

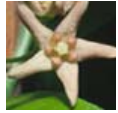


## Invasive Plant Atlas of New England

### Catalog of Species Search Results

## *Elaeagnus umbellata*

(Autumn olive )



[:: Catalog of Species Search](#)



[Common Name\(s\)](#) | [Full Scientific Name](#) | [Family Name Common](#) | [Family Scientific Name](#) | [Images](#) | [Synonyms](#) | [Description](#) | [Similar Species](#) | [Reproductive/Dispersal Mechanisms](#) | [Distribution](#) | [History of Introduction in New England](#) | [Habitats in New England](#) | [Threats](#) | [Early Warning Notes](#) | [Management Links](#) | [Documentation Needs](#) | [Additional Information](#) | [References](#) | [Data Retrieval](#) | [Maps of New England Plant Distribution](#)

### COMMON NAME

Autumn olive

### FULL SCIENTIFIC NAME

*Elaeagnus umbellata* Thunb.

### FAMILY NAME COMMON

Oleaster family

### FAMILY SCIENTIFIC NAME

Elaeagnaceae

### IMAGES



Close-up of flowers



Close-up of fruit



Nitrogen-fixing nodules



Fruit on branch



Incursion



Habit



Incursion

## NOMENCLATURE/SYNONYMS

**Synonyms:** None

## DESCRIPTION

### Botanical Glossary

*Elaeagnus umbellata* is a deciduous shrub that can grow up to 3.7 m (12 ft.) or more tall. Its untoothed leaves are alternate and range from being oval to somewhat lanceolate. The leaves are 2.5-7.5 cm (1-3 in.) long and are green and glabrescent on the top surface. The undersides of the leaves have silver/white scales. The younger branches have a silver color and are scaly. The silver color becomes a darker brown with maturity. Sometimes the young branches bear thorns.

Flowers appear on *Elaeagnus umbellata* between April and May (after the appearance of the leaves) and are located along the stems in clusters of 1-3 or more together. These fragrant flowers are creamy in color and have a slender perianth tube. The drupe-like fruits are round, juicy, range in color from red to pink (occasionally orange) and have scales on their surface. The size of the fruits is approximately 0.6 cm (0.25 in.).

Page References Bailey 718, Fernald 1045, Gleason & Cronquist 307, Holmgren 288, Magee & Ahles 757. See reference section below for full citations.

## SIMILAR SPECIES

*Elaeagnus angustifolia* L. (Russian olive)

Character	<i>Elaeagnus umbellata</i>	<i>Elaeagnus angustifolia</i>
Leaf shape	Elliptical	Linear, narrow
Leaf "color"	Upper surface: rarely silver Lower surface: sparsely silver and brown scales	Upper surface: sparsely silver Lower surface: densely silver
Flower corolla lobe color	Cream to pale yellow	Yellow

Berry shape	Round	Round to elliptic
Berry size	Smaller than 1 cm (0.4 in.)	1 cm (0.4 in.) or more
Berry color	Red or occasionally orange with scattered, peltate scales	Silver scales covering yellowish fruits
Berry consistency	Juicy	Dry
Seed Size	Small, 0.5 cm (0.2 in.)	Large, 1 cm (0.4 in.)

### REPRODUCTIVE/DISPERSAL MECHANISMS

The fruit of *Elaeagnus umbellata* is dispersed mostly by birds as well as small mammals.

### DISTRIBUTION

*Elaeagnus umbellata* is native to China, Korea and Japan. On the east coast of the U.S. it is located from Maine to Virginia. It is reported as far west at Wisconsin, Illinois and Missouri. It has been reported in all the states of New England.

### HISTORY OF INTRODUCTION IN NEW ENGLAND

*Elaeagnus umbellata* was first imported for cultivation into the U.S. in 1830 from Japan. In the 1940's *Elaeagnus umbellata* was often used for the revegetation of disturbed habitats. These plantings were often done because the fruits of *Elaeagnus umbellata* are a source of food for different types of animals (birds, mammals). However, because the fruit is so desirable to wildlife, birds and other animals have spread the plant throughout a wide range. In 1963, the cultivar 'Cardinal' (which has a heavy fruit-load) was released to nurseries for commercial purposes, adding to the species' spread via plantings along roads for soil conservation, landscaping and gardens. It has also been used to interplant with black walnut (*Juglans nigra*) to produce higher yields.

### HABITATS IN NEW ENGLAND

Abandoned Field  
 Abandoned Gravel Pit  
 Early Successional Forest  
 Edge  
 Pasture  
 Planted Forest

Railroad Right-of-Way  
Roadside  
Utility Right-of-Way  
Vacant Lot  
Yard or Garden

*Elaeagnus umbellata* is found in pastures, fields, sparse woodlands and planted as ornamentals along roads. It is often found in poor soils because it has nitrogen-fixing nodules that allow it to tolerate these conditions. It can survive the effects of salt, drought and pH levels as low as 4.0. *Elaeagnus umbellata* does not grow well in wet habitats or in dense forests.

## THREATS

Once *Elaeagnus umbellata* is introduced to a region, it seems only a matter of time before it spreads due to the ability of the plant to produce up to 80 lbs. of fruit in a season. Birds (especially Starlings) readily eat the fruit in the fall and spread it for long distances. This efficient dispersal is what has allowed the plant to spread throughout New England.

*Elaeagnus umbellata* suppresses the growth of other plants by creating shade. It is a good competitor because of its ability to fix nitrogen. If it is cut, it resprouts abundantly. Even burning does not rid the area of this plant, because it still resprouts from the stump.

## MANAGEMENT LINKS

[The Nature Conservancy](#)

[Illinois Nature Preserves Commission](#)

[The Connecticut Invasive Plant Working Group's Invasive Plant Management Guide](#)

Comprehensive management information

[Illinois Natural History Survey](#)

General description and management guidelines

## DOCUMENTATION NEEDS

[Documentation required](#): Photograph of branch with flowers or fruits.

[Best time for documentation](#): Spring, fall.

## ADDITIONAL INFORMATION

[Integrated Taxonomic Information System](#)

Taxonomic information about the species Taxonomic information about the species

[The PLANTS Database](#)

General information and map

[Department of Conservation and Recreation: Virginia Native Plant Society](#)

General information including control

[Virginia Tech Dendrology](#)

Description and photographs

[Samuel Roberts Noble Foundation](#)

Photographs and general information

[University of Connecticut Plant Database](#)

Photographs and general information

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## DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
- Export as comma-delimited text file

Submit Selection

## MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

- The whole New England area
- One or more states
- One or more counties
- One or more towns (county sub-divisions)

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