# THE MOTHS OF CAITHNESS

# PUG MOTH SPECIES IN CAITHNESS

SOME NOTES ON IDENTIFICATION

NEIL MONEY COUNTY MOTH RECORDER CAITHNESS

# PURPOSE

The purpose of this paper is

- to attempt to draw together from a number of sources information that will aid the identification of pug moth species found in Caithness
- > to help identify species that may be being overlooked
- > to encourage greater interest in pug moth identification

I make no claim to be an "expert" in pug identification so I encourage readers to correct any mistakes I have made and to add any further helpful information.

#### GETTING STARTED

Before trying to identify an unfamiliar pug always consider the following especially if it is worn:

- Flight period in Caithness. This may differ to that given in field guides eg Ochreous Pug is given as April-May but all records in Caithness have been in June. The table of flight times in Butterfly Conservation's East Scotland website (see below) shows that in Scotland there are few records in April with the main peak time being May with records going into June so this species is unlikely to be found in August.
- Habitat and food plant. Consider the habitat (although some individuals do wander away from that) and if it is found associating with a particular plant.
- Shape and resting position. These points can be helpful
- Worn specimens. Do not waste too much time trying to identify worn specimens – it may be impossible to distinguish between similar species when they are worn. DO NOT guess – accuracy of identification is important.
- If in doubt or you are dealing with a species that is scarce in Caithness try to take a good photograph.

#### SCOTTISH FLIGHT PERIODS AND SPECIES DISTRIBUTION

For comprehensive information about Scottish flight period go to:

http://www.eastscotland-butterflies.org.uk/mothflighttimes.html

# COMMON AND REGULARLY RECORDED SPECIES

# 70.141 Double-striped Pug



HINT: Swept back wings

<u>Habitat</u>: Wide ranging. <u>Larvae food</u>: Wide range of flowers on herbaceous plants, trees and shrubs <u>Flight period</u>: Usually the earliest pug to appear in Caithness recorded from end of March to end of August. Double brooded with main peak end of July & beginning of August and lesser peak end of April

<u>Identification points</u>: No confusion species. Often rests with wings held backwards. Two distinct dark cross lines the outer one often not reaching the lower edge. Two roughly triangular marks close to the apex. Varies in size.

# 70.144 Green Pug



**HINT**: Greenish tinge on thorax of worn moths

<u>Habitat</u>: Urban parks, gardens, hedgerows and woodland where food plant is found. <u>Larvae food</u>: Flowers of *prunus* including Crab Apple, Apple, Pear Hawthorn, Blackthorn and Cherry. <u>Flight period</u>: July to Mid-August

<u>Identification points</u>: No confusion species in Caithness. Variable but when fresh obvious green colouring, this fades but some green usually retained on the thorax. Rounded wings with well-marked central spot.

#### 70.151 Foxglove Pug



HINT: Unmistakable

<u>Habitat</u>: Where ever food plant occurs. <u>Larvae food</u>: Foxglove.

<u>Flight period</u>: Mid-May to July (a few records fromAugust and September may indicate occasional second broods)

Identification points: Unmistakable as no confusion species in Caithness.

# 70.160 White-spotted Pug



**HINT:** White spots on side of abdomen

<u>Habitat</u>: Damp locations such as woodlands, ditches, gardens, hedgerows and river banks. <u>Larvae food</u>: Umbellifers such as Wild Angelica, Cow Parsley and Hogweed. <u>Flight period</u>: June

<u>Identification points</u>: Brownish-grey with no strong linear markings. Prominent white tornal mark on both fore and hind wings, white marks along the outer edge of the wing, white thorax mark and white dots on either side of the abdomen. When the white marks are present they are diagnostic but they disappear with wear and it becomes difficult to distinguish from worn similar species (eg Golden-rod Pug). Veins are checkered. Confusion species can be Golden-rod Pug, Larch Pug, and Grey Pug. Wormwood Pug and Currant Pug are redder brown and have prominent discal spots.

# 70.161 Golden-rod Pug



HINT: White tuft on thorax

<u>Habitat</u>: In Caithness records come from open woodland and gardens. <u>Larvae food</u>: Not known in Caithness where there is just one generation. <u>Flight period</u>: Mid –May to Mid-July.

<u>Identification points</u>: On fresh examples there is often a white tuft on the hind thorax below a dark chevron. On the wings the discal spot is large, the veins are chequered, cross bands are negligible, often a well-marked white tornal spot and there are dark marks along the leading edge. The abdomen is long. Worn examples cannot be distinguished from confusion species such as White-spotted Pug and Grey Pug without dissection.

