

## The Breivogel parcel

At the end of the most recent Ice Age, after the last vestiges of the ice sheet that formed Cape Cod had melted away, the surface of the land here was bare sand and gravel, with scattered depressions, some of which had filled with ground water to become ponds. That description applies again today to the central section of this 68-acre piece of open space which was once a gravel pit. In the old gravel pit the topsoil was scraped off so that the underlying gravel and sand could be removed. The height of the land around the edges and in the "island" in the middle indicate the elevation of the old land surface. When gravel extraction ended some of the bare areas were planted with beach grass, which was raised in the congenial bare sand. Two ponds were also dug and cattails and other aquatic plants have become established. Something like a third of the parcel is still wooded: the strip between the road and the powerline right of way, and the eastern section from the man-made ponds to the shore of Shallow Pond.

This parcel was acquired by the town with the purpose of revegetating the ex-gravel pit and preserving the entire area as open space. Left to its own devices the expanses of bare gravel would grow forest themselves eventually, just as all of the Cape did after the ice sheet melted. First would come grasses (like the Beach Grass) and ground lichen, and mosses in damp or shady places. Over time those plants would build up enough organic material in the soil that plants like Bayberry, Rosa Rugosa, and Blackberry could sprout and survive from the seeds carried in by birds foraging on insects and grass seed. These plants in their turn would grow and die back each year, adding their leaves to the gradually developing soil. The first trees would probably be Red Cedars and Pitch Pines, which germinate best in full sunlight and which can tolerate relatively poor soils. They might soon have been joined by Bear Oak which also does best in full sun. Eventually these pioneer trees would create woodland conditions in which trees such as oaks, hickories, and maples whose seeds will only germinate in shady areas, could grow. In a thousand years or so a natural forest would cover all the man-made slopes of the old gravel quarry.

So although the central section of this parcel looks quite barren at the moment, it is a microcosm of Cape Cod at the end of the Ice Age, and, left to its own devices, would eventually be covered with woodland. The plan however, is not to wait for the natural development of soil and plants, inevitable though that development may be. Instead a revegetation plan will be developed using a fund donated by the former owner of the parcel. The large areas of bare ground have the potential to be grassland or woodland, depending on the plan and on the materials and work available to bring the plan to fruition.

In the meantime this is an interesting place to visit. A quiet approach to the ponds will often be rewarded with a good view of ducks foraging or resting among the cattails in the ponds. Hawks can often be seen soaring above the open area, and early spring brings migrating warblers and other woodland birds stopping in the woods to rest and prepare for the remainder of their flight to their breeding grounds in more northern woods. In addition a trail leads to the shoreline of Shallow Pond, a lovely and relatively isolated pond. And who knows what you

might see there next time.

The Breivogel parcel can be reached from Gifford St. extension. Take the road off to the east to the Town Stump Dump, and park near the boulders on the north side just outside the Stump Dump gate.