**Introduction to Our Case Study― Isle Royale**

*Background*

Ecosystems are often difficult to understand because they usually include interactions among so many species. Isle Royale is different. It is a relatively simple island ecosystem, located 24 km from the shore of Canada in Lake Superior.



While there are many types of small animals on the island, and almost 20 types of mammals, only two species of the mammals that live on the island are relatively large. These are the wolves and the moose. On this island, wolves are the only predator of moose, and moose are essentially the only food for wolves.

 

To understand nature it also helps to observe an ecosystem where human impact is limited. On Isle Royale, there are no towns and people do not hunt wolves or moose or cut the forest. It is a very rare place on the planet where wolves, their prey, and the plants that support the prey are all protected and left untouched by humans.

Isle Royale is remarkable, because nature runs wild there. Moreover, because the wolves and moose on Isle Royale are isolated from the mainland by the surrounding water, they are unable to leave.

Scientists have been taking measurements of the population of wolves and moose on the island since 1959. There was only one reported case of a single wolf migrating from mainland Canada in all the years since records were first kept. That single migration occurred in one extremely severe winter when the 24 km. of water between the island and the mainland froze over and the wolf walked across that ice shelf that winter to reach the island. The population changes we might observe therefore are not the mere wanderings of wolves and moose to or from the island.

Text and Images from *Wolves and Moose of Isle Royale*

(http://www.isleroyalewolf.org/)