



Contributors

Leslie Smith: The world's largest mine-shaft canary

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LESLIE SMITH

THIS YEAR a single mother cannot raise her children in their home because it has been destroyed. It has not been destroyed by natural disaster or fire; it has melted away. This mother is a polar bear and like many other polar bears in the Arctic, her home has gradually been destroyed as more sea ice melts every summer and less sea ice freezes again in the winter. There has been a trend of a 3 percent decrease in sea ice each decade in the Arctic since 1978.

Polar bears are strong swimmers that can swim far into the open ocean but some have been found drowned in the Arctic Ocean because they could not find a piece of ice large enough to climb onto. Those that have made it to solid land are hard-pressed to find food and have been observed futilely hunting geese and caribou until they give up and instead raid a human village.

This decrease in habitat has been devastating to the polar bear, which may be the largest canary in the environmental mine shaft. This threat to the polar bears has been recognized by the Bush administration in recent days, as polar bears are slated to be listed as a "threatened" species under the Endangered Species Act.

We in Rhode Island are not that different from the polar bears in the Arctic. We, too, depend on the stability of the environment. Not unlike polar bears, human families who live close to the water may see a threat to the survival of their way of life as water levels continue to rise. Natural disasters such as hurricanes can make the threat all the more real and immediate.

Here in Rhode Island we have shown initiative, ingenuity and empathy regarding polar bears by giving them a safe and accommodating habitat and making them a symbol of our concern for species other than humankind. The recent passage of \$11 million in state bond money for major upgrades and improvements at Roger Williams Park Zoo includes a new world-class polar bear habitat nine times larger than the previous one. This attraction will serve as the center of the zoo's new North American Trail. These publicly endorsed upgrades are a strong statement of our support for high-quality facilities for animals removed from the wild. We need to protect and nurture our own habitat with the same care and attention.

I came here from North Carolina to attend the University of Rhode Island's internationally renowned Graduate School of Oceanography, and I was surprised to experience autumn weather that was very similar to the autumn I had known over 800 miles to the south.

While one autumn is not sufficient to make a final judgment, over the past 50 years, the average water temperature of Narragansett Bay has increased 2-5 degrees Fahrenheit. This may not seem like a lot but it has been enough to sometimes make Narragansett Bay a habitable environment for a large number of

such tropical fish as puffer fish, butterfly fish, and damsel fish This small temperature increase is also suspected to be a catalyst for the almost complete annihilation of the winter-flounder population in the Bay.

During the same period the average yearly air temperature of Providence has increased 2 degrees and the precipitation has increased 20 percent in many parts of the state. With the conservative projected temperature increase of another 4 degrees over the next 100 years, Rhode Island's average temperature would be similar to the average temperature of Baltimore today. In short, we are becoming a southern estuary in the north.

How are we affected? We are Rhode Islanders; many of us are dependent upon Narragansett Bay and its watershed. The state seal has the word "Hope" so appropriately placed on it. We are the "Lively Experiment." We can make a difference reducing the temperature rise. This involves more than just sending money to polar-bear organizations; it demands a change in lifestyle, attitude and policy. But every little bit helps.

For a start, you and your family can go see the new polar-bear exhibit at Roger Williams Park Zoo, once it has been completed, and ride a nice RIPTA bus to get there. We can save our giant canaries, the polar bears — our environmental barometers thousands of miles away — and in doing so we will save ourselves here in Rhode Island.

By putting a halt to these weather trends in the Arctic, we would prevent the disastrous impacts of global climate change already occurring in the Arctic from reaching us here in Rhode Island.

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