

The distinctive features of Transylvania

Here you can see an impressive and **unique European landscape**: around the villages we can still find mostly traditionally grazed or mowed meadows and extensive deciduous forests (photo above right). Of particular importance is the fact that there are no sharp borderlines between forest and meadow because both merge smoothly into each other. In this richly structured region, we can therefore still observe a **great diversity of species**. Many endangered animal and plant species find a habitat here.

A very special feature of this cultural landscape is a butterfly - the **Danube Clouded Yellow (*Colias myrmidone*)**, which is now **extinct in many regions of Europe** (map below right).



Male (left) and female (right) of the Danube Clouded Yellow.



Young caterpillars only eat the green leaf layer.

The photos on this information board show this magnificent and flighty creature. Sadly, even in Transylvania it now persists only in narrowly defined areas that meet its **special requirements**. The changing and increasingly intensified use of the meadows now endangers this butterfly even here.

The life of the Danube Clouded Yellow

The butterflies of the first generation appear in May and June (see life cycle below left). The females lay their **eggs exclusively on the dwarf broom (*Chamaecytisus sp.*)**. After hatching, the caterpillars live and **feed on this plant**, until the butterflies of the second generation of a year appear from mid-July. Most of the caterpillars then overwinter while a small and variable part develops into a third butterfly generation, which flies from September.

The Danube Clouded Yellow is closely tied to the occurrence of its caterpillar food plant: Dwarf broom, however, grows **only in unfertilized grassland**. The eggs and caterpillars of the butterfly are found **exclusively on the leaves near the tips of the twigs of this plant**. Since grazing animals like to eat these young shoots, they also consume the eggs or caterpillars. At the same time, however, the meadows need to be mowed or grazed occasionally so that they do not become too overgrown by scrubs in the long term.

How can we protect the Danube Clouded Yellow?

Until today, this butterfly species coped well with traditional agriculture: local farmers mowed or grazed their meadows in diverse small-scale and extensive ways. This led to the previously described development of the broad transition zone between meadow and forest, which is now being lost in many places due to agricultural intensification. Afforestation and too intensive use of the meadows with fertilization, too frequent and extensive mowing or too many grazing animals displace not only the dwarf broom but also the Danube Clouded Yellow. It is therefore important for the protection of this butterfly species to **maintain a suitable cultivated landscape that ensures sufficient structural diversity**. One solution is to **graze only a small part of the meadows mosaic-like at a time**. Where grazing animals are not present, the caterpillars can develop undisturbed into butterflies.



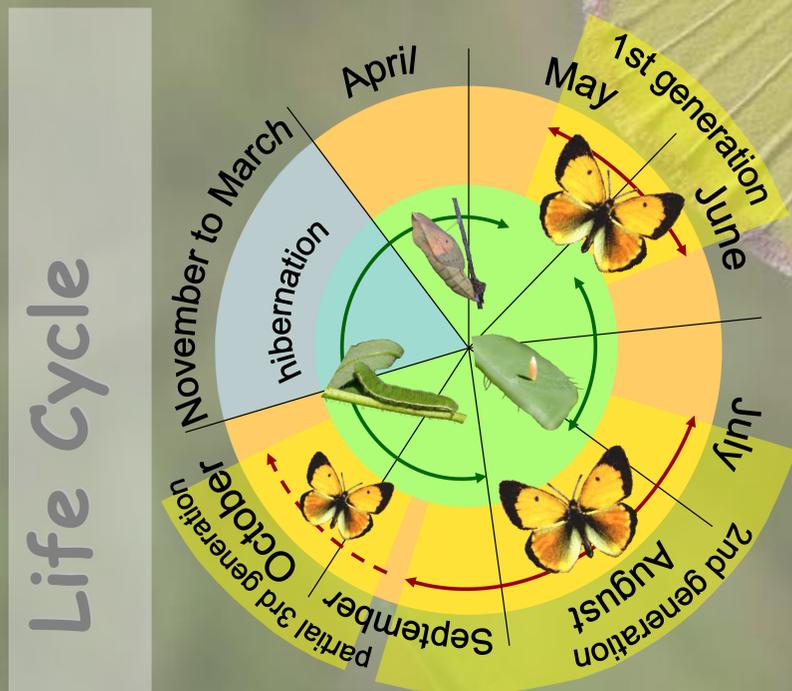
The habitat of the Danube Clouded Yellow.



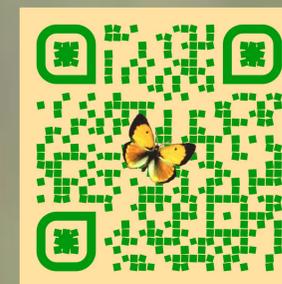
Females lay their eggs on the outer leaves of the dwarf broom.



Grazing keeps the habitat open for the Danube Clouded Yellow.



Life Cycle



www.colias.info/

