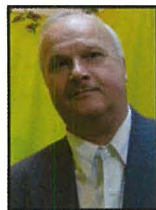


DAZZLING BRIMSTONE BUTTERFLY WHICH WAS THE REASON OF THE WHOLE FAMILY OF ‘BUTTERFLIES’

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One of the joys of a spring day is watching a fluttering, lemon-yellow brimstone alight on a flower - an early sign that the seasons are changing. It is commonly spotted in gardens, woodland and parks (**Figure 1 - Imperforated stamp of Great Britain 1963 with nature and bright Brimstone butterfly**).

The Brimstone butterfly does occur locally on Maltese Islands. This butterfly's range extends from the southern edge of Scandinavia down to the northern fringes of Africa and eastwards to western Siberia and Mongolia. These large and impressive butterflies have a wingspan ranging from 6 to 7.4cm. The males are on average slightly smaller than the females.

The name Brimstone has been in use for over 300 years. It is commonly believed that the word “butterfly” is derived from “butter-coloured fly” which is attributed to the yellow of the male Brimstone butterfly, the female being a much paler whitish-green (**Figure 2 – Imperforated stamp of Andorra 1995 with male and female of Brimstone butterfly**). It is thought that the yellow Brimstone butterfly is the species that

literally put the ‘butter’ into ‘butterfly’ (**Figure 3 – Stamp of New Zealand 1960 with butter**). The sulphur-yellow colour of the male Brimstone was not only the reason for its own name but also that of the whole family of ‘butterflies’. The firstly butterfly was described by Carl Linnaeus in the 10th edition of *Systema Naturae* in 1758 with scientific name *Gonepteryx rhamni*.



Figure 1



Figure 2



Figure 3



Figure 4

Brimstone is often cited as one of the first butterflies of the year because adults hibernate over winter in woodlands and emerge on warm spring days (**Figure 4 – Entire postal of USSR 1964 - boy catching Brimstone butterfly**). New adults emerge from their chrysalis in July. These butterflies will stay on the wing until September or October before finding a safe place to hibernate. If the brimstone can make it through the winter then it will have lived in its adult form from July one year to May the next making it one of the world’s longest-lived species of butterfly. This is one of the few species of butterflies which hibernates as a winged, fully grown insect outdoors. The Brimstone butterfly is unprotected in vegetation from late autumn onwards and exposed to the weather without any protection. So that its body does not freeze solid in temperatures below zero, it enriches it in a timely manner with an “anti-freeze agent” that consists predominantly of glycerine compounds. At the same time, the butterfly reduces its quantity of liquid and can thus withstand temperatures of down to minus 20° C without harm. When it has thawed again, life continues, even from as early as mild February days. Thanks to this unique lifecycle, Brimstone butterflies live much longer than all other indigenous butterflies. In spring Brimstones often bask on the ground with their wings closed and canted over to present the maximum area towards the sun (**Figure 5 – Stationery card of Czech Republic 2003 with Brimstone butterfly**).

The Brimstone is a beautiful insect and a grand master of camouflage. The pale greenish underside, raised wing-veins and falcate wing tips combine to disguise



Figure 5

the butterfly as a leaf, making it near invisible when at rest under bramble or ivy (Figure 6 – Meter mark of Germany 2002 with resting Brimstone butterfly). Both male and female Brimstone have a beautifully shaped wing, which closely resembles a pale yellow leaf such as we might find on ivy in the autumn. Since ivy is an evergreen, offering good protection through the winter, the Brimstone often chooses to hibernate in it.

