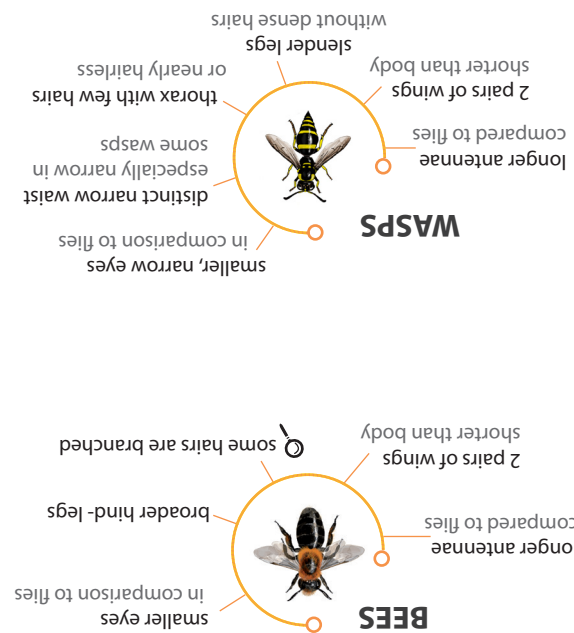
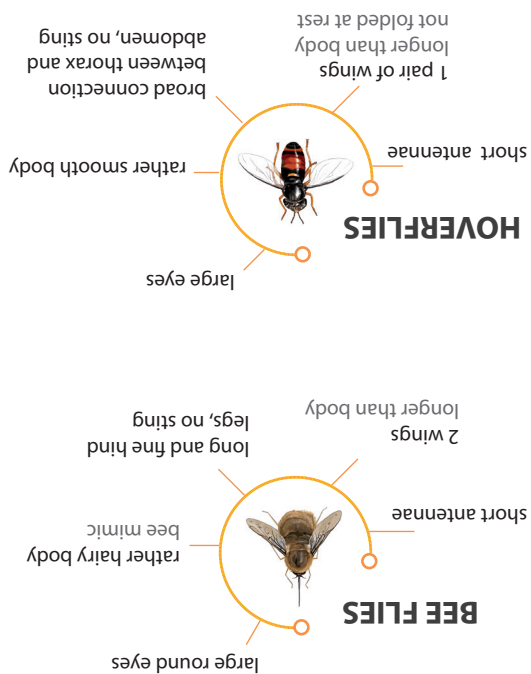
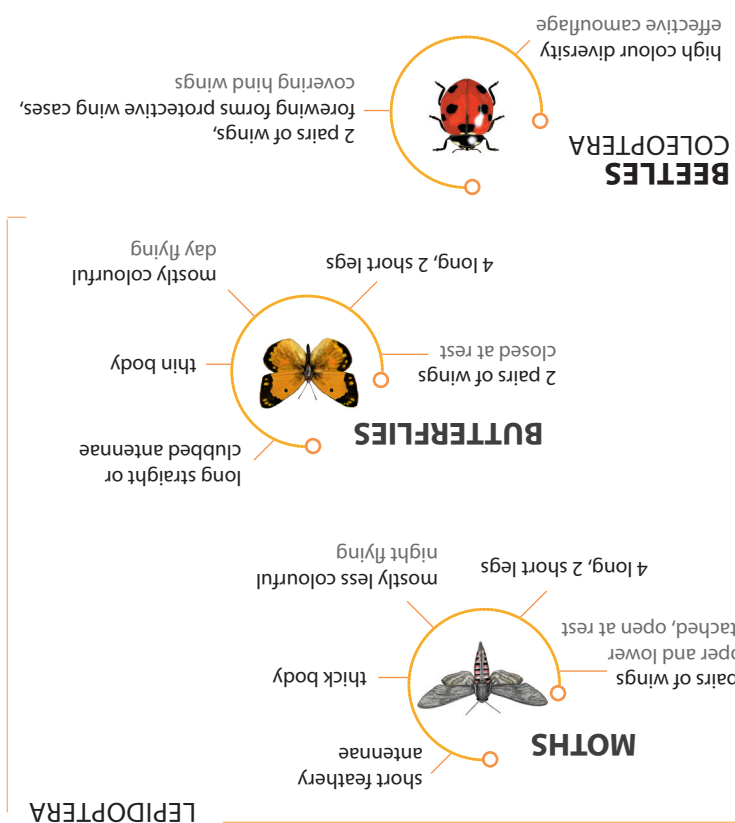


