

Maritime Link Lobster and Snow Crab Habitat Utilization Study

Executive Summary

September 8, 2026

What is this study about?

The Maritime Link includes two 250MW submarine power cables installed on the seafloor between Newfoundland and Nova Scotia. Fishers and regulators asked whether the cables, which create a magnetic field when electricity flows, could change how lobster and snow crab move. A long-term field study (2014–2024) tracked tagged crab and lobsters near the cable route to see if behavior changed before versus after installation and during normal operation.

How was it studied?

Scientists used underwater listening receivers in two areas: shallow lobster grounds near Point Aconi (12–20 m depth) and deeper snow crab grounds east of Ingonish (100–115 m depth) off of Cape Breton, Nova Scotia. Tagged animals (40 lobsters per year; 48–116 crabs per year) were released inside the detection arrays. Their positions were triangulated every few minutes to reconstruct movement paths across and around the cable corridor.

Key questions

- 1) Do animals hesitate or avoid crossing where the cables run?
- 2) Does more electricity (stronger magnetic field) change crossing success?
- 3) Do animals speed up or slow down within 5 m of the cables (the ‘zone of influence’)?

What did we find?

- (1) Lobster and snow crab crossed the cable route at similar rates before the cables were installed and after they were installed and operating.
 - (2) Crossing success did not change when the cables carried more or less power.
 - (3) Movement speeds within 5 m of the cables were similar to movement speeds farther away.
- Normal environmental factors—not the cables—explained movement: lobsters moved faster during the day and in warmer water; snow crab moved faster at night and in warmer water.

Bottom line

Across all years, no statistically significant behavioral effects of the Maritime Link cables were detected for American lobster or snow crab in the study areas. The cables did not act as a barrier or measurably change the movement of tagged animals.

Why it matters

These results respond directly to fishers' concerns and the project's environmental regulatory monitoring requirement. They indicate that, in these locations and depths, the operating cables are unlikely to affect lobster and snow crab movements. This finding is relevant to fisheries, regulators, and for High Voltage Direct Current (HVDC) submarine cable entities.