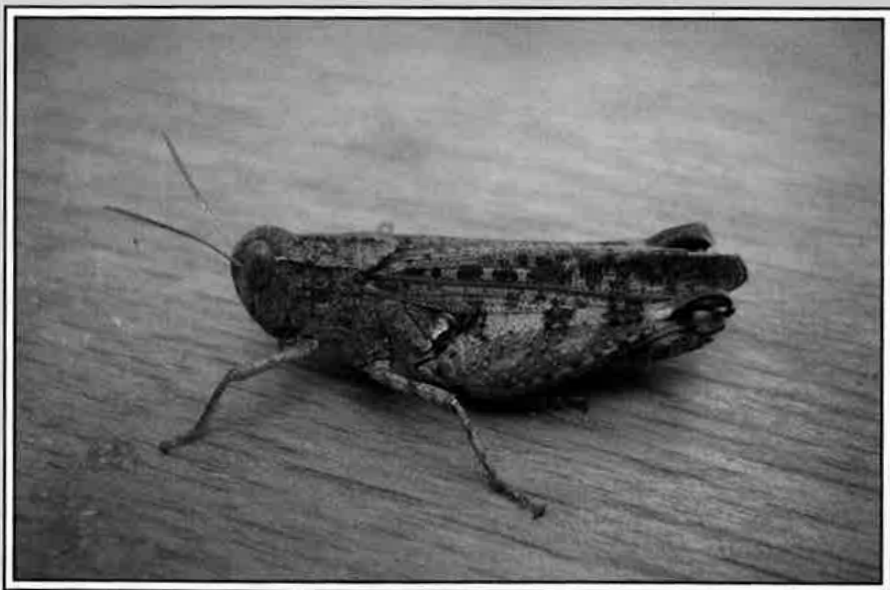


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SOME INSECTS, MAINLY ORTHOPTERA, FROM BARRAU, SOUTH-WEST FRANCE

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A recent issue of this journal included an announcement by our member Jennifer Boney (Volume 23, Part 1, inside back cover), offering free use of her holiday cottage in return for biological records from the site and its surroundings. For the last ten years she has lived in the farmhouse of Barrau in south-west France, surrounded by six hectares of land that she manages as a nature reserve (Fig. 1). The property consists of two fields bordered by woodland, largely of sessile oak (*Quercus petraea*) (Fig. 2). One long flat field extends south along a former entrance track and is partly unimproved, while a steeply sloping north-facing field was formerly arable and has been allowed to regenerate naturally. Both fields are managed by partial and infrequent mowing. The site includes a large dead oak tree and an old pond, and is crossed by hedges which included many kinds of trees. It is set in an attractive countryside of rolling hills forming ridges between small streams flowing north-east to join the mighty river Garonne. Barrau is a farm set on top of one of these ridges at UTM grid reference 31T 0336748658 and adjacent to the tiny hamlet of Haumont, in French political terms in the *commune* (= parish) of Esparsac in the *département* (= county) of Tarn-et-Garonne in the *région* of Midi-Pyrénées. In practical terms it lies 120 km north of the Pyrenees, 50 km north-west of the city of Toulouse and just 5 km north of a small market town, Beaumont-de-Lomagne. The surrounding area has many small woods, probably preserved through the ages by the love of the French countryman for hunting (shooting), since both deer and wild boar are present. The lower slopes are largely devoted to agriculture, with garlic and sunflowers being the main crops.

Jennifer has previously joined Butterfly Conservation, the Amateur Entomologists' Society and other groups, and made the same offer to their members, so there is now an impressive file of survey reports. A particularly good list of reptiles and amphibians was made the basis of an application for official status as a local nature reserve (still under consideration). Previous visitors have included two past-presidents of the British Entomological and Natural History Society, but I was the first actually to represent this Society. My visit was from 1st–8th September 2012.

After a rapid and trouble-free journey by high-speed train, changing in Paris, Jennifer met me at the small provincial station of Montauban, 30km east of her home. I was a little apprehensive as the battered white van bumped down the rough track to the farmhouse, having been warned that the accommodation was simple, but behind the ancient wooden door and shutters of the cottage I found a luxurious home-from-home with every desirable comfort. The single-storey building, like most in the area with thick walls of yellow bricks and a red-tiled roof, consisted mainly of a single spacious bed/sitting room with twin beds, a well-lit writing desk and a variety of chairs, cupboards and shelves. The small kitchen, with refrigerator, gas stove and hot water on tap, occupied an extension at the back along with a tiny toilet and shower room. A door through the kitchen opened on a shady dell with a picnic table. A huge fig tree almost covered one side of the cottage, and the ripe figs were providing food for birds, hornets and many other insects. At the front was a verandah with covered seating from which one could watch tree frogs on the



Fig. 1. The farmhouse, Barràu Haumont, Esparsac, Tarn-et-Garonne, 2012. Photo: Clare Cole.

shrubbery and a carefully-sited clump of Michaelmas daisy attracting a succession of butterflies, bees, hoverflies and other insects.

