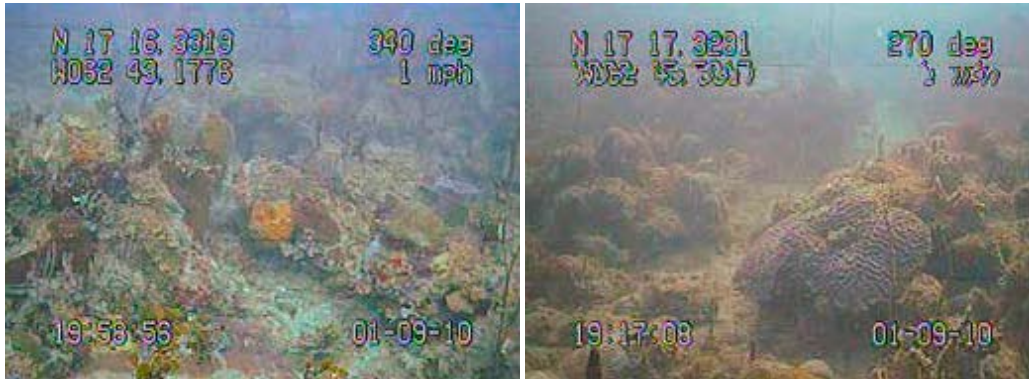


# APPENDIX B

## Key to the Benthic Habitats of St. Kitts and Nevis

## Key to the Benthic Habitats of St Kitts & Nevis

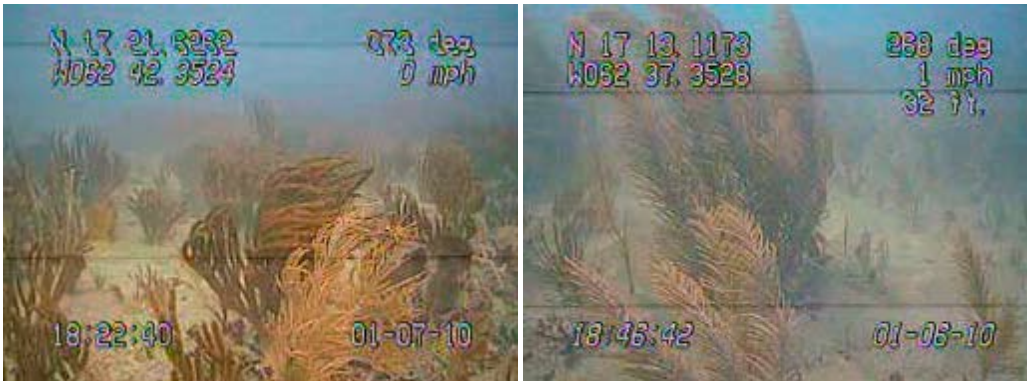
1. **Hard coral framework** – Moderately rugose frameworks with sparse coral cover (typically <10 %). Colonies are predominantly small (sub-meter) in size. The coral community is composed primarily of *Siderastrea*, *Montastrea*, *Diploria*, and *Colpophylia* spp.. Crustose coralline algae and fleshy algae (*Sargassum*, *Dictyota*) along with gorgonians dominate the remainder of substrate. This hard coral framework tends to form a semi-continuous barrier, broken by narrow sediment filled channels.



2. ***Acropora palmata* stumps** – Dense thickets of largely dead *Acropora palmata* interspersed with the occasional living colony of another hard coral species; predominantly either *Montastrea*, or *Siderastrea*. In deeper areas (< 5 m water depth) these stumps remain in an upright growth position and provide high habitat complexity. Shoreward, these corals are often displaced and mingle with rubble substrate. Narrow sand channels (1-2 m across bifurcate patches of this habitat).



3. **Flat gorgonian hardgrounds** – Hardgrounds with a thin layer of fine sediment exhibiting a dense gorgonian cover with sparse macro-algae (typically *Halimedia*, *Udotea* etc).

