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# Plant Protection Strips:
## A New Tool for Balancing Recreation and Conservation

Did you know that, according to surveys, many visitors appreciate seeing natural vegetation on the beach?[1] Or that beach plants help trap and bind the sand and contribute to coastal resilience?[2] New Jersey is home to a diverse group of native beach plants. Mostly annuals, these plants grow above the high water line but below the toe of the dune. Many of these species are rare or declining, and some are listed as threatened or endangered. Despite the benefits of this vegetation, current management practices virtually eliminate plants on most New Jersey beaches. Raking and driving are the most significant factors limiting plant distribution on our beaches.[3] Beach rakes and other vehicles crush or remove plants and degrade their habitat. Raking can also promote erosion and prevent the natural development of protective foredunes.[2]

> On average, protecting the upper 25% of the beach would conserve about half of the vegetation, while accommodating 95% of all recreational uses.

Fortunately, there is a solution. Studies show that these plants thrive on the upper beach, while recreational users strongly prefer the lower beach closer to the water[4]. Based on this research, the U.S. Fish and Wildlife Service (Service) recommends adoption of back-beach "Plant Protection Strips." The strips can support local plant populations and act as "habitat corridors" to allow seed exchange between protected natural areas—all with minimal impact on recreation. These corridors can allow plants to recolonize protected areas following storms. Curtailing beach raking in the strips can also foster development of natural foredunes,[2] provide habitat to butterflies and other pollinators, and result in cost-savings to beach managers from less raking. Designating strips can also diversify the range of recreational amenities available to beach-users, appealing to visitors who enjoy a natural section of beach with features such as plants and shells.

The following are general Service recommendations. The details of the Plant Protection Strips may vary and can be tailored to different management needs across New Jersey's numerous beach jurisdictions.[5]

- In high-use recreational areas, designate at least 10% of the beach width as a Plant Protection Strip.
- In lower-use and natural areas, including protected beach-nesting bird areas, designate at least 25% of the beach width as a Plant Protection Strip.
- Locate the strip immediately adjacent to the landward limit of the beach (*e.g.*, dune, boardwalk, bulkhead, etc.).
- Stop raking and driving in the strip from May 15 to November 30.
- Seasonally mark the strip with PVC posts and signs <u>unless</u> vehicles/rakes can be kept out by other means such as driver training.
- Stop bulldozing and other sand moving in the strip year-round, or coordinate with the Service if these activities cannot be avoided.

*Degraded open back beach habitat caused by vehicle use at Island Beach State Park, NJ (above). Seabeach amaranth found damaged in vehicle tracks (left).*

*Successful compromise management using plant protection strips at Island Beach State Park, NJ. Management supports beach habitat and dune development while allowing continued recreational use.*

Left: **seabeach knotweed** (*Polygonum glaucum*), State-listed as endangered, annual

Right: **seabeach sandwort** (*Honckenya peploides*), State-listed as endangered, perennial

Below: **seabeach evening-primrose** (*Oenothera humifusa*), State species of concern, annual

Left: **seabeach amaranth** (*Amaranthus pumilus*), federally listed as threatened and State-listed as endangered, annual

Right: **seabeach purslane** (*Sesuvium maritimum*), State species of concern, annual

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[5] https://www.fws.gov/northeast/njfieldoffice/pdf/Beach_Manage_.pdf


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