MOTHS

BUTTERFLIES



POLLINATING INSECTS

BUTTERFLIES AS POLLINATORS

Due to their great aesthetic value and their transformation of metamorphosis that they undergo in their life cycle, butterflies are possibly one of the groups of insects most appreciated by naturalists and the general public. There are butterflies of many colors and sizes and, unlike their sisters the moths, they tend to have daytime activity. Adult Lepidopterans (which also include moths) have a lick-sucking mouthpart called a spirit-tube, which serves to feed on the nectar of flowers. This characteristic makes them insects that play a fundamental role in plant-animal interactions, and therefore pollination. Like the rest of the groups of pollinators, very important declines in recent decades, which has led them to gain special attention not only for the fact that they are very efficient pollinators but also for being excellent bioindicators of ecosystem health.

MOTHS AS POLLINATORS

Moths have been frequently ignored as pollinators due to the lack of knowledge about their biology, but recent studies place them as a very important group of pollinating insects, with plant species that depend exclusively on them to be able to reproduce. Apart from suffering the same threats as other groups of pollinators (climate change, loss of habitat, use of pesticides,...), nocturnal pollinators such as moths are also affected by light pollution, increasing their vulnerability especially in areas urban or interurban, so conservation efforts need to be intensified for this group.

LIFE 4 POLLINATORS

The aim of the project is to improve pollinator conservation by creating a virtuous circle leading to a progressive change in practices across the Mediterranean region.



In Mediterranean countries (Spain, Italy, France and Greece) there is inadequate awareness about the role of wild pollinators and the importance of conserving their diversity. This knowledge gap is one of the main obstacles to proper planning of successful programmes to address the main drivers behind pollinator decline and ensure sustainable management and restoration of the remaining high-value pollinator habitats.

The project will contribute to a range of EU policy and legislation, including amongst others the biodiversity strategy, the pollinators initiative and biodiversity protection under the common agricultural policy.

LIFE 4 POLLINATORS
BUTTERFLIES AND MOTHS IN THE MEDITERRANEAN
FIELD GUIDE

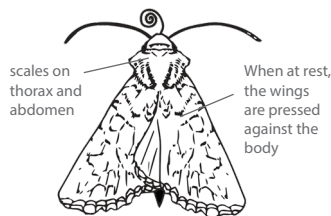
The LIFE 4 POLLINATORS project (LIFE 18 GIE/IT/000755) has received funding from the LIFE Programme of the European Union



MOTHS

IDENTIFYING MOTHS

Moths are nocturnal, so during the day it will be difficult to see them flying. Traditionally they have been classified in the Heterocera group of Lepidopterans and are the largest group of Lepidopterans. In general, moths differ from butterflies by the following features:



1. Moths have feathery or sharp-edged antennae while butterfly antennae are usually smoother
2. When at rest, moths are prone to hold the wings down, pressed against your body and parallel to the ground. On the other hand, butterflies are prone to holding their wings in an upright position.
3. Generally, moths have much duller colors than butterflies and their bodies are shorter and wider, and they often have scales on their thorax and abdomen.

Macroglossum stellatarum

BODY
The abdomen ends with scales that give it the appearance of a bird's tail.

BODY
Presents brown forewings with black lines and dots. The hind wings are orange and a little dark around the edges.

His head and torso are broad and his eyes are large. The abdomen is colored with black and white

DIMENSIONS: 40–45 mm

Autographa gamma

BODY
It has forewings with a complex pattern of coloration between brown, gray and silver colors.

WINGS
In the center of the wings are curved white lines that resemble the greek letter „gamma.“

Hindwings are light brown, darkened at the edge.

DIMENSIONS: 40–55mm

Utetheisia pulchella

BODY
Very characteristic dotted pattern on a white background

front of its forewings with very characteristic coloration with mottled black and red dots on a white background

hindwings white, with dark gray spots on the margins. Its abdomen and thorax are white, thigh and smooth

DIMENSIONS: 29–42mm

Agrius convolvuli

BODY
Large sphinx with grayish body and dark spots and lines. Hindwings are gray or light brown with dark bands.

It has a gray dorsal stripes with pink edges on the sides.

