

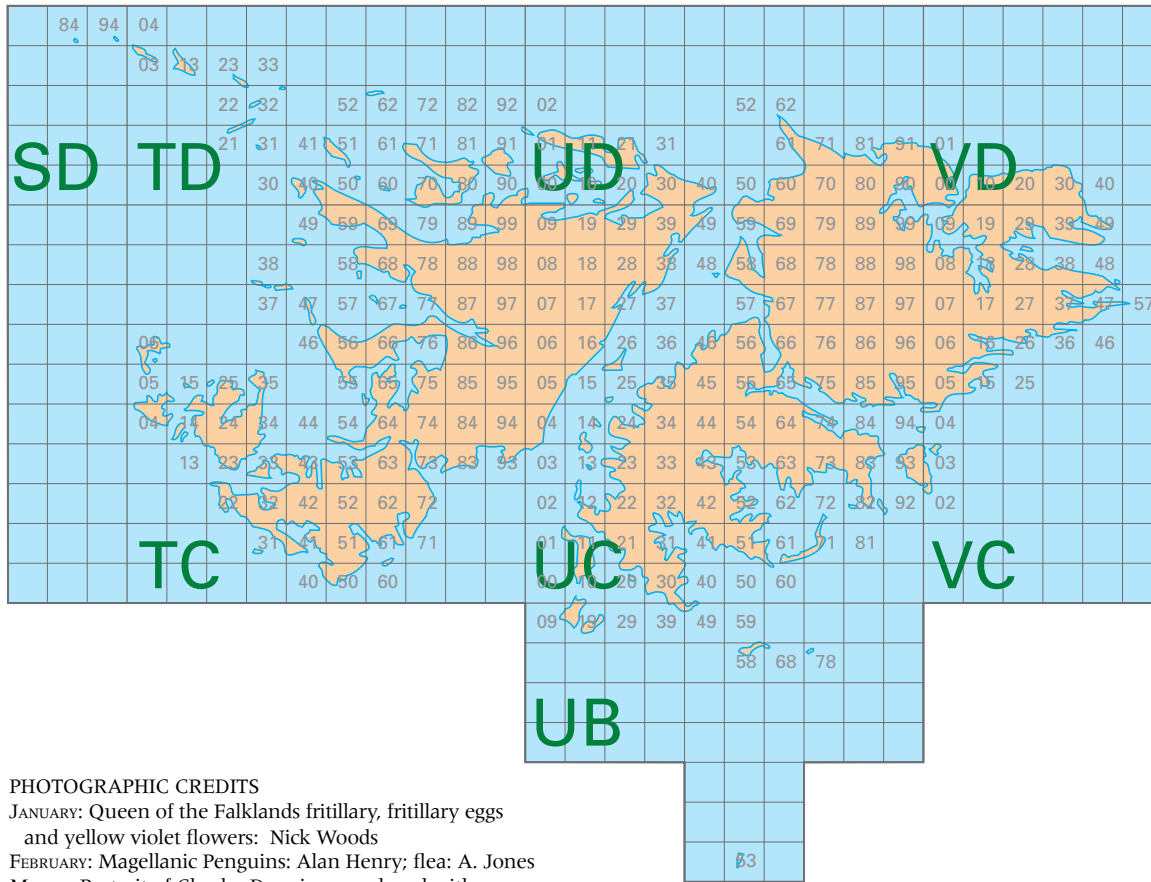
INSECTS OF THE FALKLAND ISLANDS 2006



*Butterfly
Recording
Calendar*



INSECTS OF THE FALKLAND ISLANDS 2006



PHOTOGRAPHIC CREDITS

JANUARY: Queen of the Falklands fritillary, fritillary eggs and yellow violet flowers: Nick Woods
 FEBRUARY: Magellanic Penguins: Alan Henry; flea: A. Jones
 MARCH: Portrait of Charles Darwin reproduced with permission from the NHM
 MAY: Falklands Green Spider: Alan Henry
 JUNE: Bluebottle (*Calliphora vicina*), grain aphid (*Sitobion avenae*) and common earwig (*Forficula auricularia*): A. Jones
 JULY: Watch group working: Falklands Conservation
 AUGUST: Landscape: A. Jones
 SEPTEMBER: Wasp species; left and centre: A. Jones; right: Alan Henry
 OCTOBER: Tussac grass, grass wren, Cobb's wren and tussacbird: Alan Henry
 NOVEMBER: Landscape: A. Jones
 DECEMBER: Brazilian painted lady; upperside and underside: Alan Henry