#### 70.168 Narrow-winged Pug



**HINT:** Resting position and marbled effect

<u>Habitat</u>: Heathland and moorland, but does stray to other habitats. <u>Larvae</u> <u>food</u>: Heather flowers. <u>Flight period</u>: Mid-May to Mid-August.

<u>Identification points</u>: Easily identified by narrow pointed wings (often held swept back) with strong marbled pattern of angled cross lines.

# 70.177 Satyr Pug



**HINT:** Straight leading edge

<u>Habitat</u>: Mainly moorland and upland grasslands but in Caithness does occur in other habitats including gardens. <u>Larvae food</u>: A wide range of flowers including heather, ragwort and meadowsweet. <u>Flight period</u>: Mid-May to Mid-July.

<u>Identification points</u>: A rather nondiscript moth with a straight leading edge to the wing. A gravelly, salt and pepper appearance with small discal spot and chequered veins. A heavy abdomen which lacks dark band. Largely diurnal but does come to light

#### 70.179 Wormwood/Ling Pug



**HINT:** Hooked up abdomen with dark band

<u>Habitat</u>: A wide variety of habitats including gardens, coasts, woodland, grasslands and moorland (Ling Pug). <u>Larvae food</u>: Ling – flowers of heather, Wormwood – range of flowers of composite plants Yarrow, Ragwort and Michaelmas-daisy. <u>Flight period</u>: Late June to Mid-August.

<u>Identification points</u>: Very plain wings with noticeable discal spot, dark marks on the leading edge and prominent white tornal spot. Abdomen held hooked up with dark band. In Caithness the main confusion species is Currant Pug which is smaller and has a white tornal spot which is often double.

# 70.183 Common Pug



**HINT:** Curved leading edge and very small or no discal spot

<u>Habitat</u>: A very wide range of habitats. <u>Larvae food</u>: The leaves of a number of trees and the flowers and leaves of Ragwort, Yarrow and Hogweed. <u>Flight period</u>: Mid- May to Mid-July.

<u>Identification points</u>: Wing has curved leading edge with small discal spot which is usually bifurcated but can be absent. Pale double cross line, broad at leading edge and narrowing to trailing edge. Pale sub terminal line leading to white tornal spot. Abdomen small and not projecting far beyond hindwing

# 70.190 Grey Pug



**HINT:** The Garden Warbler of the pug world

<u>Habitat:</u> Wide spread from gardens to heathland including wet lands. <u>Larvae</u> <u>food</u>: Flowers and leaves of a wide range of herbaceous and woody broadleaved plants. <u>Flight period</u>: June and July

<u>Identification points</u>: Very few distinguishing features. Broad, rounded wings with average discal spot but larger than Common Pug. Abdomen projects beyond hind wings in males, less so in females. Wings grey with no brown, but some chestnut on abdomen.

# SPECIES PROBABLY UNDER RECORDED

# 70.147 Slender Pug



HINT: Small size

<u>Habitat</u>: Damp woodland and similar habitats and gardens. <u>Larvae food</u>: Catkins of willow and salix species. <u>Flight period</u>: Mid-June to Mid-August.

<u>Identification points</u>: Small size, rounded wigs with distinct discal spot on grey background is diagnostic.

# 70.155 Netted Pug f. ochracea



HINT: Unmistakeable

<u>Habitat</u>: Largely coastal in Scotland, but recorded in near coastal gardens in Caithness. <u>Larvae food</u>: Food plant is given as Sea Campion and Bladder Campion (rare in Caithness). Probably also Red Campion in Caithness as I have caught it in a net flying low over Red Campion and on 3 occasions I have trapped it in a light trap close to Red Campion. <u>Flight period</u>: End of May to end of June.

Identification points: Unmistakable as no confusion species in Caithness.

#### 70.171 Ochreous Pug



**HINT**: Small with large elongated discal spot

<u>Habitat</u>: Coniferous plantations, also gardens and woodland where food plant occurs. <u>Larvae food</u>: Scots Pine, Lodgepole Pine and larches. <u>Flight Period</u>: June

<u>Identification points</u>: A small, fragile pug with indistinct markings on a pale brown wing, except for prominent, elongated discal spot. Trace of dark marking along leading edge. Distinctive resting position with rather pointed wings held swept back with fore wing over hind wing.

