Witches' broom, the abnormal brush like cluster of dwarfed shoots and twigs arising at or near the same point, are common in stands of white and red spruce especially on islands and headlands on the Maine coast, including here on North Haven. Witches' broom can be caused by a variety of pathogens but the most common cause of witches' broom along the coast is the parasitic plant, Eastern Dwarf Mistletoe, that stimulates the production of large twiggy growths (brooms). Spruce stands adjacent to the open ocean are the most heavily infected and heavily infected trees with large and/or multiple brooms may die over time as a result of the infestation.

The Eastern Dwarf Mistletoe is a parasitic, seedbearing plant that attacks primarily native white, red and black spruce. Mistletoe produces mucilaginous (gooey) seeds in October that are forcibly ejected from the tips of the aerial shoot protruding from the spruce needles. These sticky seeds readily adhere to needles and twigs of the same or nearby trees where they germinate causing a new infection. To be sure the brushy growth you are looking at is the result of a mistletoe infestation it is necessary to carefully inspect the foliage of the trees, looking amongst the needles for short reddish brown aerial shoots. Management of the parasite in coastal spruce forests is a challenge. In general, it is recommended that infected trees in the overstory be harvested and removed and a 60-foot buffer created around infected stands. Here on North Haven and coastal Maine where dwarf mistletoe is so extensive, that recommendation is not really a practical solution. As its real impact is on the growth and value of spruce as a timber product and not as an ecological threat, NHCP is not actively managing eastern dwarf mistletoe on its properties.

NHCP will be hosting four programs in July that we hope you can attend. On Tuesday, July 9 we will be hosting the ever-popular Crabtree Point walk, thanks to the generosity of the property owners, the Almay and Davis families. The walk will begin at 10:00 am. Follow signs from Narrow Place Beach to the parking spot.

On Saturday, July 13 at 11:00 am at Boy Scout Beach we will be hosting a Tide Pool Exploration, perfect for families and kids.

On Tuesday, July 16 at 9:00 pm we will be hosting an Introduction to Astronomy program at the golf course.

And on Tuesday, July 23 from 10:00 am to 2:00 pm in partnership with the Vinalhaven Land Trust we will be hosting a Sea Kayak trip to Perry's Creek with a hike up Fox Rocks. We will be meeting at Ferry Landing beach in town, bring your own kayak, water and lunch.

As always please contact NHCP at <u>nhcp@northhavenconservation.org</u> or 207 867 2113 with any questions. And please leave even your well-behaved pets at home.