





**GIESTAS: BRANCAS E AMARELAS** | Brooms: white and yellow

**GIESTA-BRANCA** | White spanish broom - *Cytisus multiflorus*  
Eudicotiledonea / Fabaceae



© Eva Monteiro



© César Garcia

Aspecto geral (esquerda) e flores. É a primeira giesta a florir e a única, em Portugal, com flor branca. Época de floração: Abril a Junho

General aspect (left) and flowers. The first broom to bloom and the only in Portugal with white flowers. Blooming season: April to June

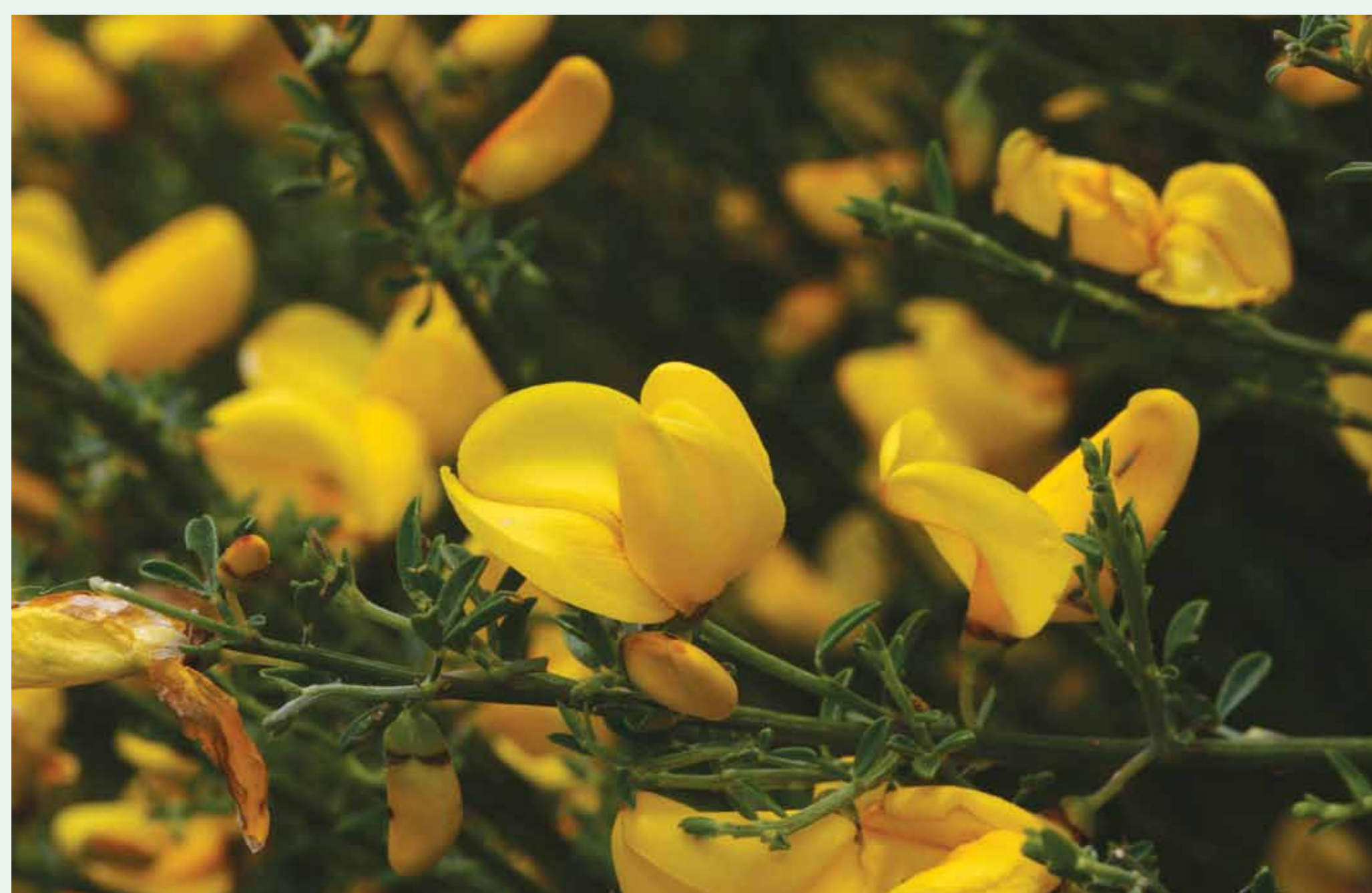
**MUITOS INSETOS PROCURAM REFÚGIO E ALIMENTO NAS GIESTAS**  
Many insects look for food and shelter in brooms



© Eva Monteiro

**SALTÃO** - *Odontura aspersicauda*  
Insecta/Orthoptera/Tettigoniidae

**GIESTEIRA-DAS-SERRAS** | Portuguese broom - *Cytisus striatus*  
Eudicotiledonea / Fabaceae



© Eva Monteiro



© Frank Remeckamp

Flores e vagem. Outras giestas têm a flor amarela, mas a giesteira-das-serras é a única com a vagem tão peluda. Época de floração: Abril a Junho

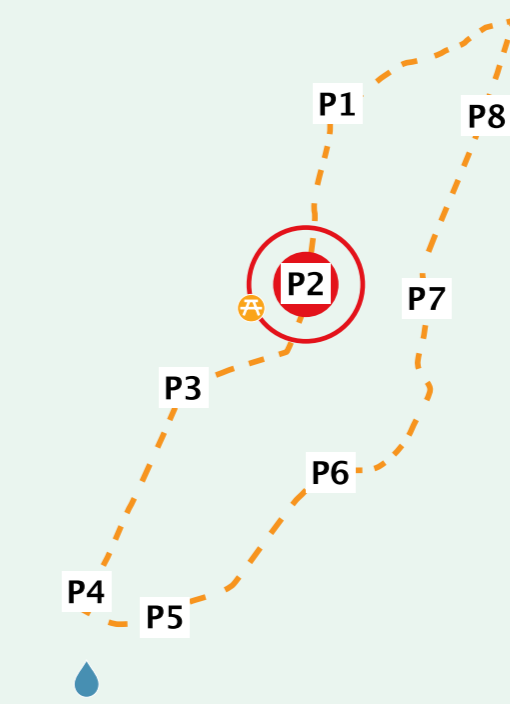
Flowers and pod. Other brooms have yellow flowers, but *Cytisus striatus* is the only one with so densely hairy pods. Blooming season: April to June

**GORGULHO** | Weevil  
Insecta/Coleoptera/Curculionidae



© Eva Monteiro





AINDA HÁ POUCO TEMPO AS FLORESTAS DE CASTANHEIROS POVOAVAM A SERRA DA GARDUNHA | Until recently chestnut tree forests covered Serra da Gardunha

**CASTANHEIRO | Chestnut tree - *Castanea sativa***  
Eudicotiledonea /Fagaceae



© Frank Pennkamp



© Frank Pennkamp

Aspecto geral e pormenor das folhas e flores. Até à década de 30 do século passado o castanheiro foi cultivado na Gardunha em castiçais, para produção de madeira, ou souts para aproveitamento do fruto – a castanha.

