

Creek Farm Reservation: Forest of past, present

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By Dave Anderson , society for the Protection of New Hampshire Forests

Where once vast inland forests meet the rocky extremes of coastal rivers and shallow, brackish tidal estuaries, combined effects of weather, past agriculture, development pressure and recently introduced landscape trees and aggressive invasive plants contribute to a chaotic "Frankenstein forest."

Located on Sagamore Creek in Portsmouth, just inland from Rye and New Castle, Creek Farm Reservation is owned by The Society for the Protection of New Hampshire Forests. Its 35 acres includes oak and pine forest, former agricultural fields and fresh and brackish wetlands that provide habitat for resident and migrant birds and mammals. Perhaps the greatest challenge facing the Forest Society managers of the property is defining what forest conditions are most "natural."

"Succession" is a term foresters use to describe how open fields revert to mature forest after mowing or grazing ends. The process is a slow relay race as sun-loving plants are gradually replaced by more shade-tolerant trees. Sun-loving "pioneer" trees include white pine, red cedar, paper birch, cherry, aspen (a.k.a. poplar) and gray birch. Once partial shade is established, red oak, white ash, red maple and yellow birch replace the pioneers. Lastly come the shade-tolerant spruce, sugar maple, beech and hemlock.

Native red oak and white pine are particularly well adapted to the coast. Their seedlings now compete for space and sunlight with non-native shrubs and ornamental trees escaped from suburban streets and gardens. Invasive shrubs at Creek Farm include autumn olive, common buckthorn, Japanese barberry, European barberry and honeysuckle. Entwining vines include thorny green briar and climbing bittersweet with its colorful yellow and red fruit. These more aggressive plants out-compete native vegetation and exclude native plants from the relay race.

Creek Farm also includes cultivated trees that have escaped from nearby designed landscapes. Apple, pear, red cedar, mountain ash, honey locust, horse chestnut, butternut, black walnut and Norway maple trees have seeded-in and now grow wild among native white pine and red oak woodlands found along Sagamore Creek. The new Goose Island Trail passes through a forest of both native and introduced species at Creek Farm.

Undeveloped woodlands at the coastal water's edge are increasingly rare as development has claimed the land, first as farmland and now for waterfront homes. The rare fragments of waterfront woods allow us to imagine how the region looked centuries ago. Even as these forests recover from frequent coastal storms and former agricultural use, they face new pressures from encroaching development and competition from non-native plants.

Creek Farm is open from dawn to dusk for passive, non-wheeled recreation: walking, picnicking, hiking, paddling, bird-watching and nature study. The buildings and wharf managed by the Shoals Marine Lab are closed to the public.

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