Helping FALKLANDS CONSERVATION record the butterflies of the Falkland Islands

This calendar has been produced to improve knowledge about Falkland Islands' butterflies. During 2006 information is being sought on when butterflies are in flight, and their distribution. With your help we hope to learn more about these fascinating insects. In addition to butterflies, each page for every month of the year has information and illustration on a different Falkland insect theme.

Every calendar page also has space to jot down sightings on the day they are seen. There is a recording form at the back to list all these and for returning to Falklands Conservation at the end of the year. The map on this page should be used to determine the grid reference for pinpointing the location of the butterfly sighting. Please refer to the back page for more information on the butterflies of the Falkland Islands, and how to record them.

Falklands Conservation aims to protect the wildlife of the Falkland Islands. For additional information go to website: www.falklandsconservation.com or call in at the office in the Jetty Centre, Stanley.

All drawings and photographs shown in this calendar are of insects in the Falkland Islands. Photographs have been kindly provided by the following individuals: Alan Henry, Alex Jones, Richard White and Nick Woods. The special permission granted by the Natural History Museum to reproduce the picture of Charles Darwin is gratefully acknowledged. Drawings are from the *Insects of the Falkland Islands* and are reproduced by kind permission of Richard Lewington.

This calendar has been produced as part of the Falkland Islands Invertebrates Conservation Project, which aims to study and survey the insects of the Falkland Islands. It is supported by the Natural History Museum (London) and the University Museum of Zoology Cambridge, with funding from the Darwin Initiative and the Falkland Islands Government.





The **Queen of the Falklands fritillary** (*Issoria cytheris*) is the only native butterfly to be found in the Falkland Islands. It is usually seen in January, often close to patches of yellow violets (*Viola maculata*), where it lays its eggs. The **Queen of the Falklands fritillary** can be distinguished from the only other regularly reported butterflies in the Islands, the painted ladies (see December), by the lack of prominent black banding on the forewings.