Chestnut tree and its leaves and flowers. Until the 1930s, chestnut trees were here planted for timber or for their fruit (chestnuts).

NOS DIAS DE HOJE OS PINHEIROS SUBSTITUEM OS CASTANHEIROS | Today, pine trees replaced chestnut trees



© Frank Pennkamp

**PINHEIRO-BRAVO | Maritime pine - *Pinus pinaster***  
Eudicotiledonea /Pinaceae

PROCURE GAFANHOTOS DE ANTENAS COMPRIDAS ENTRE OS ARBUSTOS | Please look out for grasshoppers among the shrubs



© Frank Pennkamp

Esta espécie só existe no Maciço Central Ibérico, o qual termina, a ocidente, na Serra da Gardunha.

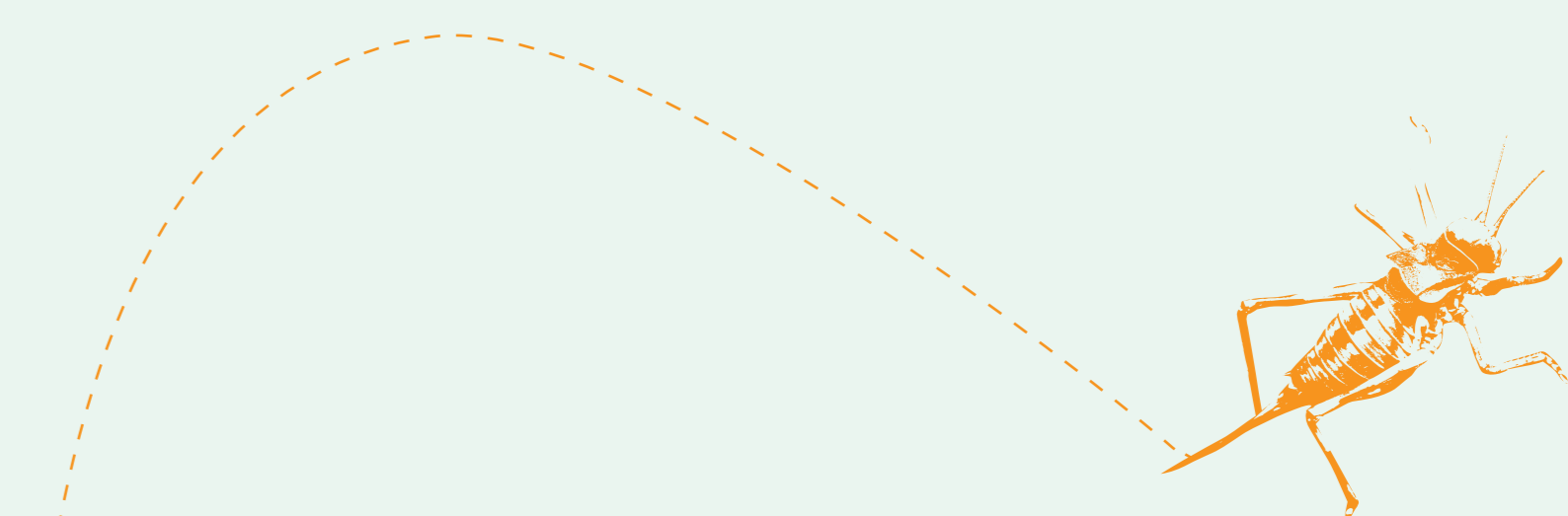
This species is only present in the Iberian Central Massif, which has its western border in Serra da Gardunha.

**GRILO-DE-SELA | Saddle-backed Bush-cricket - *Neocallicrania miegii***  
Insecta/Orthoptera/Tettigoniidae

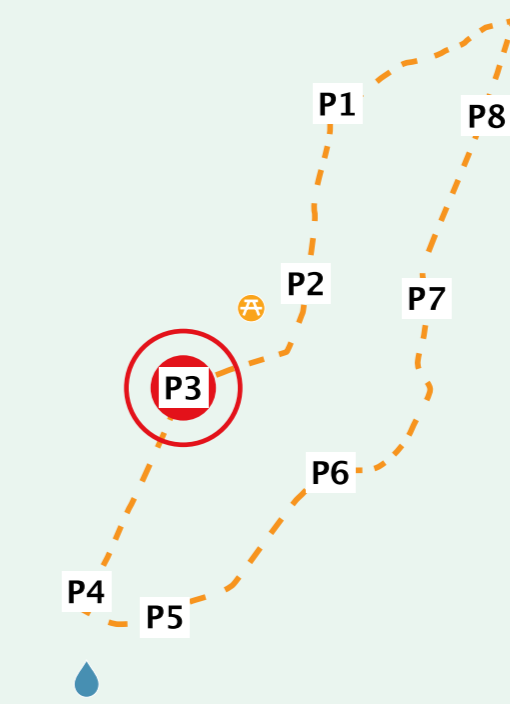


© Frank Pennkamp

**GAFANHOTO-DOS-BOSQUES | Bush-cricket - *Platycleis sp***  
Insecta/Orthoptera/Tettigoniidae







PLANTAS E INSECTOS A OBSERVAR NO MEIO DO CAMINHO PEDREGOSO | Plants and insects to observe along the rocky path

