Photos of rocky intertidal locations along the Atlantic coast of Nova Scotia, Canada

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This paper shows pictures of 9 rocky intertidal locations spanning 415 km of the Atlantic coast of mainland Nova Scotia, Canada. These are wave-exposed locations, as they face the open ocean directly. A map indicating their position is provided in Fig. 1. Their geographic coordinates and basic ecological information appear in a paper that investigated benthic-pelagic coupling and bottom-up forcing on this coast (Scrosati & Ellrich 2018). All pictures were taken at low tide. The mesh scourers, substrate clearings, PVC plates, and temperature loggers shown in the subsequent pictures were established at the mid-to-high intertidal zone, previously having locally removed the pre-existing seaweeds and invertebrates from the rocky substrate.

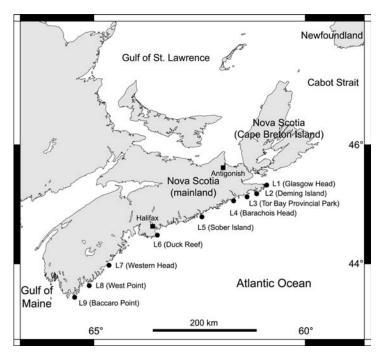


Fig. 1: Map indicating the position of the 9 rocky intertidal locations.



Fig. 2: Glasgow Head (L1). The mesh scourers shown in the picture were attached to the mid-to-high intertidal zone to measure mussel recruitment. A temperature logger is also shown attached to the substrate. The rocky substrate also had clearings to measure barnacle recruitment.



Fig. 3: Glasgow Head (L1). View in late April showing newly installed mussel recruit collectors (mesh scourers) and substrate clearings (10 cm x 10 cm) to measure barnacle recruitment.



Fig. 4: Glasgow Head (L1). View after the barnacle recruitment season, which spans May–June every year.

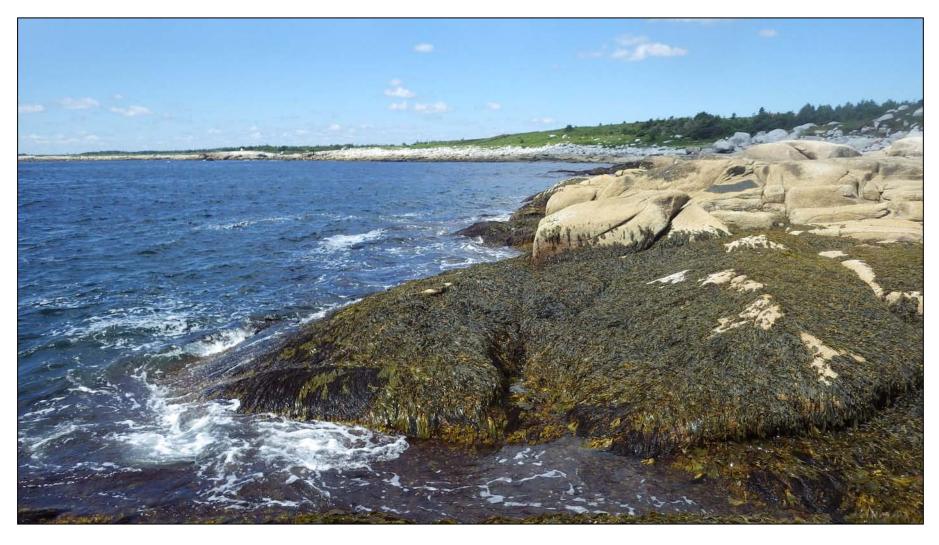


Fig. 5: Deming Island (L2). Typical view of the intertidal zone, normally covered by an abundant canopy of the seaweed *Fucus*.



Fig. 6: Deming Island (L2). View towards the sea, showing mussel recruit collectors and a temperature logger at the mid-to-high intertidal zone.



Fig. 7: Deming Island (L2). Unusual arrival of drift sea ice from the Gulf of St. Lawrence (3 April 2014).