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JANUARY



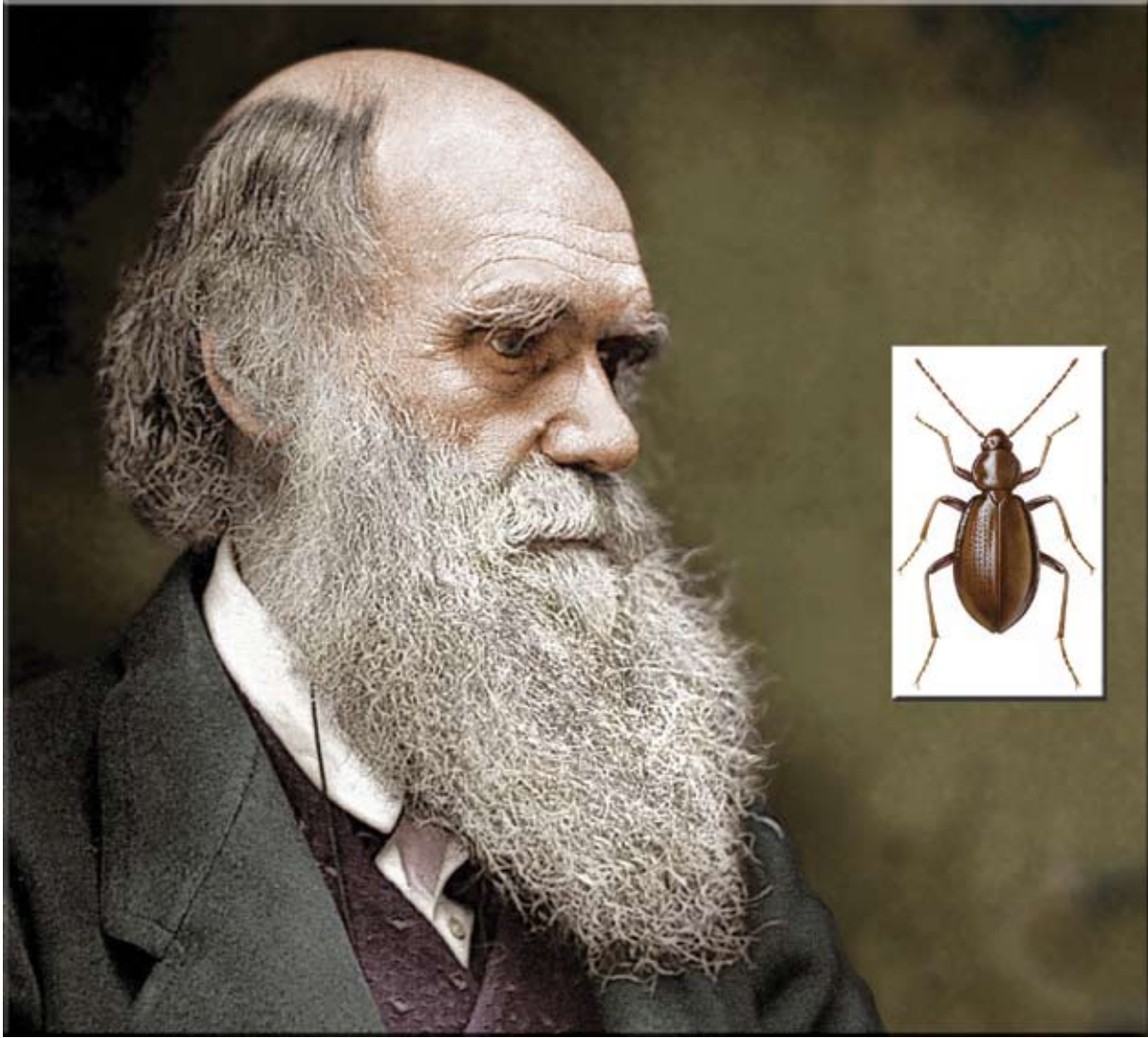
Magellanic penguins are colonial birds, which nest in underground burrows. Despite spending much of their time at sea, they suffer from a parasite found only in the Falklands. This is a species of **penguin flea** known as *Parapsyllus magellanicus*, which has evolved to live in Magellanic penguin burrows. But beware; they are also fond of biting humans given the opportunity.

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FEBRUARY



The great naturalist **Charles Darwin** visited the Falkland Islands in March 1834 on his famous voyage of discovery around the world in HMS *Beagle*. He was one of the first people to study the insect life of the Islands. One species only found in the Falkland Islands, **Darwin's black beetle** (*Lissopterus quadrinotatus*) (see inset), still proudly bears his name today.

