

## 2250 \*Coastal dunes with *Juniperus* spp.

Management of Natura 2000 habitats. Summary



Coastal dunes with *Juniperus oxycedrus macrocarpa* in Policoro, Italy. Photo: S.Picchi

Coastal dunes with junipers occur on the coasts of Southern and Western Europe. This rare and beautiful habitat features sparse junipers that are prostrate or erect depending on wind action and the adverse conditions typical of sand dunes.

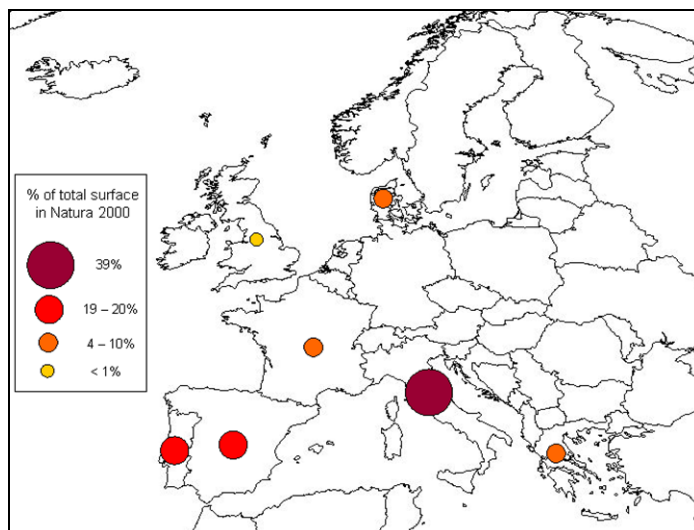
Nowadays this habitat is under threat from factors such as urban development, tourism, forest fires, alien species, coastal erosion, grazing and browsing, habitat fragmentation, polluted sea spray and nutrient deposition. When in good condition, the habitat is part of a succession of other habitats situated seaward.

The good ecological quality of juniper dunes therefore depends on the presence of habitats of embryonic shifting dunes and so-called white dunes, which help to stabilise the sand, thereby creating a more stable substratum inland that is suitable for juniper formations. From a management point of view, therefore, this habitat should be regarded as one part of dune systems that need to be managed as a whole.

Where habitat status is good and not under any threat, non intervention is the best choice. However, recurring management is often necessary owing to its unfavourable conservation status in many sites. The main recurring management measures consist of eradication of invasive plants, fire prevention, shrub clearance and controlled grazing. Alien trees or shrubs should only be removed if they are damaging the habitat. Removing plant roots can have negative impacts on the habitat. The vegetation should be removed from the site as soon as possible after felling/cutting or be left in piles in order to minimise the fertilisation effect.

Fire prevention is a response to one of the most damaging threats to habitat, and costs less than extinguishing fires and recovering habitat. It should include surveillance, making and maintaining firebreaks and preventive actions in neighbouring areas, as well as public awareness actions.

In Central and Northern Europe shrub clearance and controlled grazing are crucial since the habitat's natural successional trend is always towards climax woodland. Recovery interventions on degraded dunes with junipers take time since juniper cultivation is difficult due to its low germination rates and slow sapling growth. When rapid re-colonisation is needed, it is better to use other species associated with juniper habitat so as to create better conditions for natural propagation. Only where natural regeneration is not possible should planting be considered. As failure to take into consideration the importance and rarity of coastal juniper dunes jeopardises the habitat, it is also important to raise awareness among local people.



Percentage distribution of the total surface of Coastal dunes with *Juniperus* spp. in Natura 2000

The complete text of the document is available at: [http://ec.europa.eu/environment/nature/natura2000/management/best\\_practice\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/management/best_practice_en.htm)

Management of Natura 2000 habitats is a project launched by the European Commission in January 2007 aimed at defining best practices for management of habitat types included in Annex I of the Habitat Directive (92/43/EEC) that need active recurring management. Twenty six habitat types that are representative of different bio-geographical regions have been considered.