

TITLE: Middle Atlas - Morocco

LOCATION/Geography:



CONSERVATION IMPORTANCE

An estimated 13,000 endemic flowering plants, makes the Mediterranean region the second richest area in plant endemism in the world, after the tropical Andes.

The Middle Atlas mountains of central Morocco still host the best standing examples of the very endangered "North African mountain conifer forests" ecoregion. The endemic cedar (*Cedrus atlantica*) and the western Mediterranean holm oak (*Quercus ballota*) characterise the majority of the forest ecosystems. The dominant canopy tree species of the mountain conifer forests is the endemic Atlas cedar (*Cedrus atlantica*), which normally constitute mixed stands with the evergreen holm oak (*Quercus ilex subsp. ballota*) and less frequently with deciduous oak species (*Quercus faginea*, *Q. canariensis*). It is estimated that the Middle Atlas cedar forests extend over 100,000 hectares. A number of rare and endemic mammals are still present in these conifer forests, including the threatened barbary macaque (*Macaca sylvanus*), and the last individuals of barbary leopard (*Panthera pardus subsp. panthera*). Other species include the Maghrebian wild cat (*Felis libyca*), the red fox (*Vulpes vulpes*), the common jackal (*Canis aureus*), the Algerian hedgehog (*Erinaceus algirus*), the wild boar (*Sus scrofa*) and the Polecat ferret (*Mustela putorius*).

PROBLEM/THREAT:

A quarter of Morocco's forests –a million hectares– vanished between 1940 and 1982. It is estimated that Morocco continues to face the loss of about 40,000 hectares of forests each year, or 1.5% of the remaining total natural forest cover of the country. The increasing human pressure in the rural mountain areas of Morocco, where a new sedentary social organisation has disrupted the traditional transhumance societies, has far exceeded the carrying capacity of the forest ecosystems, especially through overgrazing, uncontrolled logging, and irrational and devastating tree pruning.

In spite of this, the Middle Atlas forests still play a vital role for ensuring livelihoods of rural communities. Rural population density is higher than the urban one (145 persons/km²), leading to an enormous pressure on the natural resources. A large part of the rural population is poor, and depends on forests as their major fuel source. Firewood provides in many cases 80 % of the rural energy. Forests are also an important source of livestock feeding, and other non-timber products (cork, honey, medicines, nuts, fruit collection).

WWF's ACTION

Under the project "Green Belts against Desertification" WWF's Mediterranean office has begun a reconnaissance phase in the landscape in the Middle Atlas to gather biological and socio-economic data, including data on major threats to the landscape. The objectives of the Green Belts landscape work in the Middle Atlas are currently: 1. to establish an efficient ecological network as a functional landscape which will serve as the basis for biodiversity conservation and sustainable management of its natural and cultural resources in the long term. 2. to build long term partnerships with all relevant actors in the region in order to generate a common vision for the biodiversity in the Green Landscape and put in place a collaboration framework in order to implement the Action Plan. This work will include forest protection, management and restoration work.

A workshop on Forest Landscape Restoration was held in May 2003 in Ifrane (Morocco), co-hosted by the Department of Water and Forests, UNDP, the University Al Akhawayn and WWF. It brought together representatives of universities and research institutions, NGOs, government and private sector, from development, conservation and policy-making backgrounds to share experiences and identify opportunities to engage in Forest Landscape Restoration in the countries of Morocco, Tunisia and Algeria, and promote co-operation among them and other neighbouring Mediterranean countries (Portugal, Spain, France and Italy).

Key next steps include the development of a full blown action plan and proposal for FLR in the Middle Atlas in order to build up on the existing "Green Belts Against Desertification" work in the Middle Atlas and also follow up on some of the more "high level" priorities across the region (linked to capacity building, training, policy work).



Photo: © WWF / S. Mansourian