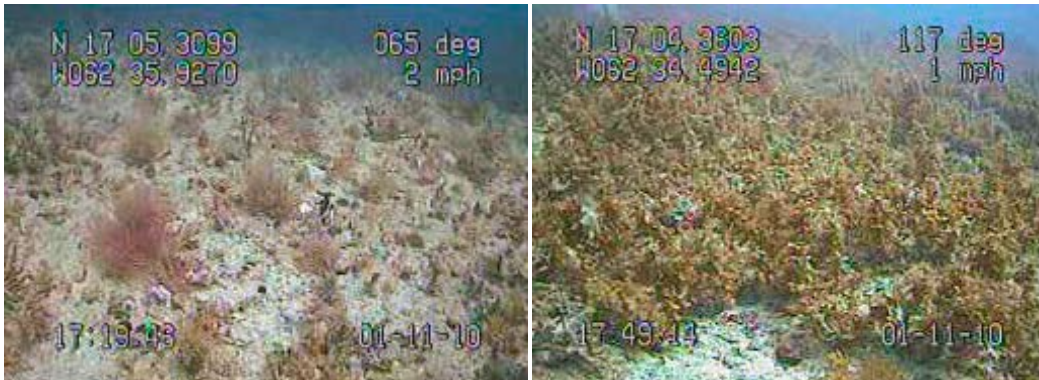


4. **Rugose gorgonian slope** - Dense gorgonian cover and sparse macro-algae (typically *Halimedia*, *Udotea* etc) found on the edge of carbonate frameworks. Patches of this habitat are often found spanning several meters in water depth.

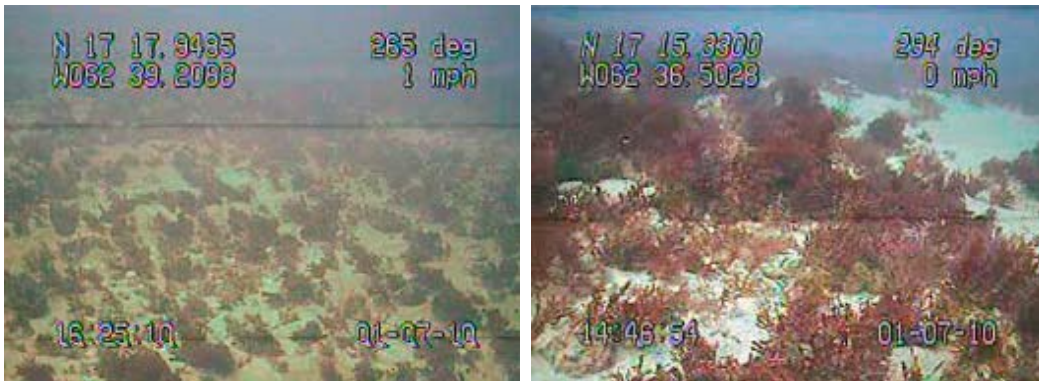




5. **Algal reef flat** - Consolidated hardgrounds with fine turf macro-algae and low lying fleshy macro-algae. This habitat is typically found in shallow environments (1-4 m water depth) atop carbonate frameworks.



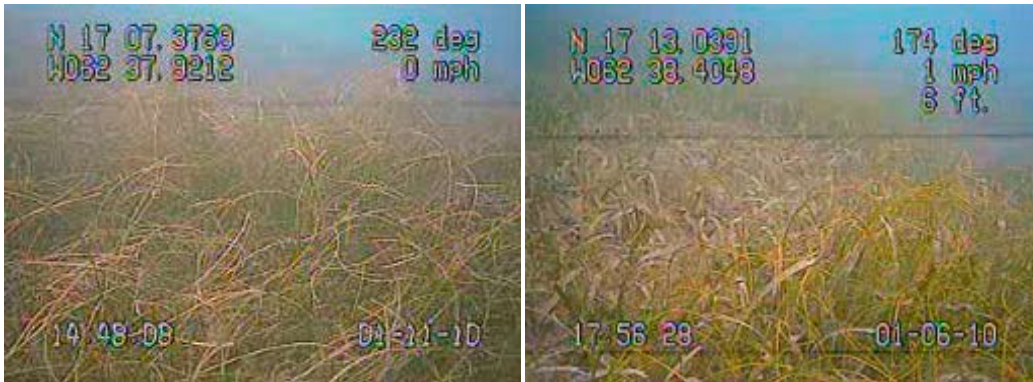
6. **Algal hardgrounds** – A dense macro-algae biota found atop low relief patches of hardground interspersed with mobile sediment. This habitat is either *Sargassum* sp. dominated, typically in the lee of carbonate frameworks and sediment channels, or *Halimeda* dominated on more exposed slopes south of the island of Nevis.



