

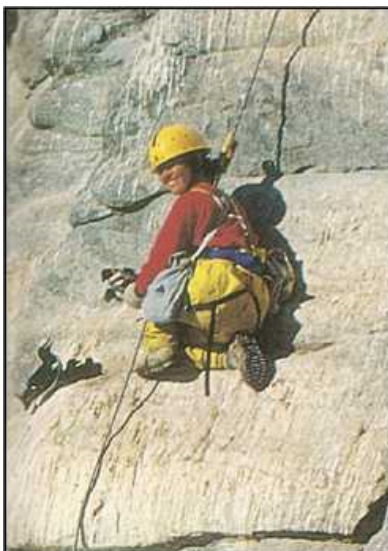


Grade 7 Science

Unit 2: Ecosystems



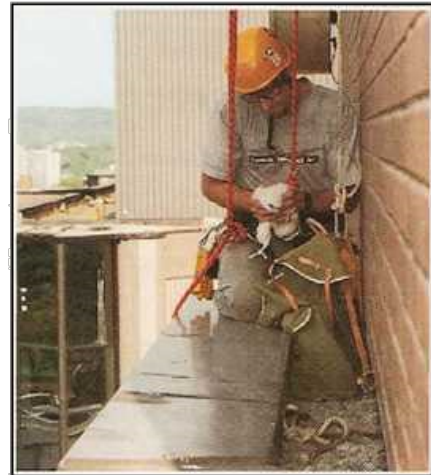
Interactions within Ecosystems



Even before these chicks learn how to fly, they dive off 15-storey-high cliff sides into the cold, dark water of Hudson Bay in Canada's North. This begins a two-month journey for the young, thick-billed murres, first swimming, and then flying, to Labrador where they spend their winters.

The scientist shown here is interested in learning about living things in their environment. In order to learn more about the lives of thick-billed murres, she has to band the chicks now, when they are easily caught because they have not yet learned to fly.

In the small photograph, peregrine falcon chicks are being placed in the nest of a pair of peregrine falcons that have not been able to produce their own young. Peregrine falcons were close to extinction in eastern Canada in the mid-1900s following the common use of the pesticide, DDT. Why? The use of this pesticide had some unfortunate side effects. One negative effect was that it caused the egg shells of many kinds of birds to become so thin and fragile that their chicks did not survive. DDT is no longer used in Canada. The ban on the use of DDT, and programs such as the one shown here, to help peregrine falcons achieve nesting success, are increasing the numbers of this majestic bird. Peregrine falcons are making a comeback and can be seen today nesting on tall buildings in Canadian cities. (Originally, peregrine falcons nested on cliff sides, but now they also use buildings for their nests — a human-made substitute.)



How do living things interact with one another? How do they interact with the non-living parts of their environment? How do we, as humans, fit in, and what should we do to ensure that Earth remains a planet full of life? These are topics you will explore in this unit.

Chain of Events

People have often thought about the impact of one tiny event on an entire chain of events. Sometimes the results can be surprising.

1. With a partner, read the following poem and discuss what it means. If you have any difficulty, invite other pairs of students to share their ideas.

*For want of a nail, the shoe was lost;
For want of a shoe, the horse was lost;
For want of a horse, the rider was lost;
For want of the rider, the battle was lost;
For want of the battle, the kingdom was lost.
And all from the want of a horseshoe nail.*

2. Relate the ideas in the poem to the world around you and to the ways that living and non-living things depend on each other.
3. Think about your "wants" — the basic things that you, as a living creature, must have in order to live. List the "wants" that are essential for your survival.
4. Make up your own chain of events starting with one small event. Include at least eight events in your chain. For example, you could start with the following event: there was no milk left when you went to have breakfast this morning, so...

Your homework for today is to complete your "For Want Of..." poem.