I studied the distribution of two groups of beetles on Kent Island, the intertidal rove beetles and fungus beetles under the supervision of Nathaniel Wheelwright and Damon Gannon. My interest is in determining which species were present on the Kent Island and which areas they preferred. Neither group is particularly easy to catch or identify, so I had my work cut out for me. Rove beetles (Coleoptera; Staphylinidae) are one of the largest and most diverse beetle families. Several intertidal species occur in Eastern Canada. Fungus beetles (mainly families within the superfamilies Cucujoidea and Staphylinoidea) possess diverse life strategies and may not show up in general surveys due to their reclusive nature.

Trapping efforts for both groups occurred simultaneously based on a cycling trap collection method that covered all targeted environments within a given three-day period extending throughout the summer. I placed intertidal pitfall traps in sheltered cobble/sand areas (West beach), exposed cobble/bedrock areas (East beach), exposed sand/cobble/bedrock (North end), intertidal salt marsh (Wharf), and exposed bedrock/cobble areas (South end). Intertidal transects and hand collecting on wrack and carrion were used where possible. Fungus beetle pitfall traps were placed in an isolated forest remnant (South field), coastal forest (West Beach), white spruce/ mixed forest (near L transect), mountain ash forest/ grassland (petrel path), balsam fir marsh (L-transect), and balsam fir forest (L-transect). I used light intercept traps, berlese traps, malaise traps, beating sheets, fungus collection, and light traps to enhance my sampling regime. I am working with Chris Majka from the Nova Scotia Museum to identify the beetles. Preliminary results indicate that the highest densities of intertidal rove beetles occurred on the exposed sandy North beach, possibly due to the increased flight potential given by sand and gravel, and that fungus beetle densities are highest in the balsam fir forest at the north end of the island where many fungus species occur, possibly due to increased moisture and less exposure to salt spray.

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