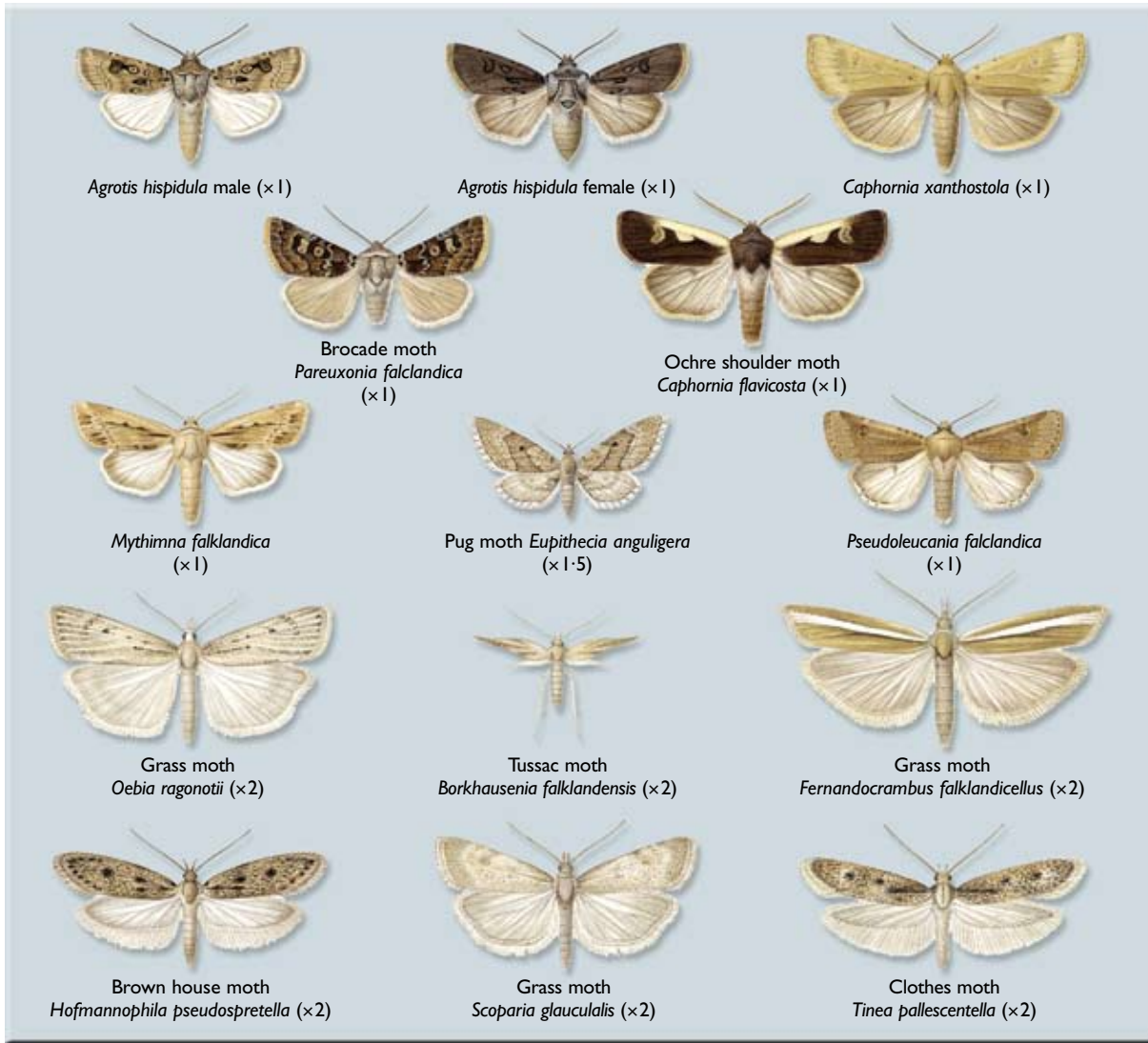


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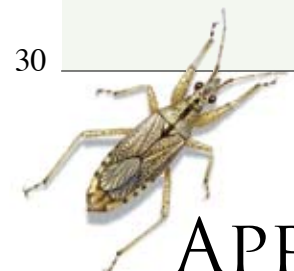
MARCH



As summer ends, Falkland **moth** populations are at their most numerous. Many are attracted to house lights as night falls. There are over thirty different moth species in the Islands. Moths can be distinguished from the butterflies by their antenna. Falkland butterflies have little clubs on the end of their antennae (see January and December) but moths do not.

