

Macro-moths of Gaddon and Birnie Lochs

S.T. Buckland

Macro-moths of Gaddon and Birnie Lochs

S.T. Buckland

I have included those species that I have been able to photo-graph 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.

Steve Buckland

steve@st-andrews.ac.uk

15/November/2026

Contents—macro-moths

Angle shades....5
Antler moth....6
Autumnal moth....7
Autumnal rustic....8
Barred straw....9
Barred yellow....10
Beautiful golden Y....11
Brick....12
Bright-line brown-eye....13
Brimstone moth....14
Brindled pug....15
Broad-bordered yellow underwing....16
Brown rustic....17
Brown-line bright-eye....18
Brown-spot pinion....19
Buff footman....20
Burnished brass....21
Canary-shouldered thorn....22
Centre-barred sallow....23
Chestnut....24
Cinnabar....25
Clifden nonpareil....26
Clouded border....27
Clouded drab....28
Clouded silver....29
Clouded-bordered brindle....30
Common carpet....31
Common marbled carpet....32
Common pug....33
Common quaker....34
Common rustic....35
Common swift....36
Common wainscot....37
Common wave....38
Common white wave....39
Copper underwing....40
Dark arches....41
Dark marbled carpet....42
December moth....43
Dotted border....44
Dotted clay....45
Double dart....46
Double square-spot....47
Double-striped pug....48
Dun-bar....49
Dusky brocade....50
Dwarf pug....51
Early thorn....52
Early tooth-striped....53
Engrailed....54
Feathered thorn....55
Flame....56
Flame carpet....57
Flame shoulder....58
Flounced rustic....59
Foxglove pug....60
Garden carpet....61
Garden tiger....62
Ghost moth....63
Gold swift....64
Golden-rod pug....65
Green arches....66
Green carpet....67
Green pug....68
Green-brindled crescent....69
Grey pine carpet....70
Grey pug....71
Heart and club....72
Heart and dart....73
Hebrew character....74
Iron prominent....75
July belle....76
July highflyer....77
Large yellow underwing....78
Latticed heath....79
Least black arches....80
Lesser broad-bordered yellow underwing....81
Lesser common rustic....35
Lesser swallow prominent....82
Lesser yellow underwing....83
Light arches....84
Light emerald....85
Lunar thorn....86
Lunar underwing....87
Lychnis....88
Map-winged swift....89
Marbled coronet....90
Marbled minor....91
March moth....92
May highflyer....93
Middle-barred minor....94
Mottled beauty....95
Mottled pug....96
Mottled rustic....97
Mottled umber....98
Mouse moth....99
Muslin footman....100
Narrow-winged pug....101
Netted pug....102
November moth....103
Nut-tree tussock....104
Oak nycteoline....105
Oblique carpet....106
Ochreous pug....107
Olive....108
Orange swift....109
Pale brindled beauty....110
Pale November moth....111
Pale pinion....112
Pale prominent....113
Pale-shouldered brocade....114
Pebble prominent....115
Pine beauty....116
Pine carpet....117
Pink-barred sallow....118
Plain golden Y....119
Poplar hawk-moth....120
Powdered quaker....121
Purple bar....122
Red chestnut....123
Red sword-grass....124
Red-green carpet....125
Red-line quaker....126
Riband wave....127
Rivulet....128
Rosy rustic....129
Ruby tiger....130
Rustic....131
Rustic shoulder-knot....132
Sallow....133
Sandy carpet....134
Satellite....135
Satin beauty....136
Scalloped hazel....137
Scarce umber....138
Seraphim....139
Setaceous hebrew character....140
Shaded broad-bar....141
Shears....142
Shoulder stripe....143
Shuttle-shaped dart....144
Silver Y....145
Silver-ground carpet....146
Single-dotted wave....147
Six-spot burnet....148
Six-striped rustic....149
Slender brindle....150
Sloe pug....151
Small elephant hawk-moth....152
Small fan-footed wave....153
Small phoenix....154

Small quaker 155
Small rivulet 156
Small square-spot 157
Smoky wainscot 158
Snout 159
Spectacle 160
Spruce carpet 161
Square-spot rustic 162
Straw dot 163
Streak 164
Swallow prominent 165
Twin-spot carpet 166
Twin-spotted quaker 167
V-pug 168
Water carpet 169
White ermine 170
Winter moth 171
Yellow horned 172
Yellow shell 173
Yellow-barred brindle 174
Yellow-line quaker 175



Angle shades

A common species across a range of habitats. Numbers are often boosted by migrants.





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 rustic

A common species, especially in broadleaved woodland.





