

MIDI PYRENEES FRANCE

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Species: There are almost 200 species of butterflies and 28 species of day-flying moths in the Midi-Pyrénées, this represents 75% of the butterfly species recorded in mainland France. Several of the red list of threatened species of European butterflies can be found in the Midi Pyrénées. The remarkable diversity of habitats, the geology, and wide range of climatic conditions together with a rich plant life has enabled the development of such a large number of butterfly species.

The Midi-Pyrénées is the largest region of France, with more than 45 000 km2 land area. It comprises 8 departments, the Ariège, Aveyron, Haute Garonne, Gers, Lot, Hautes Pyrénées, Tarn and the Tarn and Garonne.

With the effect from 1 January 2016 the number of metropolitan regions was reduced from 22 to 13 (12 mainland and Corsica), with 96 departments. The Midi-Pyrénées and the Languedoc-Roussillon have been fused to create the new region of Occitanie.

HAUTES PYRENEES FRANCE

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Website: <u>borderlinehols.com butterfly gallery</u> my butterfly gallery focused on the Hautes Pyrénées

Butterfly conservation page borderlinehols.com butterfly conservation

Together with EBG members, Nature Midi-Pyrénées and the Conservatoire d'espaces naturels Midi-Pyrénées I have been assisting with the Butterfly Atlas for the Midi-Pyrénées. The online Atlas can be consulted here: www.webobs.cen-mp.org

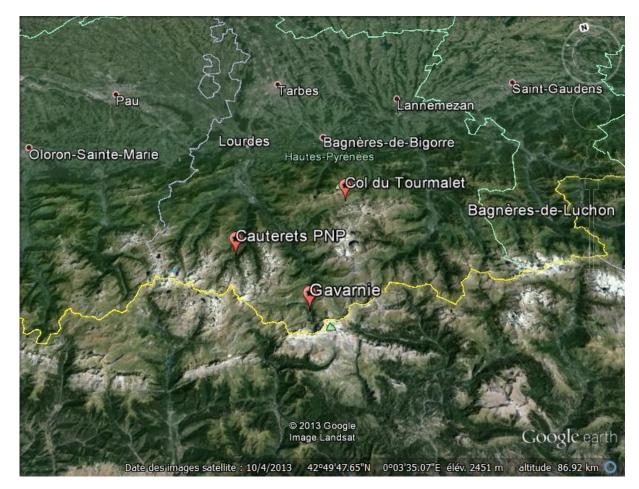
The Conservatoire d'espaces naturels de Midi-Pyrénées and Languedoc-Roussillon are working together to produce a combined Atlas for the new region of Occitanie which is due to be published in 2018.

The Hautes Pyrénées is a department of south western France. The department consists of several distinct geographical areas. The southern part, bordering with Spain and the Spanish Pyrénées, consists of a mountainous area including the Vignemale (3298m), the Pic du Midi de Bigorre (2877m), and Pic Long (3192m) in the Néouvielle nature reserve. A second area consists of lower altitude rolling hills. The northern part of the department is of largely flat



agricultural land. The department also has a small enclave, located within the neighbouring department of the Pyrenees-Atlantiques. The Parc National des Pyrénées created in 1967 covers a significant area within the Hautes Pyrénées (also the adjacent Pyrénées Atlantiques department) including Pont d'Espagne at Cauterets and the World Heritage Sites of the Cirque de Gavarnie and Mont Perdu (3355m) which straddles the border between France and Spain.

Tarbes is the administrative centre of the department, whilst Lourdes is dedicated almost exclusively to the religious pilgrimage industry.



Map of the Hautes Pyrénées

Terrain: the high alpine pastures, rocky outcrops and flower meadows are very rich, the mountain habitats support their own species according to their particular geology and orientation, the butterflies have adapted to the specific and diverse high mountain flora. Some species are rare or very local – with a number of Pyrenean endemic species such as the Gavarnie Blue (*Agriades pyrenaicus*), Gavarnie Ringlet (*Erebia gorgone*), Lefèbvre's Ringlet (*E. lefebvrei*) and Pyrenees Brassy Ringlet (*E.rondoui*).