I found that I could name all the butterflies by netting them and examining them closely in a butterfly viewing box, while referring to a most excellent book borrowed from Jennifer's library (Lafranchis, 2000). Many of the 24 species are also common in Britain, but the list also included both swallowtails, *Papilio machaon* L. and *Iphiclides podalirius* (L.), as well as *Lampides boeticus* (L.), the Long-tailed Blue, *Brintesia circe* (F.), the Great Banded Grayling, *Issoria lathonia* (L.), the Queen of Spain Fritillary, *Limenitis reducta* (Staudinger), the Southern White Admiral, and *Melitaea didyma* (Esper), the Spotted Fritillary.

Jennifer had arranged for a neighbour, a talented cook, to prepare evening meals at a reasonable price, so I was able to spend all my time studying insects. My main task was to survey the Orthoptera, for which there were no previous records. Most species would be adult in early September, so a list made at this time would be fairly complete. My list, with scientific and English names, is given below. Six grasshopper species were recorded, all common in southern France, although British readers might not be familiar with the chunky little *Pezotettix giornai* (Rossi), whose males ride on the backs of females, nor with the fat females and tooth-grinding male stridulation of *Calliptamus barbarus* (Costa) (Fig. 3). The bush-crickets were much more exciting as, one after the other, species appeared that I only knew from their pictures in books: *Tylopsis liliifolia* (F.), *Ruspolia nitidula* (Scopoli), *Yersinella raymondii* (Yersin). The long-winged green *Phanoptera nana* (Fieber) was quite common, and a large bush-cricket, *Uromenus rugosicollis* (Serville), conveniently came out to bask in the sun (Fig. 4). Its distinctive call of "squawk-squawk-squawk . . ." was heard at night and named from the recordings by Ragge and Reynolds (1998), as were the calls of three other bush-crickets. Without the bat-detector I



Fig. 2. The northern field, Barrau, and surrounding countryside. Photo: Clare Cole.

could hear none of these, but this made the song of *Oecanthus pellucens* (Scopoli), the Tree Cricket, all the more musical to my ears. Another call, like a free-wheeling bicycle, was heard from long grass in the daytime, but I was unable to trace it until I was accompanied one day by a neighbour, Clare Cole. Much younger and with good hearing, she managed to locate and photograph a specimen, which was *Decticus albifrons* (F.), a large relative of *D. verrucivorus* (L.), our Wart-biter, but brown and with pale marks. Perhaps the most significant find was *Cyrtaspis scutata* (Charpentier), a small green wingless member of the Meconematinae, apparently rare in France but probably under-recorded according to the national atlas of Orthoptera (Voisin, 2003). The distribution map shows few records from two areas, the mid-west and extreme south-east of France, 500 km apart, and the record from Barrau falls in the centre of this huge gap, although the atlas text does mention an unmapped record from the neighbouring *département* of Gers. I took three specimens home in order to study their habits, and all three fed on some dead insects but then went into hibernation without showing any courtship or mating behaviour. This species is a relative of *Meconema meridionale* (Costa), the Southern Oak Bush-cricket, which was also found and by the same method of beating the lower branches of oak trees. In Britain, and in other parts of northern Europe, this *Meconema* is a recent arrival and generally only found very locally in the parks and gardens of the urban environment. However, in the remote countryside of Barrau it was recorded at three separate locations, as was *C. scutata*, and this suggests that both species are here within their area of natural distribution.

My list of other insects is still in preparation, but it was a surprise to find that some of the most striking species were aliens of recent introduction. Prominent among them was the Asian hornet *Vespa velutina* Lepeletier, making a nuisance of itself at Barrau, as elsewhere, by attacking honeybees. It is somewhat smaller than the European hornet, *Vespa crabro* L., and largely black in colour, with yellow face and



Fig. 3. A female grasshopper *Calliptamus barbarus*, Barrau, 2012. Photo: Roger Hawkins.



Fig. 4. A male bush-cricket *Uromenus rugosicollis*, Barrau, Midi-Pyrénées, 2012. Photo: Roger Hawkins.

yellow band at end of abdomen. A large black sphecid wasp with stalked abdomen turned out to be *Isodontia mexicana* (Saussure), a recent arrival from America that preys upon just those crickets and bush-crickets that I was studying, although this was not observed. On my last evening a large soldierfly was captured indoors as it flew noisily around the light. It had long antennae, white-spotted abdomen and legs, and large green eyes patterned with thin dark bands and thus resembling those of a horsefly. This was *Hermetia illucens* (L.) (Stratiomyidae), the Black Soldierfly of North America (see Plate 4, Fig. 3). Two more American invaders were beaten from trees, both leafhoppers in a broad sense, *Stictocephala bisonia* Kopp & Yonke, the Buffalo Treehopper of family Membracidae, and *Metcalfa pruinosa* (Say), the Citrus Flatid Planthopper of family Flatidae.