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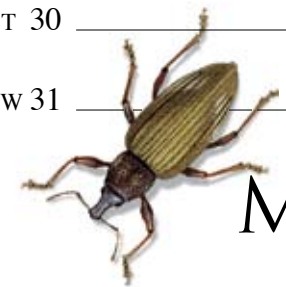
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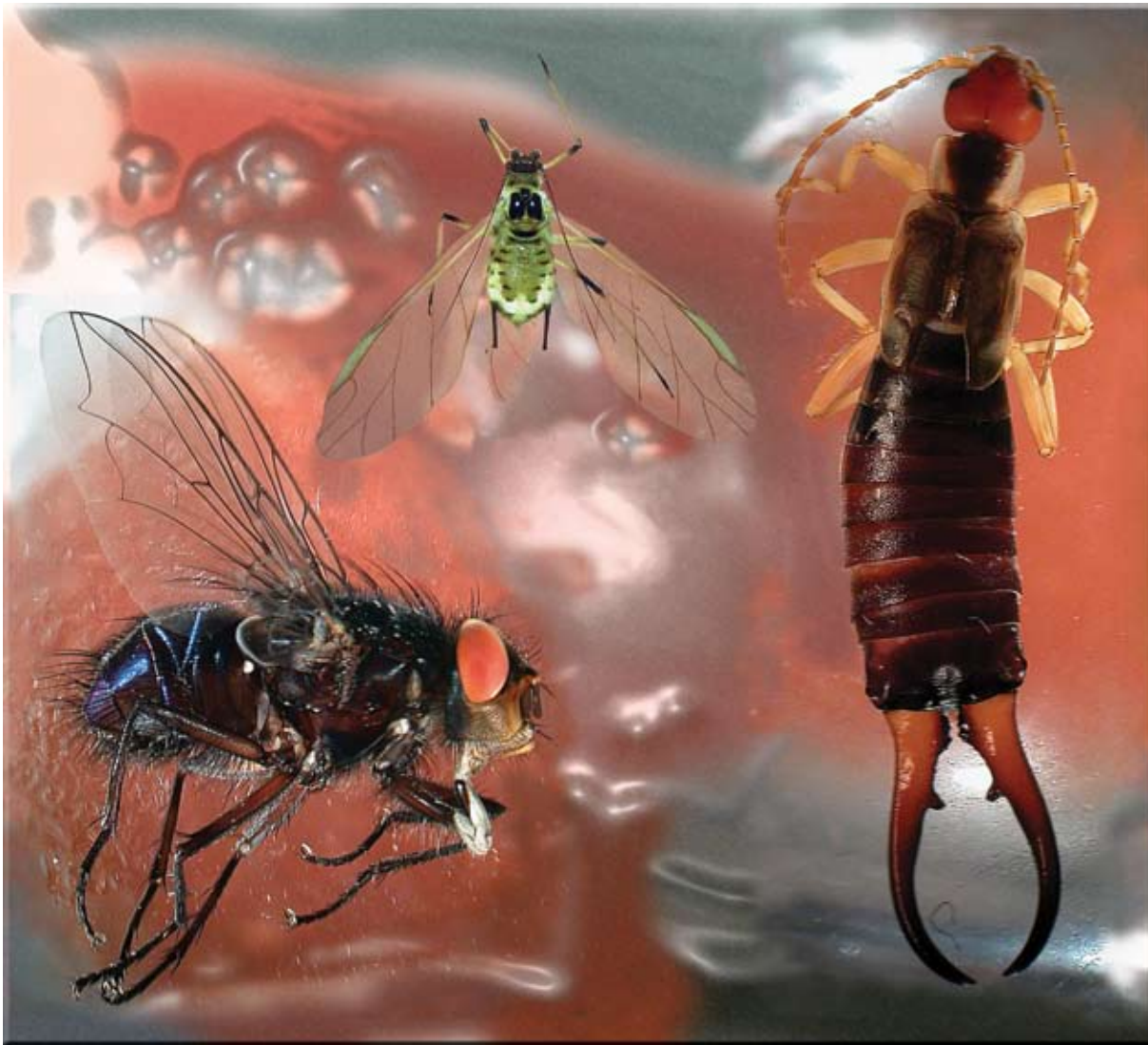
Spiders are not insects; they are arachnids, having four pairs of legs not three. The **Falklands green spider** (*Araneus cinnabarinus*) is one of the greatest enemies of Falkland insects. To catch its prey this common spider spins a web of silk carefully placed to entangle flying insects.

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MAY



SPOT THE VILLAINS: These insects have all been accidentally introduced to the Falkland Islands from Europe. **Earwigs** (*Forficula auricularia*) (RIGHT) have become more numerous in settlements in recent years. Despite their impressive pincers they are harmless to man, but may prey upon native insect species. **Bluebottle flies** (*Calliphora vicina*) (LEFT), known locally as blue buzzers, probably came to the Islands in 1886 on an early refrigeration ship, the *Selembria*, rapidly spreading to all parts of the Falklands where they are now a domestic nuisance. The **grain aphid** (*Sitobion avenae*) (CENTRE) is one of half a dozen aphid introductions, all of which are plant pests.

