</sup>Lee, Y., M. A. Kost, J. G. Cohen, and E. H. Schools. 2012. Climate Change Vulnerability Assessment and Adaptation Strategies for Natural Communities in Michigan, Focusing on the Coastal Zone. Michigan Natural Features Inventory Report No. 2012-18, Lansing, MI.