The Néouvielle nature reserve (Néouvielle meaning "new snow" in Occitan language) was created in 1936. The 2313 acres comprise high altitude granite rocks and peaks sculpted by erosion with a rich flora and fauna dependent on its microclimate. It is particularly noted for the Dwarf Mountain Pine sub-species (Pin à crochets), peat bogs, hidden meadows, numerous mountain streams, almost 70 lakes and tarns and a large number of algae species.

Over-wintering species can be observed from February on sunny days and then throughout the spring, as one gains altitude the flight period is slightly later for newly emerging species, due to the relatively short growing season in the high mountains. From March you can expect to see Small Copper (*Lycaena phlaeas*), Orange Tip (*Anthocharis cardamines*), Holly and Adonis Blue (*Celastrina argiolius* and *Polyommatus bellargus*), Red-underwing Skipper (*Spialia sertorius*), de Prunner's Ringlet (*Erebia triaria*), Weaver's and Queen of Spain Fritillaries (*Boloria dia* and *Issoria lathonia*) amongst others, numbers of species peaking from mid- June. It is common to come across large numbers of blues and skippers puddling on damp footpaths throughout the summer.

Distribution and good areas:

There is good road access into the high mountains for mountain species at:

Col du Tourmalet (2115m) with a cable-car access from La Mongie to the Pic du Midi du Bigorre

Col du Tentes (2208m) on the Spanish border at Gavarnie

Col du Soulor (1474m)

Parc National des Pyrénées at Pont d'Espagne (1496m), Cauterets

Néouvielle nature reserve, access from Barèges and Saint Lary Soulan

There are three glaciated cirques within the Parc National des Pyrénées – Troumouse, Estaubé and Gavarnie. Gavarnie is an UNESCO World Heritage site famous for its natural and cultural significance. The area supports a very rich endemic and sub-endemic flora with alpine and sub-alpine pastures, there is a complex geology of shale and metamorphic rock, glaciated limestone and nappe belts formed during the continental plate collisions.

There is an excellent footpath network including the GR10 (grande randonnée) which runs from coast to coast.

The flower meadows of the valleys which lead into the higher mountains are particularly rich. It is not uncommon to observe 60 species in a day in these areas.



At lower altitudes you can discover Black Hairstreak (*Satyrium pruni*), there are sites for False Ringlet (*Coenonympha oedippus*), whilst Twin Spot Fritillary (*Brenthis hecate*) can be found in the north of the department on hillsides bordering the Gers, particularly in areas where *Filipendula vulgaris* grows.

Selected species of interest:

Pieridae:

Peak White (*Pontia callidice*) This is a high mountain butterfly, appearing from late May, and found amongst steep scree and poor grazing pasture above 1800m, usually at the higher end of its altitude range. It has an erratic flight pattern, and rarely settles, however the distinctive green mottled markings on the hind-wing underside are usually visible in flight

Mountain Clouded Yellow (*Colias phicomone*) - very localised colonies in grassy rocky outcrops.



Mountain Clouded Yellow Colias phicomone

Papilionidae:

Apollo (*Parnassius apollo*) - a widely distributed Pyrenean sub-species is to be found in subalpine meadows which are rich in flora. Clouded Apollo (*Parnassius mnemosyne*) occurs in open grazing pastures, favouring damp meadows and often near streams (larval food plant Corydalis ssp), although smaller than the Apollo it has a similar "floppy" flight pattern but no trace of red markings, and has a slightly earlier flight period towards the end of May.



Clouded Apollo Parnassius Mnemosyne

Apollo Parnassius apollo

Satyridae:

Erebia: Several species of mountain Ringlets can be found on the wing at the same time, some high flying species can only be found above 2000m and within specific habitats such as rocky outcrops, scree and areas of low density flora. The Pyrenees Brassy Ringlet (*Erebia rondoui*) and Gavarnie Ringlet (*E. gorgone*) are both endemic to the Pyrénées and are common on high pastures from early July.

The Gavarnie Ringlet is usually found above 1800m. Pyrenees Brassy Ringlets are found from 1600m; males can be found in large numbers 'puddling' on damp ground or at the edge of streams. They have fore-wing upper sides containing two fused black spots with bright white pupils which are also present on the fore-wing under side. This area of the Pyrénées is one of the few remaining places in Europe where you can find both Common and Pyrenees Brassy Ringlets flying together.



