

Supplementary material for: Shively K.A., Divoky G., van der Laan A. & Robards M. 2026. Polar bear predation on barrier island bird colonies in Arctic Alaska increases with sea-ice decline. *Polar Research* 45. Correspondence: Kayla Shively, Wildlife Conservation Society, Arctic Beringia Program, 302 Cushman Street, Suite 203, Fairbanks, 99701 AK, USA. E-mail: kshively@wcs.org.

Supplementary Video S1. A polar bear preys on newly hatched black guillemot chicks occupying nests in wooden debris on Cooper Island, Alaska, in 2009, prior to the introduction of bear-resistant plastic nest cases in 2011. Video: G. Divoky
<https://www.youtube.com/watch?v=9bdqiQBKRm8>

Supplementary Video S2. A polar bear attempts to access a black guillemot nest in an experimental bear-resistant plastic nest case on Cooper Island in 2010, prior to broad deployment of nest cases. Video: G. Divoky
<https://zenodo.org/records/20600330>

Supplementary Video S3. A polar bear sow and large cub extract an adult black guillemot from a bear-resistant plastic case on Cooper Island in 2014. Video: G. Divoky.
<https://www.youtube.com/watch?v=c2EcCnvLnEQ>

Supplementary Video S4. A polar bear and large young repeatedly attempt to access a black guillemot nest within a plastic nest case in 2024, an example of the persistence and problem-solving behaviours polar bears are now exhibiting on Cooper Island. Video: G. Divoky
<https://zenodo.org/records/20600456>