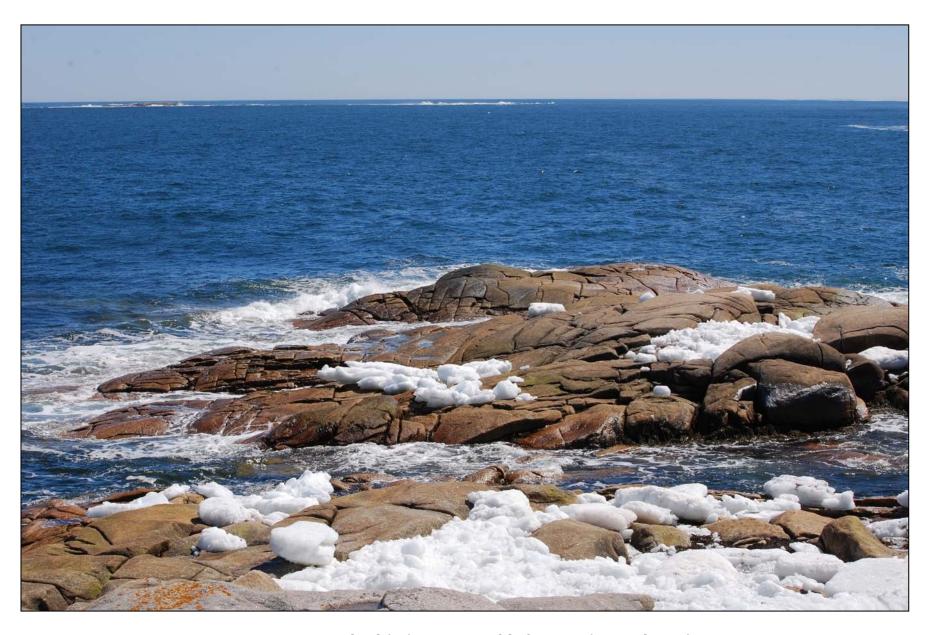


Fig. 8: Deming Island (L2). Remains of drift sea ice (10 April 2014).



Fig. 9: Deming Island (L2). Widespread disturbance caused by drift sea ice in early April (photo taken on 30 April 2014). The small PVC plates were attached to the mid-to-high intertidal zone.



Fig. 10: Deming Island (L2). Abundant *Fucus* canopy covering the intertidal zone on 12 April 2017. No drift sea ice had arrived to this shore since its last occurrence in April 2014.

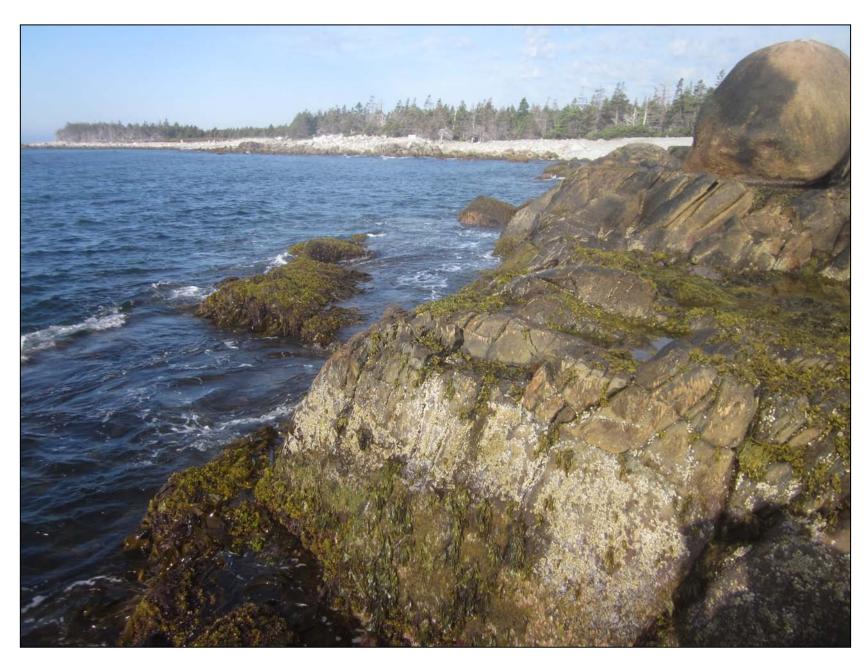


Fig. 11: Tor Bay Provincial Park (L3). Intertidal areas from the mainland.



Fig. 12: Tor Bay Provincial Park (L3). Intertidal areas from an island. A PVC plate covered with Safety-Walk tape (used to measure barnacle recruitment) appears attached to the mid-to-high intertidal zone.



Fig. 13: Tor Bay Provincial Park (L3). Wave approaching mainland intertidal areas.



Fig. 14: Tor Bay Provincial Park (L3). Wave hitting mainland intertidal areas.



