Deserts and People

Cartoons often show deserts as huge stretches of sand, without any animals or plants. Few deserts match this simple picture. In fact, a wide variety of plants and animals have adapted to life in dry, desert conditions. But desert ecosystems are fragile. People can dangerously disrupt them.

People: Part of the Problem

When people move into desert areas, they often cause problems for native plants and animals. The four major deserts in the United States—the Chihuahuan, the Sonoran, the Mojave, and the Great Basin—bear witness to this fact. Each of these deserts faces problems brought on by development and recreational use.

The development of communities in and near desert areas requires heavy machinery to construct buildings, roads, and utility lines. Earthmovers and other heavy machines compact desert soil. They also destroy plants and animal habitats. The damage can have long-lasting effects. It is difficult for water to soak into compacted soil. As a result, rain washes away the soil. Plants have difficulty surviving. Their roots cannot push through the hard soil to reach underground water. Without plants to anchor the soil, wind carries it away.

People who move to desert communities bring pets and nonnative plants with them. The pets and plants compete with desert plants and animals for food and water. Homes and businesses also put extra pressure on limited water resources. New lawns and golf courses use underground water. As water levels drop, the roots of desert plants can no longer reach the water. When the plants die, native animals suffer because they lose important sources of food and shelter.



This aerial view shows new housing near a desert area.

Desert regions that become popular recreation areas also face problems. Like heavy machinery, off-road vehicles compact soil, kill animals, and crush plants and their roots. It can take a very long time for recreational areas to recover.

People: Part of the Solution

People and deserts can coexist. Pima County, Arizona, is an excellent example of a community with a plan. Their motto is "a vision for the future by conserving the past." Through its Sonoran Desert Conservation Plan, the county supports science-based conservation,



A wide variety of plants and animals have adapted to desert conditions.

planned land use, and laws that protect endangered plants and animals.

Development isn't forbidden in Pima County, but it is carefully controlled. Other desert communities would be wise to follow Pima's lead. Conservation and planned growth can help ensure that United States deserts don't become lifeless stretches of sand.