Upstairs Gallery Case 4

Butterflies of the North East of Scotland

1. Small Pearl-bordered Fritillary - Boloria selene

Found in open, lightly-grazed woodland, moorland and damp grassland; recorded in many parts of Moray from the coast to the uplands and flies from late June through July. Eggs are laid singly on or near violets, which are the caterpillars' food. They hibernate in withered vegetation during the winter.

ELGNM: 1956.11.038

2. Grayling - Hipparchia semele

Found in dry coastal grassland, dunes and cliffs between Findhorn and Cullen. They have excellent camouflage when resting on the ground with their wings closed over their backs. Flies in July and August, laying eggs on grasses which are the caterpillars' food plant. Overwinters as a caterpillar.

ELGNM: 1956.11.016

3. Clouded Yellow - Colias croceus

A migratory species from southern Europe, found in open, grassy countryside. Usually scarce throughout the UK but occasionally numerous in the south in 'Clouded Yellow years'. Only a few Moray records, near the coast. Flies between May and August. Breeds in the south of England where one or two generations of caterpillars feed on legumes such as clover.

ELGNM: 1930.10.054

4. Small Tortoiseshell - Aglais urticae

Widespread in most habitats throughout Moray. Flies between April and October. Batches of 60-100 eggs are laid on nettles. Parasitic flies and wasps lay eggs in the caterpillars where they hatch and the larva eats the caterpillar while it is still alive. Overwinters as an adult in holes in

trees, garden sheds etc. Fattens up by feeding in gardens before hibernation. Early hibernators are often eaten by mice.

ELGNM: 1956.11.003

5. Peacock - Aglais io

This butterfly is a recent arrival in Moray (since 2000) but is now widespread and common, especially in the coastal lowlands. Flies during April to September. Females lay batches of 300 or more eggs on nettles. Caterpillars feed together in a web. Hibernates as an adult after fattening up on nectar from garden flowers. Adults defend themselves from predators such as mice by flashing their owl-like eye spots and hissing.

ELGNM: 1956.11.029

6. Small Copper - Lycaena phlaeas

Prefers warm, dry areas such as banks, road verges and heaths. Widespread in Moray but commonest along the coast. Has become scarcer and more local in recent years. Flies between May and September in two generatiaons. Males defend a small territory on the ground from which they chase off other males and pursue females. Overwinters as a caterpillar, which feeds on Sorrel.

ELGNM: 1930.10.043

7. Small Blue - Cupido minimus

Forms discrete colonies in sunny dune slacks with sparse vegetation - mostly along the coast in Moray. Sometimes also on rocky sea cliffs. Flies in June over patches of Kidney Vetch which is the food of the caterpillars. The female lays a single egg in a flower head bud. The caterpillar feeds on the developing seeds - and can be cannibalistic if it meets another caterpillar. When full grown it descends to the ground and hibernates for about nine months.

ELGNM: 1956.11.052

8. Green-veined White - Pieris napi

Prefers damp grassland, marshes and woodland. This is Moray's most widespread and numerous butterfly. Flies between mid April and September, in two overlapping generations. During mating the male transfers a package of protein and other nutrients into the female. The male then applies an anti-aphrodisiac to the female to deter other males. Caterpillars feed on Cuckooflower, Garlic Mustard and Hedge Mustard. Overwinters as a chrysalis.

ELGNM:1956.11.008

9. Common Blue - Polyommatus icarus

Found in dunes, heath and rough pasture. Widespread in Moray. One generation of adults flies in July and August. Caterpillars feed on Birdsfoot Trefoil, before hibernating over the winter. Caterpillars are sometimes tended by ants which they attract by secretions and by making unusual drumming noises.

ELGNM:1930.10.044

10. Comma - Polygonia c-album

Has only recently colonised Scotland. Still spreading north, with several records in Aberdeenshire and at least one in Moray. Flies around woods, hedgerows and gardens. Named because of the white mark on the underwing. Wing shape, especially when the wing is closed, provides excellent camouflage. The caterpillar mimics a bird as though it was dropping.

ELGNM: 1956.11.032

11. Large White - Pieris brassicae

A partial migrant, found in all habitats except mountainous areas - widespread over most of Moray, breeding in gardens and turnip fields. Flies in two generations between April and September. The forewing of the male is plain, while that of the female has dark spots. While mating, the male coats the female with a chemical that deters other males. The caterpillars feed on a range of plants in the cabbage family, and Large

Whites overwinter as a chrysalis. Parasitic wasps lay eggs in the bodies of the caterpillars. The wasp larvae feed within the caterpillar, eventually emerging to form rows of yellow cocoons along the sides of the caterpillar.

ELGNM: 1956.11.010

12. Pearl-bordered Fritillary Boloria euphrosyne

Found in dry, sheltered grassland and woodland clearings. A scarce species in Moray, found mostly in the western lowlands and up Speyside. Flies in May and June. Overwinters as a caterpillar, whose food plant is violets.

ELGNM: 1956.11.039

13. Painted Lady - Vanessa cardui

A migrant from the desert edges of North Africa. Numbers vary from year to year - sometimes huge swarms arrive in Britain such as in 2009 when 28 million were estimated to have crossed the south coast of England on 23-24 May. In these years, Painted Ladies are very common in Moray except for the high uplands. Flies between May and October. Caterpillars feed on thistles.

