



# Mountains

Mountains are places with cool summers and harsh, snowy winters. They are places where only the specially adapted can survive.

High mountains experience long, cold, snowy winters and short, wet, cloudy summers. Not only is the weather harsh, but soils are thin and stony and have little nourishment in them.

## Mountain plants

Few plants can survive such conditions. Some of those that are adapted to cope with the cold and wind are called alpenes. Most alpenes are perennials. Few annual plants grow on mountains – it takes many years of slow, determined growth for a plant just to get big enough to flower (Picture 1). Alpenes are small, woody

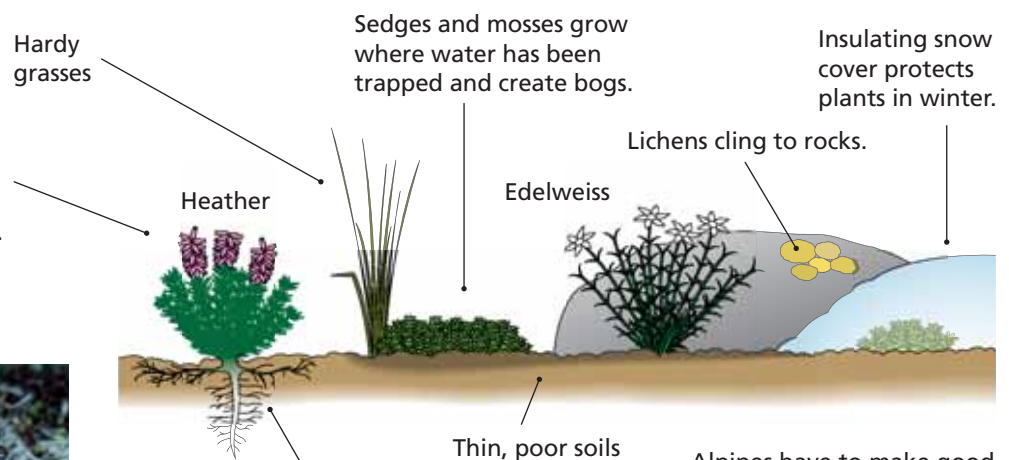
perennial plants that hug the ground, or shelter between boulders, growing just a little each year in the brief summer.

## Mountain animals

Because mountain plants are scarce and grow slowly, there is not much food for animals on a mountain. Each animal needs a large **TERRITORY** in which to search for food (Picture 2). A single golden eagle, for example, needs a territory of 200 square kilometres!

