

Causes for Species Decline

The greatest cause of species decline is loss of habitat, or living space. Every organism needs a unique combination of food, water and living space if it is to survive and reproduce. If any one of these needed elements is lost, the organism leaves the area or dies. Since different species need different combinations of food, water and space it is a rare site that does not support some kind of organism.

Those organisms that are able to use the greatest variety of food, water and types of living spaces are called **generalists**. They tend to be widespread and numerous. Generalists are able to handle moderate changes in their environment.

Specialists are organisms that have very specific living requirements. They are often very successful at making use of something in their environment that other organisms do not or cannot use. Most specialists are found in very limited areas. Their numbers may be large where they are found but a loss of any part of their unique habitat causes a rapid decline in their population. Endangered species are usually specialists.

Where do humans come into this picture? Needless to say, humans are generalists. They eat many different kinds of food and live in many different kinds of habitat. Humans alter their environment in ways to make life more comfortable for themselves and to supply their own needs for food, water and living space. Prairies are cleared for farms that produce food. Forests are cut for wood products and additional living spaces. Rivers are dammed for water, flood control and the production of electricity. Wetlands are

drained for farmlands and the construction of roads and homes. Mountains are mined for their minerals. Humans are able to alter their environment more than any other organism. In doing so they produce even more habitat suitable for themselves.

All of these changes have impacts on the other organisms who share those spaces and get their food and water from them.

Often, in the process of creating more human habitat, humans alter the environment enough to eliminate the food, water or living spaces needed by other organisms to survive. We as humans have recently discovered that, for the environment to function properly, the activities of many other organisms are needed. Habitat destruction and pollution threaten the organisms that remove carbon dioxide from the air and supply the oxygen most organisms need to live.

Fortunately, it is not too late to start repairing the damage that has been done to the environment.

Knowledge is the key and each of us has our own part to play in protecting and restoring habitat to its former diversity. For more information on what you can do, please refer to the information on habitat management practices found elsewhere in this packet.