Lefèbvre's Ringlet (female) Erebia lefebvrei

Lefèbvre's Ringlet male Erebia lefebvre



The Mountain Ringlet (*E.epiphron*) is a small butterfly with a weak flight it is widely distributed above 1500m on damp sub-alpine meadows, often near mountain streams and lakes. Lefèbvre's Ringlet (E. lefebvrei) is another Pyrenean endemic species and has a wider distribution than the Gavarnie Ringlet. It has a very dark colouration and can appear almost black, the diagnostic features being large and bright white-pupilled black spots in the apex area of fore-wings and marginal area of the hind-wings. The spots are usually (but not always) found right at the edge of the red patch. It can be observed above 1800m from mid-July on high grazing pastures and scree. The Water Ringlet (E. pronoe) is another high altitude Ringlet, found in localised pockets in grassy places near streams, usually above 1400m and during August. The Bright-eyed Ringlet (*E.oeme*) is widely distributed, and has variable forms, with bright eye-spots on both wing sets and found mainly amongst long grasses in meadows and pastures. Piedmont Ringlet (E. meolans) is the most widely distributed ringlet found in flowery meadows, on dry paths and stony tracks in sunny places. It often has a tiny third spot on the top of the forewing, out of alignment with the other two spots, and a large orange patch covering both top and lower ocelli. Yellow-spotted Ringlet (E. manto) is a very variable Ringlet which is found mainly in open woodland clearings, the Pyrenean ssp constans with no markings on the under wings is well represented.



Common Brassy Ringlets Erebia cassioides

Lycaenidae:

Blues: Gavarnie Blue (*Agriades pyrenaicus*) A Pyrenean endemic, the males have a diagnostic silver grey colouration on the upper sides, found in very localized pockets from late June, above 1600m, it can be seen congregating around damp stony patches on alpine tracks. The Turquoise Blue (*Polyommatus dorylas*) males have a light shiny turquoise blue upper side, with very pale undersides, the orange spots on the under wing often heart-shaped, it is mainly found feeding on flora alongside hay meadows, and in rocky, stony areas, it is not uncommon. Baton Blue (*Pseudophilotes baton*) is about the size of a Small Blue, with chequered edges, and is found in the Barèges, Gavarnie and Cauterets valleys, often on gravel, but not common.



Silver-studded Blue (*Plebejus argus*) is a small blue, it is common in flowery meadows, Amanda's Blue (*Polyommatus amandus*) is a larger blue with a pale underside, widely distributed but in small numbers at lower altitude.



Gavarnie Blues Agriades pyrenaicus

Coppers: Purple-edged Copper (*Lycaena hippothoe*) and Scarce Copper (*L. virgaureae*) are very well represented, the Purple-shot Copper (*L. alciphron*) can be found in small localised colonies, usually in the *gordius* form. The Large Copper (*L. dispar*) can be found in damp meadows but only at lower altitudes.

Nymphalidae:

Camberwell Beauty (*Nymphalis antiopa*) this majestic butterfly is present particularly above 1000m in the spring (March and April), in broken sunny woodland areas near streams and river beds where there is an abundance of LHP, with a further fresh brood in August. The Purple Emperor (*Apatura iris*) is present in small numbers. Shepherds Fritillary (*Boloria pales*) is widespread on rocky alpine grassland, usually above 1600m. Niobe Fritillary (*Argynnis niobe*) is a large fritillary and has a more restricted range than either the Dark Green Fritillary (*A.aglaja*) or Silver-washed Fritillary (*A.paphia*), and is most commonly found in the *eris* form.

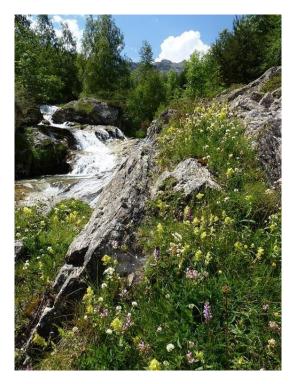


Camberwell Beauty Nymphalis antiopa

Purple Emperor Apatura iris

Riodinidae:

Duke of Burgundy Fritillary (*Hamearis lucina*) - the fast-flying males are easily recognized as they dart from their perched position to inspect anything flying within their territory. Locally present from May, found up to 1770m on rocky grassy outcrops in addition to woodland clearings.



Habitat « Quand la montagne vous a pris le coeur tout vient d'elle et tout vous y ramène. »