

Mediterranean scrub

Human impact

Over-pasturing

One of the main causes for the drying of the soil is excess pasturing. It occurs when the pressure of the pasturing activity on an area exceeds what that area can bear. The soil, deprived of its vegetal covering, is more sensitive to atmospheric agents. As a consequence, it dries up in the summer and is washed away by winter rains. Unfortunately, people often resort to fire as a quick way to obtain pasturelands. This involves the deterioration of the garrigue and steppe Mediterranean scrub areas.

Desertification

Desertification is a process of degradation with regressive alterations of the water cycle, of the fertility of the soil and of the biodiversity of ecosystems. In Mediterranean scrub areas, especially in the Mediterranean basin, deep economical and social changes have been taking place since the Fifties which led to leave the countryside, to change the use of the soil, to increase the demand for water and to urbanise rural and coastal areas. These territorial exploitation phenomena have increased the gravity of erosive processes and degradation and desertification risks. In particular, deforestation and the loss of the vegetal covering cause the soil to lose much of its ability to retain water, so this impoverished soil is no longer productive.

Fires

In these regions, where the summer climate is dry and parched, fires are frequent and natural; fires may be caused by spontaneous combustion or by a flash of lightning of a summer storm.

Because of the many fires, the vegetation contains many fire-resistant plants, such as cork oaks, or plants whose germination is even promoted by fires (pyrophitic plants, such as, for instance, plants of the genus *Tuberaria*) or plants that quickly recover after fires, such as holm-oaks. Animals have also adjusted to live in different habitats and can quickly repopulate recently burnt areas.

Nevertheless, fires are becoming more and more frequent because of man's presence. Fires caused by man can be arsons (purposefully set fires) or caused by carelessness (a lit cigarette thrown away, a bonfire not completely extinguished, etc.). Fires destroy entire woodlands and are dangerous to men and animals.

In Italy, there are thousands of fires every year: a total of 8,595 fires took place in 2000, which covered a total surface of 114,648 hectares, 58,234 of which were woodlands; over the last ten years, 700,000 hectares of woodland have been damaged by fires (with a peak of 115,000 hectares in 1993).