

## The Apollo butterfly on the Rhine embankment near Balzers



Maximum card from the first day of issue of the Liechtenstein postage stamp featuring the Apollo butterfly (*Parnassius apollo*), dated 7 September 2009. Maximum cards are not particularly popular with jurors who evaluate philatelic exhibits. All the more important, then, that stamp, card, and postmark — as in this case — match precisely in theme. That can at least help ease the frowns a little.

and observed the females laying their eggs. The cages were cube-shaped, made of polystyrene frames covered with gauze. Inside, a miniature habitat was created, with the food plant growing directly from the soil at the bottom.

The caterpillars fed on *Sedum* in April and May. Since we had also planted other types of fleshy-leaved plants in the garden, I tried offering those as food as well — and sure enough, all were accepted. Once the caterpillars were fully grown, the moment came when they retreated into a loose silken cocoon, where they remained still. A few hours later, their caterpillar skin split open to reveal a greenish-yellow chrysalis. After a few more hours, the pupa changed color — it turned a pale pink and looked as if dusted with flour. A related alpine species, *Parnassius phoebus*, forms a similar pupa in the mountains, but in its case, the chrysalis remains deep black to better absorb light and warmth.

After about 14 days, a butterfly emerged from the chrysalis. It clung to a blade of grass — or, in my case, to the gauze-covered wall — and spread its wings. After roughly three hours, the butterfly would be ready to fly, but mine had to stay a bit longer. I was also able to observe the mating of the females, as well as their later egg-laying, all in the sunshine. In the wild, the females can often be seen flying over the host plants in the sunshine, scattering their eggs in flight over the stonecrop (*Sedum*). In the literature, there are also images showing females clinging to the stonecrop,

Many claim it is the most beautiful of all butterflies: the Apollo butterfly. In 1758, it was described as *Parnassius apollo* by Linnaeus, who named it after Apollo, the god of beauty.

Recently, I came across postage stamps from Liechtenstein featuring this butterfly, and I was instantly reminded of my years as a butterfly collector and observer. Back then, I, too, collected Apollo caterpillars along the Rhine embankment near Balzers. I raised them on stonecrop — specifically white stonecrop (*Sedum album*) — watched them mate in a large flight cage,



- Size: 38 x 32 mm
- Color: Multicolor
- Designer: Stefan Erne
- Format: Definitive stamp
- Perforation: 12 x 12½
- Printing: Offset lithography



Apollo butterfly depicted with the caterpillar's host plant (left: stonecrop – Switzerland, 1955) as well as with the nectar plants of the adult butterfly (center and right: knapweed and thistle – Romania, 2011; Czechoslovakia, 1961).

carefully placing their eggs with a curved abdomen. The butterflies are best photo-graphed in all their beauty while feeding on thistles or Knautia blossoms. Along the Alpine Rhine near Balzers, it is important to keep the habitat free of woody shrubs.

Sheep are best suited for this task, as they perform it effectively and cost-efficiently.

Do the Apollo butterflies still remember my experiments with them on my garage roof? In hot summers, I could occasionally see a butterfly - or was it a she - flying over the *sedum*-covered garage roof. This habitat is too small for a population to develop here. In addition, the demarcated habitat is populated with ants, which bite the young Apollo butterfly caterpillars to death. I have seen such corpses again and again - but perhaps there are more suitable secondary habitats where the butterflies can survive...

The Apollo butterfly is today one of the best-protected day-flying butterflies — thanks to the *Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES). However, this protection often stops at the boundaries of its habitat: while the species itself is strictly protected, the crucial habitats frequently remain unprotected — with dramatic consequences.

Local populations repeatedly die out because scrub encroachment, reforestation, or intensive agriculture destroy their habitats. Particularly problematic is the spreading of slurry—not only on meadows but increasingly in previously untouched, hard-to-reach areas. Modern techniques like the so-called slurry spreader enable exactly this: what is considered efficient in reality endangers sensitive biotopes.

Instead of targeted protection, the use of such technology leads to even the last refuges of the Apollo butterfly being reached and contaminated with slurry. Mechanical soil protection or the possible sparing of valuable rocky areas often remain theoretical in practice. The reality is that this form of fertilization also contributes to the loss of precious natural habitats—despite all protective laws.

Sources: KI-Recherchen; Wikipedia; <https://lepiforum.org/>



Not the Apollo butterfly (*Parnassius apollo*), but its close relative, the high mountain Apollo (*Parnassius phoebus*), can be found on mountain ridges up to 2800m in the Alps. The two species are very similar in their wing markings (e.g. Sweden 2008) and are therefore difficult to distinguish. However, the antennae are a clear distinguishing feature: *P. phoebus* has a distinctive black and white ringing. Unfortunately, this important distinguishing feature is missing on almost all stamps showing the Alpine Apollo - for example on the GDR issue of 1964.