

Prizzly Bears

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By Christine Clisset Scientists ([From Slate.com](#))



Pizzly Bears When polar bears and grizzlies breed, they can produce fertile offspring. Why can't other species? By Christine Clisset Scientists confirmed last week that a bear shot by an Inuvialuit hunter in the Northwest Territories is a second generation grizzly-polar bear hybrid—a "pizzly" or "grolar" bear. Why can some interbreeding species produce fertile offspring, while others—like horses and donkeys—cannot? Because they have more recent common ancestry.

When geographical barriers—such as rising sea levels or retracting ice floes—separate populations, they may develop genetic, physiological, or behavioral differences; changes in chromosome structure or number; differently shaped genitalia; or incompatible mating times and rituals—any of which can prevent successful reproduction. Take horses and donkeys, which probably diverged about 2.4 million years ago. Horses have 64 chromosomes, while donkeys have 62, and when they mate, their open in browser PRO version Are you a developer? Try out the HTML to PDF API pdfcrowd.com Advertisement chromosomes don't pair up properly, inhibiting meiosis in their offspring. As a result, mules are sterile. Brown bears and polar bears, by contrast, evolved from the same ancestor only about 150,000 years ago—a relatively brief period—and have not developed significant genetic differences. The prevailing theory holds that polar bears diverged from brown bears at the end of the last ice age (the Pleistocene), when a population followed retreating ice northward. As they adapted to their new arctic home, the separated population lost the brown bear's hump and developed the polar bear's characteristic hair (which is actually clear), narrower shoulders, longer neck, smaller head, and partially webbed toes. Despite appearances, polar bears and grizzlies are still genetically quite similar. In fact, there are multiple instances of the two species successfully interbreeding in zoos. The reason grizzlies and polar bears rarely interbreed in the wild is that, generally speaking, they don't cross paths during mating season. Barren-ground grizzlies live primarily on land, where they feast on caribou and berries, and mate from May to July; meanwhile, polar bears mate from April to June while hunting for seals along the sea ice. But four years ago, a sports hunter shot a male grizzly-polar bear hybrid near Banks Island (just west of Victoria Island), proving that at least a couple of wild bears bridged their differences. The hybrid shot last month was the offspring of a female hybrid and male grizzly, bringing the total known wild hybrid count to three (counting the two dead bears and hybrid mother). It's possible there could be more out there. Some scientists are re-evaluating past sightings of bears that they assumed, at the time, were blonde grizzlies.