



Figure 1. Aerial view of Nantucket Barrier Beach and Wildlife Refuge, photo by Above Summit; courtesy of The Trustees.

Potential National Natural Landmark Brief

Name:

Nantucket Barrier Beach and Wildlife Refuge

Location:

Nantucket County, Massachusetts

Description:

Forming the northern extension of Nantucket Island into Nantucket Sound, the sandy beach and spit complex (Coatue, Coskata, Great Point, and The Haulover) provides exceptional examples of coastal barrier forms. Coatue spit, at its southwestern extension, exemplifies two such forms. This symmetrical cusped foreland is the largest in the Outer Lands sub-province of the Atlantic Coastal Plain. More remarkably, the series of six regularly spaced symmetrical to sub-symmetrical cusped spits carved out of the foreland along its sheltered southeastern shore provide a world-class example of a rhythmic cusped spit series. The unique form results from a number of supporting coastal conditions, yielding scientific insight into barrier dynamics. Nantucket's glacial deposits supply ample sand along a stable coast for thousands of years; Nantucket Harbor's long axis aligns with seasonal wind and wave direction; tidal amplitude is low enough to form barriers, but high enough to erode spit tips. Associated coastal ecology of the barrier complex—maritime oak and cedar forests and beaches, dunes, and tidal salt marshes—strengthens national significance.



Significance:

The barrier beach complex, and specifically Coatue spit, within Nantucket Barrier Beach and Wildlife Refuge provides a world-class example of a rhythmic cusped spit series, unparalleled among coastal features of the Atlantic Coastal Plain. It appears on a well-developed and symmetrical cusped foreland, the largest in the Outer Lands sub-province. Associated maritime environments offer exemplary representative coastal ecology.

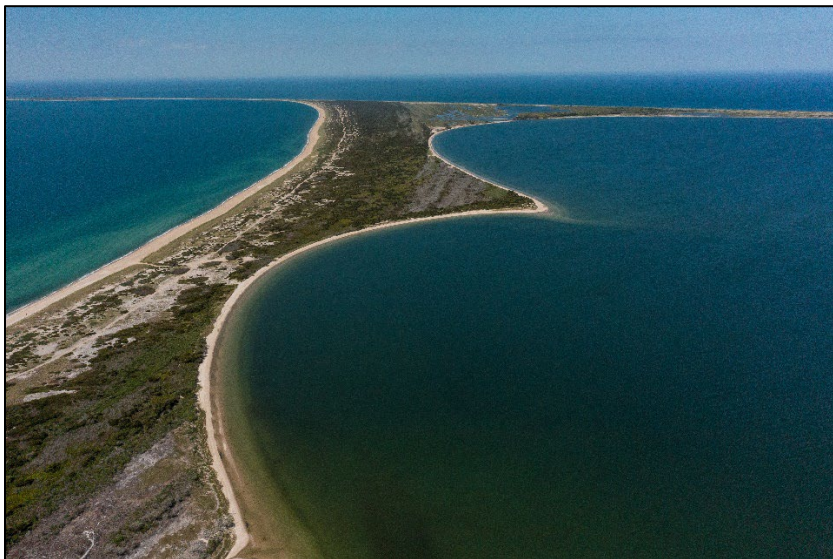


Figure 2. (Top) Aerial view of rhythmic cusped spits, photo by Above Summit; courtesy of The Trustees; (Bottom) On the ground view of The Glades, Coskata Pond and Coskata Woods in the distance, NPS photo.

Ownership:

Private (The Trustees of Reservations, Nantucket Conservation Foundation) and Federal (U.S. Fish and Wildlife Service)

Evaluation:

August 2024, Nicholas L. Venti, PhD, CPG



General Location and Proposed Boundary:



Figure 3. Map showing the general location within Massachusetts and the proposed boundary for the Nantucket Barrier Beach and Wildlife Refuge potential NNL.

