

# [Acid rain effects on wildlife](https://assignbuster.com/acid-rain-effects-on-wildlife/)

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Name: Course: Instructor: Date: Acid rain effects on wildlife Acid rain is caused by sulfur and nitrogen oxide deposits, released in the air by fuel power plants and motor vehicles.

When nitrogen oxide and sulfur react with other elements in the atmosphere under humid temperatures, the transformations are transported many miles away before being deposited. Acid rain affects the soil, water and air pHs, which directly affect wildlife since the animals depend on these resources in their habitat. The effects vary depending on a specie’s tolerance to acidity caused by these deposits. One of the effects of acid rain on wildlife is that it leads to a decrease in reproduction. Acid rain affects the wildlife reproduction rate due to a reduced quality of food nutrients in plants and animals.

Acid rain causes a rise in acidity of soil, which changes the chemistry composition, therefore altering available mineral nutrients to plants. When plants receive poor mineral nutrients from the soil they lack some vital minerals and in turn increase other minerals that may harm the animals that consume them. Due to lack of some minerals like calcium, which mammals depend on for their fetus skeletal development, they end up losing most of their fetuses thus reproduction is decreased. In addition, lack of calcium causes the bird’s egg to be thin and porous leading to breakages during hatching process, which reduces their reproduction.

Another effect is that acid rain affects the quality and quantity of food for the wildlife. When the soil is affected by acid rain, it causes an alteration of nutrients, which affect the quality of plants. Plants need the correct minerals to develop and form all the nutrients that are needed for wildlife to survive. Therefore, when these minerals are not available in the right quantity the plants lack proper nutrients reducing their quality.

This in turn affects the development and growth of wildlife species causing them not to attain their maximum growth level. Poor soil minerals lead to the plants underdevelopment causing a reduction in the quantity and quality of food available to animals (Huang pg 271). The plants do not develop and produce leaves and fruits in plenty that are the source of food for herbivorous wildlife. Less quantity of food leads to poor growth and development of wildlife. Acid rain affects the food chain of wildlife. The food chain exists in the wildlife since some species feed on other species for their survival. When herbivorous animals feed on plants that lack nutrients and are underdeveloped they suffer from poor nutrition and underdevelopment. This affects the carnivores who feed on herbivores for their survival since the meat they consume also lacks vital nutrients.

This in turn affects the growth and development of the species that feed on the carnivores and herbivore after they die. Hence, the entire food chain is affected. In addition, the acid rain may cause the extinction of some species, which will disrupt the food chain. Since the species that feed on these particular extinct species will be forced to turn to other sources of food.

Acid rain affects the invertebrates found in the soils, which are responsible for decomposing forest litter hence the litter accumulates and makes the soil more acidic. This in turn diminishes the nutrients in plants, affecting the animals that feed on them. This leads to food chain disruptions when the plants can no longer grow due to an increase in acidity. The acid rain causes a decrease in wildlife reproduction due to poor nutrients. It also causes poor quality food to wildlife resulting to underdevelopment. The other effect is that it disrupts the wildlife food chain, which may lead to extinction of some species and lack of food for other species.

Work cited Huang, Herman. “ Studies of Acid Rain in the Eastern United States: a Review.” International Journal of Environmental Studies. 41, 1992: 267-275. Print.