



# Moths of Gaddon and Birnie Lochs

S.T. Buckland

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I have included those species that I have been able to photograph at Gaddon and Birnie Lochs. My thanks go to Nigel Voaden for help with identifying the more difficult species, and to Duncan Davidson for his help, enthusiasm and encouragement.

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## Antler moth

A common summer species which can be seen feeding on flowers in daylight.





## Autumnal moth

A relatively scarce autumn species that occurs where birches grow. This one was at Gaddon Loch in mid-October 2022.





## Autumnal rustic

A common autumn species of open country.







## Barred straw

A common species. The caterpillars feed on cleavers and bedstraws.



## Barred yellow

A fairly common species where dog roses grow.





## Beautiful golden Y

A fairly common species that occurs in a range of habitats.



## Brick

An autumn species of broadleaved woodland, relatively scarce in Fife.





## Bright-line brown-eye

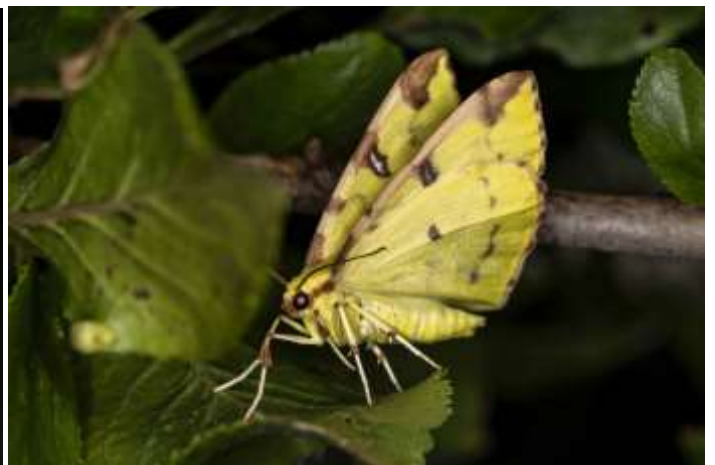
A common species in a range of habitats.





## Brimstone moth

A common species that can often be seen during the day.





## Brindled pug

An early-season pug, common in oak woodland.





## Broad-bordered yellow underwing

A fairly common species of broadleaved woodland.







## Brown-line bright-eye

A common grassland species.





## Brown rustic

A common species, especially in broadleaved woodland.





## Brown-spot pinion

A common autumn species.





## Buff footman

A southern species that recently arrived in Fife, and has now become fairly common.





## Burnished brass

A common species, especially where nettles, the main food plant of its caterpillars, occur.





## Canary-shouldered thorn

A common species of broadleaved woodland.





## Centre-barred sawfly

A common species where ash trees grow.



## Chestnut

A common species of late autumn and early spring, which may also be recorded on mild nights in winter.







## Cinnabar

Most commonly found at the coast, this one was at Gaddon in late May 2022.





## Clouded border

A common summer species that is often seen in daylight.



## Clouded-bordered brindle

A common summer species. The two images here show the two colour forms.





## Clouded drab

A common spring species.





## Clouded silver

A southern species that has spread north to reach Fife.





## Common carpet

A common species that is often seen during the day.





## Common marbled carpet

A common summer species with variable markings.





## Common pug

Common in a range of habitats.







## Common quaker

A common and often numerous spring species.





## Common rustic / lesser common rustic

These two species cannot be separated from photos.





## Common swift

A fairly common grassland species.





## Common wainscot

This grassland species is becoming more common in Fife.





## Common wave

A common species where willows or poplars occur.



## Common white wave

A common woodland species.



## Copper underwing / Svensson's copper underwing

Two southern species that have spread into Fife in the last few years. This one is too worn to identify which of the two species it is. It was at Gaddon Loch in late September 2022.





## Dark arches

Common, occurring in a wide range of habitats.







## Dark marbled carpet

A fairly common species of woodland and moorland. Usually a striking moth, this worn individual has seen better days!



## December moth

A common woodland moth of late autumn and early winter.





## Dotted border

A common species in late winter and spring. These are males, which vary in appearance, but always with dots along the wing edges. The females are flightless.





## Dotted clay

A common species in late summer, mostly in or near woodland or heathland.





## Double dart

A declining species of broadleaved woodland. This one was at Gaddon Loch in late June 2022.



## Double square-spot

A common summer moth.