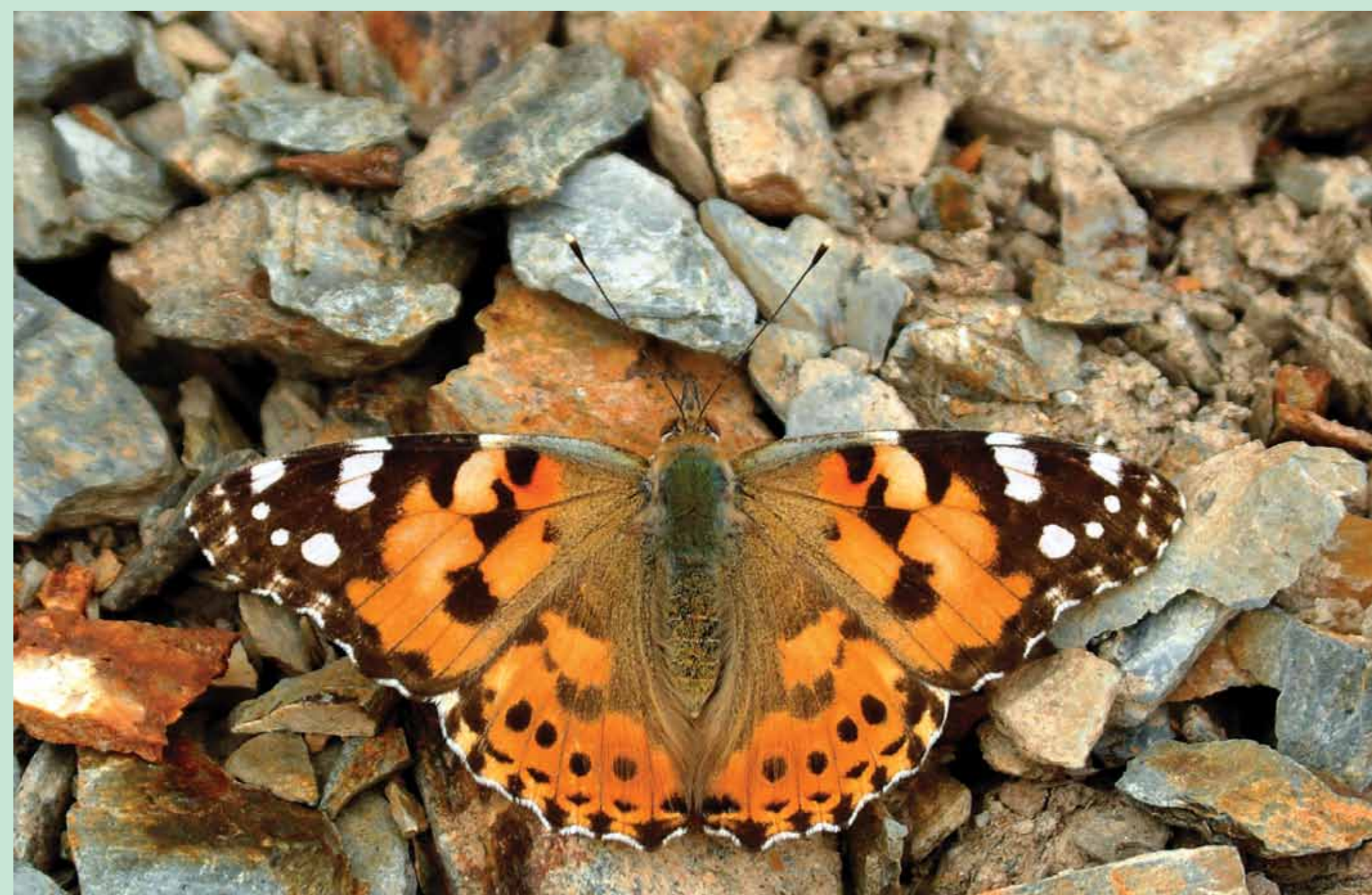
**BORBOLETAS QUE POUSAM DE ASAS ABERTAS AO SOL**  
Butterflies resting in the sun, with their wings open



Época de voo: todo o ano  
Envergadura / Size: 23 a 30 mm  
Flying time: all year round

© Albano Soares

**ACOBREADA** | Small Copper - *Lycaena phlaeas*  
Insecta/Lepidoptera/Lycaenidae



Época de voo: todo o ano  
Envergadura / Size: 55 a 70 mm  
Flying time: all year round

© Paulo Rodrigues

**BELA-DAMA** | Painted Lady - *Vanessa cardui*  
Insecta/Lepidoptera/Nymphalidae

**PLANTAS** | Plants



Planta hospedeira da borboleta acobreada.  
Host plant of the small copper.

© Eva Monteiro

**AZEDA-DOS-OVINOS** | Sheep's sorrel - *Rumex acetosella*  
Eudicotiledonea /Polygonaceae



© Frank Pennkamp

**ESTRELÊTA** - *Sesamoides purpurascens*  
Eudicotiledonea/Resedaceae

**OUTROS INSECTOS** | Other insects



© Frank Pennkamp

**ESCARAVELHO-TIGRE-VERDE** | Green Tiger Beetle - *Cicindela campestris*  
Insecta/Coleoptera/Carabidae



© Frank Pennkamp

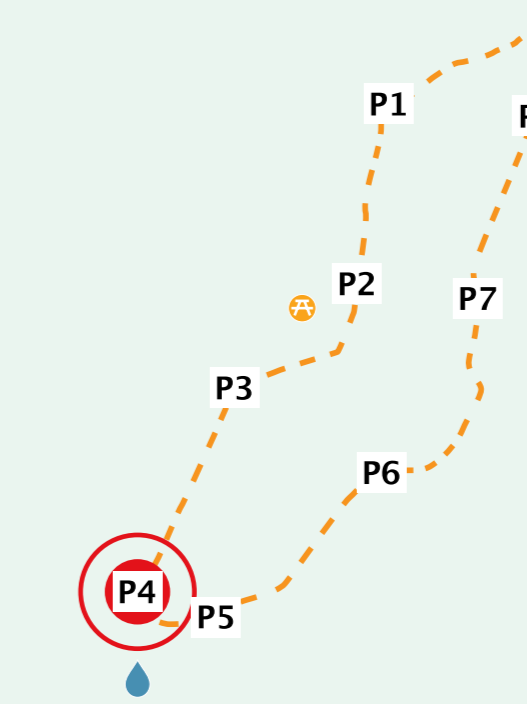
**GRILLO-DE-SELA** | Saddle-backed Bush-cricket - *Neocallicrania miegii*  
Insecta/Orthoptera/Tettigoniidae

Fêmea de grilo-de-sela a pôr ovos a meio do caminho.

A female Saddle-backed Bush-cricket laying eggs.







