

Survival of Glass Houses in a War Zone

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The cloud sponge, *Aphrocallistes vastus*, is red listed by the BC Conservation Data Center. This species belongs to the class of 6 rayed glass sponges which are normally restricted to the deep sea. The shallow water occurrence of several species is unique to British Columbia and the Antarctic. However, their glass skeleton is very fragile and they are particularly vulnerable to physical impacts from traps, anchors, fishing lines and weights as well as directly from SCUBA divers. Most non-divers are not aware of the presence of these sponges or their vulnerability. The major project objectives were to increase awareness of these sponges, their life styles and their fragility; to identify where populations were present and absent, and to describe methods which would reduce impacts. The project was largely limited to Saanich Inlet with extrapolations to two other fjords with high volumes of fishers and divers. Divers built and deployed tie up buoys adjacent to popular sponge dive sites to eliminate the need for anchoring; divers also placed & photographed crab and prawn traps, fishing cannonballs, and SCUBA fins next to sponges to simulate the potential damage from this equipment; Divers and the author examined aspects of Cloud Sponge life style both in situ and in a laboratory system simulating the sponges habitat. This assessment includes growth and repair, recruitment, water pumping rates, response to sediment and to other organisms. Results, in part, are included in a brochure distributed to marinas, dive stores, and marine equipment stores on southern Vancouver Island; and on our web site.