

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

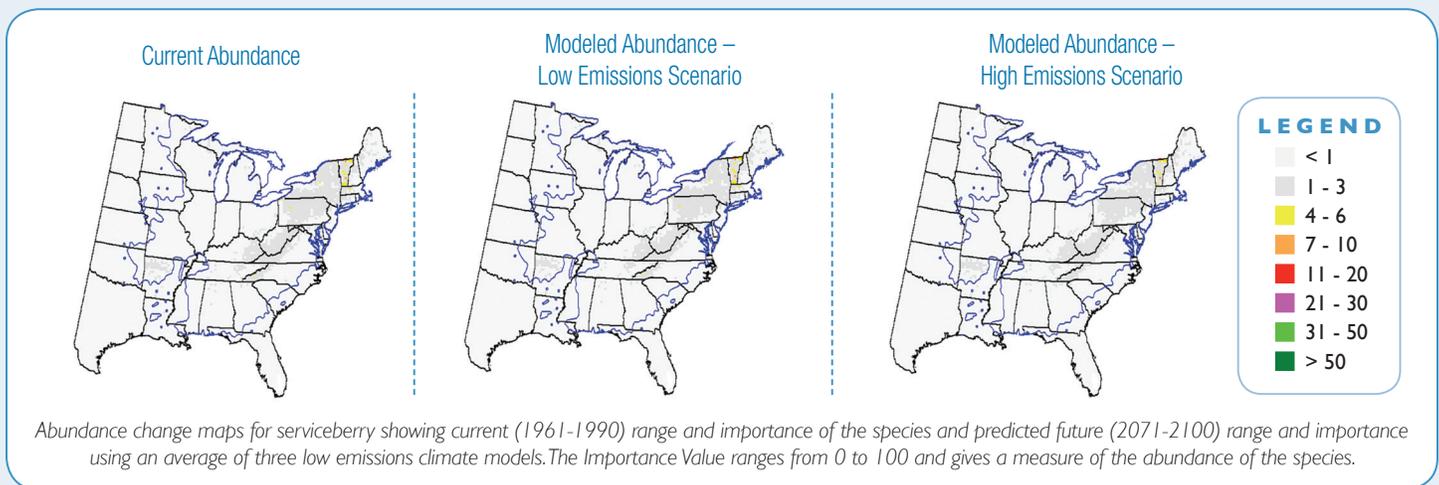
### Serviceberry *Amelanchier spp.*

#### Description

There are multiple native serviceberry species common throughout Michigan including the Allegheny serviceberry (*A. laevis*) and downy serviceberry (*A. arborea*). Additionally, many cultivars are used for urban forestry and landscape purposes. The genus is comprised of small, multi-stemmed trees that can tolerate a variety of light levels, and soil and site conditions. It is a common ornamental tree because of its showy flowers, edible fruit and ability to tolerate a wide variety of conditions.



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



#### Implications of Climate Change

Under most climate change scenarios serviceberry will remain of low importance throughout its current range in Michigan. The low importance value likely reflects the fact that all serviceberry species were aggregated in the analysis and, as an understory genus, it will inherently have a lower relative dominance. Serviceberry is a common understory native that can tolerate a variety of climatic conditions and has a range extending far south indicating a tolerance for the types of climatic conditions likely in southeast Michigan as temperature and precipitation change. It is likely to remain a common understory species and a good choice for planting in urban environments.

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

Understory tree in rich tamarack swamp, oak barrens, dry southern forest, and dry-mesic southern forest.

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

Rich tamarack swamps are a wetland community typically occurring in isolated patches and therefore have high vulnerability to climate change due to altered hydrology and limited dispersal. Oak barrens have a specific climate envelope that it prefers and as those conditions move north so will this habitat type. Dry and dry-mesic southern forests are expected to have low vulnerability to climate change.

<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.nr.msu.edu/communities](http://www.mnfi.nr.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.