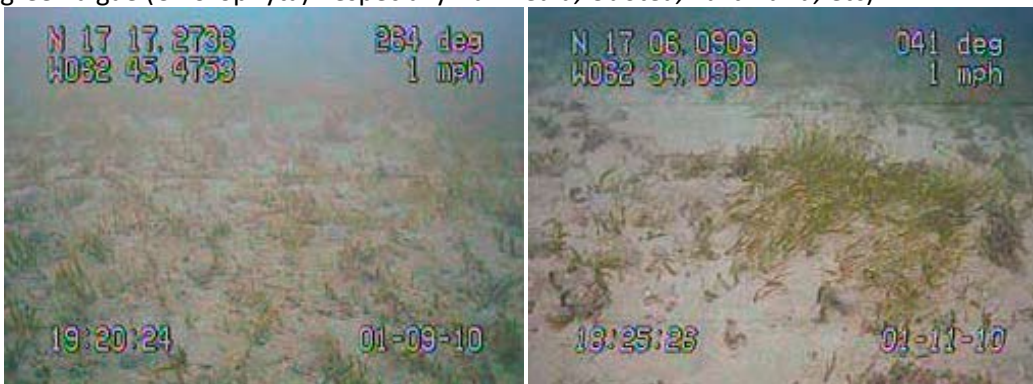
7. **Semi-consolidated rubble** – Skeletal rubble originating from reef structures and bonded by coralline algae to form a semi-consolidated framework with patchy macro algae. This habitat may also be found surrounding, or atop, carbonate frameworks.



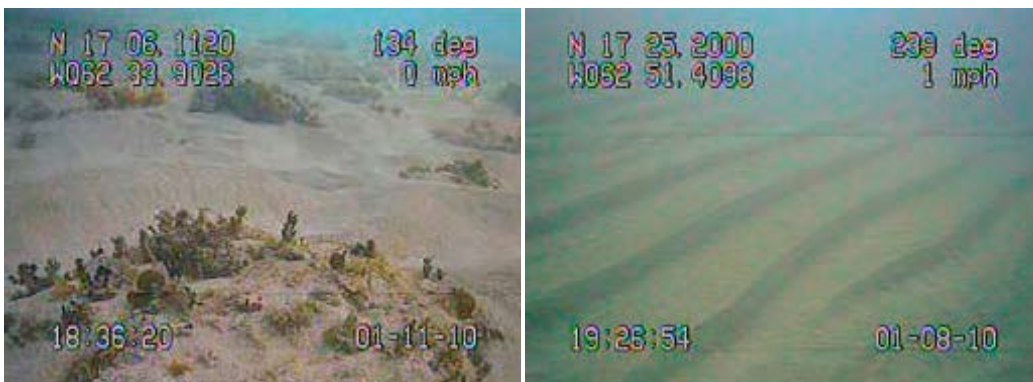
8. **Dense seagrass** – Sand sheets with a dense seagrass community (> 50% cover) dominated by *Thalassia testudinum*, and secondarily *Syringodium filiforme*. Associated with the grass are green algae (Chlorophyta) - especially *Halimedia*, *Udotea*, *Turbinaria*, etc).



9. **Sparse seagrass** – Sand sheets with a sparse seagrass community (< 50% cover), dominated by *Thalassia testudinum*, and secondarily *Syringodium filiforme*. Associated with the grass are green algae (Chlorophyta) - especially *Halimedia*, *Udotea*, *Turbinaria*, etc).

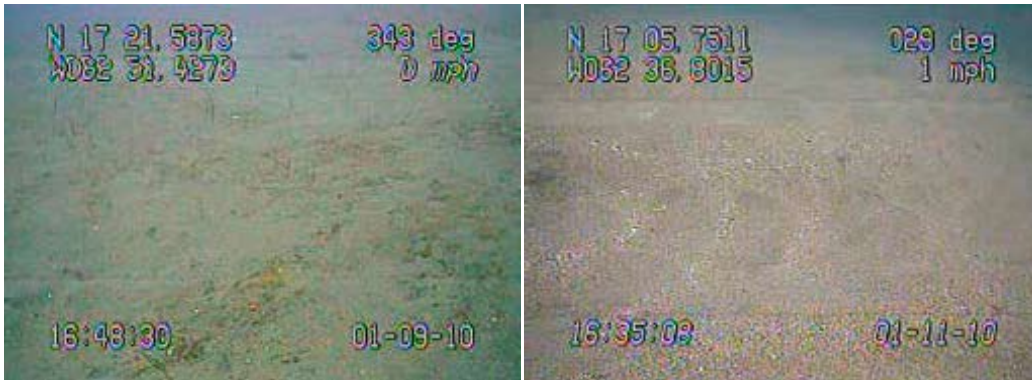


10. **Unconsolidated sand with algae** – Coarse, often rippled, sand sheets found in areas with higher energy flow along with small patches of *Halimedia* algae.





11. **Bare carbonate sand** – Expansive sand sheets encompass much of the benthic habitat. These are found across the whole of the mapped area, particularly to the leeward side of the barrier reef system, east of the islands, and extending at least to 30 m on the west coast.



12. **Lagoonal muds** – Enclosed muddy embayment. The salt water content of these areas varies with tidal fluctuations, with water typically percolating through the surrounding land matrix.