Animal-borne video camera provides new insights into predator-prey interactions between the Adélie penguin *Pygoscelis adeliae* and the prey fish *Pagothenia borchgrevinki*

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Predation acts as a strong selective pressure on the behaviors of both predators and prey. However, the opportunity to observe predator-prey interactions in the wild is limited, especially for aquatic animals. Animal-borne video cameras (i.e., video loggers) would be a powerful tool to solve this problem. Here, we examined the animal-borne videos obtained from the Adélie penguin (*Pygoscelis adeliae*) that showed interactions with the prey fish (*Pagothenia borchgrevinki*) under Antarctic sea-ice. A video logger and an accelerometer were attached to eight penguins at Hukuro Cove colony, Antarctica, during December 2012 to January 2013. The videos showed that the penguins foraged on krill and small fishes, consistent with a previous study. While, one out of eight penguins targeted two large *P. borchgrevinki*. During these two predation events, the penguin pursued the prey five times. After correcting camera rotation and attach angle, it is suggested that the penguin did not swim toward the prey (i.e., tracking strategy) but rather toward the prey's future position or swimming path (i.e., interception strategy). We also found that *P. borchgrevinki* curls the body into a circle or a "C" shape in six out of nine captures. Based on these findings, we raise the following two hypotheses: 1) Adélie penguins can intercept the maneuvering prey, and 2) the prey fish *P. borchgrevinki* takes a curling posture to increase the likelihood of escape. Our observations reinforce the effectiveness of animal-borne videos in understanding predator-prey interactions in natural environments.