Leaves: small, oval, opposite, toothed, growing in sets of 7 or 9
Stems: long, arching, and rigid, with backward-curving thorns; typically bright green
Flowers: fragrant, white or sometimes pink with 5 petals, growing in clusters; blooms June to July
Fruit: clusters of small, red fruits called hips

JIMSONWEED

Datura stramonium

Jimsonweed is a rapidly growing annual herbaceous plant that can reach heights of up to five feet. It outcompetes native species for water and nutrients, crowding them out of their habitats. All parts of jimsonweed plants are poisonous if eaten.

Origin: southern Asia
Habitat: various, thrives in open areas, sandy soil
Removal: pulling to remove roots; best done before plants mature and release seeds; use of gloves is recommended to avoid accidental ingestion of poisonous plant material
Status: under control with continued management
Known locations: beachheads of Kennedy's, Coyle's, Stinky, Robinov's, ACE/Sou'west, and Bluff beaches, as well as Lee's and Griffin's coves

Leaves: dark green with purplish tinge, often appear crinkled; edges are coarsely serrated; typically 3-8 inches long; have an unpleasant odor when crushed

Stems: sturdy, hollow, smooth, and branched; can be green or purple, have an unpleasant odor when broken

Flowers: white to purple, long, trumpet-shaped, on short stalks; have a strong odor; can be found all summer

Fruit: green, spiky seed pods with four segments; burst open when ripe; seeds are black, bean-shaped

Roots: thick and branched

GARLIC MUSTARD

Alliara petiolata

Garlic mustard is a biennial herbaceous flowering plant that outcompetes native herbaceous plants. It poses a particular threat to rare forest wildflowers by taking over their habitat. Garlic mustard has a distinct physical appearance in each of its two years of growth. The leaves and stem smell like garlic when crushed.

Origin: Asia and Europe
Habitat: forest or relatively shady understory, prefers moist or disturbed soil
Removal: hand pulling or digging, taking care to remove roots. Removal before flowering or seed production can help prevent spreading.
Status: requires continued management
Known locations: Across from the Church, along the road north of the school, likely other locations

Leaves: *first year* – leafy rosette growing close to the ground with broad, rounded leaves with bluntly toothed edges
Second year – alternate, triangular and strongly serrated

Stems: *first year* – low, slender, green with dark purple bottoms and purplish roots
Second year – sturdy and erect with similar coloring, can be several feet high

Flowers: *second year only* – small, white, with four petals

Seeds: *second year only* – very slender seed pods, 2 to 4 inches long, light green to purple; seeds inside are oblong, dark, and shiny

BLACK SWALLOWWORT

Cynanchum louiseae

Black swallowwort is an invasive perennial vine that grows over other plants, blocking sunlight. It can crowd out native plants by forming dense thickets, and threatens some of New England's rare plants.

Threat to monarch butterflies: black swallowwort is an invasive relative of native milkweed plants. Endangered monarch butterflies mistakenly lay their eggs on swallowwort, thinking that it's milkweed, but their caterpillars cannot feed on it, contributing to the crash in monarch populations.

Origin: southwestern Europe
Habitat: open areas and edge habitats
Removal: pulling or mowing to prevent seed formation; digging to remove roots can prevent resprouting
Status: under control, requires monitoring
Known locations: Alming's

IDENTIFICATION

Leaves: opposite, glossy, dark green, oblong to heart- or spade-shaped
Stems: single vine with no branches
Flowers: small, dark purplish-brown, with five petals. They bloom in June and may persist all summer.
Fruit: long, slender seedpods that turn brown when ripe, growing in pairs or threes; seeds are small and flat with a tuft of fine fibers for wind dispersal (similar to milkweed).

BISHOP'S WEED

Aegopodium podagraria

Bishop's weed is a tolerant perennial garden plant that grows in dense patches. It spreads extensively through underground root systems and crowds out native species, reducing the diversity of ground plants in a variety of habitats. It also inhibits the growth of native tree seedlings.

Other names: goutweed, snow-on-the-mountain
Origin: Europe and northern Asia
Habitat: various, prefers moist, disturbed soil and some shade; common in forest understories
Removal: digging, being very careful to remove all roots to prevent regrowth
Status: spreading slowly
Known Locations: intersection of Ed's Hill and Sunset Road, various gardens

IDENTIFICATION

Leaves: toothed with irregular lobes; arranged in three groups of three leaflets; 'wild' variety is medium green, commonly planted variety is variegated dark bluish-green with white edges

Stems: green, slender, erect

Flowers: white, growing in flat clusters (like Queen Anne's Lace) atop long stems up to 3 feet tall; flowers mid-summer

Fruit: small, oblong seeds, ripe in late summer

Roots: long, white, branching rhizomes that are connected to multiple above-ground plants

Native Alternative:
Dwarf Jacob's Ladder *(Polemonium spp.)*

CREDITS

This Guide was written and compiled by Nora Hefner, Invasive Species Management Director 2016, with the support of the Cliff Island Corporation for Athletics, Conservation, and Education.

Identification and management data for each species were assembled from resources provided by:

- The University of Maine Cooperative Extension
- The USDA Forest Service
- The National Park Service

Information about ticks and their relationships with invasive species and diseases was compiled from studies done at:

- The Maine Medical Center Lyme and Vector-Borne Disease Laboratory
- The University of Illinois
- The Univeristy of Connecticut
- The Centers for Disease Control and Prevention

Front cover images:
Ornamental Japanese barberry (top)
Asiatic bittersweet berries (bottom left)
Shrub honeysuckle with berries (bottom right)

Invasive species locations were mapped for monitoring using Maine iMapinvasives: www.imapinvasives.org

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INVASIVE PLANTS ON CLIFF ISLAND

A GUIDE TO ECOLOGY, IDENTIFICATION, AND MANAGEMENT

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If you have additional questions about invasive species, or if you would like assistance identifying or removing invasive plants from your property, or advice about planting natives, please contact the ACE Invasive Species Management Director or any of the following community members:

Carolyn Walker
Bob Howard
Roger Berle

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CLIFF ISLAND CORPORATION FOR ATHLETICS, CONSERVATION, AND EDUCATION

INVASIVE SPECIES MANAGEMENT PROGRAM