

Pinelands Communities and Habitats: the Landscape Perspective

Rick Lathrop
Rutgers University

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The Pinelands Comprehensive Management Plan contains the charge to “Preserve the essential character of the existing pinelands environment, including the plant and animal species indigenous thereto and the habitat therefore.” Considerable effort and progress has been made in mapping and characterizing the landscape pattern and vegetation community structure and composition across the Pinelands. This has not been an easy proposition, due to the patchy landscape pattern, in both space and time - the result of wildfire, past human disturbance and natural succession dynamics. The Pinelands Commission has synthesized this research into a series of robust indicators of the ecology integrity for upland, wetland and aquatic ecosystems. While the general pattern is understood, there are still major gaps on finer scale understanding of individual species or habitats. For example, the habitat area needed to support a minimum viable population/metapopulation of indigenous Pinelands species is an open question. The needed research and modeling is highly species-specific, data intensive and yet to be undertaken. While great progress has been made it still instructive to review the findings of the original 1982 Science Forum “*Ecological Solutions to Environmental Management Concerns in the Pinelands National Reserve.*” Among other issues such as nutrient dynamics, hydrology and fire management, **ecosystem fragmentation** was highlighted. Many of the unanswered questions back in 1982 concerning the role of ecosystem fragmentation are still pertinent today.