TENTE ENCONTRAR ESTAS ESPÉCIES NAS PROXIMIDADES DA BARRAGEM | Please try to find these species near the dam

**RÉPTEIS**



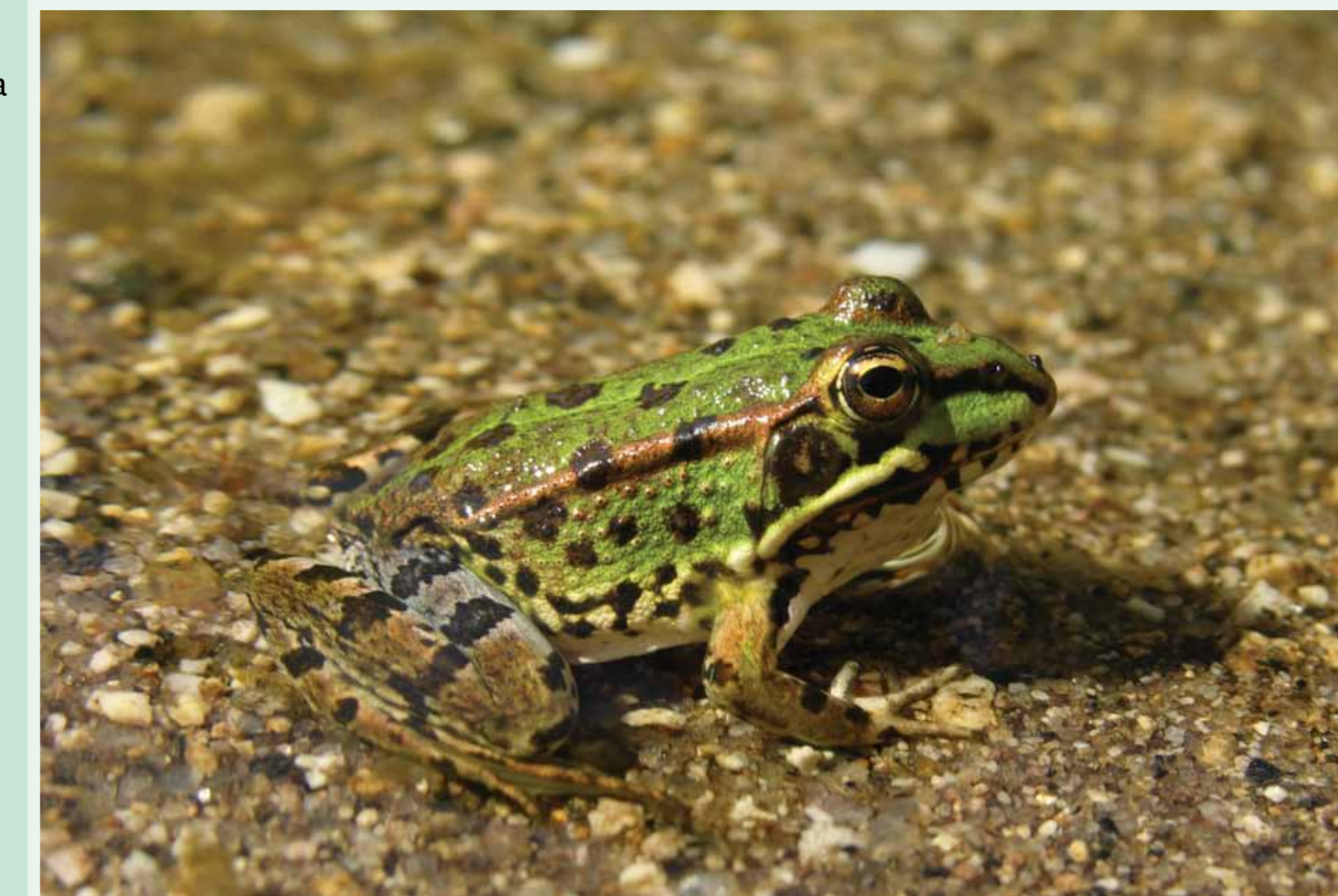
**COBRA-DE-ÁGUA-VIPERINA** | Viperine water snake - *Natrix maura*  
Reptilia/Squamata/Colubridae



Quando se sente ameaçada, a cobra-de-água-viperina imita o comportamento da víbora, no entanto esta espécie é inofensiva.

When threatened, the viperine water snake impersonates vipers for self-defense.

**ANFÍBIOS**



**RÁ-VERDE** | Iberian Water Frog - *Pelophylax perezi*  
Amphibia/Anura/Ranidae

**LIBELINHAS VERDES** | Green damselflies



**LESTES-BÁRBARO** | Migrant Spreadwing - *Lestes barbarus*  
Insecta/Odonata/Lestidae

Época de voo: Março a Outubro  
Envergadura / Size: 40 a 45 mm

Flying time: March to October



**LESTES-VERDE** | Western Willow Spreadwing - *Lestes viridis*  
Insecta/Odonata/Lestidae

É característica, no tórax, uma marca verde, tipo espinho.  
Época de voo: Junho a Novembro  
Envergadura / Size: 39 a 48 mm

It has a green spot on the thorax, resembling a thorn.  
Flying time: June to November

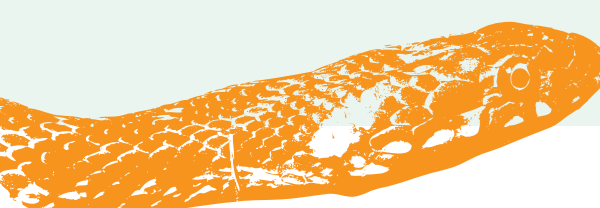
**LIBELINHAS AZUIS E PRETAS** | Blue and black damselflies



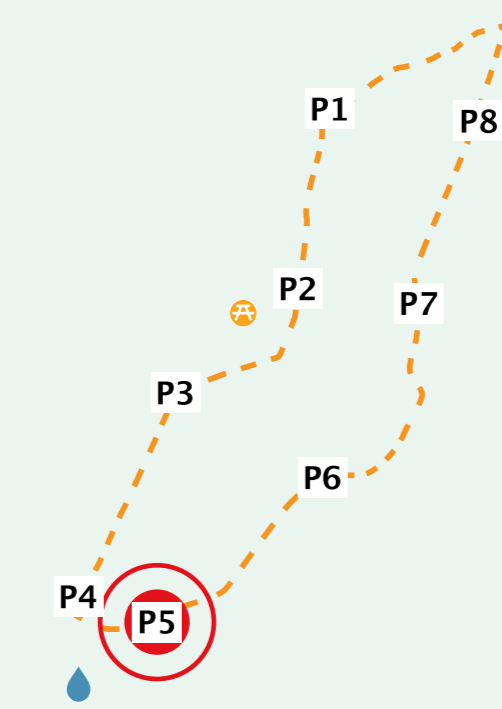
**LIBELINHA-AZUL-COMUM** | Common Bluet - *Enallagma cyathigerum*  
Insecta / Odonata / Coenagrionidae