Fig. 15: Barachois Head (L4). Mussel recruit collectors, substrate clearings to measure barnacle recruitment, and temperature logger at the mid-to-high intertidal zone.

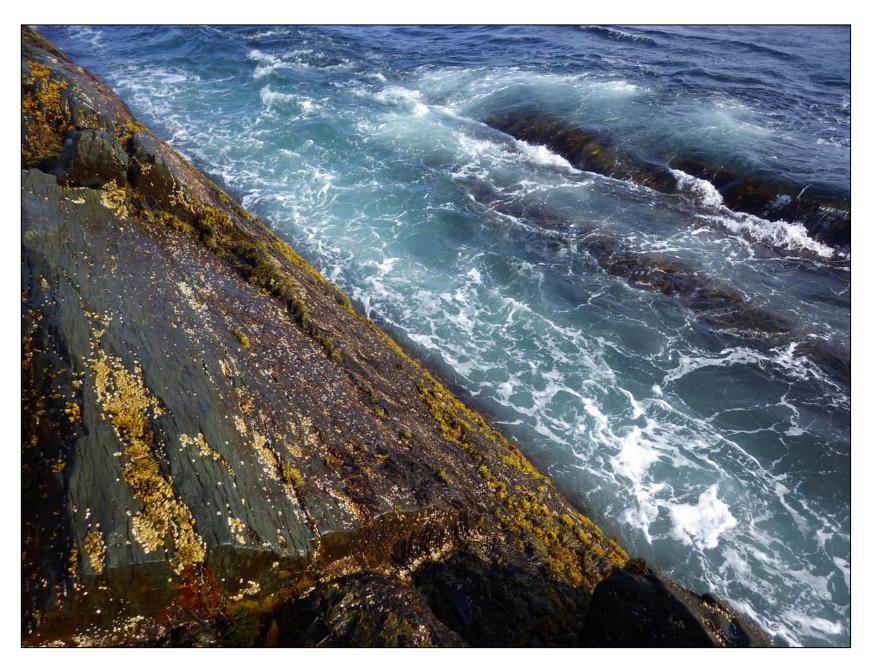


Fig. 16: Barachois Head (L4). Vertical intertidal gradient from high to low elevations.

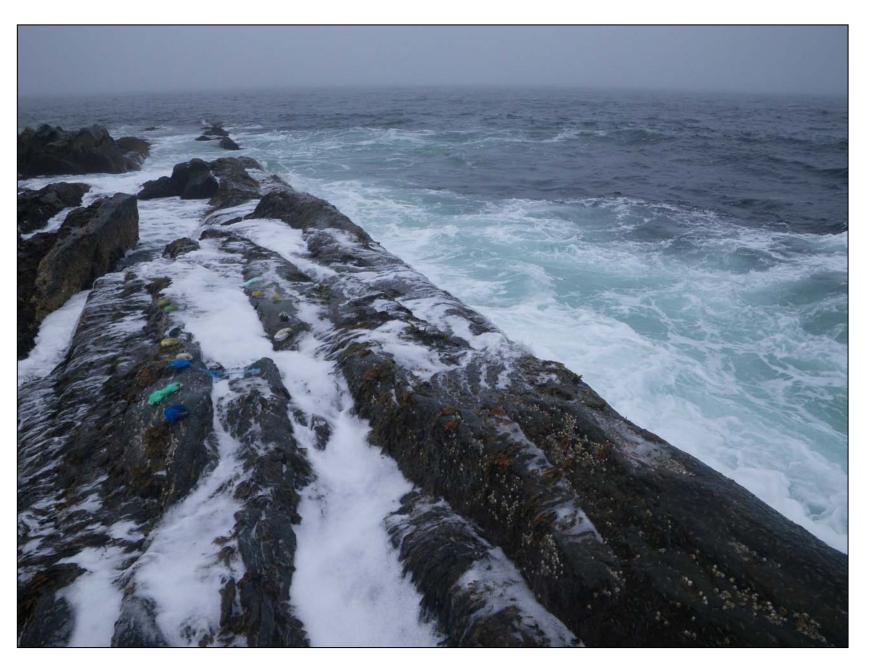


Fig. 17: Barachois Head (L4). Wavy conditions on the intertidal areas shown in Fig. 15.

