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Title: *Parasite-contaminant interactions within an Arctic seabird host*

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Marine birds are exposed to mercury through their diet, and mercury burdens have been linked with declines in condition and reproduction in this group of animals in the Arctic. Alongside mercury marine birds also carry a diverse community of endoparasites, which may also have negative impacts on host health. Under changing climatic conditions both mercury and parasites are predicted to increase in Arctic wildlife in the coming decades. It is unclear how these two types of burdens interact, and what the impacts may be, but as studies investigate how contaminants and parasites interact within a host it is becoming clear that these interactions are complicated. On one hand, a host that carries heavy metals and parasites may be negatively affected by both of these stressors. On the other hand, although parasites may affect host health, parasitic worms themselves are known to uptake heavy metals from within the digestive tract. In this case the parasites may act as a reservoir for heavy metals, effectively reducing exposure to the host. Since these parasite-contaminant interactions may be neutral, additive or antagonistic understanding these dynamics is important in predicting how changes in these two burdens will impact wildlife populations.

In Canada's north the common eider (*Somateria mollissima*) is widely distributed, an important hunt species, and is known to have varying levels of mercury and parasite loads. My ongoing PhD research uses the common eider as an avian model to investigate interactions between parasite-contaminant dynamics, and how these two burdens affect Arctic marine birds.