

Global warming brings gnawing uncertainty

Right around this time of year, when the mercury decamps to the far side of zero, the car won't start, and the trip from woodshead to woodstove starts to feel Sisyphean, a little global warming seems like not an altogether unpleasant idea.

"Warning" has positive connotations: think of warming up the car, warming food for supper, or a warming in relations between nuclear-armed adversaries. Good developments, all.

This may be partly why scientists have started to refer to "global climate change" instead of global warming. (That and the fact that not all parts of the globe are expected to warm.) But the word "change" doesn't set off any serious alarm bells, either. Change is inevitable, as people are wont to say, and the smart folks get with the program by accepting and working with it.

Among the many frightening aspects of global warming, one of the most immediate may be the lack of urgency in the name itself.

If we called it "global species extinction," for example, and there is plenty of evidence to support such a description, perhaps we'd feel more alarm. The globe is currently in the midst of the greatest mass extinction since the demise of the dinosaurs 65 million years ago. Here in New Hampshire and Vermont, the most at-risk ecosystem is that of our alpine

peaks, whose tundra-like vegetation has survived since the tail end of the Ice Age. As the region warms, hardwood forest will march up the mountainsides, engulfing the open summits. One victim of this habitat shift will be the Bicknell's thrush, 90 percent of whose breeding pairs require the rough, coniferous scrub that surrounds our highest peaks.

"Global acidification" is another candidate term, seeing as the majority of the globe is covered by water and our oceans are becoming increasingly acidic as they absorb carbon dioxide in the atmosphere. Some scientists forecast that, as a result, coral reefs will have ceased to function by the end of this century, disrupting the oceanic food chain. All our efforts to restore salmon and shad to the Connecticut River could end up being for naught if these fish find no food to eat in the ocean.

"Global souring" may not be an apt phrase, though "regional souring" could be. The sugar maple – the signature tree of Vermont and New Hampshire – is particularly vulnera-

ble to the effects of burning fossil fuel. Sugaring would not be possible without the sugar maple, and the

fossil fuel combustion, and a future without the sweetness of spring is entirely possible.

"Global pestilence" would certainly grab our attention, and not without reason. Lyme disease is the most obvious plague that is spreading north into the twin states on the heels of warming weather.

Less obvious are the pests of trees and food crops that have historically been barred from our region by the deep cold of winter. With this obstacle reduced, the composition of our fields and forests will be altered as new insects and diseases disrupt the historical balance.

Topping all these off, perhaps, is the possibility of "global hemispheric cooling." Yes, cooling. The Gulf Stream is part of the oceanic conveyor belt that delivers heat from the tropics to the higher latitudes. One engine in this system is the cold, dense, salty water that sinks in the North Atlantic as the Gulf Stream

reaches Iceland and the shores of Europe. The sinking water starts its long journey back to the tropics along the ocean floor while simultaneously pulling warmer, fresher water along the ocean's surface to

take its place.

Fresh water streaming into the Atlantic from Greenland and the thawing Arctic may provide sufficient less-dense water to shut this conveyor off, as last occurred during the melting of the continental glaciers. Should this happen, the Gulf Stream would no longer deliver warmth to the Northern hemisphere. Tropical temperatures would soar far beyond current predictions, while temperatures in Vermont and New Hampshire would fall far below historical averages for the past 500 to 1,000 years.

A half-century ago, the type of weather we experienced this past November – temperatures well above normal, T-shirt and shorts on occasion – would have been celebrated as an unexpected gift, a chance to finish those last few autumn chores, or extend the harvest of Brussels sprouts, or really fill the woodshead this time. But who could undertake such activities this past fall with the unbridled joy appropriate for such weather? Call it what you will, but at the very least, call it this: "global gnawing uncertainty."

Chuck Wooster is the associate editor of Northern Woodlands magazine in Corinth, VT. Illustration by Adelaide Tyrol. To respond to this article or suggest a future topic, contact the New Hampshire Charitable Foundation's Wellborn Ecology