ELGNM:1930.10.024

14. Ringlet - Aphantopus hyperantus

A butterfly of damp grassland and cool woodland rides. Common in Moray since about 2000, following a major northwards range expansion. Number of wing spots very variable - most visible on the underside. Flies in one short generation in July and August. Females squirt their eggs into the air, while perched on a tall grass stem or even while hovering in flight. The caterpillar lives for about ten months, feeding on grasses and hibernating over winter. It forms a chrysalis in June and emerges as an adult butterfly soon afterwards.

ELGNM:1956.11.119

15. Dingy Skipper - Erynnis tages

An uncommon species, absent from most of Scotland but with a stronghold along the southern coast of the Moray Firth, where it prefers sheltered, warm heath and dunes. A single generation of adults flies in May and June. The caterpillars feed on Birdsfoot Trefoil and hibernate in a nest of leaves before forming a chrysalis in spring.

ELGNM:1930:10:073

16. Small Heath - Coenonympha pamphilus

A widespread inhabitant of dry grassland, common in Moray. In Scotland there is only a single generation which flies from June to August. The males live for only one or two weeks. They gather in communal displays near some landmark such as a bush or small tree, to which the females are attracted. The caterpillar feeds on grasses before hibernating over the winter.

ELGNM:1956:11:023

17. Small White - Pieris rapae

Mainly occurs in Moray as a migrant, with numbers variable from year to year. Found mainly in gardens near the coast. Flies between April and September in two generations. During mating, the male transfers two types of sperm - live sperm to fertilise the eggs and infertile sperm that contains nutrients that are absorbed by the female's body. The caterpillars feed on plants of the cabbage family before forming a chrysalis over the winter.

ELGNM:1956:11:009

18. Orange-tip Anthocharis cardamines

Flies in spring along hedgerows, river banks and woodland edges. The eggs are laid singly, often on Garlic Mustard or Cuckooflower, and the caterpillars feed on the developing seed pods - which they come to resemble as an excellent camouflage. The orange wings of the male serve as a warning to predators, as the body contains distasteful mustard oils taken up from the food plant by the caterpillar.

Females fly less frequently and so rely on the camouflage of the folded underwings when at rest.

ELGNM:1930.10.059

19. Speckled Wood Pararge aegeria

A widespread butterfly in lowland Moray, which prefers the dappled shade of open woodland. First arrived in Moray around 1980, following a major spread eastwards from Argyll. Two generations of adults fly between May and September but individual adults seldom live longer than a week. The males perch in sunlit spots from which they chase away other males or court females which are attracted to the pools of sunlight. Passes the winter in either the caterpillar or chrysalis stage.

ELGNM:1930.10.029

20. Dark Green Fritillary Argynnis aglaja

Found in flower-rich grassland, Bracken-covered hillsides and coastal dunes. Common in Moray from late June through to August. The males spend much of every warm day on the wing, searching for hidden females. The caterpillars feed on the leaves of violets before hibernating and forming a chrysalis in late spring.

ELGNM:1956.11.037

21. Scotch Argus Erebia aethiops

Abundant in some areas of Moray in upland grasslands and sunny rides in coastal forests. Large numbers are usually only seen flying in sunny weather. Their flight season is very short, mainly in August.

They spend about ten months of their lives as a caterpillar before briefly forming a chrysalis in June and emerging as a butterfly shortly afterwards.

ELGNM:1930.10.028

22. Northern Brown Argus Aricia artaxerxes

Forms colonies on sheltered, grassy hillsides which contain the caterpillars' preferred food plant, Rockrose. Very scarce in Moray with only a few records, mostly on Speyside and in the Tomintoul area. Adults fly in June and July and are often extremely sedentary, moving only 20-30 m from the hatching site in their lifetime.

ELGNM:1930.10.046

23. Red Admiral Vanessa atalanta

A very familiar migrant butterfly from southern Europe. Immigrants normally arrive in late May and June, producing a local brood from early August onwards. Visits gardens in late summer to feed on Buddleia and rotten fruit. The caterpillars are solitary, feeding on fresh nettle leaves. The chrysalis is suspended under vegetation where it may be attacked by parasitic wasps which lay their eggs in it. Most adults return south in autumn.

ELGNM:1930.10.023

24. Meadow Brown Maniola justina

A very common species found in grasslands throughout Moray, with the exception of the higher hills. A single generation of adults flies between June and September. The dots on the wings may deflect bird attacks away from the body so that the butterfly can escape with no more than a piece of wing pecked off.

Females generally mate on the first active day of their lives, and lay eggs within four days. They live for little more than a week. After feeding on grasses, the caterpillars hibernate and form a chrysalis in early summer.

ELGNM:1956.11.017

25. Green Hairstreak Callophrys rubi

Recorded at only a few sites in Moray, on heathland or moorland which contains the caterpillars' food plants - Blaeberry, Gorse or vetches. The adults, which fly in May and June, are green only on the underside - to provide camouflage when the butterfly perches with its wings closed. In

late summer, the caterpillar forms a chrysalis which hibernates in an ants' nest. It produces secretions on which the ants feed and they, in turn, presumably protect the chrysalis.

ELGNM: 1930.10.038

Upstairs Temporary Exhibition from 1st April to 28th October 2017, by Martin Cook, Museum Volunteer and Author of The Breeding Birds of North-East Scotland.

Case 4

Lepidoptera



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