# 70.182 Currant Pug



**HINT:** Obvious white bifurcated tornal spot

<u>Habitat:</u> Gardens and places where food plant has been introduced. <u>Larvae</u> food: Black Currant and Red Currant. (Also recorded from Wild Hop which is rare in Caithness) <u>Flight period</u>: Mid-June to early August

<u>Identification points</u>: Similar to White-spotted Pug but wings shorter, more rounded and with curved leading edge. Very noticeable white tornal spot which is bifurcated. Large elongated discal spot and obvious black marking on leading edge.

# SPECIES RARELY RECORDED IN CAITHNESS

#### 70.154 Marsh Pug



**HINT:** Diurnal, habitat and small tornal spot

<u>Habitat</u>: In Caithness sand dunes. <u>Larvae food</u>: In Caithness probably flowers and seeds of Common Mouse-ear. <u>Flight period</u>: June

<u>Identification points</u>: Diurnal. A small chocolate brown moth fading to khaki when worn. Discal spot very small or absent and small white tornal spot. Straight leading edge of wing. Fringes of wings chequered.

### 70.156 Brindled Pug

No local photograph available.

HINT: Dashes on veins

Habitat: Woodland. Larvae food: Oaks and hawthorn Flight period: Only Caithness record June

<u>Identification points</u>: A largish well marked pug with rounded wings and short abdomen. There is a small elongated discal spot. The veins between the discal spot and the apex have dark dashes.

# 70.158 Juniper Pug

No local photograph available.

**HINT:** Dark patch through discal spot and dashes on veins

<u>Habitat</u>: Moorland but also gardens with *Juniper* cultivars. <u>Larvae food</u>: Junipers. <u>Flight period</u>: Caithness records are in August

<u>Identification pointers</u>: A grey medium sized pug with dark bands across the forewing. The discal spot has a dark patch behind it and can have a white edge on the outer side. There are Dark dashes on the veins through the centre of the wing. The abdomen has a dark line along the side and a pale "tail".

# 70.162 Dwarf Pug



**HINT:** Curved wavy cross line below elongated discal spot

<u>Habitat</u>: Woodlands and gardens with introduced conifer species. <u>Larvae</u> <u>food</u>: Introduced conifers including Norway Spruce, Sitka Spruce and Lawson Cypress. <u>Flight period</u>: June

<u>Identification pointers</u>: A medium sized pug with curved leading edge and wings held slightly backward when at rest. Obvious elongated discal spot. The dark cross line beyond the discal spot curved and wavy. The fringes are chequered. There is a dark discal spot on the hindwing and a dark band on the abdomen.

#### 70.163 Larch Pug



HINT: White spot on thorax

<u>Habitat</u>: Woodlands and gardens where Larch occurs. <u>Larvae food</u>: Larch species. <u>Flight period</u>: June to early July.

<u>Identification pointers</u>: Largish grey pug with strong cross lines on the wings. A white thoracic spot. Cross lines angle round the prominent discal spot.

#### 70.169 Angle-barred/Ash Pug

No local photograph available.

**HINT:** Large size and long narrow wings

<u>Habitat</u>: Woodlands and gardens were Ash occurs. <u>Larvae food</u>: Ash. <u>Flight period</u>: Record from Caithness in July. Elsewhere in Scotland recorded May to August.

<u>Identification pointers</u>: Large grey-brown pug with few markings and long pointed wings. Short abdomen which is turned up. A sharply angled cross band beyond the elongated discal spot.

#### 70.173 Lime-speck Pug



HINT: Unmistakable

<u>Habitat</u>: Caithness record from a garden. <u>Larvae food</u>: The flowers of many low-growing plants including ragworts, Common Knapweed and Yarrow. <u>Flight period</u>: Caithness record in August. Elsewhere in Scotland recorded from June to September.

Identification pointers: Unmistakable.

**HINT:** Tawny in wings if present and tawny on abdomen

## 70.187 Tawny-speckled Pug f. cognata

No local photograph available.

<u>Habitat</u>: In Caithness from open woodland. Wide range including gardens hedgerows, acid grassland and open woodland. <u>Larvae food</u>: Yarrow and Sneezewort. <u>Flight period</u>: July and August.

<u>Identification pointers</u>: Variable but the form occurring in Scotland can show very little tawny in the wings and can be very grey, but usually retains some tawny colour. Has distinct whitish cross lines with well-defined discal spot. Abdomen is tawny.