On the Right Track: but it is Time to Fully Protect BC's Sea of Glass

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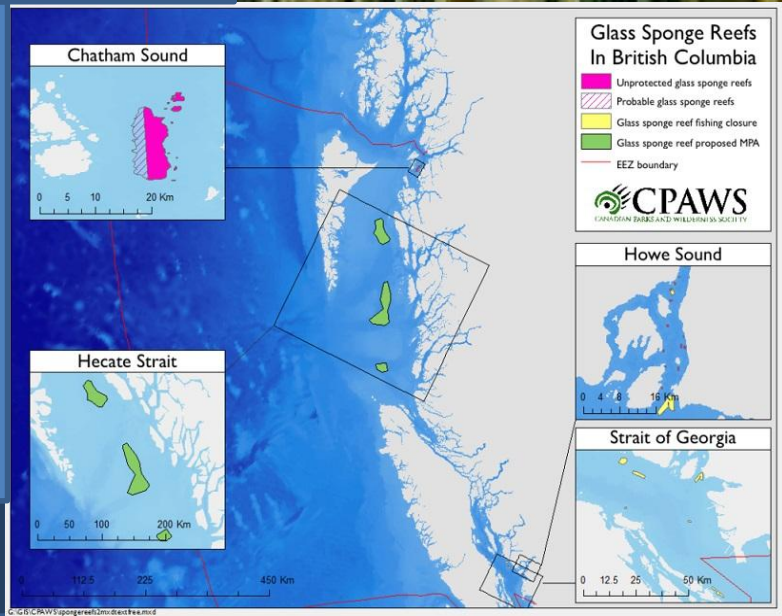
British Columbia's prehistoric glass sponge reefs are an international gem and house critical habitat for endangered rockfish species. Glass sponge reefs form unique benthic habitats with intrinsic ecological and economic value. These pre-historic structures are especially long-lived, but are very fragile to the slightest disturbance. Some reefs even began forming 9000 years ago after glaciers retreated from the continental shelf of western Canada, thus hold significant cultural and ecological value. Because glass sponges are able to communicate with electrical signals, the whole organism seizes feeding in response to mechanical injury and excessive siltation. Sponges do not recover easily from heavy disturbance, especially from fishing practices that involve prawn traps or bottom trawling. Research has shown that sponges do not recover from crushing of a large area even three years later (Kahnn *et al.* 2015). BC's sponge reefs need to get the full protection that they desperately need now, in order to minimize further detrimental harm.

"In my opinion, the immediate issue with prawn traps is that they can be thrown onto unprotected glass sponge reefs where they can cause a lot of damage. Close to home, in Howe Sound, there are several 'shallow' sponge reefs that are targeted by prawn fishers when the season opens" – Dr Isabelle Côté, Professor of Marine Ecology, March 6, 2017



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Recommendations

The final designation of the Hecate Strait and Queen Charlotte Sound sponge glass reef MPA that will **prohibit bottom contact fishing activities** is a great step in the right direction. However, with the Aichi Biodiversity Targets by 2020, further action is needed to fully protect glass sponge reefs in BC.

Action Items:

- **Protection of the newly discovered Howe Sound and Chatham Sound reefs from bottom contact fishing**
- **Educate recreational fishermen and users of marine areas on sponge reef protection and ensure compliance of fishing closures**
- **Offshore oil and gas exploration: Reroute cable around reefs, minimize cable movement across the surface of the reef at installation and routine operation, and assess potential damage to glass sponges prior to decommissioning**
- **Reduce anchor damage from fisheries and recreational boats by managing activities in MPA, and protecting other glass sponge reefs**

Prawn trap with glass sponge reef remnants attached on February 25, 2017 (DFO Pacific)

Conclusion

With the protection of the Hecate Strait and Queen Charlotte Sound reefs, it is time to take a step forward in ocean conservation and fully protect BC's sea of glass to include the Howe Sound and Chatham Sound sponge reefs. The value of these ecologically significant reefs can be protected by encouraging local engagement in indigenous and coastal communities to monitor the use of critical sponge reef habitat.

References

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