SURVEY FOR SEASIDE BONE JUNE 2020

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On June 12th, Sheringham Point, Otter Point and Roche Cove were visited by Jenifer Penny and Ryan Batten to collect samples and coordinates for mapping *Hypogymnia heterophylla* (seaside bone) to support the COSEWIC re-assessment. Seaside bone is currently assessed as Threatened (2008) and is on the SARA legal list as Threatened (2010).



Figure 1. Sheringham Point with ownership boundaries and confirmed locations of seaside bone; seaside bone; blue-circled area is un-surveyed potential habitat where very densely-vegetated and steep.

The first site visited was Sheringham Point. The restoration manager, Ian Fawcett, met us at the gate to enter the strata area and access the Sheringham Point lighthouse property which is currently closed to the public due to COVID 19. Seaside bone was relocated in 3 different areas on the lighthouse property and the adjacent parcels which have recently been transferred to the T'Sou-ke First Nation (Fig. 1) GPS coordinates were collected, specimens were sampled, and photos taken (Table 1). There are no development plans for any of the three parcels according to Ian. They will be managing the lighthouse property for visitor access, and maintenance of the historic lighthouse. Maintaining the natural resources of the site is also a priority.

Table 1: Locations Surveyed for Seaside Bone June 12th, 2020.

Location/Directions	Coordinates (NAD 83), Mapping	Notes
	Guidance and Habitat	
T'Sou-ke FN parcels, Sheringham	WP 2027 -10 431652 5358696	There are at least a hundred
Point	WP 2028 -10 431659 5358693	thalli present, perhaps 100's
	WP 2029 -10 431658 5358708	towards the area circled in

The observed area together form a small polygon, but there is still suitable habitat not searched thoroughly due to dense vegetation and trees and steep slopes to the south and southeast. WP 2027 - overlooking beach on dead pine WP 2028 – 30-40 healthy pine hosts in the vicinity including a pine with lichen partially encircling it (Fig. 2)	blue above where it was difficult to access. Over-looks beach to the west, and may have been the original collection site for this species in 1975. Judging by the size of the population, it was likely the site of the 2006 field observation cited in the COSEWIC status report. On shore pine and Douglas-fir.
WP 2030 - 10 431850 5358610	The access from the east to the cliffside where seaside was found is currently blocked off to mitigate damage by visitors to the slope. There is no access from the west at the path to the lighthouse where it is too steep and densely vegetated.
WP 2031 - 10 439089 5358681 - on branch cut to create trail. Also seen on intact branches of the Douglas-fir host. Approx. 30 colonies in area.	Near new trail to connect Sheringham Point trail to the lighthouse.
WP 2032 - 10 431865 5356357 - 50-100 thalli on 4 host pines; also on spruce branches to the west of coordinate	
WP 2033 - 10 442940 5358180 – Few thalli on shore pine branch	
	a small polygon, but there is still suitable habitat not searched thoroughly due to dense vegetation and trees and steep slopes to the south and southeast. WP 2027 - overlooking beach on dead pine WP 2028 – 30-40 healthy pine hosts in the vicinity including a pine with lichen partially encircling it (Fig. 2) WP 2030 - 10 431850 5358610 WP 2030 - 10 431850 5358651 WP 2030 - 10 431865 5356357 - 50-100 thalli on 4 host pines; also on spruce branches to the west of coordinate WP 2033 - 10 442940 5358180 –



Figure 2. Sheringham Point seaside bone (WP 2028) – T'Sou-ke parcel

Threats

There appear to be few, if any threats to the lichens in the locations surveyed, even at Sheringham Point, where the lichens appear to have persisted despite some development in nearby areas. Even to the east of the lighthouse property, the private land has a home on it, but the home is set back from sea with a buffer of trees between it and the lighthouse property. There appear to be suitable habitat there for more colonies. Unbeknownst to the restoration manager, Ian Fawcett, lichens were present on a branch that he cut to connect a well-used trail (Sheringham Point trail) north of the property to the lighthouse (Figure 3). The host tree still has intact branches containing *H. heterophylla*, and furthermore, the thalli persist for some years on blown-down trees so long as they continue to be well ventilated (COSEWIC draft status report); they may persist long enough for the spores to disperse onto regenerating trees or onto trees adjacent to the blow-downs. Now that Ian Fawcett is aware of the lichens, he will be more cautious in any further management actions on the property.





Figure 3. Sheringham Point Lighthouse trail population. Pine branches that were cut had some seaside bone thalli.