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JUNE

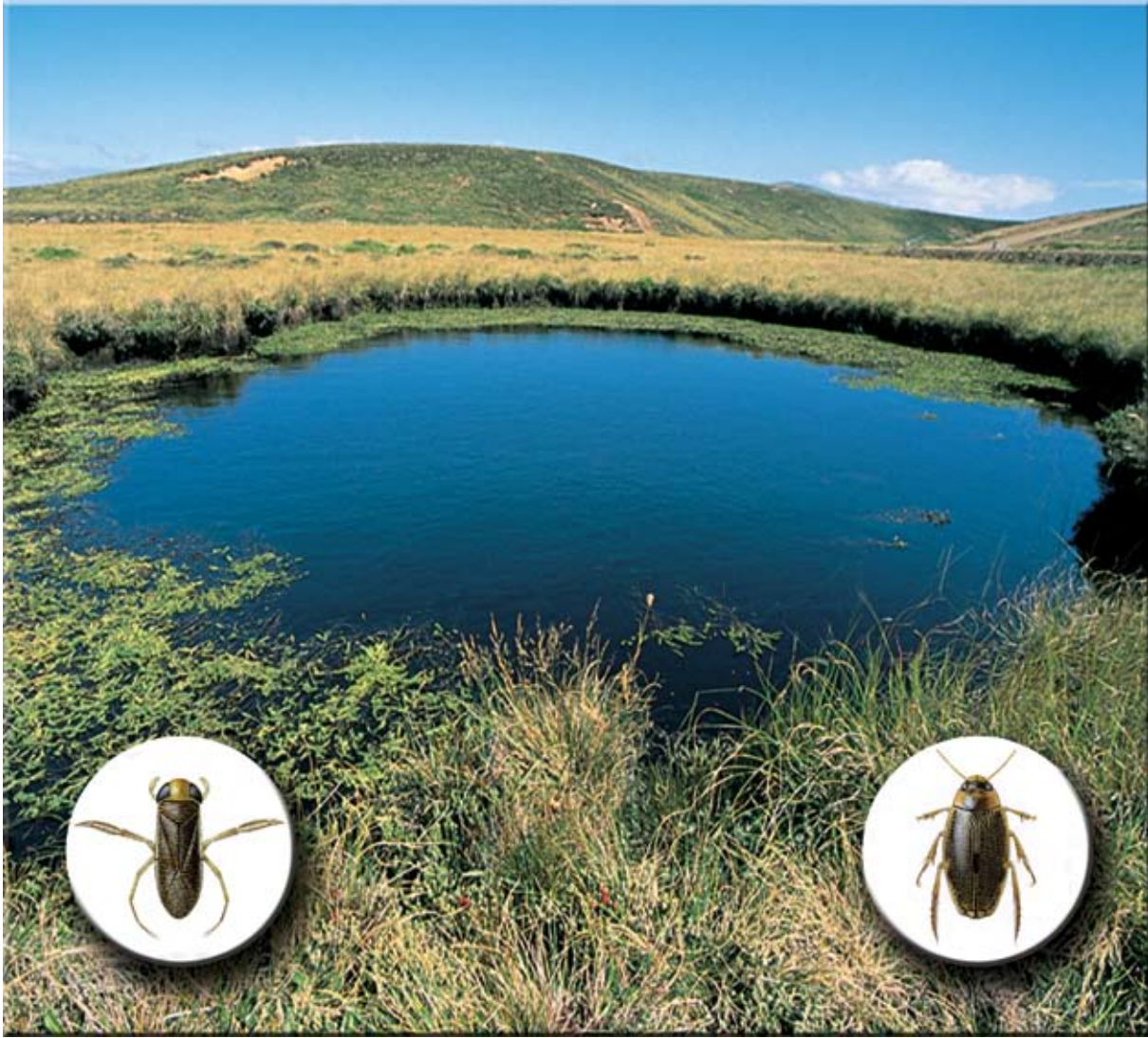


Falklands Conservation **WATCH Group** help with the collection of insects. About 350 different insect species are currently known from the Falklands, and many are unique to the Islands but none are harmful to man. Some are wingless as an adaptation to the windy conditions. The Falkland Islands Invertebrates Conservation Project will provide a permanent reference collection to help with identification by both young and old budding entomologists.

