Dirty Deeds Done Down Deep
Using echolocation to study deep-sea predator-prey interactions

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The need for animals to eat and yet not be eaten place an adaptive premium on sensory and locomotory capabilities both to detect and subdue prey, and to detect and elude predators. But little is known about the temporal and spatial scales over which strikes of aquatic predators are effective compared to those over which prey can detect and escape predators, especially in the deep ocean. We have been using sound recording tags that eavesdrop on echolocation signals and the echoes from organisms to study the behavior of prey targeted by deep-diving whales. Results show that despite being an air-breathing endotherm 25x bigger than their prey, foraging is not a walk in the park for beaked whales.