

Forestry Best Management Practices

The following **Best Management Practices (BMP)** were developed by Vermont's private and public land managers: foresters, loggers, land trust staff, botanists and others.

When these BMPs are put into practice by land managers, they will help Vermont's **forests** and natural communities remain healthy and productive.

Education and Prevention

- BMP 1: Learn to identify **invasive plants** and how they threaten **native ecosystems**. If you are a **land manager**, be sure to educate your clients.
- BMP 2: To prevent the introduction and spread of invasive plants, become familiar with current **non-native** invasive plant species in **Vermont** and those in neighboring states. Do not intentionally or unintentionally plant these species.
- BMP 3: Prevent the spread of invasive plant species when working or recreating in the forest.

Early Detection and Rapid Response

- BMP 4: Be aware of "**early detection**" species and infestations and plan to incorporate early detection into all **land management plans**.
- BMP 5: Scout for, locate and treat any new invasive plant infestations annually.
- BMP 6: Land managers should survey for invasive plants during forest inventories and incorporate invasive plant prevention and management into land management plans.
- BMP 7: If a property is infested with invasive plants, develop a strategy for managing invasive species that includes short- and long-term goals and actions. Consider the following factors: degree of invasiveness, severity of the current infestation, difficulty to kill, potential impacts and feasibility of treatment/control.

Strategies for Managing Invasives Based on Infestation Level	
Degree of Infestations	Treatment Strategies <i>(Adapted from Alliance for the Chesapeake Bay, 2003)</i>
Light infestation	Use a preventative approach to keep the area clean. Eradicate populations of any invasive plant species. Frequently visit previously infested sites and nearby areas to remove any new plants. Keep an eye out for new species that are known to be in the area.
Moderate infestation	Prioritize management activities depending on: the threat invasive species pose to the site; special features (e.g. vernal pools, woodlot, sugarbush, natural community), wildlife habitat or native species that need protection; and the feasibility of species-specific treatment options considering available resources. Eradicate small infestations if possible by treating from the edge of the infestation into the center and controlling mature (seed-bearing) individuals first. Total eradication may or may not be feasible.
Heavy infestation	Choose your battles. Identify remnant patches of native vegetation and special features to protect from invasives. Revegetation with native species may be necessary.

Treatment

- BMP 8: Consider different **treatment** strategies and methods that will help you determine where, when and how to treat the invasive plant infestation.
- BMP 9: Apply treatment methods within the appropriate time window to be most effective and make sure that follow-up steps, such as monitoring and **restoration**, are taken.
- BMP 10: Plan for post-treatment management of invasive plant populations.

Restoration

- BMP 11: Consider the need for restoration efforts following invasive plant treatment or **disturbances**.
- BMP 12: Use site-appropriate **native plants** and **invasive-free** materials for restoration efforts.
- BMP 13: Limit the introduction and spread of invasive plants during **reforestation** or **revegetation**.

Monitoring

- BMP 14: Plan for annual and continuous monitoring of the forest following invasive plant treatment work, forest management activities and restoration efforts.

Forest Management

- BMP 15: Foresters should survey for invasive plants during **forest inventories** and incorporate invasive plant infestations and management into **forest management plans**. As of 2010, **Use Value Appraisal (Current Use)** plans are recommended to include invasive plant information.
- BMP 16: Consider timing forest inventories during seasons when invasive plant populations can be detected.
- BMP 17: Conduct proper pretreatment of invasive plant infestations before commencing **timber harvesting** or using roads, skid trails and landings during timber harvesting activities.
- BMP 18: Consider invasive plant populations and their likely response when prescribing timber harvesting activities that result in an increase of **sunlight** reaching the **forest understory**.
- BMP 19: Consider invasive plant populations and their likely response when prescribing timber harvesting activities that result in **soil disturbance**.
- BMP 20: To the extent feasible, clean all equipment before moving onto and off the property to reduce the chance of spreading invasive plants.

Practice Early Detection Rapid Response:

- Regularly monitor properties for invasive species.
- Remove new populations before they spread.
- Treatment is cheaper and more effective when populations are still small and isolated.

