

Nashua Street: Dune Walkway Profile

Site Assessments: February 14, 2024 and July 25, 2024

Structure Conditions and Observations	
Road to beach	591 ft
Boardwalk Length	520
End of boardwalk to beach	71 ft
Walkway Width	4 ft
Walkway Material	<ul style="list-style-type: none"> Asphalt apron Pressure treated plywood connected by cable
Attached pathways*	2
Benches	3
Additional Features	NA
*Human-made pathways connected to the municipal walkway	



Ecological Conditions and Observations			
Community Types Present	Rare Species	Other Native Species of interest	Species of Concern
<ul style="list-style-type: none"> Beachgrass grassland Hudsonia maritime shrubland 	<ul style="list-style-type: none"> Wooly beach heather (<i>Hudsonia tomentosa</i>)^{S2} 	<ul style="list-style-type: none"> Beachgrass (<i>Ammophila breviligulata</i>) Seaside goldenrod (<i>Solidago sempervirens</i>) Northern Bayberry (<i>Myrica pennsylvanica</i>) 	<ul style="list-style-type: none"> Autumn olive (<i>Elaeagnus umbellata</i>)^P Climbing nightshade (<i>Solanum dulcamara</i>)^W Beach rose (<i>Rosa rugosa</i>)^W
S2 = threatened in NH, P = prohibited species in NH, W = NH invasive watch list			



Walkway Entrance



Landward Side



Seaward Side

Walkway Observations

Landward Side of Dune

- The initial portion of the walkway is flat and appears structurally stable.
- Nonnative and/or invasive species are present at the entrance to the walkway near the road.
- As the path begins to slope upward toward the dune crest, several boards show signs of bowing, and a few are missing (Figure 1).
- Near the dune crest, the walkway curves and exhibits noticeable tilting.
- Areas of bare sand and sparse vegetation were observed along the walkway.
- Bare sand areas appear to correspond with sections of walkway that has missing and unstable boards.
- Walking paths to homes have created large unvegetated areas (Figure 2).
- Vegetation adjacent to the path on either side appears to have been mowed (Figure 3).



Figure 1: Missing boards; noticeable tilting.



Figure 3: Large unvegetated areas adjacent to walkway



Figure 2: Vegetation appears to have been mowed

Seaward Side of Dune

- The walkway continues to tilt in certain sections as it descends, with dune elevation rising on both sides as it nears the beach access point.
- One bench is located on the north side of the walkway, oriented parallel to the path.
- Two additional benches are situated where the sand path transitions to the beach.
- Vegetation adjacent to the path on both the landward and seaward side of the walkway appears to have been mowed (Figure 3).
- Earthstar mushrooms found at this site (likely *Astraeus hygrometricus*) (Figure 4).

Potential Action Items

- Inspect and repair loose or uneven planks to maintain a safe, level surface.
- Add non-slip surfacing on curved and inclined sections to improve traction and reduce the risk of slipping.

- Assess feasibility of Installing handrails along the curved section of the walkway to provide additional stability.
- Install a Mobi Mat or similar ADA-compliant beach access mat at the end of the walkway to improve accessibility.
- Revegetate areas of bare sand and sparse vegetation with native sand dune species.
- Delineate walking paths from homes, consider routing the paths perpendicular to the walkway along the edge of the dune close to the houses to limit dune impacts.
- Revegetate abandoned walking paths.
- Remove invasive species and replant with native dune species.
- Increase education and awareness about state regulations regarding the cutting of dune vegetation

Notes

The mushroom observed at this site is likely in the genus *Astraeus* – the false earthstars. They are often called the “**Barometer Earthster**” as the rays of the star open and close based on the humidity.



Figure 4: Earthstar Mushroom

Resources

- GoBotany – Native Plant Trust: <https://gobotany.nativeplanttrust.org>
- NH Comprehensive Invasive Plant list: <https://www.agriculture.nh.gov/publications-forms/documents/nh-invasive-plant-list.pdf>
- NH Guide to Upland Invasive Species: <https://www.agriculture.nh.gov/publications-forms/documents/upland-invasive-species.pdf>
- Planting Guide for Tidal Shoreline Erosion Management in New Hampshire (beach and dune sections): <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/tidal-erosion-planting-guide.pdf>
- UNH Extension resources on invasive species: <https://extension.unh.edu/natural-resources/forests-trees/invasive-species>