

## ***Amelanchier canadensis***

## **Rosaceae family**

Canadian serviceberry, Eastern serviceberry, Eastern juneberry, juneberry, shadblow serviceberry

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**Description:** *Amelanchier canadensis* is a deciduous, large understory shrub to small tree; often multi-stemmed; having many upright branches. Flowering occurs before or as leaves are emerging. Plant can send out many suckers, forming thickets of plants.

Variation: Other *Amelanchier* species are very similar to *Amelanchier canadensis* generating discussions amongst botanists as to which are considered distinct (*Amelanchier arborea*, *A. laevis*). *Amelanchier canadensis* hybridizes with *Amelanchier arborea*. There are several cultivars developed in the horticultural trade.

Size: 6-25 ft. (2-7.6 m) tall; 10-20 ft. (3-6 m) wide.

Leaves: Leaves alternate. Leaf blade/lamina simple; oblong to oblong-elliptic to obovate to oval; margins finely serrate; pinnately veined. 0.8-4 in. (2-10 cm) long; 0.5-1.25 in. (1.3-3.2 cm) wide. Hairy when young; becoming bright green, glabrous in maturity. Petioles 0.3-0.6 in. (0.8-1.6 cm) long.

Inflorescence: Dense, erect raceme; 0.4-3 in. (1-7.6 cm) long; 4-10 flowers.

Flowers: Flowers having petals attached to hypanthium. 5 petals; 0.5 in. (1.3 cm) long; 1 in. (2-3 cm) wide; petals linear to oblong; white. Stamens 20; styles 5. Sepals 0.06-0.2 in. (0.2-0.4 cm) long; hairy.

Fruit: A pome (yet, berry-like). Fleshy, round, 0.2-0.4 in. (0.6-1 cm) in diameter; red to purple or black. Edible.

Bark: Smooth when young, ashy-gray; with age the bark becomes rough having long furrows.

Habitat: Moist areas with well-drained soils to wetland environments (swamps, bogs, pocosins, pine savannas, along streams), and, along wood borders and moist upland woods. Mostly found in partial shade and filtered sunlight, but can tolerate full sun.

**Species distribution in US states:** AL, CT, DC, DE, MA, ME, NC, NH, NJ, NY, PA, RI, SC, TN, VA

**Species images:**

Whole plant:

<http://www.cnr.vt.edu/DENDRO/dendrology/syllabus2/factsheet.cfm?ID=850>  
<http://www.hort.uconn.edu/Plants/a/amecan/amecan1.html>, then select/click on picture within the descriptions

Bark:

[http://plants.usda.gov/java/largeImage?imageID=amca4\\_003\\_ahp.jpg](http://plants.usda.gov/java/largeImage?imageID=amca4_003_ahp.jpg)  
<http://www.hort.uconn.edu/Plants/a/amecan/amecan1.html>, then select/click on picture within the descriptions

Leaf:

[http://plants.usda.gov/java/largeImage?imageID=amca4\\_004\\_ahp.jpg](http://plants.usda.gov/java/largeImage?imageID=amca4_004_ahp.jpg)  
<http://www.cnr.vt.edu/DENDRO/dendrology/syllabus2/factsheet.cfm?ID=850>

Colored leaves:

<http://www.hort.uconn.edu/Plants/a/amecan/amecan1.html>, then select/click on picture within the descriptions  
<http://www.paghat.com/autumnleaves26.html>

Buds:

<http://www.cnr.vt.edu/DENDRO/dendrology/syllabus2/factsheet.cfm?ID=850>  
<http://www.hort.uconn.edu/Plants/a/amecan/amecan1.html>, then select/click on picture within the descriptions

Flowers:

<http://www.cnr.vt.edu/DENDRO/dendrology/syllabus2/factsheet.cfm?ID=850>  
[http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_index&enlarge=0000+0000+0107+0381](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_index&enlarge=0000+0000+0107+0381)

Fruit:

<http://www.cnr.vt.edu/DENDRO/dendrology/syllabus2/factsheet.cfm?ID=850>  
<http://www.hort.uconn.edu/Plants/a/amecan/amecan1.html>, then select/click on picture within the descriptions

**Expected timing of growth stages:**

Flowering: April-May, depending on location.

Bud break/Leaf out: \*Needs info.

Leaf/canopy development: \*Needs info.

Fruit ripening: Early to mid-summer; July-August.

Leaf coloration: Autumn. \*Needs info.

Leaf fall: \*Needs info.

