Scientists should look at their own carbon footprint

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Scientists studying the impact of climate change on the Arctic need to consider ways to reduce their own carbon footprints, says a researcher who regularly flies north to study the health of caribou.

In the June issue of *Arctic*, the journal of the University of Calgary's Arctic Institute of North America, postdoctoral fellow Ryan Brook calls on scientists to show leadership by examining and sharing ways to reduce the impact of working in polar regions.

"The importance of the research is not at question here. It is vital to our understanding of and adapting to climate change. But we need to think about better approaches," says Brook from the U of C's faculty of Veterinary Medicine.

"This is an issue for all scientists, though polar researchers often travel particularly long distances using commercial air travel. We also rely extensively on small aircraft, icebreakers, and snowmobiles, all of which produce large amounts of carbon. We know that carbon release by human activity is a key contributor to climate change."

Brook studies the health and anatomy of caribou herds in Nunavut and Northwest Territories. He collaborates with northern wildlife managers and is also involved in youth education. This work typically takes him north five or six times per year and when he calculated his own carbon footprint, he was not happy with the result.

"My research footprint is about the same as the annual footprint of an average Toronto resident. Basically, I have two footprints—my own personal life, which is moderate, and my research footprint."

Arctic research is a specialized field and the community of scientists who travel north is relatively small. Even if all scientists working in the north reduced their carbon emissions, it would not make a big impact on the global scale. For Brook, it's the optics that matter.

"The total footprint of all scientists is small, but it's important to critically evaluate how we can reduce our footprint from research activities. What are we doing in the best ways possible? Where can we improve? What do we need in order to improve? Let's start talking about this on a larger scale."

There are ways researchers can reduce the amount of carbon they use. Some helicopters use less fuel than others. Solar and wind power are alternatives to gas-fired generators. And while carbon offsets don't reduce the amount of carbon emitted, they are an easy first step.

"There aren't necessarily any easy answers, but we need to start talking about it," says Brook. "This is particularly important for the next generation of scientists being trained and I hope to see them become leaders in this issue."

Source: University of Calgary (news : web)

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