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## COMMON BUCKTHORN MANAGEMENT TIPS

Common buckthorn, a member of the Rhamnaceae family, is a perennial tall shrub or small tree. The flowers are yellowish-green with four petals. Mature plants can grow 20 to 25 feet tall. The fruit is a round, black, pea-sized and is found in clusters. Common buckthorn has an extensive, black fibrous root system. It reproduces by seed, but can regenerate from root and stump sprouts. The leaves are egg-shaped with pointed tips and fine-toothed edges. Cut bark exposes an orange inner cambium layer. Common buckthorn often has thorns between the terminal buds at the tips of the twigs. It is a primary overwintering host for the soybean aphid. It is also an alternate host for the alfalfa mosaic virus and the crown fungus that causes rust disease in oats.



**Management and control efforts must be planned for many years at the existing site in order to prevent seed formation/dispersal and to monitor for, and appropriately treat, any new plants that emerge.**

## **Effective control measures for the management of common buckthorn include:**

- 1. Mechanical (hand pulling, digging & mowing):** Mowing young stems less than 2 years old in early spring and again in fall will eventually kill the plant and deplete the seedbank. If stems are less than ½ inch diameter, it can be effective to hand pull the entire plant, including all of the root system. Wear gloves when hand pulling plants. If the stems are between ½ - 2 inches in diameter, you will need to use a shovel to remove the entire root.
- 2. Herbicide: Always follow directions on the label. The label is the law!** Calibrate your equipment to ensure that you are adding the proper amount of herbicide to your tank. The following herbicides are commonly used to manage common buckthorn.

### **Mixing rates in small backpack or hand sprayers are as follows:**

Glyphosate:	Use as a cut stump treatment (read the label for directions).
Garlon 4:	Use as a basal bark or cut stump treatment (read the label for directions).

### **Rates in large sprayers are as follows:**

Glyphosate:	Use as a cut stump treatment (read the label for directions).
Garlon 4:	Use as a basal bark or cut stump treatment (read the label for directions).

**NOTE:** Adding a surfactant to your tank mix may enhance the performance of your herbicide and is required for certain herbicides (read the label). Add 0.5 - 1 oz per gallon of water for backpack sprayers or 1 – 2 pints per 100 gallons for large sprayers.

- 3. Cultural (revegetation):** Following an herbicide application in areas of severe infestation, it is recommended to plant desirable plant species to compete with common buckthorn.
- 4. Integrated management:** Management of common buckthorn is more effective when more than one strategy is used.