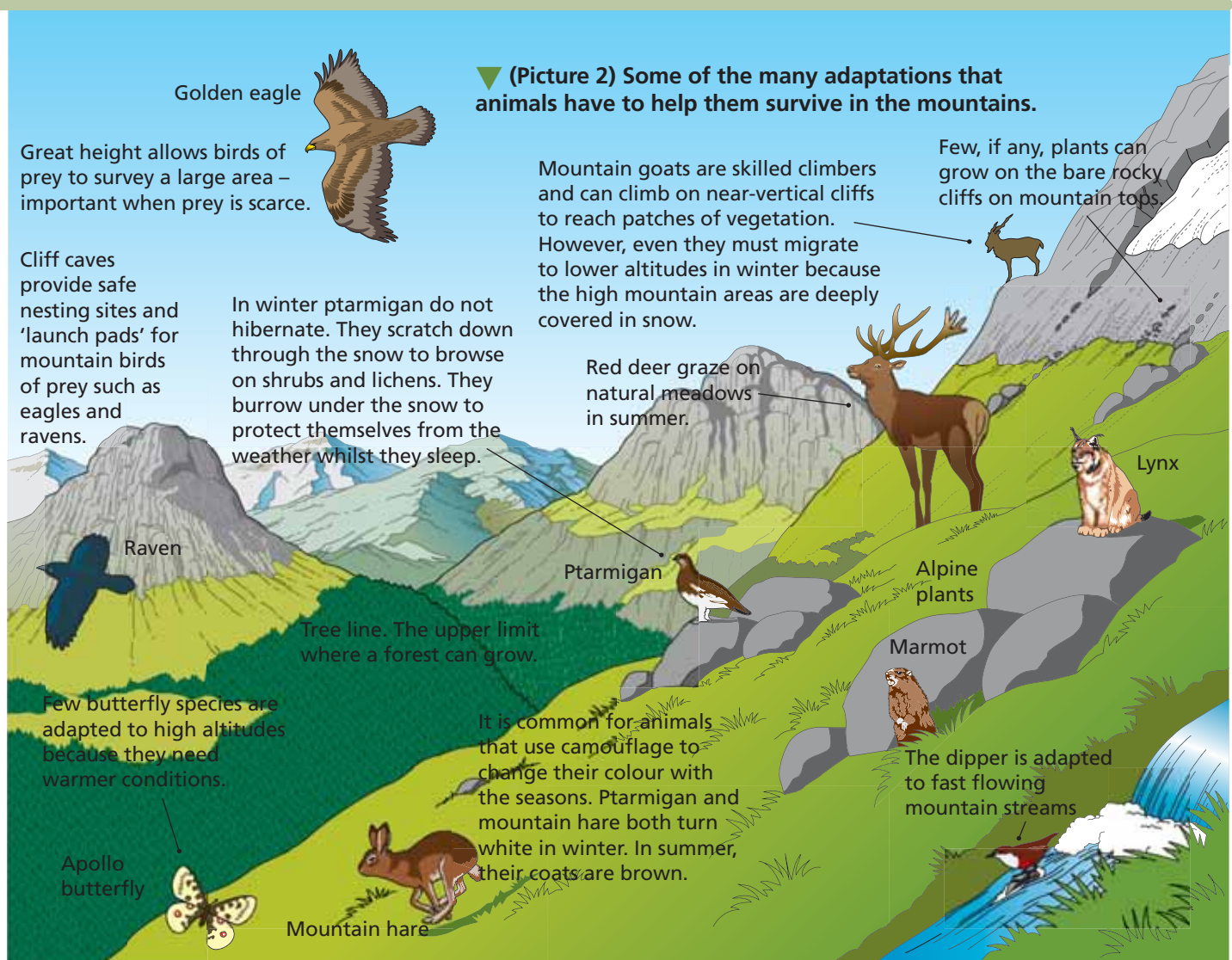
▼ (Picture 1) How alpine plants are adapted to the harsh mountain environment.

Alpenes need to store as much heat as possible. Many are tufted, have furry leaves, and grow in dense, low bushes. Many even make their own antifreeze. The leaves are dark green, to soak up as much of the Sun's heat as possible.



All alpine plants need to be adapted for dry conditions. This may seem strange when they may be covered in snow for half the year. But the water in snow is locked up as ice and so plants cannot use it. Then, as soon as the snow melts, harsh winds dry out the ground. To cope with this, even plants that seem tiny when seen on the surface may have deep **TAP ROOTS** that seek water far underground.

Alpenes have to make good use of the short growing season. As soon as the snow melts, they shoot, flower and set seed – giving the spectacular blossoms for which mountains are so famous. The entire growing season may be only three months.



Few animals remain in the mountains during winter. Most hibernate until the snow melts in spring. The small number of animals that continue to be active in the winter snow are especially hardy and change colour to white in order to stay camouflaged in the snow.

Many **RODENTS** in high mountains live in a network of tunnels in the rocky soil. These provide a place to hibernate in winter. However, as rodents such as marmots (above) and voles (below) search among the rocks for food, they are easily spotted by predators such as eagles, weasels, lynx and foxes. To escape being caught, they are camouflaged by the colour of their fur and quickly take shelter in the rocks.



### Summary

- Mountain plants grow slowly and hug the ground.
- Most animals hibernate through the winter.
- Some animals change colour from summer to winter in order to remain camouflaged and avoid being eaten.