

Dr. Chad Gaffield  
President  
Royal Society of Canada

Dear Dr. Gaffield:

As a trained scientist who abandoned a career in genetics for journalism aimed at informing the public about the scientific enterprise, I am writing to you on an urgent matter.

“Foresight”, the ability to look ahead and to recognize dangers and opportunities based on experience and observation, has been one of the critical survival strategies of our species. The abstract concept of a “future” is a human creation that enabled us to realize that we can influence it by what we do in the present. Other species do prepare for the future but their actions are pre-programed or instinctive, not deliberate the way humans act.

Humanity has become a new kind of force on the planet that scientists acknowledge by defining the current epoch as the Anthropocene. Our numbers, technological prowess, consumptive demand and a globalized economy, are now the major factors that alter the physical, chemical and biological properties of the planet as no other species ever has. The work of scientists has become a critical part of the economy and politics but now, more than ever, in providing information on the state of the planet. Armed with supercomputers, scientists inform us on the catastrophic decline in biodiversity (especially insects), buildup of greenhouse gases, and their repercussions, a role that elders play in traditional societies.

Ever since the development of nuclear weapons, scientists have felt a responsibility that extends beyond research in the lab. As a journalist, I have observed the increasing outspokenness and urgent warnings of scientists since Rachel Carson's book, *Silent Spring* (1962). Despite the enormous power and opposition of the fossil fuel industry, climatologists like James Hansen and Michael Mann have been beacons of courage in speaking out.

By definition, intergovernmental reports are vetted by all countries. That means those countries with a vested interest in fossil fuels or biodiversity ensure the scientific facts are interpreted and projected in the most conservative way. The IPCC is the most authoritative source of information on climate change and it was shocking when it issued a Special Report in October, 2018 that concluded a temperature increase by 2100 of more than 1.5°C above pre-industrial levels will be catastrophic and called for a 45% decrease in emissions by 2030 and 100% by 2050. That report should have triggered an all-out effort to reduce emissions starting immediately. Instead, the urgency was completely lost under the flood of stories around Canada's legalization of marijuana the day after the report was released.

In May, 2019, when the UN issued a harrowing report on the catastrophic global decline in biodiversity with the possible imminent extinction of another million species, I expected an urgent call for a huge effort to halt the losses. Instead, the next day, Harry and Meghan had a baby and extirpated the issue of extinction from media coverage.

As a species, we are literally fiddling like Nero while the planet is burning. Scientists have never been more important in providing foresight on where the dangers lie and the path we must take to avoid catastrophe. Last week, the IPCC report issued a terrifying description of the state of the planet with a mere three years to cap and begin immediate and rapid reduction of the emissions that are causing the crisis. UN Secretary General, Antonio Guterres accused governments and corporations who claim they are playing their parts to avoid disaster of “lying” and pronounced “investing in new fossil fuels infrastructure is moral and economic madness”. Two days later, the Trudeau government which had already bought the Trans Mountain pipeline four years earlier, announced the approval of the Baie du Nord project to pump deep sea oil out of the Atlantic.

That was a slap in the face of scientists and future generations. The government is behaving as if science does not matter and can selectively quote or ignore it. In the name of politics and the economy, we are turning our backs on the survival strategy of our species which has been to look ahead, recognize the dangers and opportunities, then act by taking the safest path into the future. Science is the most critical part of this strategy today.

The Royal Society of Canada represents the outstanding members of the scientific community and must demand that governments elevate science above economics and politics. Already a few scientists are risking arrest to do that. The RSC must speak out and call on the entire scientific community to do so. The

interlinked twin crises of climate change and mass species extinction, which scientists have documented and warned of, represent a threat to the very survival of our species. Scientific information must supercede the corporate agenda of profit above all else and the political priority of re-election. More than at any other time in human history, science and scientists must be listened to. I stopped paying to remain a member of the Royal Society years ago because I didn't think that it was playing a meaningful role in society, but this is the moment when it must step up and exert its authority and importance.

If there is anything I, as a journalist can do to help, please don't hesitate to contact me.

Sincerely,

David Suzuki, scientist and grandfather