

Glass Sponge Reef Protection Falters—Will Reefs Survive?

by Sheila Byers

WITH MY FIFTEEN YEARS of commitment to the Marine Life Sanctuaries Society (MLSS), whose primary focus is the protection of rockfishes and glass sponge reef habitats in Átl'ka7tsem/Howe Sound, I now better appreciate why it takes so long to make changes. By no means am I providing excuses for lack of action by government agencies on whom the primary responsibility rests, but it takes time to obtain the science-based justification to introduce conservation management measures. As such, time, energy and the will to persevere underlie the major costs required to achieve conservation of our natural habitats by all stakeholders, whether government agencies, research scientists, citizen scientists or the public. Conservation 'wins' do happen, albeit slowly.

McDaniel's article in this *Discovery*, "Golden Treasure at the Hoeya Head Sill", describes 14+ years of citizen science efforts to pressure DFO into action. The good news from the federal government announcement (1 November 2022) is that protection of Hoeya Head Sill is promised for some time in 2023. Hoeya Head Sill area is one of the Ecologically and Biologically Significant Areas proposed as an MPA. Realistically, the time to design and implement the

MPA network management plans in the Northern Shelf Bioregion will likely not be in place until 2025. The hope with this DFO announcement is that the Hoeya Head Sill will potentially be closed to commercial and recreational fisheries within the boundary site in 2023—before the prawn season opens, usually in May or June.

The destructive damage to the *Primnoa* corals and glass sponge structures growing on Hoeya Head Sill is not unlike the destructive damage that continues within DFO-protected Marine Refuges for eight Glass Sponge Reefs (GSR) in Átl'ka7tsem/Howe Sound. Damage to both the *Primnoa* coral and GSR benthic habitats are most likely caused by bottom-contact prawn fishing traps and lines by both recreational and commercial fishers. The GSR Marine Refuges and five subsequently designated GSR Fisheries Closures (2019 and 2022, respectively) supposedly provide protection. Why are the GSR protective measures not working?

In last year's *Discovery*, the continuing damage to the sensitive benthic habits of the GSRs in Átl'ka7tsem/Howe Sound by illegal bottom-contact fishing activities was described (issue 49: 83–90). The response from the Honourable

Bernadette Jordan, then Minister of Fisheries, Oceans and the Canadian Coast Guard on 11 August 2021 to the MLSS letter submitted on 6 July 2021 was disappointing, yet predictable.

However, positive news from DFO was received, 15 February 2022; this indicated that there **may be** two additional Fishery Officers hired to enforce and monitor the expansive coastal conservation areas in the Salish Sea Fisheries Management Areas 28 and 29: Howe Sound to Vancouver to Indian Arm; Sechelt to Steveston (including Tsawwassen) to Thrasher Rock (off Gabriola Island) and Galiano Island. These two fishery officer positions, however, will not be in effect until 2023. There is no guarantee that the officers' time commitment will be dedicated strictly to Howe Sound Area 28; nor, to providing coverage for full 24-hour shifts as unfortunately violations and infractions are likely occurring around the clock.

Within just one area of the Sound, MLSS witnessed and reported to DFO 78 infractions and violations within GSR Marine Refuges from 13 February 2022 to 2 May 2022, the period prior to the May prawn season commercial opening. The level of infractions and violations within protected areas continued through the 2022 prawning season and into the Fall with observers reporting infractions to DFO from elsewhere in the Sound. In other words, no one

including DFO, has any idea of the true size of the problem, other than that it's BIG. It is unconscionable to think that we are allowing this physical damage to continue at the very real risk of seeing a complete collapse of sensitive GSR ecosystems in Átl'ka7tsem/Howe Sound—world-class treasures unique to BC and Canada.

Persevering, MLSS sent off another email to the new Minister of Fisheries, Oceans and the Canadian Coast Guard, Honourable Joyce Murray on 23 May 2022. A request to meet in-person was not granted. The letter focused on the MLSS recorded bottom-contact fishery infractions within the GSR Marine Refuges in Átl'ka7tsem/Howe Sound. Fifty-eight stakeholders, including government employees, were copied on that letter.

A good-news response was received from Honourable Joyce Murray on the 16 September 2022. Among more rhetoric of accomplishments of which MLSS was already aware, the response stated progress over the summer month. DFO's Conservation and Protection (C&P) Branch is responsible for enforcing the Fisheries Act, the Oceans Act, and other mandated legislation and regulations, including bottom-contact fishing closures. With all the infractions and violations reported by MLSS and other observers, it was satisfying to see that in May 2022, a DFO C&P investigation resulted in a \$40,000



A healthy, pristine GSR at Halkett, Átl'ka7tsem/Howe Sound in 2020.
 Photo: Adam Taylor

fine issued for illegal prawn fishing in 2019 within a protected area of Howe Sound. Another 2022 conviction, for illegal prawn fishing within a protected area in 2020, resulted in an \$18,000 fine. Note that, unfortunately, two to three years is the timeframe required to process these convictions in court. But at least the enforcement actions are ramping up with significant fines to hold those responsible for the damage accountable. It may be that the designation in 2021 of the UNESCO Biosphere Reserve for Átl'ka7tsem/Howe Sound, is helping to focus the federal government's attention on this area.

Increased funding to C&P has enabled utilization of more technology to monitor for regulation compliance, e.g., fisheries aerial surveillance enforcement aircraft and remotely-operated vehicles. A focus on education and outreach has

engaged local Indigenous communities and stakeholders. Recently, one large sign, visible from the water, has been installed to notify boaters about the Átl'ka7tsem/Howe Sound GSR protected areas and fishery restrictions. Additional signs are proposed.

These steps forward are encouraging but not sufficient to halt the fishery violations that are likely to continue into 2023. On 5 December 2022, MLSS sent a letter of support to the Honourable Joyce Murray to address the failure of DFO to protect GSR Marine Refuges and GSR Fisheries Closures in Átl'ka7tsem/Howe Sound, BC. This letter was undersigned by 19 stakeholder ENGOs and individuals. MLSS is imploring DFO to invoke increased protection of these GSRs 'as soon as possible'—definitely prior to the opening of the 2023 prawn season.



The same Halkett GSR from a different perspective, sadly showing that by 2021 it had been completely destroyed. Photo: John Kaay

Currently, DFO is organizing a Public Engagement Workshop for stakeholders to consider a Glass Sponge Reef and Rockfish Conservation Area (GSR-RCA) Alignment Project. Proposed changes are to amend already established fisheries closures (RCAs, GSR Marine Refuges, GSR Fisheries Closures) in Átl'ka7tsem/Howe Sound specifically to reduce public confusion on the water, improve compliance and enforcement, improve education and awareness for GSRs and RCAs, as well as several other objectives to refine management efficiency of current GSRs and RCAs.

These DFO conservation and protection efforts of the *Primnoa* coral and GSRs are timed to support Canada's Marine Conservation Target to conserve 25% of marine and coastal waters by 2025.

Time is of the essence, however, for the GSRs. Without immediate increase in enforcement, there is a **VERY HIGH RISK** of additional damage to the GSRs and a complete economic and ecological collapse of these valuable, healthy and productive GSRs. It is our duty as citizens of Canada to protect these reefs.

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