## Double-striped pug

A common pug, and one of the first to appear in spring.





## Dun-bar

A common species where trees or shrubs grow.







## Dusky brocade

A common moth of grasslands.





## Dwarf pug

A fairly common pug, mostly in conifer plantations.





## Early thorn

A common spring species.





## Early tooth-striped

A spring species that occurs in damp broadleaved woodland, especially where willows grow.





## Engrailed

A fairly common species in broadleaved woodland.





## Feathered thorn

A fairly common species in broadleaved woodland.





## Flame

This species occurs in a range of habitats and is becoming more common in Fife.





## Flame carpet

A common summer species, now increasingly recorded in spring. The one below was by Gaddon Loch in late April, while the one above was there in early September.







## Flame shoulder

A common summer species in a range of habitats.





## Flounced rustic

A common grassland species.



## Foxglove pug

A common pug species where foxgloves grow.



## Garden tiger

The adult of this summer species is one of the more impressive common moths, with bold red, black and white markings. This caterpillar was by Gaddon Loch in late April.



## Ghost moth

A large and fairly common species. Male above, female below.





## Gold swift

A locally-distributed species of open woodland and rough grassland.





## Golden-rod pug

A locally-distributed species of pug. This one was at Gaddon Loch in mid-May 2022.



## Green arches

A locally-distributed species of broadleaved woodland.







## Green-brindled crescent

A locally-distributed species of broadleaved woodland.





## Green carpet

A common summer species.





## Green pug

This pug is quite common and occurs in a range of habitats.



## Grey pine carpet

A common species wherever conifers grow.



## Grey pug

A common pug in a range of habitats.





## Heart and club

A scarce species in Fife, and occurring mostly on coastal dunes. This one was at Gaddon Loch in late June 2022.



## Heart and dart

A common summer species.





## Hebrew character

A common spring species with distinctive markings.







## Iron prominent

A fairly common species where birches or alders grow.





## July belle

A locally-distributed species, mostly on heathland and moorland. This one was at Gaddon Loch in late June 2022.





## July highflyer

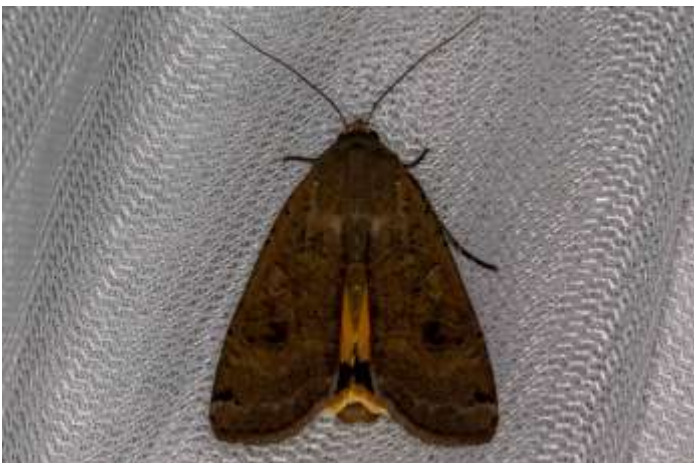
A common woodland and heathland species with very variable markings.





## Large yellow underwing

A large and very common species.





## Least black arches

This woodland species was very scarce in Scotland, but has increased markedly in the last few decades.





## Lesser broad-bordered yellow underwing

Common and often abundant in a range of habitats.





## Lesser swallow prominent

A fairly common species where birch grows.





## Lesser yellow underwing

A common species (but seldom abundant) in most habitats.







## Light arches

A fairly common grassland species.





## Light emerald

A fairly common grassland species.





## Lunar thorn

A locally-distributed thorn.





## Lychnis

A common species where red or white campion grows.



## Map-winged swift

A locally-distributed species. Its caterpillars mostly feed on bracken roots.





## Marbled coronet

A scarce species in Fife, occurring mostly at or near the coast. This one was at Gaddon Loch in mid-June 2022.





## Marbled minor

A declining species. It cannot be distinguished from two similar species from images, but those two species are southern, and do not occur in Fife.





## March moth

A common species between mid-February and mid-April.







## May highflyer

A fairly common species where alders grow.





## Middle-barred minor

A very common species that can sometimes be seen feeding on flowers during the day.



## Mottled beauty

A common species of woodland and moorland.





## Mottled pug

A locally-distributed species in Scotland.