Época de voo: Abril a Outubro  
Envergadura / Size: 29 a 36 mm

Flying time: April to October







TRÊS ESPÉCIES DE ORTÉTRUNS | Three species of skimmers (**Insecta/Odonata/Libellulidae**)

**ORTÉTRUM-ELEGANTE** | Epaulet Skimmer  
*Orthetrum chrysostigma*



Macho maduro e macho imaturo (em baixo). Quando são novos, os machos dos Ortétruns são semelhantes a fêmeas. Com a passagem do tempo vão adquirindo tons azuis. Nos machos desta espécie é característico o abdómen que estreita perto do tórax.

Old and young male (below). When young, male skimmers are more similar to females. Then, they gain blue tones. In this species the narrowing abdomen near the thorax is typical.

© Frank Pennelkamp

**ORTÉTRUM-RETICULADO** | Black-tailed Skimmer  
*Orthetrum cancellatum*



Macho e fêmea (em baixo). Espécie com nervuras claras e pterostigma (indicado na imagem) escuro. O abdómen é amarelo com duas linhas longitudinais pretas. Nos machos maduros adquire uma coloração azul com a ponta preta.

Male and female (below). Species with light veins and dark pterostigma (in the photo). Its belly is yellow with two black lines that run across the length of the body. Older males gain blue tones and the tip of the belly is black.

© Albano Soares

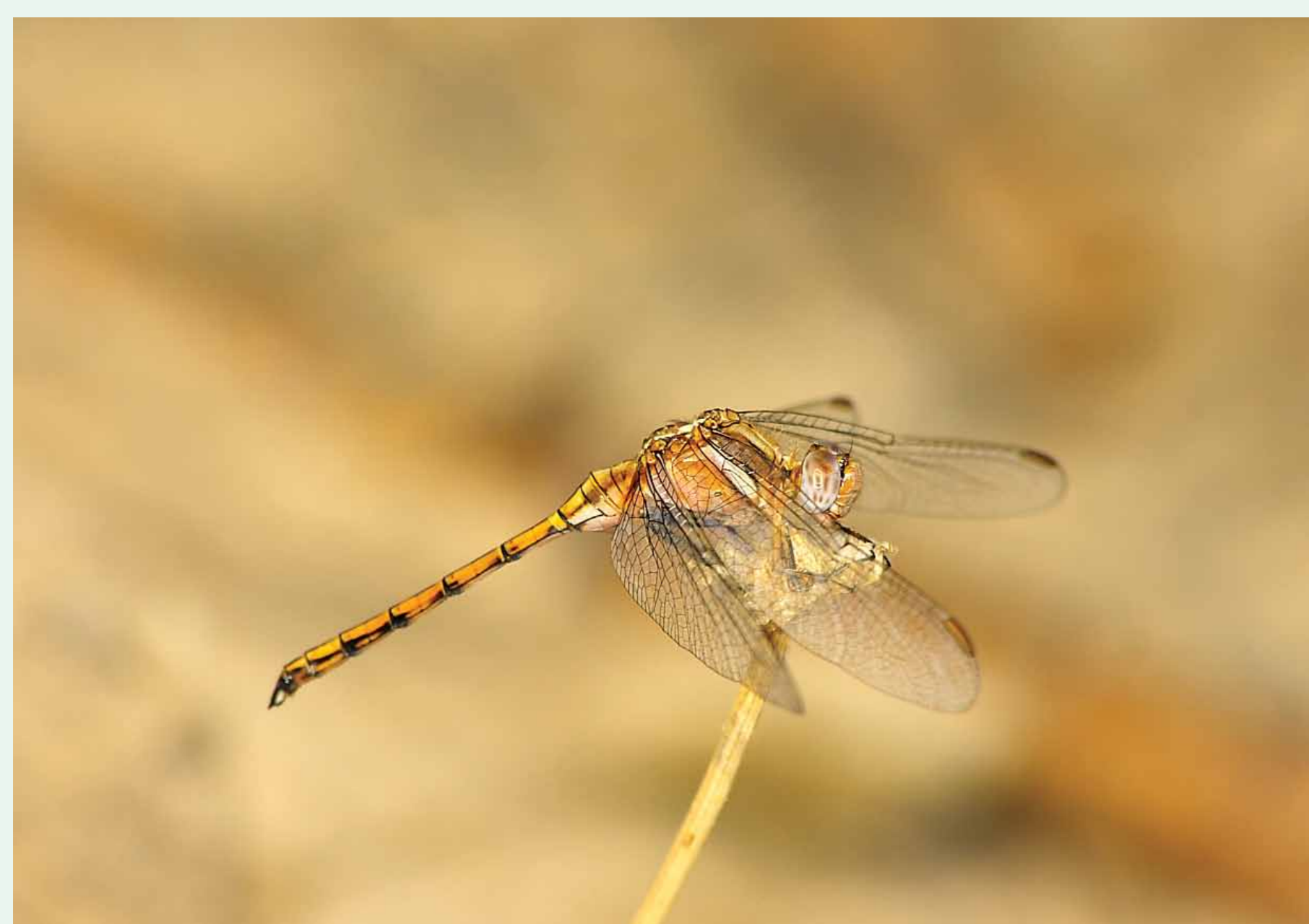
**ORTÉTRUM-AZULADO** | Keeled Skimmer  
*Orthetrum coerulescens*



Macho e fêmea (em baixo). Nervuras e pterostigma claros. Repare no abdómen todo azul do macho. Abdómen da fêmea amarelo.

Male and female (below). Light veins and pterostigma. The belly of males is blue and of females is yellow.

