

Expect the Unexpected: Rare Plants Identified in Assateague Island National Seashore

[Assateague Island National Seashore](#)

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Hidden in plain sight, rare plants reside next to parking lots in Assateague Island National Seashore (NS) in Maryland. In this special place, careful visitors may be lucky enough to spot these subtle species.



Researchers found coral honeysuckle (*Lonicera sempervirens*) in the park.

NPS/Hall

Constructing a Plan

Assateague Island National Seashore (NS) collaborated with the [University of Maryland](#) (UMD) and the National Park Service's [Inventory and Monitoring Division](#) on an inventory project. Researchers worked to discover what plants were present in the park and where. This inventory was necessary to protect plant species during proposed construction to take down abandoned structures and relocate a campground.

Addressing Threats

Assateague Island NS provides habitat for several plants that are considered rare, threatened, or endangered (RTE). Major threats to these plants include development and visitor use, often leading to increased vehicle and foot traffic. It is critical that visitors park in designated areas only and avoid creating [social trails](#). Additional long-term threats are burial and drastic habitat changes from sand dune migration. This is a natural process on barrier islands where the dunes begin to shift westward and reshape habitat zones. Effects from climate change are speeding up this process, however, which means plants that cannot adapt quickly enough may become buried in sand.



This represents unwelcome disturbance to a habitat caused by a vehicle in an undesignated area.

NPS

The Search Begins

Based on previous knowledge and efforts, researchers focused on 46 RTE plant species that could be in the park. They looked for these plants in areas where human activity may be impacting the plants, such as the frontcountry. The frontcountry refers to areas easily accessible by vehicle such as parking lots and where the campground relocation is planned to occur. Teams of two paired up while one focused on spotting plants and the other noted the species for about an hour per designated area. Researchers also took off-road vehicles into the backcountry to fully search other parts of the seashore where demolition of abandoned structures would occur. Some species samples were brought back to the laboratory for identification from expert botanists.



Biologists trekked through remote areas in search of plants to inventory.

NPS/Hall

Momentous Discoveries

Biologists found 16 of the 46 target species in the park, including two plants never before seen in Assateague Island NS. The first species, the Atlantic lady's tresses (*Spiranthes bightensis*), is an orchid classified as critically imperiled by [NatureServe](#). This rare plant occurrence may represent a globally important population based on how many stems were present. The second new species identified was the largeleaf pennywort (*Hydrocotyle bonariensis*). This is the first known population of this plant in Maryland. Other target species that were not found during these surveys may be in areas the researchers didn't explore.



Pink redstem (*Ammannia latifolia*) was one of the plants researchers encountered.

NPS/Hall

Leave No Trace

Researchers were surprised to find several plants in developed frontcountry areas rather than mostly the undisturbed outskirts. Lorie Staver, researcher at UMD, pointed out how unique and dynamic the seashore's ecosystem is as it provides habitat for a wide array of species. This inventory emphasizes the need to protect these biodiverse habitats, so it is invaluable that visitors [leave no trace](#) while exploring the park.

Protecting Plants

The distribution of plants recorded in this survey was widespread, including some occurrences near planned construction areas. Although researchers noted the populations may be fairly resilient, they provided some recommendations for park managers to help protect them as summarized below:

- Modify mowing schedules to protect late blooming species
- Flag plant species to avoid damage during demolition
- Fence off areas with plant species during construction

These suggestions will allow park managers to protect these rare plant species during upcoming projects. Additionally, park staff will continue long-term monitoring to ensure these plants are persisting in the areas where they were found.

Tools for Conservation

Park manager, Lindsay Ries, described how the inventory report is a really great tool for planning projects and protecting plants amidst development. Researchers provided helpful conservation recommendations for each species and an interactive map showing their exact locations. This collaborative project laid the groundwork for these plants to thrive within the seashore's ecosystem.

Want to learn more?

Check out all the species in Assateague Island National Seashore (NS) at [NPSpecies- Search for a Park Species List](#) or learn about other monitoring projects at [Northeast Coastal and Barrier Inventory & Monitoring Network](#) (U.S. National Park Service)