

# The Wolves of Isle Royale

Phenomenal Image
Student Handout

## **WOLF AND MOOSE 1**



### **WOLF AND MOOSE 2**



### **WOLF AND MOOSE 3**



#### **BACKGROUND INFORMATION**

For almost 60 years, scientists have been examining the relationship between wolves and moose on Isle Royale National Park in the longest continuous predator-prey study in the world. Moose likely came to Isle Royale, an island about 580 square kilometers in size in Lake Superior, in the early 1900s by swimming from the mainland. Without any predators around, the population shot up and then crashed in 1934 as the moose depleted the food available to them on the island. A wolf population was established on the island in the late 1940s, probably after crossing an "ice bridge" from the mainland. In 1958, scientists started monitoring the cyclical rise and fall of moose and wolf numbers, with one population influencing the other, but also responding to other factors, such as disease, tick outbreaks, severe winters, and immigrant wolves. The wolf population grew to as many as 50 individuals in 1980, and 24 wolves lived on the island as recently as 2009.

The number of wolves has steadily declined since 2009. In recent winters, few wolves have immigrated to the island, resulting in higher rates of inbreeding and accompanying higher wolf mortality rates. Climate change has resulted in a steady reduction in ice cover over the Great Lakes. Currently, the wolf population is down to two individuals, making their local extinction likely. Without wolves, the already-large moose population is on track to double in the next few years. The moose are likely to repeat the pattern from the 1930s, decimating their diet of native vegetation. The National Park Service will soon decide whether to introduce 20 to 30 new wolves to the island.

	Outcome for Moose	Cost for Moose	Outcome for Wolves	Cost for Wolves
Ex. Moose escapes wolves.				