

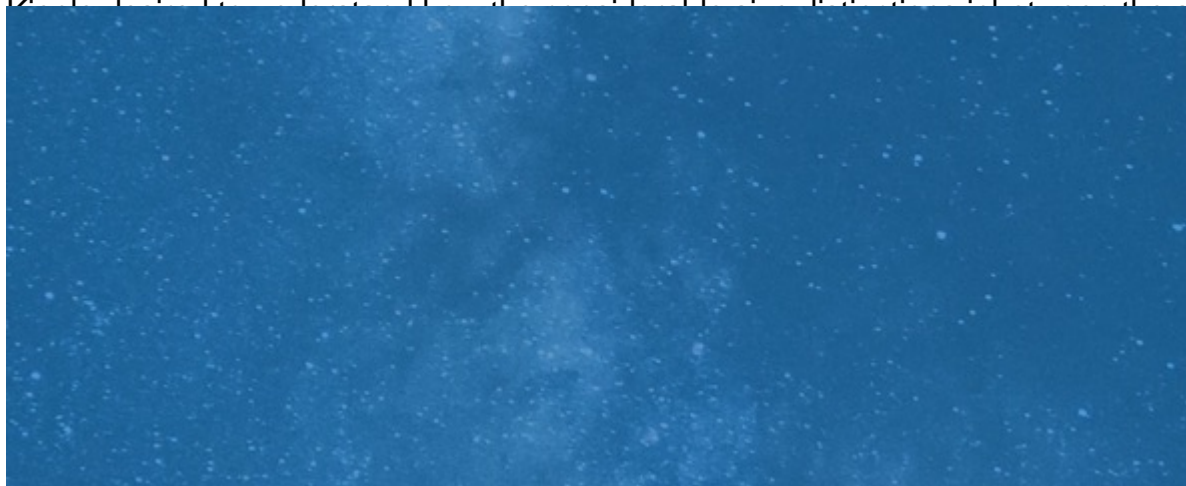
Male elephant seals goal to get substantial or die attempting

If you're a male northern elephant seal, your car-sized bulk is vital to your hereditary tradition, because just a portion of the really biggest males will have gainaccessto to mates. Now, researchers haveactually discovered that male elephant seals are so driven to consume and grow that they take on terrific individual danger and are much more mostlikely than women to passaway while foraging for food.

The findings, explained in the January *Royal Society Open Science*, expose a significant divide in how and where male and woman elephant seals primarily feed and how their various breeding techniques play a function in picking those areas.

Male and woman northern elephant seals (*Mirounga angustirostris*) appearance rather various from each other. Females can weigh hundreds of kgs, however males are genuinely enormous, growing 3 to 7 times as big as women. Despite these physical distinctions inbetween the sexes, much of the clinical researchstudy hasactually targeted simply women, states ecophysiologicalist Sarah Kienle at Baylor University in Waco, Texas.

Kienle and his team studied the feeding habits of male and female elephant seals in the North Pacific Ocean. The study found that male seals spend more time foraging in high-risk areas, such as near the coast, where they can gain access to mates. This behavior is driven by the need to grow large, as only the largest males are able to mate. The study also found that female seals spend more time foraging in lower-risk areas, such as in the open ocean, where they can avoid predators and conserve energy. The findings suggest that the sexes have evolved different foraging strategies to maximize their reproductive success.



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As part of a long-lasting, continuous tracking job of elephant seals at Año Nuevo State Park in California, Kienle and coworkers connected depth loggers and satellite and radio transmitters to more than 200 seals from 2006 to 2015. The scientists determined the seals' fat stores and utilized this info, along with the animals' area and depth information, to identify how and where they were foraging and how well their efforts transformed into blubbery heft.

The group discovered that the 2 sexes hunt for food in really various locations. Females invested most of their foraging time in the open ocean, diving deep for victim, while males stuck to shallower, nearshore environments, feeding constantly on victim on the continental rack. This assisted males collect 6 times as much mass, on typical, as women, gobbling up calories more than 4 times as quickly.

But there's a expense to that shallow hodgepodge. Males were 6 times as mostlikely as women to passaway while foraging, Kienle and her group discovered. It's a pattern that was evident even throughout information collection.

"I might have informed you that from simply putting out instruments on males, that it was a 50 percent possibility whether or not I was going to get that instrument back," Kienle states. "And that's not the case for women."

Why the males are passingaway at such a greater rate isn't clear, however Kienle thinks predation. Throughout the seals' variety in the North Pacific, whale and fantastic white sharks patrol nearshore waters.

The waters of the continental rack assistance more plankton, fish and other sea animals than muchdeeper waters, which in turn assistance starving seals and sea lions. It's a relationship observed by mammal-eating pinnacle predators too, states Andrew Trites, a zoologist at the University of British Columbia in Vancouver, who was not included with the researchstudy.

"That's where the supper bell is ringing all day long," he states.

The threat might be more than worth it to the males. Male and woman elephant seals both reach sexual maturity around age 3 to 4, Kienle states. But while women can have puppies every year or 2 for much of their 20-year life period, bulls live half that long on typical, and wear't usually reach their peak poundage till lateron in life. They then monopolize breeding gainaccessto to a group of women just if gigantic sufficient to daunt or battle off other bulls (*SN: 7/20/17*).

This divergence in reproductive plans appears to motivate 2 various feeding habits amongst the seals. Females are material to prevent the shallow buffet and the jaws of nearshore horrors, intending rather to consume enough to consistently back offspring over time. Males, ontheotherhand, search out the quicker development benefits however do so at an increased danger of death.

The males are “the supreme bettors,” Trites states. “If you’re a male, then you’re going to roll the dice. And it’s all or absolutelynothing duetothe factthat the reward is substantial.”

Source: [Male elephant seals goal to get substantial or die attempting.](#)