## Mottled rustic

A sparsely distributed species in Fife.



## Mottled umber

A fairly common species on the wing in late autumn and early winter. The caterpillar was on birch by Gaddon Loch in late May 2022.





## Mouse moth

A common species in a range of habitats. It will run mouse-like when threatened, hence its name.



## Muslin footman

A scarce species that occurs mostly where stone walls are present.





## Narrow-winged pug

A common species of heathland and moorland.



## Netted pug

Seldom recorded in Fife, this one was at Gaddon Loch in early June 2022.



## November moth

A common autumn species where broadleaved trees grow.





## Nut-tree tussock

A common species of broadleaved woodland.





## Oak nycteoline

Mainly a southern species, rarely recorded in Fife. This one was near the oaks by the east bank of Gaddon Loch on 23 March 2022.





## Oblique carpet

The first record of this species in Fife was from Rossie in 2021. This one was at Gaddon Loch on 1 September 2023, and is the first Fife record away from Rossie.





## Ochreous pug

A species of pinewoods and plantations that is not often recorded in Fife. This one was at Gaddon Loch in mid-May 2022.



## Orange swift

A fairly common species in a variety of habitats.





## Pale brindled beauty

A common species that flies very early in the season, most commonly reported in February.





## Pale November moth

Very similar to the November moth, but less common. It is associated with beech trees. This one was at Gaddon Loch in mid-October 2023.



## Pale pinion

Mainly a southern species of broadleaved woodland, which is increasingly recorded in Fife. It occurs in late autumn, then again in spring when it comes out of hibernation.





## Pale prominent

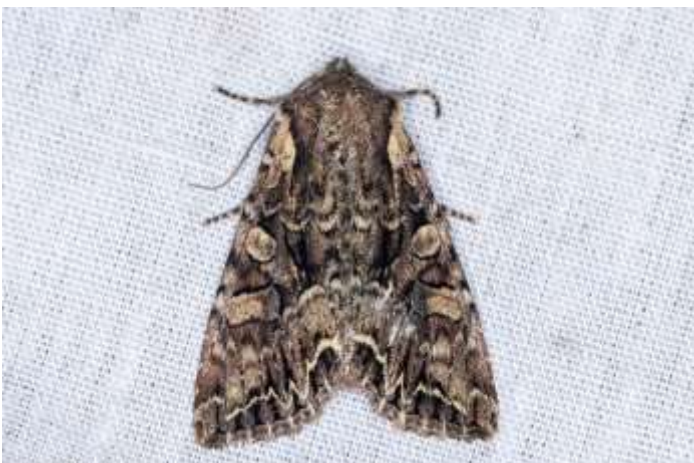
A locally-distributed species, occurring where poplars grow.





## Pale-shouldered brocade

A common woodland species.





## Pebble prominent

A fairly common species where willows or poplars grow.



## Pine beauty

A pretty species with an impressive hair-do! Not widely recorded in Fife. This one was by Gaddon Loch in late April 2022.





## Pink-barred sawfly

A common autumn species where poplars or willows grow.







## Plain golden Y

A fairly common species in a range of habitats.



## Poplar hawk-moth

A very large and quite common moth.





## Powdered quaker

A species of bogs, marshes and damp woodland that is not common in east Fife. This one was at Gaddon Loch in early May 2023.





## Purple bar

A fairly common species where bedstraws grow.





## Red chestnut

A woodland species that is not especially common in Fife. This one was at Gaddon Loch in early May 2023.





## Red-green carpet

A common species of autumn, and again in spring, when it emerges from hibernation.





## Red-line quaker

A common autumn species where willows grow.





## Red sword-grass

A locally-distributed species, mostly of damp habitats. The adult flies in autumn and spring, and migrants arrive in small numbers in Fife each year. This one was at Gaddon Loch in mid-October 2023.







## Riband wave

A common species of autumn, and again in spring, when it emerges from hibernation.





## Rivulet

A common summer species where red campion grows.





## Ruby tiger

A fairly common species in a range of habitats.





## Rustic

A common summer species in lowland habitats.





## Rustic shoulder-knot

A common summer species of grasslands.





## Sallow

A common late summer and autumn species where sallows or poplars grow.



## Sandy carpet

A common summer species.





## Satellite

Mostly a southern species that is locally distributed in Fife. Mainly a late autumn and early spring species, the one above was at Gaddon Loch in mid-November 2022, and the one below in late February 2022.







