

GOBI DESERT

The Gobi Desert is a large desert or brushland region in East Asia. It covers parts of Northern and Northeastern China and of Southern Mongolia. The desert basins of the Gobi are bounded by the Altai Mountains and the grasslands and steppes of Mongolia on the north, by the Taklamakan Desert to the west, by the Hexi Corridor and Tibetan Plateau to the southwest and by the North China Plain to the southeast. The Gobi is notable in history as the location of several important cities along the Silk Road.

The Gobi is a rain shadow desert, formed by the Tibetan Plateau blocking precipitation from the Indian Ocean reaching the Gobi territory. It is the 6th largest desert in the world and the 2nd largest in Asia.

Gobi Desert



Length	1,500 km (930 mi)
Width	800 km (500 mi)
Area	1,295,000 km ² (500,000 sq mi)

Conservation, ecology, and economy

The Gobi Desert is the source of many important fossils finds, including the first dinosaur eggs, twenty-six of which, averaging 9 inches in length, were uncovered in 1923.

Despite the harsh conditions, these deserts and the surrounding regions sustain many animals, including black-tailed gazelles, marbled polecats, wild Bactrian camels, Mongolian wild ass and sandpipers. They are occasionally visited by snow leopards, Gobi bears, and wolves. Lizards are especially well-adapted to the climate of the Gobi Desert, with approximately 30 species distributed across its southern Mongolian border.^[10] The most common vegetation in the Gobi desert are shrubs adapted to drought.^[11] These shrubs included gray sparrow's saltwort, gray sagebrush, and low grasses such as needle grass and bridlegress. Due to livestock grazing, the amount of shrubs in the desert has decreased.

Several large nature reserves have been established in the Gobi, including Gobi Gurvansaikhan National Park, Great Gobi A and Great Gobi B Strictly Protected Area.

The area is vulnerable to trampling by livestock and off-road vehicles (effects from human intervention are greater in the eastern Gobi Desert, where rainfall is heavier and may sustain livestock). In Mongolia, grasslands have been degraded by goats, which are raised by nomadic herders as source of cashmere wool.

Large copper deposits are being mined by Rio Tinto Group. The mine was and remains controversial. There was significant opposition in Mongolia's parliament to the terms under which the mine will proceed, and some are calling for the terms to be renegotiated. Specifically, the contention revolves primarily around the question of whether negotiations were fair (Rio Tinto is far better resourced) and whether Rio Tinto will pay adequate taxes on the revenues it derives from the mine (an agreement was reached whereby the operation will be exempt from windfall tax).

Desertification

The Gobi Desert is expanding through desertification, most rapidly on the southern edge into China, which is seeing 3,600 km² (1,390 sq mi) of grassland overtaken every year. Dust storms have increased in frequency in the past 20 years, causing further damage to China's agriculture economy. However in some areas desertification has been slowed or reversed.

The northern and eastern boundaries between desert and grassland are constantly changing. This is mostly due to the climate conditions before the growing season, which influence the rate of evapotranspiration and subsequent plant growth.

The expansion of the Gobi is attributed mostly to human activities, locally driven by deforestation, overgrazing, and depletion of water resources, as well as to climate change.

China has tried various plans to slow the expansion of the desert, which have met with some success.^[17] The Three-North Shelter Forest Program (or "Green Great Wall") was a Chinese government tree-planting project begun in 1978 and set to continue through 2050. The goal of the program is to reverse desertification by planting aspen and other fast-growing trees on some 36.5 million hectares across some 551 counties in 12 provinces of northern China.

Ecoregions

The Gobi, broadly defined, can be divided into five distinct dry ecoregions, based on variations in climate and topography:

Eastern Gobi desert steppe, the easternmost of the Gobi ecoregions, covering an area of 281,800 km² (108,804 sq mi). It extends from the Inner Mongolian Plateau in China northward into Mongolia. It includes the Yin Mountains and many low-lying areas with salt pans and small ponds. It is bounded by the Mongolian-Manchurian grassland to the north, the Yellow River Plain to the southeast, and the Alashan Plateau semi-desert to the southeast and east.

Alashan Plateau semi-desert, lies west and southwest of the Eastern Gobi desert steppe. It consists of the desert basins and low mountains lying between the Gobi Altai range on the north, the Helan Mountains to the southeast, and the Qilian Mountains and northeastern portion of the Tibetan Plateau on the southwest.

Gobi Lakes Valley desert steppe, ecoregion lies north of Alashan Plateau semi-desert, between the Gobi Altai range to the south and the Khangai Mountains to the north.

Dzungarian Basin semi-desert, includes the desert basin lying between the Altai mountains on the north and the Tian Shan range on the south. It includes the northern portion of China's Xinjiang province and extends into the southeastern corner of Mongolia. The Alashan Plateau semi-desert lies to the east, and the Emin Valley steppe to the west, on the China-Kazakhstan border.

Tian Shan range, separates the Dzungarian Basin semi-desert from the Taklamakan Desert, which is a low, sandy desert basin surrounded by the high mountain ranges of the Tibetan Plateau to the south and the Pamirs to the west. The Taklamakan Desert ecoregion includes the Desert of Lop.