



Outline

- Interspersion/Juxtaposition
- Key Habitats
- Beach nourishment



Interspersion and Juxtaposition





Ecological Law:

If all the kitchens were located in one quarter of a given city and all the bedrooms in another, ...the human population would be considerably reduced.



Aldo Leopold, 1939, Game Management. Scribners, NY.

Ecological Law:

The maximum population of any given piece of land depends not only on its environmental types or composition, but also on the interspersions of these types ...



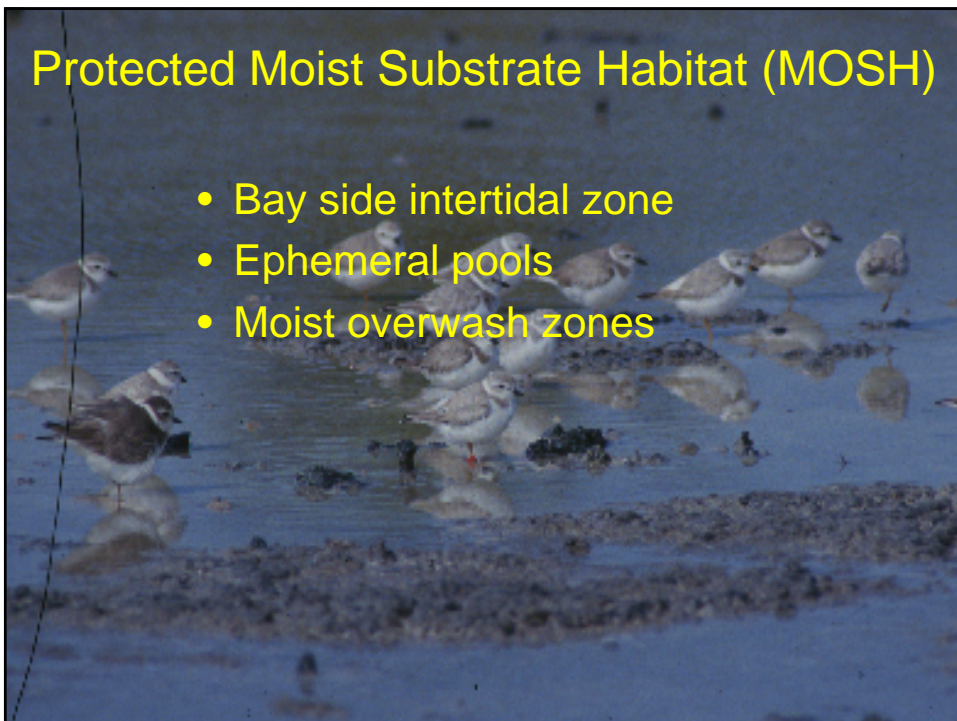
Aldo Leopold, 1939, Game Management. Scribners, NY.

Key Habitats



Protected Moist Substrate Habitat (MOSH)

- Bay side intertidal zone
- Ephemeral pools
- Moist overwash zones



Piping Plover: A bird of the bay intertidal zone



Wintering

Extensive use of mudflats, sand flats, algal flats (74-93% of the time)

Johnson and Baldassare 1988

Nicholls and Baldassare 1990

Zonick 2000

Drake et al. 2001







Nesting

Higher densities, higher foraging rates, faster growth, sometimes better survival near MOSH