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The Falkland Islands have several thousand small ponds and lakes, as well as numerous streams and small rivers. Two of the most commonly seen insects found in freshwater are the predatory **water beetle** (*Lancetes falklandicus*) (RIGHT) which feeds on other insects, and the **water boat man** (*Sigara santiagiensis*) (LEFT), which feeds on algae.

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AUGUST



The Falkland Islands are home to dozens of species of small **parasitic wasps**, who lay their eggs in the larvae of other insects, especially flies, and the caterpillars of butterflies and moths. Even the largest of these wasps seldom have a body length over 2 cm, whilst the smallest are less than a millimetre and can easily walk along the antennae of the largest! (CENTRE).

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SEPTEMBER



Tussock-forming grasses support a rich insect life, providing food for many Falkland birds. The endemic **camel cricket** (*top*) is a favourite part of their diet. **Tussacbirds** (*right*) are particularly fond of fly larva, whilst the endemic **Cobb's wren** (*centre*) likes lice, crickets and moth larvae. Its cousin, the **grass wren** (*left*), feeds high in the tussac and can survive in places despite the presence of rats, where Cobb's wren cannot.

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OCTOBER



The Falkland Islands are bisected from east to west by a mountainous ridge. Surprisingly, many beetles, such as **weevils** (LEFT) and **perimylopids** (RIGHT), thrive in these windblown and exposed conditions by hiding away beneath rocks and among plant roots. Most recent sightings of the elusive **Falklands blue butterfly** have been in the mountains. This butterfly has not yet been scientifically identified and no-one knows if it breeds in the Islands or is a rare visitor from South America.

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NOVEMBER



As summer comes, vagrant species arrive from South America, including the **painted lady** butterflies. Two species have been recorded in the Islands, the **southern painted lady** *Cynthia carye* (BELOW) and the **Brazilian painted lady** *Cynthia braziliensis* (ABOVE). Whilst able to survive during the summer months, these animals do not over-winter in the Islands and die out with cooling conditions.

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DECEMBER

INSECTS OF THE FALKLAND ISLANDS

2006



BUTTERFLIES OF THE FALKLAND ISLANDS

Butterflies, like moths, belong to the insect order known as the Lepidoptera. They are among the most recognisable of insects with two pairs of wings covered in small, often brightly coloured, scales forming distinctive patterns. The mouthparts form a coiled tube known as a proboscis, used for sucking nectar from flowers. The larval stage of the butterfly is the caterpillar, which changes into the adult form inside a protective chrysalis. For simplicity, butterflies may be thought of as the brightly coloured day-flying Lepidoptera. Falkland Islands butterflies can be distinguished from moths by the presence of clubbed antennae. Only four species of butterfly have been reliably recorded in the Falkland Islands. These are: the **Queen of the Falklands fritillary**, the **southern painted lady** and the **Brazilian painted lady** (these can be difficult to tell apart), and a **blue** butterfly that, although photographed, has never been caught or identified (see November). Of these 4 species only the Queen of the Falklands fritillary is known to breed in the Islands (see January). The remaining species are summer visitors from South America.

BUTTERFLY RECORDING

Falklands Conservation would like your help in recording the flight-times of Falkland butterflies. Space has been provided on every calendar month page to note down the days when you see a Falkland butterfly. The Queen of the Falklands fritillary and southern painted lady can be easily distinguished from their distinctive markings (see opposite and also January and December). If you see a butterfly species that does not look like a fritillary or a painted lady, be sure to note down its key features, and if possible take a photograph. As the Brazilian and southern painted ladies look very similar, do not worry too much about distinguishing between the two. When making records it is important to note down not only the date, but also the grid reference locality (a reference map is provided on the inside of the front cover), notes on behaviour, appearance, unusual conditions, numbers present and the name of the recorder. Please don't capture or collect any butterflies. This is illegal in the Falklands without a permit and any samples sent to Falklands Conservation will not be accepted.



Queen of Falklands fritillary



Southern painted lady



Brazilian painted lady