

Vision and its Relationship to Novel Behaviour in St. Lawrence River Greenland Sharks, *Somniosus microcephalus*

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Rarely observed Greenland Sharks, *Somniosus microcephalus*, were recorded at shallow depths by divers employing underwater video in the St. Lawrence River, in association with a seasonal concentration of Capelin (*Mallotus villosus*) in May-June 2003. We recorded unique proximity-induced display motor patterns in these sharks, which have not been recorded in underwater observations of Arctic Greenland Sharks. Arctic sharks have a high incidence of blindness due to an ocular copepod parasite, *Ommatokoita elongata*. The absence of parasite-induced blindness in St. Lawrence Greenland Sharks, in contrast to endemic blindness in the Arctic population, may allow sharks in this region to more readily visually recognize the presence of conspecifics and potential prey. Improved visual acuity may therefore allow St. Lawrence River sharks to express a different behavioural repertoire than Arctic sharks, with resulting changes in intra- and inter-specific aggression and predatory behaviour.

Key Words: Chondrichthyes, Squaliformes, Somnositidae, Greenland Shark, *Somniosus microcephalus*, display behaviour, copepod, *Ommatokoita elongata*.