



Adapting Fisheries Management to a Changing Ecosystem
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Case Study 1

The collapse of snow crab: what happened and what now?

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ABSTRACT

Eastern Bering Sea snow crab abundance collapsed to historical lows in 2021 after reaching historical highs in 2018. Over 10 billion crab disappeared from the survey during this time. Two questions now dominate conversation around snow crab in management: “What happened?” and “What do we do now?” I will describe efforts to answer these questions including the construction of population dynamics models that estimate time-varying natural mortality, simulation studies to understand the estimability of variation in mortality, and attribution studies to identify potential drivers of the collapse. I will also describe the difficult decisions required to implement rebuilding plans and outline counter-intuitive consequences of climate-adaptation in management targets.