© Albano Soares



© Albano Soares

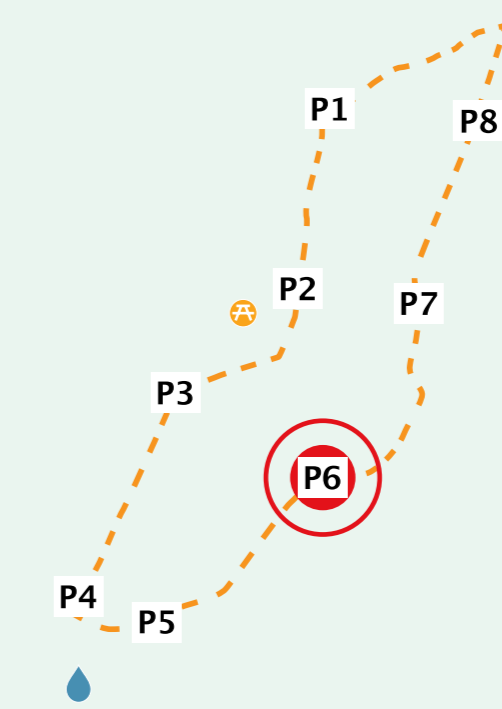
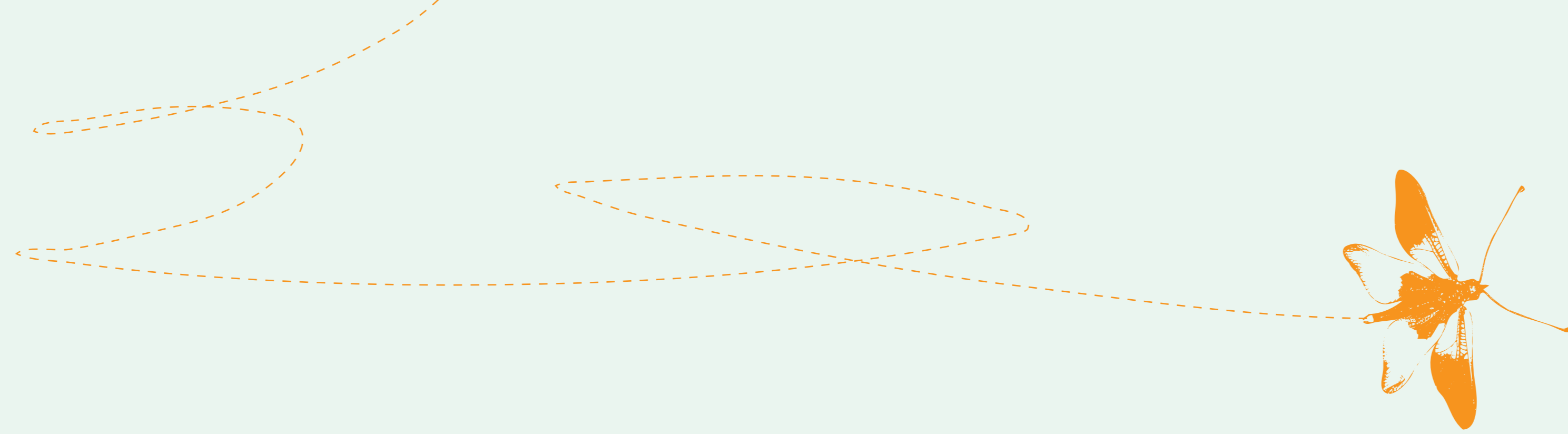


© Albano Soares



© Albano Soares





## PREDADORES | Predators

### LIBELÓIDES | Owl-fly (Insecta/Neuroptera/Ascalaphidae)



Larvas e adultos alimentam-se de pequenos insectos. Os adultos aparecem no fim da primavera e gostam de caçar em dias de sol e temperatura elevada.

Larvae and adults feed on small insects. The adults appear in late Spring and enjoy hunting in sunny hot days.

© Albano Soares

*Libelloides baeticus*



© Frank Pennelkamp

*Libelloides longicornis*

### LIBÉLULAS | Dragonflies



© Albano Soares

**IMPERADOR-AZUL** | Blue Emperor - *Anax imperator*  
Insecta / Odonata / Aeshnidae



© Albano Soares

**GONFUS-COMUM** | Large Pincertail - *Onychogomphus uncatus*  
Insecta / Odonata / Gomphidae

### OUTROS INSECTOS | Other insects



© Frank Pennelkamp

**LOUVA-A-DEUS** | Praying mantis - *Ameles spallanzania*  
Insecta/Mantodea/Mantidae

Repare nas patas adaptadas para caçar.

Please note adaptations in the feet adapted to efficient hunting.



© Frank Pennelkamp

**GAFANHOTO-VERDE-MAIOR** | Great Green Bush-cricket - *Tettigonia viridissima*  
Insecta/Orthoptera/Tettigoniidae

Esta espécie alimenta-se de pequenos insectos, pelo que é importante no controlo de pragas.

This species feeds on small insects and it's crucial in pest control.



UMA BORBOLETA LARANJA E AS SUAS PLANTAS HOSPEDEIRAS | Spotted Fritillary and its host plants

**LARANJA-FORTE-PONTEADA** | Spotted Fritillary - *Melitaea didyma*  
Insecta/Lepidoptera/Nymphalidae



© Frank Pennelkamp



© Albano Soares



© Frank Pennelkamp

Adulto e lagarta.  
Repare no desenho diferente das asas do adulto quando vistas por baixo.

Adult and caterpillar.  
Please note the distinct butterfly wing patterns when seen from below.

AS PLANTAS HOSPEDEIRAS | Host plants (**Eudicotiledonea / Scrophulariaceae**)



