

*Column #2 For July 8 edition*

**Celebrating Place: Anniversary Notes from BHHT**

**Surprising Diversity Amidst Stunning Beauty**

**By Charlotte Clews Lawther**

Driving down the Blue Hill Peninsula on a sunny July morning, it is hard to miss the natural beauty of the landscape. What you may not realize is that behind this beauty is a wealth of ecological diversity. As the Stewardship Coordinator at the Blue Hill Heritage Trust I spend a good amount of time stomping around our forests and fields, and I am continually surprised by the incredible variety of plants and natural communities that I find here.

Over the last 25 years Blue Hill Heritage Trust has helped protect this natural diversity by conserving lands as diverse as the ecosystem itself. Our mission, after all, is “to conserve land and water of special ecological, natural, agricultural, scenic, cultural and recreational significance” on the Blue Hill Peninsula.

While the stunning scenic beauty found throughout this landscape is obvious, the special ecological features are less familiar to most people, and even less familiar is the reason for this diversity.

The Blue Hill Peninsula is caught between two worlds – land and ocean - and to our great fortune the resulting landscape is the best of both worlds. But what makes this area of Maine exceptional, in contrast to other coastal areas, is that we are right in the middle of the transition between northern and southern ecosystems.

The geologic history of our place is responsible for that. About 65,000 years ago, the Laurentian Ice Sheet descended from Northern Canada, and rumbled its way across Maine, scraping south toward the ocean. It gouged out the rugged-ragged peninsulas and bays, taking with it a great deal of Maine’s top soil. When at last the glacier came to rest, like a bulldozer out of fuel, it created an underwater mountain called George’s Bank that now deflects warm Gulf Stream waters away from the coast of Maine. Instead, cold, oxygen-rich water from the Labrador Current flows into the Gulf of Maine and along our coast.

This cold water is responsible, for an abundance of marine life in the Gulf of Maine, as well as the diversity of plants found on our coastal lands. Botanists have counted at least 1,000 species of plants in the Blue Hill Peninsula area. As warm moist summer breezes blow in from the southwest, they hit the cold Gulf of Maine waters and condense into thick fog. People might resent the mildew and failed pea plants, but many Northern plants love our cooler coastal climate and do very well right along the edge of the sea. Boreal tree species such as jack pine, black spruce and grey birch grow readily in our cool moist climate. When the long summer days do eventually warm up the ocean, the water holds the heat, making the coastal fall climate slightly milder than further inland.

This climate buffering effect means that several southern plant species are able to thrive on the Blue Hill Peninsula that would not make it further inland or much further Downeast. One such example is pitch pine, commonly found in the warm sandy soils of New Jersey, or Cape Cod. In fact this is one of the very few places that you will find pitch pine growing right next to jack pine, a northern forest species.

Although you can find this climate-driven abundance and diversity throughout the Peninsula, the north shore of Eggemoggin Reach is one area that is filled with many excellent examples. Steep south facing slopes magnify the effect of the sun's heat, while the deep Reach waters often stay cold even into late summer. Beaten by harsh winter storms, shrouded by spring fog and bathed by the strong summer sun, one might think a plant in these parts hardly stands a chance. Not so. This narrow strip of land is home to some of the most exquisite combinations of northern and southern species: cool bog species such as sundew plants and reindeer lichen grow beneath canopies of sun-loving pitch pine trees.

Fortunately many landowners have recognized how special this area along the Reach is, for its ecological significance as well as its tremendous scenic beauty. Some of the Trust's earliest projects focused on this area, and one of our most recent projects, completed earlier this year, continues that work. Conservation easements donated by those landowners now protect long stretches of undeveloped land at the western end of the Reach.

So if you are fortunate enough to find yourself on a boat out on the Reach this summer, or wandering about elsewhere along our magnificent coast, enjoy the knowledge that behind all that beauty is a spectacular ecosystem, and that we are working to protect both.