## Satin beauty

A woodland species that has increased its range in Scotland in recent decades.





## Scalloped hazel

A fairly common large moth of late spring and early summer.





## Scarce umber

Despite its name, a common late autumn and early winter species of broadleaved woodland.





## Seraphim

Rarely recorded in Fife, the seraphim is a species of broadleaved woodland with poplars. These were at Gaddon Loch in May 2022.





## Shaded broad-bar

A common grassland species that can often be seen in daylight.



## Shears

This species is uncommon inland in Fife. This one was at Gaddon Loch in late May 2023.





## Shoulder stripe

A common spring species where dog-roses occur.





## Shuttle-shaped dart

A southern species that is spreading northwards, and occasionally recorded in Fife. This one was at Gaddon Loch in early May 2022.







## Silver-ground carpet

A common species which is often seen during the day.





## Silver Y

A common species in summer and autumn, with many migrants arriving each year. Often seen at flowers in daylight.





## Six-spot burnet

A brightly-coloured daytime moth which can sometimes be seen in large numbers in the wild flower meadow at Gaddon.





## Six-striped rustic

A common species, mostly in damp habitats.





## Sloe pug

In Fife, this species has only been recorded at Gaddon Loch, where there is abundant blackthorn (sloe), its food plant. This one was there in late June 2022.



## Small elephant hawk-moth

A locally-distributed species whose caterpillars mostly feed on bedstraws.





## Small fan-footed wave

A locally-distributed species whose caterpillars mostly feed on bedstraws.



## Small phoenix

A common species where willowherb grows.







## Small quaker

A spring species that is fairly local in distribution.





## Small rivulet

A common summer species; very similar to the rivulet.





## Small square-spot

A common summer species.





## Smoky wainscot

A common grassland species.





## Snout

A common summer species. Its caterpillars feed on nettles.





## Spruce carpet

A common species of conifer plantations.





## Square-spot rustic

A common species of conifer plantations.





## Straw dot

A species of damp habitats that is widespread but not numerous in Fife.







## Streak

A fairly common autumn species that can be found in areas where broom grows.





## Swallow prominent

A locally-distributed species, occurring where poplars or willows grow.





## Twin-spot carpet

A fairly common species in a range of habitats, but most common on moorland.



## Twin-spotted quaker

A southern species that has spread north, and is now fairly common in Fife.





## V-pug

This species is becoming more common in Fife, occurring in a range of habitats.





## Water carpet

A common spring species. The above is the dark *piceata* form of the species.





## White ermine

A common summer species.





## Winter moth

Common in late autumn and early winter.







## Yellow-barred brindie

A scarce species of broadleaved woodland. This one was at Gaddon Loch in early May 2023.



## Yellow horned

An attractive and furry spring species that can be numerous where there are birch woods. These were by Gaddon Loch in late March 2022.





## Yellow-line quaker

A common autumn species of broadleaved woodland.



## Yellow shell

A lowland species, locally-distributed in Fife away from the coast.





Scalloped tortrix

*Acleris emargana*

A fairly common species where goat willow grows.





## Dark-marked tortrix *Acleris laterana*

A common species of woodland, hedgerows and gardens.





## Rhomboid tortrix *Acleris rhombana*

A fairly common species of hedgerows and scrub.





## Hawthorn knot-horn *Acrobasis advenella*

A locally-distributed species associated with hawthorn, and sometimes rowan.





## Green longhorn *Adela reaumurella*

A scarce 'longhorn' moth. This is a female, which was at Gaddon in late May 2022. Males have antennae more than twice as long as their body.





## Garden straw *Agapeta hamana*

A common species where thistles occur.



Common brindled brown *Agonopterix heracliiana*

A very common species.





## Red-eyed buff *Agonopterix ocellana*

Fairly common in locations with willows.



## Broom buff *Agonopterix scopariella*

A relatively scarce species in Fife, associated with broom. Although the above moth is probably this species, *Agonopterix propinquella* and *Agonopterix subpropinquella* cannot be ruled out on the basis of this image. This moth was at Gaddon Loch in mid-October 2023.



Straw grass-moth *Agriphila straminella*

A common grass moth.



## Common grass-moth *Agriphila tristella*

A common grass moth.



## Beautiful plume *Amblyptilia acanthadactyla*

A locally-distributed species, occurring in a variety of habitats.