© Frank Pennelkamp

**SAMACALO** | Daisy-leaved toadflax  
*Anarrhinum bellidifolium*



© Frank Pennelkamp

**DEDALEIRA** | Common foxglove - *Digitalis purpurea*



© Paulo Simões

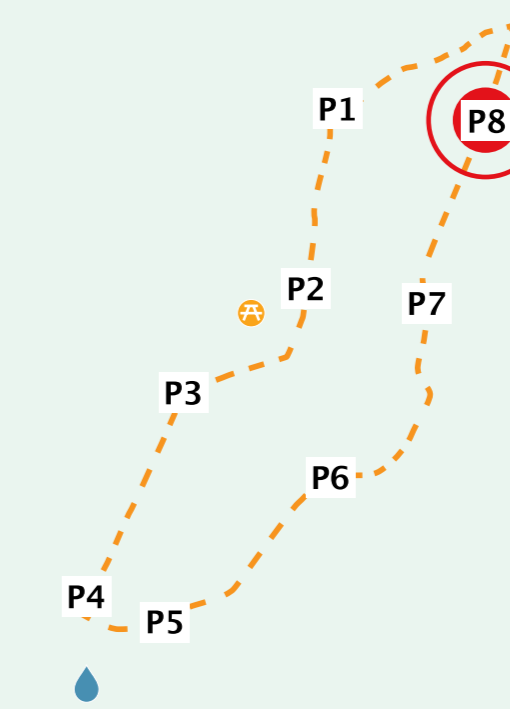
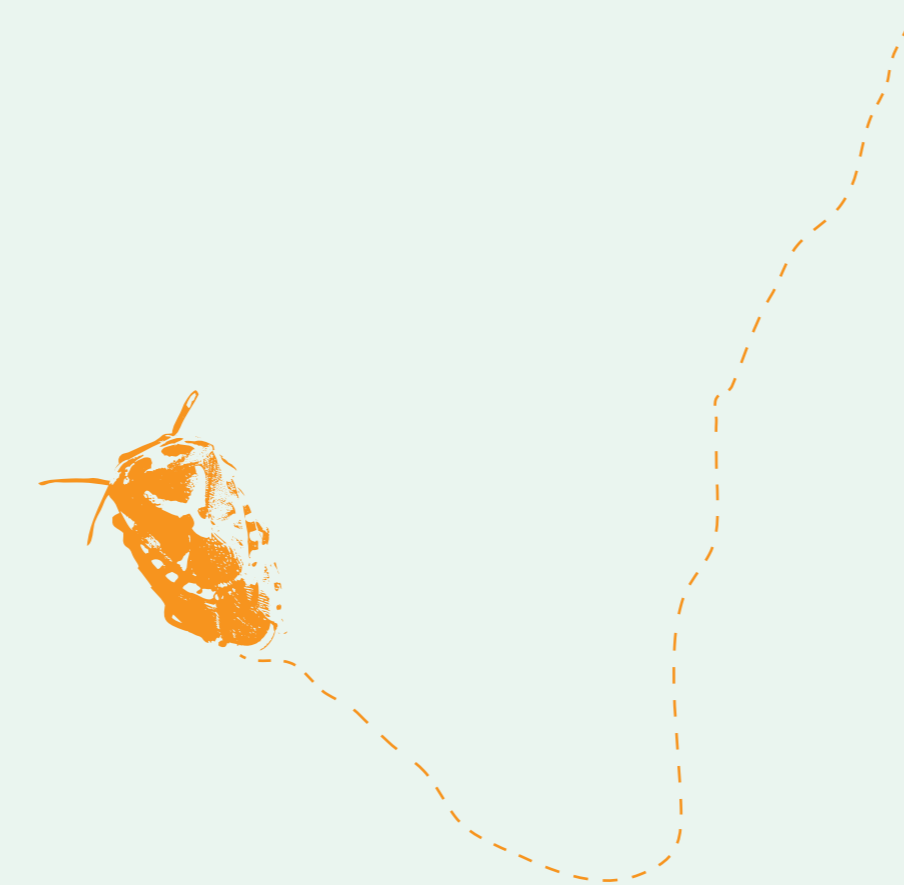
**ABELOURA-AMARELADA** | Yellow foxglove - *Digitalis thapsi*

Planta endémica da Península Ibérica.

Endemic plant of the Iberian Peninsula.