DIMENSIONS: 80–105mm

Hemaris fuciformis

BODY
Its body is yellowish brown, dots on a white background. The head follows the with a very characteristic dark red abdominal band.

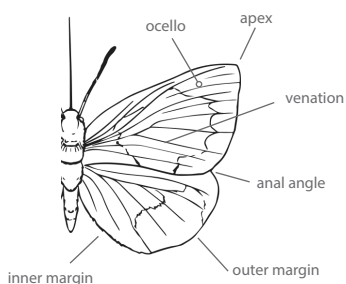
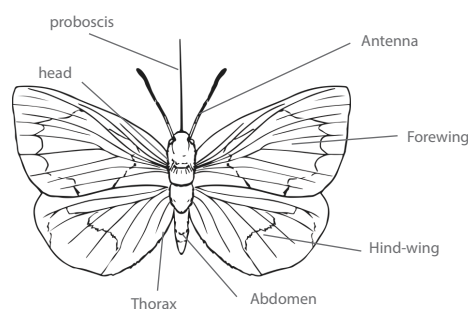
WINGS
Transparent wings, with marked veins and reddish edges

His abdomen is thick, and his eyes are large.

DIMENSIONS: 40–45mm

BUTTERFLIES

IDENTIFYING BUTTERFLIES



For more information on pollinators, please visit:
www.life4pollinators.eu



Zerynthia rumina

unmistakable coloring pattern formed by a mosaic of black and red spots on a yellowish background.

Vitreous window near the apex

Red dots with a black outline window near the apex

Females are slightly larger than males.

DIMENSIONS: 18–29mm

Iphiclides podalirius

Large yellowish-white, hindwings have submarginal blue and yellow spots and a blue ocellus surrounded by black and red near the anal angle

Longitudinal black spots

Very marked tails

Females are slightly larger than males

DIMENSIONS: 31–46mm

Papilio machaon

Large yellow with wings with black spots and marked veins. The forewings have a black margin, with a yellow submarginal band followed by another broad black band.

Red ocelli

Tail on the margin of the hind wings

DIMENSIONS: 32–47mm

Parnassius apollo

White butterfly with scattered gray scales. The forewings have 5 large black spots. The hind wings have two large red ocelli with a white pupil and a black outline.

Black spots

Red ocellus with a white pupil

Females have more transparent wings due to the absence of scales.

DIMENSIONS: 28–46mm

Vanessa cardui

Orange with black spots and dots. The forewings present a large black spot in the apical area that also contains white spots.

Black spots with white dots

The hind wings have scattered black dots. On the reverse, the hind wings have brown tones and white veins.

DIMENSIONS: 21–34mm

Vanessa atalanta

black with the forewings with white spots at the apex and an oblique orange band. The reverse is in shades of brown and gray.

Orange marginal bands with black spots.

DIMENSIONS: 25–32mm

Gonepteryx cleopatra

Greenish-yellow butterfly. Brown dots in the center of each wing.

Apical hook

The males have a more intense greenish color and have an orange spot on the front of the hind wings.

DIMENSIONS: 23–33mm

Pieris (Artogetia) rapae

Small and white with some black spots and darkened forewing apices.

Females have two black dots in the center of the forewings while males only have one.

DIMENSIONS: 16–27mm

Pararge aegeria

Orange with dark brown spots and black ocellus with a white pupil at the apex of the forewings and two ocelli also with a white pupil on the hindwings.

Males have a row of grayish-brown scent scales on their forewings that is absent in the females.

The reverse of the rear wing is completely dark brown.

DIMENSIONS: 19–23mm

Pyronia cecilia

Orange with a dark brown band on the margins of the wings with black ocellus on the forewings with two white pupils.

dark spot on the front of the forewing and are smaller than females.

The reverse of the hind wings is dark brown with gray tones.

DIMENSIONS: 15–21mm

Polyommatus icarus

Small bluish and brown with numerous black spots with a white outline on the back of the wings and orange spots on the margins.

reverse of the wings is pale gray in males and brown in females.

DIMENSIONS: 9–17mm

Colias crocea

Yellow with marked black band on the margins and a solitary black spot on the obverse of the wings.

females have orange spots on the black marginal bands

The reverse of the wings the black band is absent

DIMENSIONS: 22–26mm

Aglais urticae

Orange with black spots and yellow areas on the forewings.

Both wings have a dark band in the margins that includes blue spots

DIMENSIONS: 20–30mm