The Lemmings of Norway: An Example of Balancing Populations by Flux

Lemmings are tiny rodents that live in the Arctic regions. Lemmings are what scientists call a “key species.” That means that a lot of what goes on in the lemmings’ ecosystem is linked to the size of their population. Animals like snowy owls and arctic foxes depend on lemmings for food, and how many babies they have depend on how many lemmings there are to eat.

Lemmings keep the ecosystem balanced through flux. Every three to four years, the numbers of the lemming population go through a cycle. During one part of the cycle, there are almost no lemmings anywhere. They have all died from starvation or been eaten.

One lemming can have as many as eleven babies, so even if there are only a few lemmings, their population size will grow. Over the next three years the size of the lemming population grows very quickly, and becomes enormous. After a female lemming is one month old, she can give birth to her first litter. So can all of her sisters and cousins. Can you imagine how many babies could be born after only one month?

After a few years, there are so many lemmings that they begin to fight. They fight for space, and vegetation – their main food source. Eventually there are so many of them that there isn’t enough food. Some starve to death, and some get eaten, but one species of lemmings in Norway just picks up and leaves. In a mass migration (moving from one home to another all at the same time) they leave, eating everything in their path. They swim across rivers to get to the other side and simply continue on. When they get to the ocean, it just looks like a very big river to them, so they start swimming. In fact, some lemmings have even been seen out in the ocean on floating ice. If you find Norway on a map, you’ll see that the nearest landmass off the coast of Norway is very far away. One tiny little lemming can’t swim that far, and many of them drown.