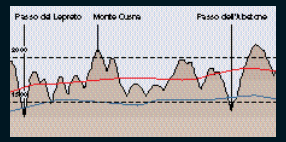
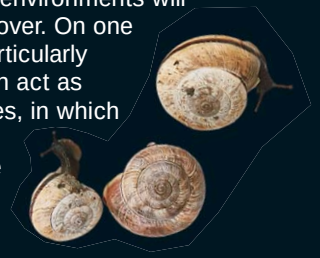
The main feature of nival environments is that they are covered by snow for long periods during the year. This fact greatly influences not only the lives of the animals and plants which live in these realms of snow and ice, but also some morphogenetic processes typical of high mountains. Biodiversity in places which are under snow and ice for months on end - or even permanently - is low, mainly due to the very low average temperature. But the organisms which live in these harsh habitats have developed exceptional adaptations to resist cold, and to hide or camouflage themselves in a white environment with few natural hiding-places.



Unfortunately, on both planetary and regional scales, the latest climatic models predict considerable changes in the future, which will involve the snow cover in Alpine areas above the treeline.

Predictions are that these environments will lose much of their snow cover. On one hand, this makes them particularly interesting, in that they can act as genuine natural laboratories, in which to verify *in vivo* the effects of climatic changes on the distribution of living organisms.



On the other hand, the idea of writing a volume describing these snowy places was also inspired by scientific considerations connected with conservation: as global warming continues, the extraordinary biological patrimony of these high regions will inevitably be exposed to the risk of extinction.

9 788888 192215

ITALIAN HABITATS

10

Realms of snow and ice

ITALIAN HABITATS

10

Realms of snow and ice

Ministero dell'Ambiente e della Tutela del Territorio
Museo Friulano di Storia Naturale