



Informationen zur Umwelt und für Naturreisende auf Kreta:
Information about the Environment and for travellers in Crete:

Crete vegetation on the peninsula of Akrotiri Remarks to Phrygana (Garrigue)



The peninsula of Akrotiri lies northeast of Chania and shields the Souda Bay against the open sea. The airport Chania is located at the peninsula as well as the village Stavros with the cable car of Zorbas the Greek, and a NATO restricted area. Especially the monasteries (and caves) are worth seeing on the peninsula; therefore see our leaflets No. 038-04/E and 042-04/E. The peninsula consists of Dolomites, limestone's and marble of the Tripali formation. The geological age is 200-174 million years; therefore see also our leaflets No. 054-04/E, 081-05/E and 082-05/E of the [CRETE EnvironmentInfo](http://www.kreta-umweltforum.de) at http://www.kreta-umweltforum.de/NLUK_en.htm.



The formerly natural forest vegetation in Crete was destroyed by deforestation during antiquity. The small shrub society resulting from the degradation of natural vegetation and the ongoing human impact (such as burning and grazing) prevent regeneration today.



The term Phrygana comes from the geo botanical literature. Plant sociologically defines the term Phrygana best as social class of the Eastern *Cistro*-dwarf shrub-heath. Floristic the Phrygana differs from the related formations by the emergence of Eastern-Mediterranean and the recede of the Western-Mediterranean species. Characteristically for the physiognomy of the Phrygana is the prevalence of xeromorph dwarf shrubs with hemispherical- or almost spherical growth. However, the hemisphere form of many shrubs is not their natural growth habit, but a result of cattle browsing, which is also responsible for some incomplete population of vegetation.

Phrygana-landscape on Akrotiri Pictures: U. Kluge (11.07.2003)

The predominant soil type on the Akrotiri peninsula is a flat base-Rendzina. The following brief description of the Phrygana is certainly very incomplete, given that at the time of the excursion many herbs were already dried up and shrubs and sub shrubs dominate. Who would like to learn more detail about the vegetation of Crete (and the peninsula of Akrotiri) here the reference to a vade-mecum with approx 370 registered and specific species in Crete at www.pollichia-kaiserslautern.de/anderes/listen/kreta200.htm.

The **shrub layer** is mainly determined by: *Olea europaea* (olive tree), *Ceratonia siliqua* (carob tree), *Pistacia lentiscus* (pistachio), *Cistus incanus* subsp. *creticus* (cistus), *Genista acanthoclada* (gorse), *Rhamnus oleoides* (buckthorn) und *Acacia saligna* (acacia). In addition grow in the shrub layer: *Calicotome villosa* (thorny broom), *Sarcopoterium spinosum* (thorny saxifrage), *Prasium maius* and *Phagnalon graecum*. **Herbs** found are: *Ballota acetabulosa* (black horehound), *Valantia hispida*, *Biscutella didyma*, *Tordylium apulum*, *Urginea maritima* (squill), *Rha-*

gadiolus stellatus, *Silene colorata* (coloured toadflax), *Galactites tomentosa* (milk thistle), *Bryonia cretica* and *Ricotia cretica* (as endemic) sowie *Dracunculus vulgaris* (bog arum). **Grasses** to be named are: *Briza maxima* (large quaking grass), *Lagurus ovatus* and *Melica minuta*. As representative of typical Chasmphyten within the cleft vegetation are primarily the endemic species to be named: *Ebenus creticus*, *Achillea cretica*, *Galium fruticosum*, *Campanula tubulosa* and *Petromarula pinnata* and *Verbascum arcturus*. In addition join *Galium graecum* (Greek cleaver), *Rosularia serrata*, *Umbilicus rupestris*, *Helichrysum graecum* (Greek strawflower), *Ceterach officinarium* and *Parietaria judaica*. Species of clover (Fabaceae) and chicory (Asteraceae) complement this range of plant array in several species, as well as the not as cleft plants to be seen species such as *Hypericum empetrifolium* and species from the family of Lamiaceae.

Representative of shrub society



Broom (*Genista acanthoclada*)



Cistus (*Cistus incanus* subsp. *creticus*)



Large quaking grass (*Briza maxima*)

Herbs



(*Biscutella didyma*)



(*Silene colorata*)



(*Bryonia cretica*)

Pflanzen der Felsspaltenvegetation



Archillea cretica



(*Umbilicus rupestris*)



(*Parietaria judaica*)



(*Rosularia serrata*)