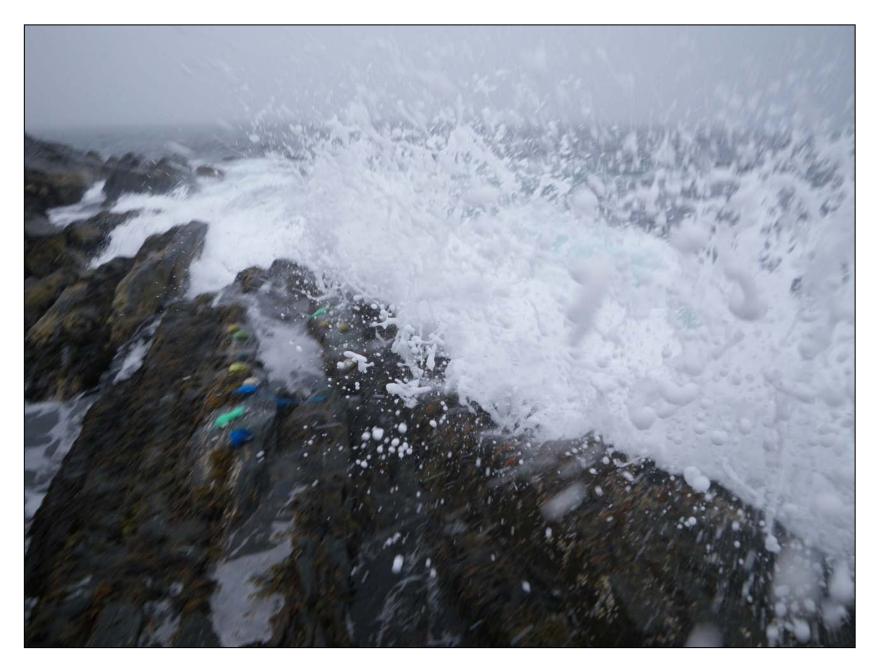


Fig. 18: Barachois Head (L4). Wave hitting the shore.



Fig. 19: Sober Island (L5).



Fig. 20: Sober Island (L5). Mussel recruit collectors, PVC plates with Safety-Walk tape to measure barnacle recruitment, and substrate clearings to measure barnacle recruitment established at the mid-to-high intertidal zone.



Fig. 21: Sober Island (L5). Mussel recruit collectors, PVC plates with Safety-Walk tape to measure barnacle recruitment, substrate clearings to measure barnacle recruitment, and temperature logger established at the mid-to-high intertidal zone.



Fig. 22: Duck Reef (L6).



Fig. 23: Duck Reef (L6).



Fig. 24: Duck Reef (L6).

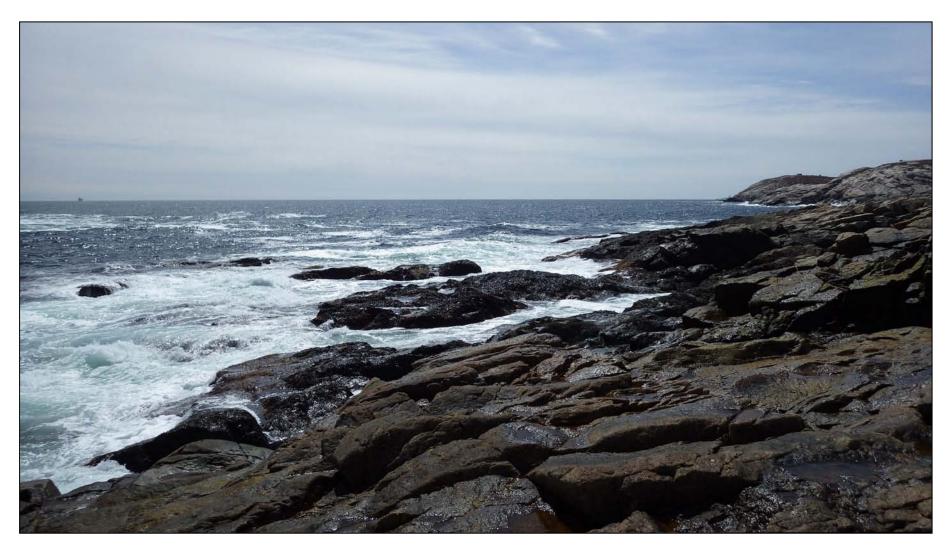


Fig. 25: Duck Reef (L6).



Fig. 26: Duck Reef (L6). Mussel recruit collectors, PVC plates with Safety-Walk tape to measure barnacle recruitment, substrate clearings to measure barnacle recruitment, and temperature logger established at the mid-to-high intertidal zone.