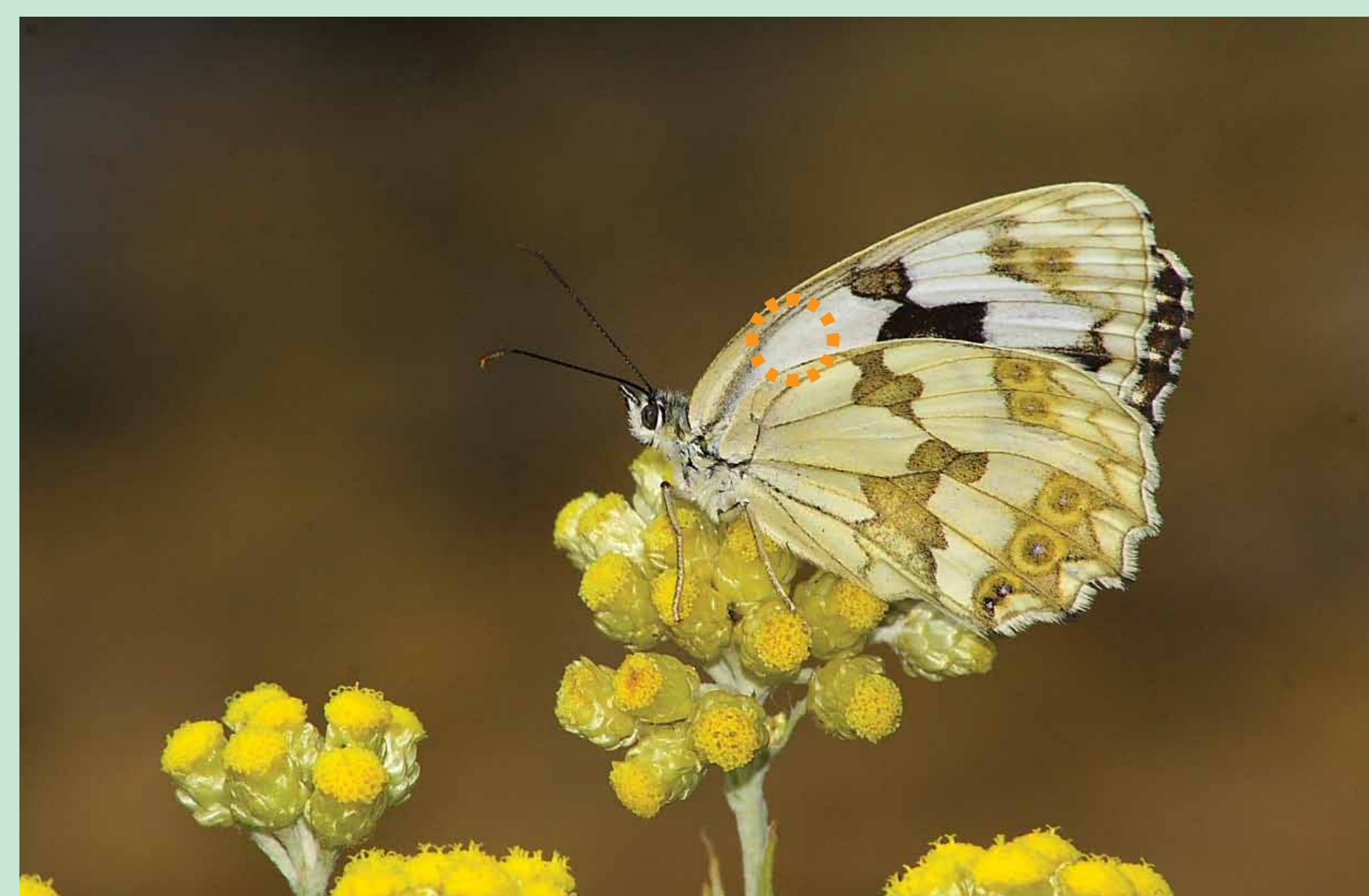






A PROCURAR NA VEGETAÇÃO | To look for in the vegetation

**BORBOLETAS PRETAS E BRANCAS | Black and white butterflies**



Célula toda branca nas asas anteriores.  
Período de voo: Junho a Setembro

Totally white cell in the forewings.  
Flying period: June to September

© Albano Soares

**BRANCA-PRETA-COMUM | Spanish Marbled White - *Melanargia lachesis***  
Insecta/Lepidoptera/Nymphalidae



Célula branca interrompida por uma banda preta nas asas anteriores. Vista por baixo, nervuras castanhas e ocelos azuis bem marcados.  
Período de voo: Abril a Junho

White cell with a black stripe in the forewings. Seen from below, this butterfly has brown veins and blue ocelli.  
Flying period: April to June

© Paulo Simões

**BRANCA-PRETA-DO-OCIDENTE | Western Marbled White - *Melanargia occitanica***  
Insecta/Lepidoptera/Nymphalidae

**ARANHAS | Spiders**



Estas aranhas fazem as teias entre ervas altas. As teias têm uma "costura" em forma de "Z" característica das espécies deste género.

These spiders make their cobwebs in high grass. The cobwebs have a typical mark in the center with the shape of a "Z".

© Frank Pennelkamp

**ARANHA-VESPA-LOBADA | Wasp spider - *Argiope lobata***  
Arachnida/Araneae/Araneidae

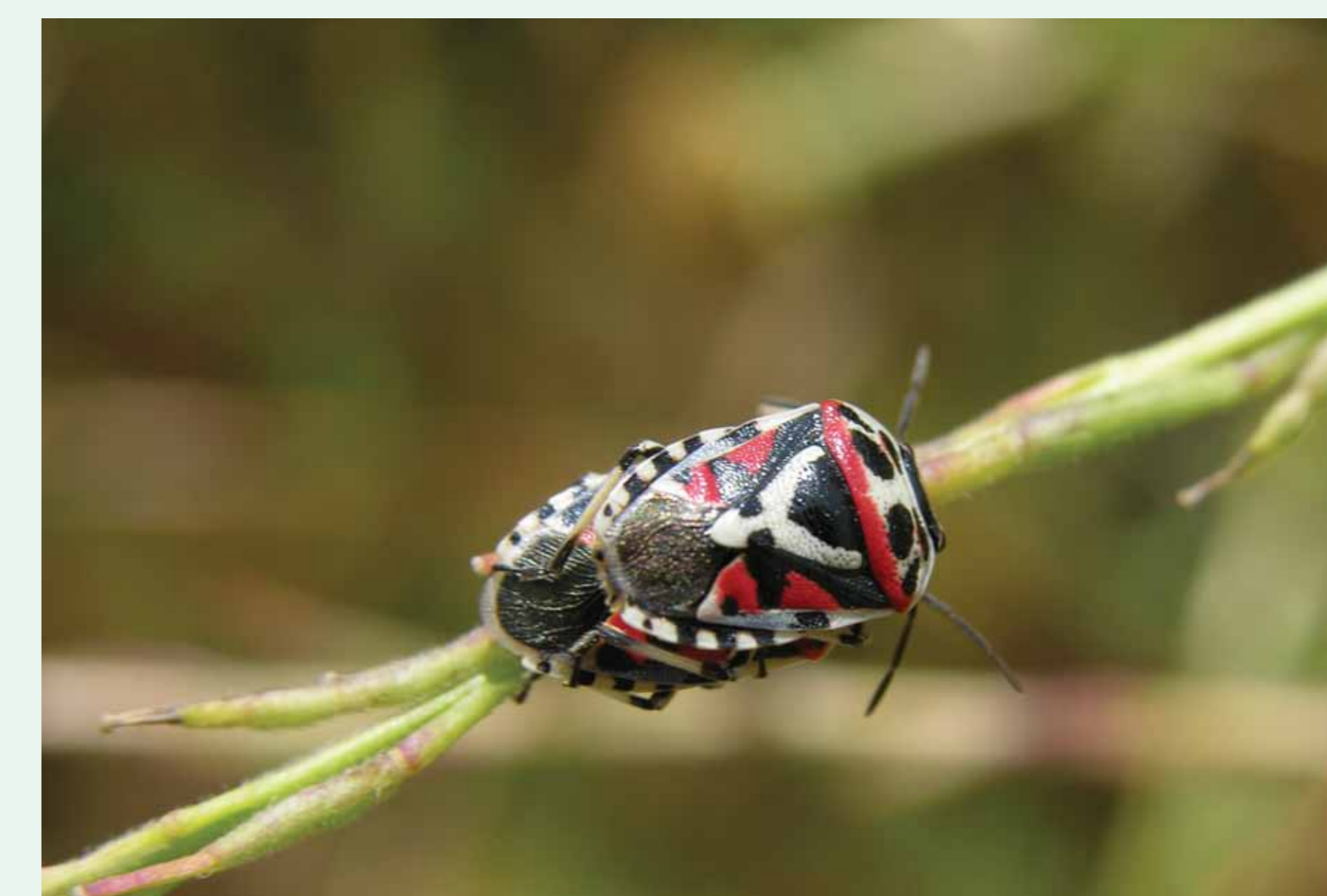
**INSETOS QUE PARECEM PAUS | Insects resembling sticks**



© Frank Pennelkamp

**BICHO-PAU | Stick insect - *Leptynia attenuata***  
Insecta / Phasmida / Phasmatidae

**PERCEVEJOS COLORIDOS | Coloured bugs**



© Frank Pennelkamp

**PERCEVEJO-ORNADO | Red Cabbage Bug - *Eurydema ornata***  
Insecta / Heteroptera / Pentatomidae

**POSTURAS DE INSETOS | Insects laying eggs**



© Frank Pennelkamp

Neste caso, ovos de percevejo. Parecem pequenos frascos.

In these case bugs eggs, resembling tiny jars.

**Insecta / Heteroptera / Pentatomidae**