### **Phenophases to be monitored for NPN:**

#### **Leaf out**

- *First leaf*  
In at least 3 locations on the plant, the very first green tip of a young leaf has visibly moved out of the leaf bud.

#### **Flowering**

- *First flower*  
In at least 3 locations on the plant, a flower has opened completely. Flowers are considered 'opened' when the reproductive parts are visible between unfolded or opened flower parts.
- *Full flower [Intensive only]*  
The plant has reached its peak floral display. This occurs when half (50%) of the flowers on the whole plant have opened completely.
- *Last flower*  
The last visible flower has opened completely and is still fresh.

#### **Leaf elongation**

*Note: These measures can be difficult to estimate without a few seasons of practice.*

- *25% leaf elongation [Intensive only]*  
The majority of young leaves have unfolded completely and have expanded to one-quarter (25%) of their mature size. Leaf elongation may also be estimated by viewing the canopy as a whole. At 25% leaf elongation, the canopy appears to be approximately one-quarter (25%) full.

- *50% leaf elongation [Intensive only]*  
The majority of young leaves have unfolded completely and have expanded to half (50%) of their mature size. Leaf elongation may also be estimated by viewing the canopy as a whole. At 50% leaf elongation, the canopy appears to be approximately half (50%) full.
- *75% leaf elongation*  
The majority of young leaves have unfolded completely and have expanded to three-quarters (75%) of their mature size. Leaf elongation may also be estimated by viewing the canopy as a whole. At 75% leaf elongation, the canopy appears to be approximately three-quarters (75%) full.
- *Full leaf elongation [Intensive only]*  
The majority of young leaves have unfolded completely and have expanded to 95-100% of their mature size. At full leaf elongation, the canopy appears to have reached its full density.

### **Fruit ripening**

- *First fruit ripe*  
In at least 3 locations on the plant, a fruit has become ripe. For *Amelanchier canadensis*, a fruit is considered ripe when it is dark purple or black in color or when it has been eaten by wildlife.
- *50% of fruit ripe [Intensive only]*  
For the whole plant, half (50%) of the fruits are ripe.
- *All fruit ripe [Intensive only]*  
For the whole plant, virtually all (95-100%) of the fruits are ripe.

### **Leaf color change**

**Note: If drought seems to be the cause of leaf color change for a plant, please make a comment about it for that plant.**

- *First leaf colored [Intensive only]*  
In at least 3 locations on the plant, the green leaves have begun to change to their late season colors.
- *25% of leaves colored [Intensive only]*  
For the whole plant, one-quarter (25%) of the leaves (including any that have fallen to the ground) have changed to their late season colors.

- *50% of leaves colored*  
For the whole plant, half (50%) of the leaves (including any that have fallen to the ground) have changed to their late season colors.
- *75% of leaves colored [Intensive only]*  
For the whole plant, three-quarters (75%) of the leaves (including any that have fallen to the ground) have changed to their late season colors.
- *All leaves colored*  
For the whole plant, virtually all (95-100%) of the leaves (including any that have fallen to the ground) have changed to their late season colors and there is virtually no green left in the leaves.

### **Leaf fall**

**Note:** *If drought seems to be the cause of leaf fall for a plant, please make a comment about it for that plant.*

- *First leaf fallen [Intensive only]*  
In at least 3 locations on the plant, a leaf easily falls off into your hand when touched or gently handled. First leaf fallen may also be indicated by the presence of at least 3 leaves on the ground below the plant (that are not apparently from another individual nearby).
- *25% of leaves fallen [Intensive only]*  
For the whole plant, one-quarter (25%) of the leaves have fallen.
- *50% of leaves fallen*  
For the whole plant, half (50%) of the leaves have fallen.
- *75% of leaves fallen [Intensive only]*  
For the whole plant, three-quarters (75%) of the leaves have fallen.
- *All leaves fallen*  
For the whole plant, virtually all (95-100%) of the leaves have fallen.

**Did you know?** *Amelanchier canadensis* obtained its common name ‘shadblow serviceberry’ due to its fruit development occurring when the ‘shad’ (a northern fish) run. Its fruits are used in pies and sweetbreads, and can be dried. The plant was also used medicinally by the Native Americans, and also used to make arrow shafts.

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## Notes

The USDA PLANTS symbol for this plant is AMCA4.

The ITIS Taxonomic Serial No. for this species is 25112.

BBCH codes for phenophases used for this plant are available from the USA-NPN office upon request.

Proposed modifications, updates or corrections to this protocol are welcome; please direct correspondence to the USA-NPN National Coordinating Office.

Prior versions of this species protocol will be made available in a documents library on USA-NPN webpage.

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