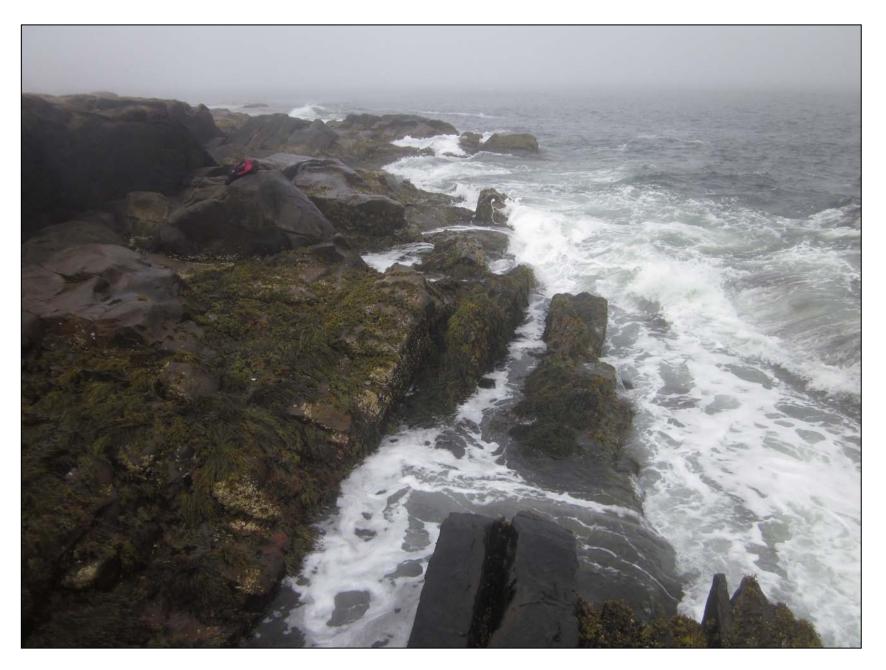


Fig. 27: Western Head (L7).

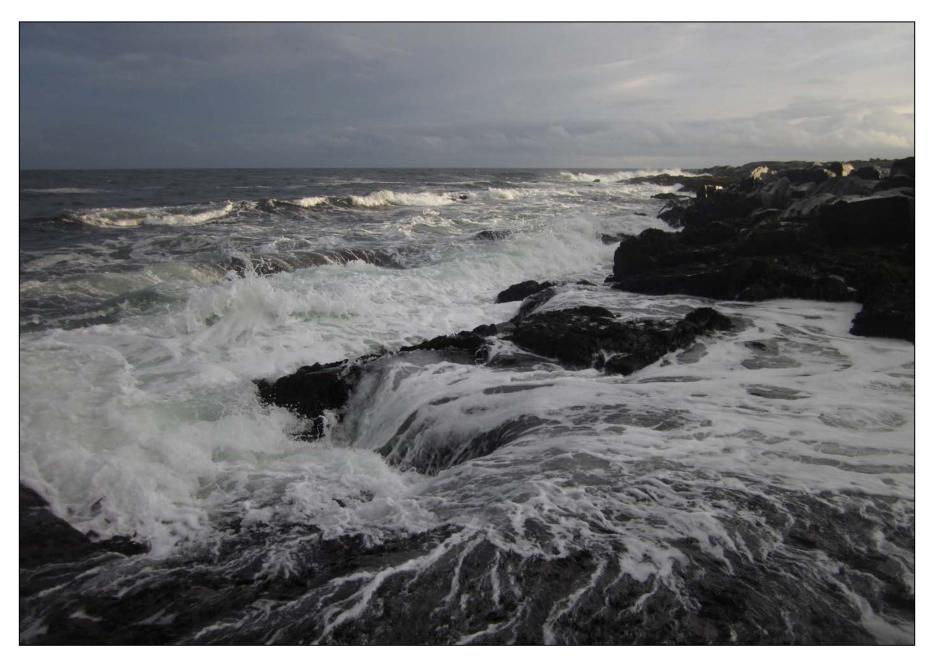


Fig. 28: Western Head (L7).



Fig. 29: Western Head (L7). J. Ellrich appears as reference.



Fig. 30: Western Head (L7). PVC plates with Safety-Walk tape and substrate clearings to measure barnacle recruitment established at the mid-to-high intertidal zone.