Brown-line bright-eye

A common grassland species.





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 sallow

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.





Clifden nonpareil

A rare species that is mostly southern, but expanding its range northwards. This was one of two at Gaddon Loch in mid-September 2026. The foodplants of the caterpillars are aspen and other poplars.





Clouded border

A common summer species that is often seen in daylight.



Clouded drab

A common spring species.





Clouded silver

A southern species that has spread north to reach Fife.







Clouded-bordered brindle

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





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

A southern species that has spread into Fife in the last few years. This one was at Birnie Loch in mid-August 2024.



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 sallows 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 carpet

A common species in a range of habitats.





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 carpet

A common summer species.







Green pug

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



Green-brindled crescent

A locally-distributed species of broadleaved woodland.







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 at or near the coast. 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.







Latticed heath

A southern species that is spreading north, and has now become quite common in Fife.





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.





Lunar underwing

A common autumn species of grasslands.





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 are unlikely to 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.



Olive

A scarce species, occurring where poplars grow. This one was at Gaddon Loch in mid-August 2024.





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 sallows 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.





Pine carpet

A locally-distributed species in Fife, occurring in areas with pine trees.





Pink-barred sallow

A common autumn species where poplars or sallows 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 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.





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.









Riband wave

A common species of summer and early autumn.





Rivulet

A common summer species where red campion grows.





Rosy rustic

A common species of late summer and early autumn, occurring in a range of habitats.





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.







Setaceous hebrew character

A common species in a range of lowland habitats.



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 now often recorded in Fife. This one was at Gaddon Loch in early May 2022.





Silver Y

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





Silver-ground carpet

A common species which is often seen during the day.





Single-dotted wave

A southern species that is spreading north and becoming more common in Fife. This one was at Birnie Loch in mid-August 2024.





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.





Slender brindle

A common species, especially in open woodland.



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 common summer species.





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.





Spectacle

A widespread moth but not especially common in Fife. 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 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.

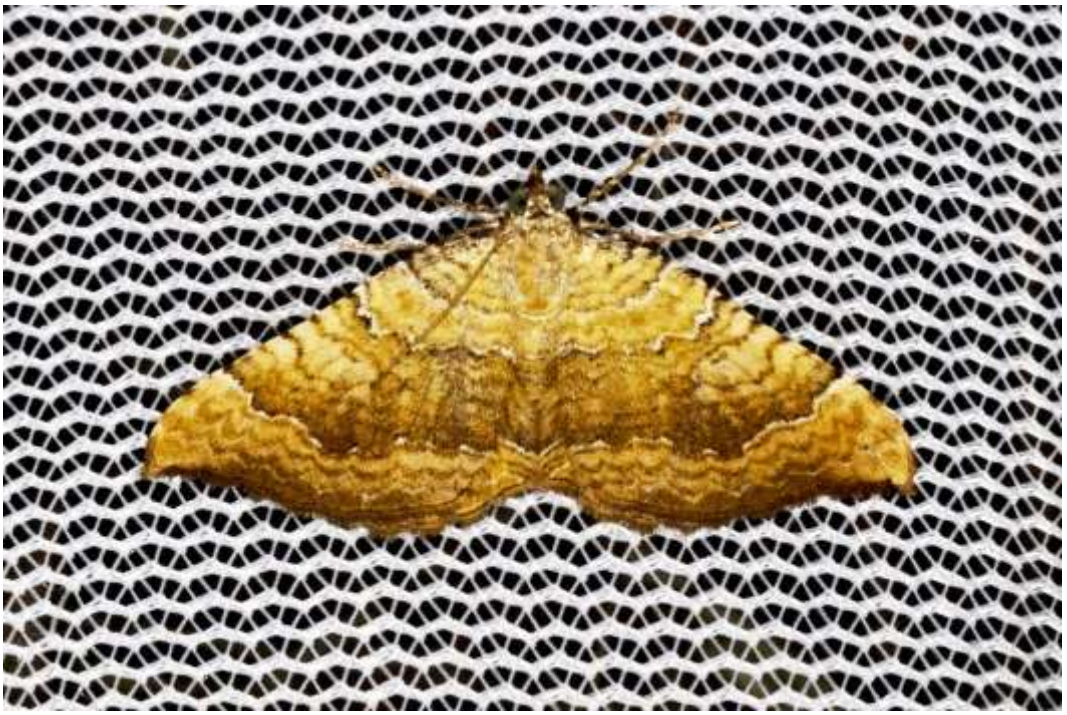






Yellow shell

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





Yellow-barred brindle

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



Yellow-line quaker

A common autumn species of broadleaved woodland.