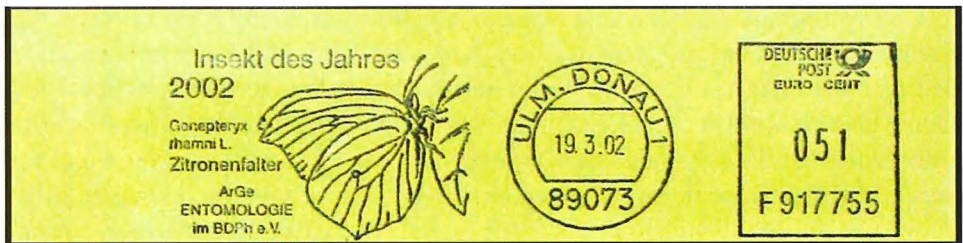


Figure 6

The Brimstone butterfly to have an innate preference for certain colours in nectar plants – red and blue inflorescences are common in heavily used nectar sources. *Gonepteryx rhamni* also has a stronger reliance on visual indications such as colour compared with other butterfly species, which rely more on odour. They prefer to drink from purple flowers, and bluebells are an important early nectar



Figure 7

source (Figure 7 – Telegram of Poland 1960 – Brimstone butterfly nectaring from purple flowers).

The Brimstone is a great wanderer and can be found in almost any habitat, from chalk downland to woodland rides to gardens. In flight they move fast and often high, forever changing direction – a good defence strategy against predatory birds (Figure 8 – Germany 2000 unissued draft of postage stamp with Brimstone butterfly). You'll rarely see one in the evening: they are early to bed, going to roost among the leaves between 3 and 4pm even in high summer. Whereas most butterflies have very strict habitat requirements and are thus localised in distribution, the Brimstone is highly mobile and can be seen in almost any habitat within its distribution range. A given insect may wander many miles from its emergence site, breeding with insects from other areas. This helps it to maintain a high level of genetic diversity, resulting in a hardy species that is highly adaptable, and not prone to major population fluctuations from year to year. The Brimstone is commonest on scrubby chalk grasslands and deciduous woodlands but it will breed almost anywhere where its larval foodplants grow,



Figure 8

including heathland, farmland, railway cuttings and coastal habitats. It is also regularly seen in gardens and parks or meandering along roadsides when dispersing in search of new habitats.

In the spring adult Brimstones are a chief pollinator of primroses both in the wild and in our gardens (**Figure 9 – Guinea Equatorial 1976 imperforate proof on presentation card depicting Brimstone butterfly**). They have an exceptionally long tongue which enables them, in the summer, to reach down into the deep flowers of Buddleia, teasels, thistles and knapweeds.

The Author is ready to help for philatelists in creating of philatelic exhibits on butterflies and moths. His address: Vladimir Kachan, street Kulibina 9-49, Minsk-52, BY-220052, Republic of Belarus, E-mail: vladimirkachan@mail.ru

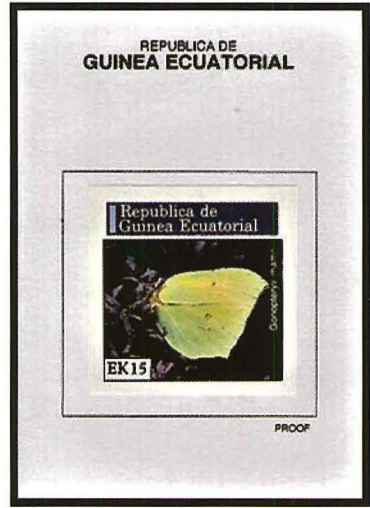


Figure 9

PLEASE ENROL A MEMBER

Membership renewal

becomes payable from 1st January,
and not later than 31st January 2021,
as per Clause 14(a) of our Statute.

Subscriptions are the same as last year namely:-
Australia - Aus \$40.00; Euro Countries - €20.00;
U.K. - £15.00 and U.S.A. - US \$21.00;
Local Members Juniors €3.00, and Seniors €10,
remittances as usual.

Members are reminded that payments by overseas personal cheques
are no longer acceptable by our Bankers.

You are kindly requested to remit payment through a bank transfer
using the details indicated hereunder:-

1. IBAN: MT 85 VALL 2201 3000 0000 4002 6085 661.
2. Bank's BIC VALLMTMT.
3. Account Name: The Malta Philatelic Society.