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Science Literacy Warm

CLIMATE CHANGE AND PIZZLY BEARS

(6) Four years later, in 2010, David Kuptana, an Inuvialuit hunter killed what he thought was a polar bear on Victoria Island, near Nunavut. This bear also looked a little different from the standard polar bear so he had the bear's DNA tested. It turns out that the bear was the offspring of a pizzly mother and a grizzly bear father. This was the first solid evidence that pizzlies created in the wild could be fertile.

(7) Though the Arctic is not currently overrun with pizzlies, and in fact it would be quite extraordinary to find a living specimen, some scientists speculate that pizzlies might be more common in the future as grizzly bears begin encroaching more and more into the warming Arctic regions of the polar bear.

(8) Not only might climate change create more pizzlies, it might also promote the creation of other Arctic hybrids. Sightings of narwhale and beluga whale hybrids have been reported. Hooded seal and harp seal hybrids are possible. Bowhead whale and North Pacific right whale hybrids are already suspected to have been produced as the warming oceans have caused increased overlap in their territories. These hybrids and more might be a part of our future.

Article Questions

1) How is climate change threatening the availability of sea ice?

Climate change is causing the Arctic to warm. This rise in temperature increases the melting of sea ice in the summer and decreases the formation of sea ice in the summer. Overall there is less sea ice all year around. (1)

- 2) Explain two reasons why sea ice so important to a polar bear.
 - 1) They need the sea ice because they use it for rest spots between long swims. With less sea ice, more polar bears will drown. (1)
 - 2) They hunt for food on the sea ice and with less sea ice, they will have less food. (1)
- 3) What is a pizzly? What is another name for a pizzly?

It is the hybrid offspring of a polar bear and a grizzly bear. They have also been called grolar bears. (3)

4) What parts of a pizzly resemble that of a grizzly bear?

They have shorter snouts like a grizzly bear and also hunched backs and brown fur patches in certain areas like around the eyes, nose, legs and back. (5)

5) What proof is there that pizzlies can be made in the wild?

In 2006, Jim Martell , shot a pizzly in the Northwest Territories of Canada. Genetic testing proved that the pizzly was the offspring of a polar bear mother and a grizzly bear father. (5)

6) What proof is there that pizzlies can be fertile?

In 2010, David Kuptana, shot and killed a bear on Victoria Island that was later genetically tested and confirmed to be the offspring of a pizzly bear mother and a grizzly bear father. (6)

7) How might the changing climate be the cause of more wild pizzlies in the future?

The warming Arctic will make it possible for grizzly bears to expand their territory further north which will cause more grizzly bear and polar bear encounters. If these encounters don't result in aggression, they may result in mating which could increase the number of pizzlies in the future. (4 & 7)