Patterson 1988

Loefering and Fraser 1995

Elias et al. 2000

Keane 2002

Elias et al. in Review

Houghton et al. in Prep

Cohen et al. in Prep



Post-nesting

Fledglings move to MOSH to gain weight prior to migration

Cohen et al. in prep





Nesting Beaches, Atlantic Coast

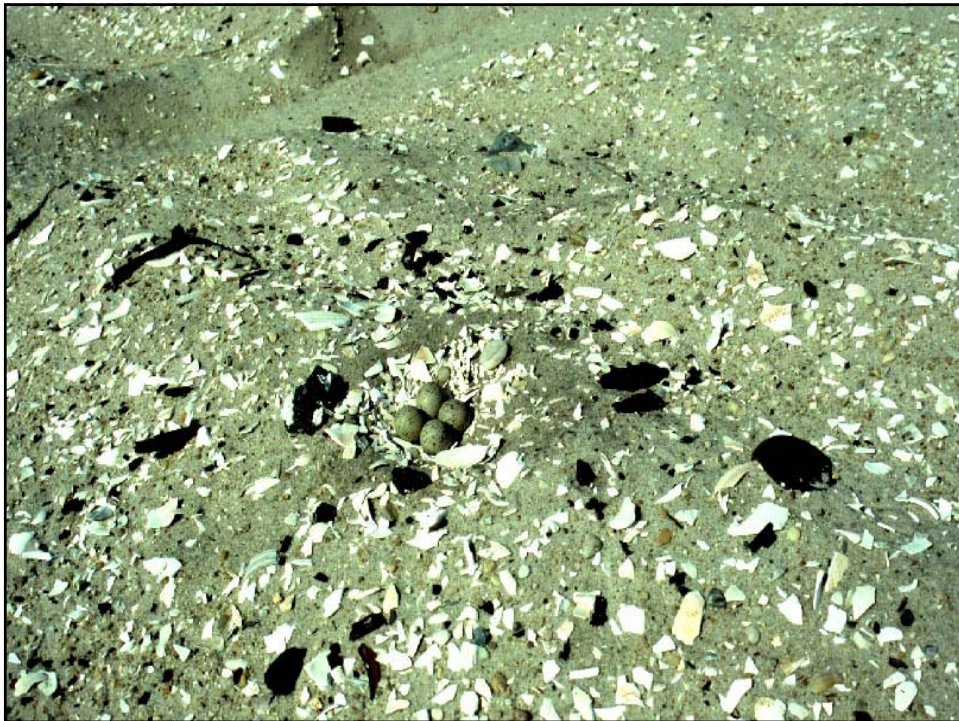
Beach Widths

~30->200 m

Mean ~ 140 for Atlantic Coast

Beach Slope

Low, < 5-8%



Sparse vegetation is good for nesting



Dense vegetation is bad



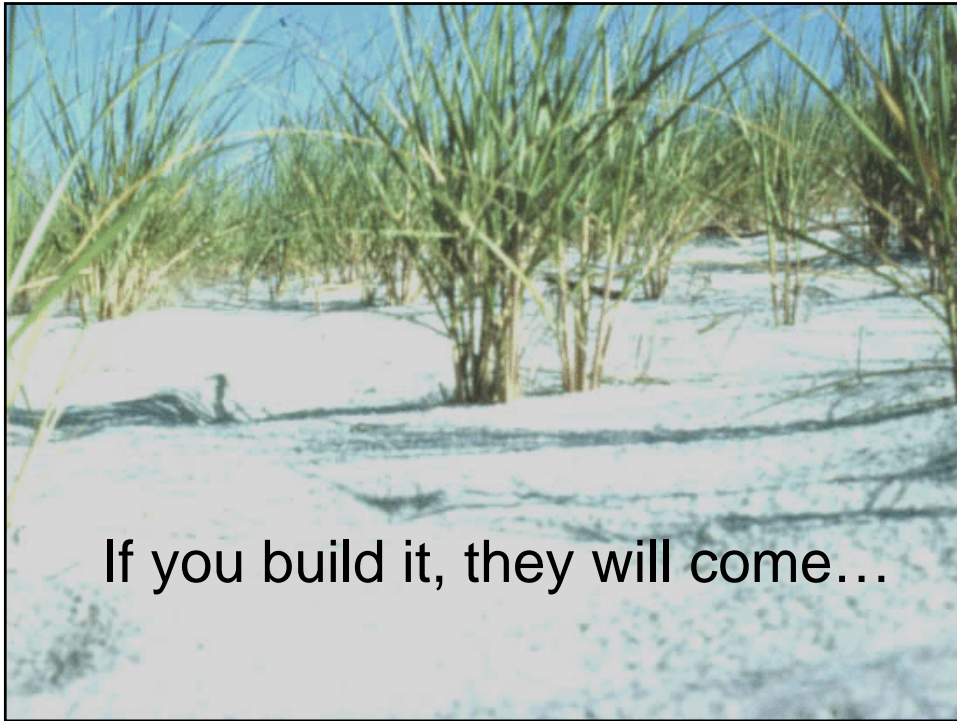






Post Construction Issues

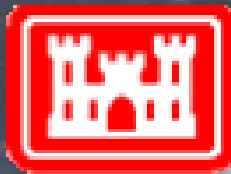
A collage of images illustrating post-construction issues. The top section features a blue background with the text "Post Construction Issues" in yellow. Below the text are three images: a close-up of a young fox cub, a beach area with construction equipment and vehicles, and a sandy dune with a path leading to the ocean. The bottom right corner of the collage is a solid blue rectangle.



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