

**Appendix 2. Description of known living bioherms in Howe Sound**

***1. \*Defence Island bioherms (2)***

**Approximate Location:** N49° 34.69’; W123° 16.27’

**Depth:** 103 ft; 2nd most shallow in Howe Sound

**Abundance/Extent of Sponges:**

**Health**: previous signs of stress on live sponges followed by improvement

**Damage or Known Threats:** contact fishing

**Other Species and Abundance:** lingcod eggs, sea whips

**Imagery and Resources Available:** photographs

**Temperature Logger:** Yes

**Features:** sponge bioherm and seawhip forest side by side; potential dive site,

Vancouver Aquarium research area

**Date of Discovery:** pinnacle bioherm on Sunday, November 14, 2010

***2. Anvil Island East (Clayton bioherm)***

**Approximate Location:** N49° 32.60’; W123° 17.10’

**Depth:** 230-300 ft

**Abundance/Extent of Sponges:** largest in Howe Sound; wide extent (no negative data as

in no areas lacking sponge coverage);

**Health:** white and healthy

**Damage or Known Threats:** garbage, prawn traps (footage), heavy steel box

**Other Species and Abundance:** large quantities of schooling rockfish (redstripe, Puget

Sound)

**Imagery and Resources Available:** footage of prawn trap on sponge

**Temperature Logger:** No

**Features:** no negative data

**Date of Discovery:** Saturday, October 04, 2014

***3. \*Lost Reef Bioherm (between Christie Islet and Pam Rocks)***

**Approximate Location:** N49° 29.67’; W123° 17.80’

**Depth:** 120 ft

**Abundance/Extent of Sponges:** bioherm on all of the peaks and in some of the valleys;

fairly high sponge coverage in northern bioherm, light coverage in southern bioherm

**Health:** Under investigation

**Damage or Known Threats:** sport fishing

**Other Species and Abundance:** Puget Sound rockfish, quillback rockfish, lingcod eggs

**Imagery and Resources Available:** photographs

**Temperature Logger:** Yes

**Features:** sponge bioherm and sponge garden side by side; *Heterochone calyx* and

*Aphrocallistes vastus* present; reef is partially contained within a Rockfish Conservation

Area (Pacific Region Area 28; p. 158: Pam Rock); muddy between sites; potential dive

site

**Date of Discovery:** Sunday, January 31, 2010

Howe Sound Glass Sponge Reefs – Request for Protection

6

***4. Lions Bay area bioherms (3)***

**Approximate Location:** N49° 28.50’/ N49° 27.00’;W123° 15.50’/ W123° 14.50’

**Depth:** 220 ft

**Abundance/Extent of Sponges:** morphology of *A. vastus* changes with depth

**Health:** some of the healthiest in Howe Sound, very large sponges

**Damage or Known Threats:** commercial trap fishing and sport trap fishing

**Other Species and Abundance:**

**Imagery and Resources Available:** most data available, drop camera video footage of

Lion’s Bay Seamount, footage showing damage by commercial prawn fishermen

**Temperature Logger:** No

**Features:** rockfish habitat, reef is partially contained within a Rockfish Conservation

Area (Pacific Region Area 28; p. 161: Lions Bay); trimix dive survey

**Date of Discovery:** January 2013, Lions Bay and Kelvin Grove seamounts; June 2013,

Brunswick Beach bioherm

***5. \*Halkett Deep Reef bioherm***

**Approximate Location:** N49° 26.81’; W123° 18.73’

**Depth:** 102 ft

**Abundance/Extent of Sponges:**

**Health:** evidence of increasing damage to reefs, anchor damage to reefs

**Damage or Known Threats:** anchoring, sport trap fishing

**Other Species and Abundance:** abundant shiner perch

**Imagery and Resources Available:** photographs

**Temperature Logger:** Yes

**Features:** sponge bioherm and garden side by side, *H. calyx* presence, extensive diving

**Date of Discovery:** June 30, 1996

***6. Cates Bay Bowen Island bioherm***

**Approximate Location:** N49° 24.70’; W123° 18.20’

**Depth:** one of the deepest at 320 ft

**Abundance/Extent of Sponges:** small bioherm

**Health:** no trap damage

**Damage or Known Threats:** sport trap fishing

**Other Species and Abundance:**

**Imagery and Resources Available:**

**Temperature Logger:** No

**Features:**

**Date of Discovery:** Saturday, February 14, 2015

Howe Sound Glass Sponge Reefs – Request for Protection

7

***7. South Bowyer Island bioherms (2)***

**Approximate Location:** N49° 24.70’/ N49° 24.45’; W123° 16.10’

**Depth: 250 feet**

**Abundance/Extent of Sponges:**

**Health:**

**Damage or Known Threats:** automobile tire embedded in sponge, evidence of

recreational prawn trapping

**Other Species and Abundance:**

**Imagery and Resources Available:** photographs

**Temperature Logger:** No

**Features:** reef is within a Rockfish Conservation Area (Pacific Region Area 28; p. 162:

Pam Rock);

**Date of Discovery:** February 22, 2014, and Saturday, March 22, 2014

***8. \* Dorman Point bioherm***

**Approximate Location:** N49° 22.40’; W123° 19.30’

**Depth:** 125 ft

**Abundance/Extent of Sponges:** two areas of heavy sponge coverage

**Health:**

**Damage or Known Threats:** evidence of damage to reef from prawn traps

**Other Species and Abundance:** one of the greatest densities of rockfish (yelloweye,

quillback, and redstripe), historical documentation of large rockfish

**Imagery and Resources Available:** photographs

**Temperature Logger:** Yes

**Features:** within Bowen Island municipal boundaries, southern portion sponge garden

**Date of Discovery:** Saturday, October 6, 2012,

***\*Air dive-able reefs***