## Rattle pearl *Anania fuscalis*

A common grassland species.





## Nettle-tap *Anthophila fabriciana*

A common species wherever nettles grow. Flies in daylight.





## Bee moth *Aphomia sociella*

A fairly common species. Its caterpillars live in nests of bumblebees and wasps.



## Apple fruit moth *Argyresthia conjugella*

Common where rowans or apples grow.



## Sallow tip moth *Argyresthia pygmaeella*

A scarce species in Fife, occurring in woodland with willows or poplars.





## Common masoner *Blastobasis adustella*

A common species in a range of habitats.





## Large pale masoner *Blastobasis lacticolella*

A common species, occurring mostly from May to November.





## Grizzled moss-moth *Bryotropha senectella*

A locally-distributed species in Fife. Identity of this one is not certain!







## Daisy tuft *Bucculatrix nigricomella*

A scarce species in Fife. These were by Gaddon Loch in late May 2022.





## Alder stilt *Caloptilia elongella*

An uncommon species that occurs where alders grow. This moth was at Gaddon Loch in mid-October 2022.





Common marble *Celypha lacunana*

A very common species.





Garden grass-moth

*Chrysoteuchia culmella*

A very common species of grass moth.





## Flax tortrix *Cnephasia asseclana*

*Cnephasia* moths cannot always be identified to species from photos. The identity of this one is not certain.



Light grey tortrix *Cnephasia incertana*

As with the previous species, the identity of this one is not certain.



Pignut brown *Depressaria pulcherrimella*

A grassland species that is seldom recorded in Fife.





## Early reveller *Diurnea fagella*

A common spring species.







## Common ridge-back *Epermenia chaerophyllella*

A scarce species in Fife, which has most often been recorded at or near the Firth of Forth coast. This one was at Gaddon Loch in mid-October 2023.





## Brindled poplar tortrix *Epinotia nisella*

A common species with variable markings, occurring where willows or poplars grow. The image bottom left shows a moth that matches the markings of *Epinotia cinereana*, but as there is a form of *Epinotia nisella* with the same markings, it cannot be identified with certainty.





## Hoary tortrix *Eucosma cana*

A common summer species.





## Cocksfoot moth *Glyphipterix simplicella*

A very common and often abundant grassland species.





## Plum tortrix *Hedya pruniana*

Seldom recorded in Fife, the large areas of blackthorn will have attracted this species to Gaddon loch.



Brown house moth *Hofmannophila pseudospretella*

A common house moth, although this one was a long way from the nearest house!



Knapweed seedhead moth *Metzneria metzneriella*

A local species in Fife.





## Sandy longhorn *Nematopogon schwarziellus*

This species of longhorn moth is not often recorded in Fife. Its caterpillars feed on dead leaves. This one was at Gaddon Loch in late May 2023.







## Black cloak *Notocelia cynosbatella*

A common species of early summer, often seen in daylight.



## Hawthorn shoot moth *Notocelia trimaculana*

A scarce species in Fife. The caterpillars feed on hawthorn.





## Double orange-spot *Pammene aurana*

Generally local in Scotland, but can be common in summer at Gaddon Loch, where it can be seen on flowers in daylight.



## Dark fruit-tree tortrix *Pandemis heparana*

A common species of woodland, hedgerows and gardens.





Rowan parornix *Parornix scoticella*

This tiny species is not often recorded in Fife.





## Mother of pearl *Patania ruralis*

A common species, especially where nettles grow.



## Common grey *Scoparia ambigualis*

A common species, often seen during the day.





## Brown-spot grey *Scoparia pyralella*

A locally-distributed species of open habitats, where ribwort plantain grows.







Dark-barred tortrix *Syndemis musculana*

A common woodland species.





## Orange-tipped nest moth *Tinea semifulvella*

The caterpillars of this species feed on the debris in bird nests. It is not often recorded in Fife.





## Spring harbinger *Tortricodes alternella*

Fife is on the edge of the range of this species. It is an early-season species that occurs mostly on or near oak trees. Those above and below left were at Gaddon Loch in late February 2022, while the worn one below right was at Birnie Loch in mid-February 2024.





Pale straw pearl *Udea lutealis*

Common in a variety of habitats.





## Bird cherry ermine *Yponomeuta evonymella*

A common species that can be very numerous.





Timothy tortrix *Zelothereses paleana*

A grassland species that is not especially common in inland Fife.

