Bear love affair: Grizzly and polar–Interbreeding neighboring species played key role in evolution

In 2006, a hunter shot what he thought was a polar bear in the Northwest Territories of Canada. Closer examination, however, revealed brown patches on its white fur, uncharacteristically long claws and a slightly hunched back. The creature was in fact a hybrid, its mother a polar bear, its father a grizzly.

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But grizzlies and polar bears, as it turns out, have been mating since the species diverged hundreds of thousands of years ago. Polar bear genomes have retained mitochondrial DNA from ancient grizzly bears, and grizzlies have inherited genes from hybridizing with polar bears.

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Hybrids have generally been disqualified from protection by conservationists: Hybrids are thought to degrade the gene pools of their parent generations and pose a threat to biodiversity. [...] But preventing hybridization altogether can also have negative repercussions.

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[W]hen interbreeding between geographically neighboring species happens naturally, it can help species adapt to new threats. "When [hybridization is] a creative evolutionary force, conservation policies that retain that process are important and should come to the forefront," [Bradley Shaffer, an evolutionary biologist] said.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>Hybrids Play a Vital Role in Evolution</u>