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## Polar bears' loss is science's loss

The Boston Globe

October 3, 2007

RE: "[ACTION in the Arctic](#)" (Op-ed, Oct. 1): Heartbreaking as it is that polar bears face extinction because of global warming, the medical dimensions of our loss of these magnificent animals are tragic as well, and almost never mentioned.

Like all denning bears, polar bears are largely immobile, and do not eat, drink, urinate, or defecate for five to seven months or longer, and yet they do not lose bone mass, starve, or die from lack of water or the build-up of urinary wastes. As nature's master recyclers, they have evolved unique physiological processes that have much to teach physicians about how to prevent and treat osteoporosis, malnutrition, dehydration, and kidney failure. Also, for reasons not well understood, polar bears do not develop type II diabetes when they become obese prior to denning. Obesity-associated diabetes of this type affects almost 16 million Americans.

Losing polar bears, and countless other organisms, because we are living unsustainably on this small planet not only damages ecosystems and impoverishes our lives aesthetically, emotionally, and spiritually. It deprives us of the life-giving medical secrets these organisms contain.

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