Fig. 31: West Point (L8). Mussel recruit collectors, PVC plates with Safety-Walk tape to measure barnacle recruitment, substrate clearings to measure barnacle recruitment, and temperature logger established at the mid-to-high intertidal zone.

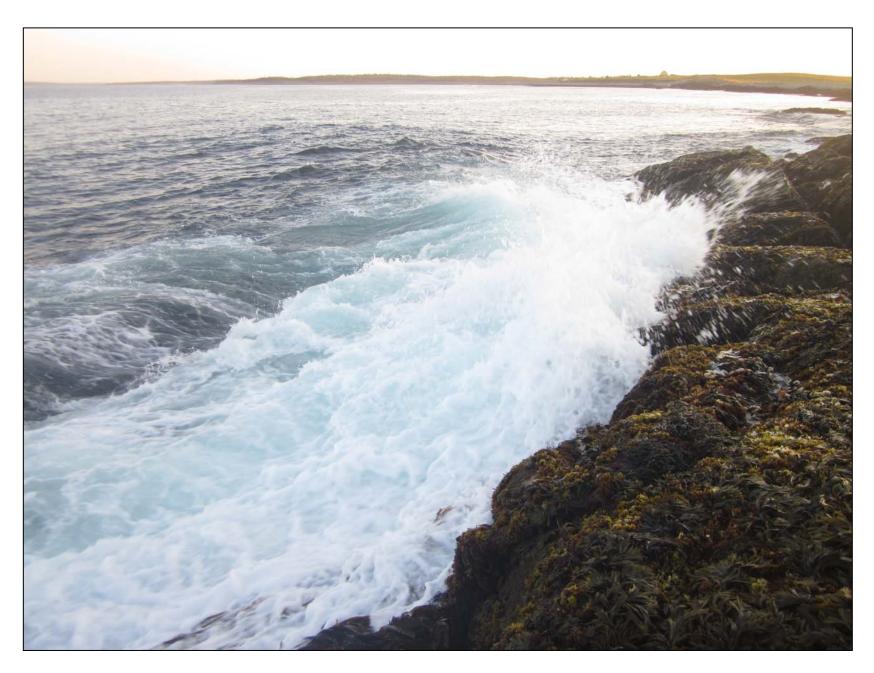


Fig. 32: West Point (L8). Wave hitting the shore.

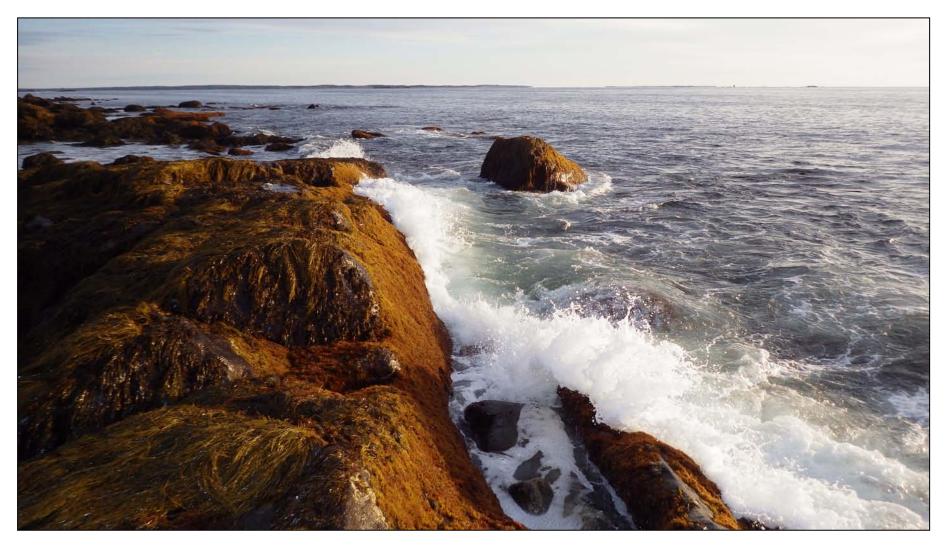


Fig. 33: Baccaro Point (L9).



Fig. 34: Baccaro Point (L9). Mussel recruit collectors seen at the mid-to-high intertidal zone.



Fig. 35: Baccaro Point (L9).

Reference

Scrosati, R. A. & J. A. Ellrich (2018) Benthic–pelagic coupling and bottom-up forcing in rocky intertidal communities along the Atlantic Canadian coast. *Ecosphere* 9 (5): article e02229. DOI: 10.1002/ecs2.222