

Drought; what can we do?**Part 2**

Northern Pintail is not the only species that is impacted by drought here in Alberta. The Beaverhill Bird Observatory, located an hour's drive east of Edmonton, is located beside Beaverhill Lake. Historically, this lake was 139km², and 145 species of birds have been found breeding there. In particular, Beaverhill Lake contained two islands important for nesting pelican and cormorants. These birds nest on the ground. By nesting on islands, they were safe from predators such as coyotes, that don't often swim to find their prey. Due to a multi-year drought, this huge water body completely dried up by 2005. The islands that provided protected nesting habitat for American White Pelicans and cormorants were lost.

Beaverhill Lake was not only important for nesting birds! Beaverhill Lake was internationally known for the Snow Goose Festival in April. When the lake was full of water, thousands of Snow Geese could be found at any one time on the vast open water of the lake. It provided what we call a staging ground; a site where thousands of shorebirds and waterfowl could stop during migration to find food before they continue on their journey. With the drying of the lake, that important habitat was lost. The thousands of shorebirds that relied on the mudflats, and the thousands of ducks and geese that depended on the shallow water, now had to disperse to other water bodies, which were also decreasing in size and number as well. Some species of shorebirds fly thousands of kilometers from their breeding grounds in the arctic to wintering grounds in the south. If they run out of places to stop and refuel, they will be in critical danger of becoming extinct. Up to 270 different species of birds have been recorded on or near Beaverhill Lake. The loss of this waterbody has huge ramifications for bird conservation.

Long Term Effects

Strangely enough, severe drought can eventually contribute to flooding as well! When the water table (level of water in the ground) is lowered for a long time, the soil can compress, and remove the spaces that formerly held water. When more water occurs in the area again, the soil can no longer hold as much water, and the excess must run along the surface, which promotes flooding. Unfortunately, flooding also negatively impacts many of our bird species.

What can we do?

One action you can take to slow climate change individually, with significant effect, is to reduce consumption of meat or become vegetarian or vegan. A study found that if all Americans were to replace beef with beans today, while not changing their consumption of other animal products, they could almost meet their national carbon emission reduction goals immediately. You can make a difference!

**Additional Reading:**

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