

Mowing and Maintenance Best Management Practices For Pine Barrens Roadside Plant Communities¹



Mowing and Maintenance Regimes

The following mowing and maintenance practices are intended to protect and promote native Pinelands vegetation while addressing traffic safety concerns relative to roadside shoulders. <u>Please refer to the typical section on the following page, which illustrates the 3 vegetated Zones described below.</u>

I. REGULAR-MOW ZONE

The regular-mow zone includes any vegetated portion of the road shoulder within 8 feet from the outside edge of the travel lane. The purpose of this zone is to provide safe emergency vehicle pull-off areas and to allow road maintenance activities including maintenance of drainage swales and access to utilities. This zone may be wider than 8 feet where drainage swales or utilities are set farther back from the roadway.

a. Regular-Mow Zone Mowing and Maintenance Regime

The regular-mow zone should be mowed as frequently as needed to maintain its practical functions. Because typical roadside mowers have a 5- to 6-foot cutting width and paved/gravel portions of road shoulders ordinarily vary from 2- to 3-feet in width, it is expected that no more than one pass will be required during each mowing event. Vegetation height in these areas should be kept below 10 inches at all times to prevent contact with the bottom of vehicles, which may cause the vegetation to catch fire under certain conditions. However, to benefit some native Pine Barrens species, mowing height should be no lower than 6 inches above the ground.

To encourage native Pinelands species and minimize the establishment of non-native species, only use clean fill along roadsides that is obtained from a local source. Do not use nutrient-rich or high pH soil or soil amendments. Areas of any zone that are currently sparsely vegetated should not be mowed. This will reduce soil erosion and soil compaction caused by mower wheels and help promote re-vegetation.

b. Rare Plant Hotspots Mowing Regime

To prevent impacts to known rare plant populations, the dormant-season mow zone mowing regime, described in Section 2, should be followed at sites where rare plants are found ("rare plant hotspots"). The boundaries of rare plant hotspots should be marked with signs to alert roadside managers to their location and avoid untimely mowing that would be detrimental to these rare plant populations.

2. DORMANT-SEASON MOW ZONE

The widths of dormant-season mow zones vary and these zones are kept free of all woody plants that present potential hazards to drivers. Where intersection sight lines extend into the dormant-season mow zone, vegetation that is likely to obstruct such sight lines must be maintained below 30 inches at all times.

Dormant-Season Mow Zone Mowing and Maintenance Regime

The dormant-season mow zone is mowed no more frequently than one time each year. The dormant season extends from December 1st to March 31st. However, mowing activity should be confined to the month of March to allow the full, uninterrupted life cycle of plants - including growth, flowering, seed production, seed dispersal and seedling establishment.

Set mowing height no lower than 6 inches above the ground to avoid damage to short-statured, woody native species (e.g., Bearberry, Wintergreen, and Pine Barrens Heather), which are excellent groundcover for roadsides.

Areas of any zone that are currently sparsely vegetated should not be mowed. This will reduce soil erosion and soil compaction caused by mower wheels and help promote re-vegetation.

Annual mowing will remove the tops of any woody plants. However, exclusive use of dormant-season mowing may not be adequate to prevent some vigorous woody species from growing to a height that obstructs sight lines, especially where establishment is already underway (e.g., Pitch Pine sprouts). In these cases, it may be necessary to selectively cut such plants to ensure unobstructed sight lines.

3. Undisturbed Zone

This zone begins at the tree line of adjacent forest cover and defines the limit of the dormant-season mow zone.

Undisturbed Zone Mowing and Maintenance Regime

Mowing is not recommended in this zone except to remove tree limbs that may hang over and shade the dormant-season mow zone.

¹ Note: Adapted from Van Clef, Michael, Ph.D.; Ecological Solutions, LLC; May 2009; "BEST MANAGEMENT PRACTICES FOR PINE BARRENS ROADSIDE PLANT COMMUNITIES"

