



Recommendations for Conservation Mowing



Conservation Mowing involves reduction of mowing frequency and alteration of mowing schedules to encourage the growth and establishment of native plants and their seed banks currently existing along roadsides. Native plants provide pollinators and other beneficial insects habitats rich with pollen, nectar, and shelter and nesting opportunities. Compared to turfgrass, native grasses and wildflowers have deeper roots, which improve soil structure and provide greater erosion control. In addition, reduced mowing results in decreased equipment emissions and likely lower labor and operational costs.



ROADWAY CROSS-SECTION – light green areas are appropriate for conservation mowing; dark green zones receive repeat mowing

Conservation Mowing Calendar for New England

Windows for Annual Mowing	March	April	May	June	July	August	Sept	Oct	Nov
	Yes	Yes	Until May 15	June 1-20 Mow only milkweed	No	No	No	After Oct 15	Yes

Conservation Mowing Best Practices

The goal of Conservation Mowing is to ensure that roadside maintenance does not restrict driver safety or interfere with native plant growth and flowering periods. The window for Conservation Mowing in New England is **late fall after October 15th and early spring before May 15th**. Spring mowing is the optimal time to allow seeds to ripen and disperse in the fall and to provide wildlife sheltering opportunities in the dormant vegetation during winter months. For this fact sheet, the section of roadside beyond the 30 foot of the Clear Zone will be referred to as the **Conservation Area**. The **Area appropriate for Conservation Mowing** encompasses the Conservation Area and the portion of the Clear Zone beyond the Mowed Shoulder, which will receive repeated mowing to prevent potential hazards for errant drivers. Medians and ramp sections wider than 60 feet would also be areas appropriate for Conservation Mowing.

The **Conservation Mowing height** should vary depending upon the season. Clippings from fall mowing will disperse and decompose over the course of the winter, so **fall mowing should be at minimum 4 inches**. With spring mowing, however, clippings could smother spring emerging plants. Therefore, it is advised that **spring mowing heights should be higher, between 6-8 inches**.

Reduced mowing may also help to limit the proliferation of invasive species by decreasing the potential for mowing equipment to spread invasive plant stems and seeds and by fostering more widespread and better-established native plant communities with deeper, more extensive root systems. Therefore, **Conservation Areas should be mowed no more than once a year or once every other year**. For zones populated with woody saplings, it is recommended to mow once a year to prevent woody plants from establishing.



Mowing the Shoulder

Roadways require a 30-foot **Clear Zone** for vehicle recovery. Within the Clear Zone, the **Mowed Shoulder** next to the roadway pavement is mowed frequently to prevent possible vegetation fire hazards from errant drivers leaving the road and to prevent obstruction of signs and object markers. The width of the Mowed Shoulder is determined by each DOT and is often dictated by the width of the flail mowers used. Since spring and summer are the growth periods for most plants, mowing of the Shoulders is recommended during these seasons.

While functional, Mowed Shoulders also create the impression of intentional, active management. In addition, the mowed edges minimize vehicle-insect conflict because insects will tend to remain within the habitats of taller, unmowed vegetation.

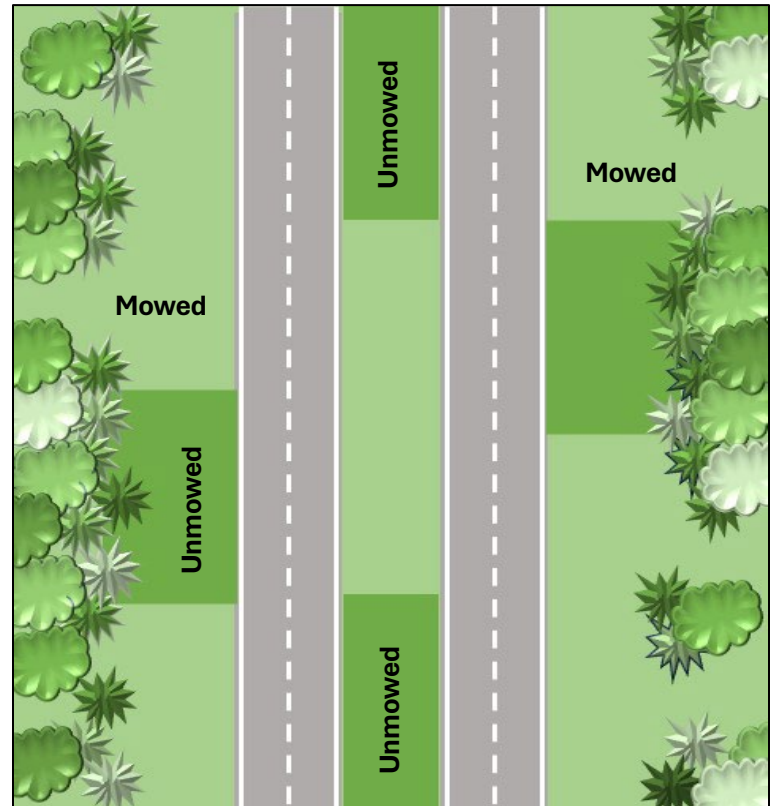
Maintaining Sight Lines

To maintain clear sight lines, vegetation should be routinely mowed at intersections, around signage, and on medians and ramp sections less than 60 feet wide.

Staggered or Mosaic Mowing

Staggered Mowing helps preserve corridors of habitat often eliminated when long stretches of roadsides are mowed, requiring pollinators to expend precious energy reserves searching for resources, which research shows threatens their lives and has contributed to declines in their populations. Staggered mowing involves mowing roadsides into segments near one another on alternate sides of roadways, leaving continuous, easily accessible patches of nutrient rich refuge areas for insect migration. **It is recommended to leave about 30% of an area uncut during annual cycles of staggered mowing.**

Rotating sides: Long portions of roadsides on alternate sides of roadways may be mowed at different times of the year to ensure that habitat always exists for pollinator to forage, shelter, and nest. Each side can be mowed entirely every 2 or 3 years.



Mowing to Benefit Monarch Butterflies

Milkweed (*Asclepias* spp.) is a critical resource for monarch butterflies, which lay their eggs exclusively on its leaves to allow their caterpillars to feed upon its leaves and ingest the plant's milky sap, making them toxic for ingestion by birds. The milkweed leaves need to be fresh to produce sap. **By mowing milkweed at a height of 6 - 8" between June 1-20**, milkweed delays flowering, puts out new growth, and produces fresh sap, which benefits monarch butterflies migrating back to Mexico in the fall. However, best practices recommend leaving a third of a site's population unmowed during this June window to allow butterflies to lay eggs while the mowed milkweed regenerates. **For further information about monarchs, see fact sheet "How Roadsides Can Support the Eastern Monarch Butterfly".**