Jennifer's generous offer, of free accommodation in return for a survey, is still open for the coming season. She does not allow the collecting of butterflies, or any collecting for purely selfish reasons, but is prepared to tolerate the taking of specimens as vouchers or for identification. The butterflies of Barrau have been well studied, as have the breeding birds, but the excellent and apparently comprehensive list of moths only covers those flying in late September. Nobody has yet surveyed the spiders or the hoverflies. Beetles have been covered, but only in May, while I, and several other visitors, have only made a tiny start on the true bugs and leafhoppers, the other families of flies, and the bees, wasps and ants. I plan to return myself during the coming season, but principally to list the wild flowers.

LIST OF ORTHOPTERA

Family Tettigoniidae – Bush-crickets

Phanoptera nana (Fieber). The commonest bush-cricket at Barrau, with adults regularly disturbed from bushes and trees, and then flying away. Many adults and nymphs sitting on a hedge of laurel (*Prunus laurocerasus*). Nymphs seen feeding on leaves of rose, and on the upper surface of laurel leaves.

Tylopsis liliifolia (F.). Two females (one yellow and one green), both among long grass.

Leptophyes punctatissima (Bosc) (Speckled Bush-cricket). One female seen on fig tree, and a male and two females beaten from oak.

Meconema meridionale (Costa) (Southern Oak Bush-cricket). One male and three females beaten from oak trees at three separate locations, often together with *Cyrtaopsis scutata*.

Cyrtaopsis scutata (Charpentier). Two males (green) and three females (one yellow and two green), all beaten from oak trees, at three separate locations.

Ruspolia nitidula (Scopoli). Two females found, low down in grass, but the strident song of the males could be heard at night at several places, with some being high up on bushes.

Tettigonia viridissima L. (Great Green Bush-cricket). None seen but two heard at night, from a bush and from an oak tree.

Decticus albifrons (F.). Distinctive song heard from long grass. One male seen.

Platypleis albopunctata (Goeze) (Grey Bush-cricket). None seen but song heard, both by day and at night, from bramble patches and from scrub.

Yersinella raymondii (Yersin). One male beaten from oak tree.

Uromenus rugosicollis (Serville). Two seen basking in sun, a brown female on top of the laurel hedge and a green male with white side-stripe on a nearby bramble leaf. The distinctive song of this species was heard at night from this spot, from the fig tree, and from various other places.

Family Gryllidae – Crickets

Nemobius sylvestris (Bosc) (Wood Cricket). Below oak trees on edge of wood.
Oecanthus pellucens (Scopoli) (Tree Cricket). Ubiquitous in trees and bushes, and calling most of the night.

Families Catantopidae and Acrididae – Grasshoppers

Pezotettix giornai (Rossi). Frequent in areas of short grass.
Calliptamus barbarus (Costa). Common in areas of short grass.
Omocestus rufipes (Zetterstedt) (Woodland Grasshopper). Common.
Chorthippus biguttulus (L.). Commonest grasshopper.
Chorthippus parallelus (Zetterstedt) (Meadow Grasshopper). At two locations.
Euchorthippus pulvinatus (Fischer de Waldheim). Common.

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SHORT COMMUNICATION

Further records of *Hylaeus pectoralis* Förster (Hymenoptera: Apidae) and *Gasteruption assectator* (L.) (Evanioida: Gasteruptionidae) from Kent. – On 1.vii.2010 I reared a male *Hylaeus pectoralis* from an old gall of *Lipara lucens* Meigen (Diptera: Chloropidae) from Shorne in Kent (Jennings, 2011, *British Journal of Entomology and Natural History* 24: 29). This species had not previously been reported from Kent (Allen, 2009, *Bees, wasps and ants of Kent*). Geoff Allen (*pers. comm*) advised me that Gerald Dicker, in the 1970s and early 1980s, had collected many *Lipara* galls from along the old, now derelict, Gravesend – Strood canal. As this is only 5km from Shorne, in July 2011, I decided to search along the canal for *Lipara* galls occupied by *H. pectoralis*. From galls collected along the canal at Chalk TQ6773 on 19.vii.2011 15 *H. pectoralis* emerged between 5–23.vii.2012. On 23.vii.2011 I found an occupied gall not far from the canal at Higham TQ7175. Three *H. pectoralis* emerged between 13–22.vii.2012. This suggests that *H. pectoralis* is a recent arrival in Kent, perhaps resulting from a southern expansion of the population in south Essex.

From a gall collected at Chalk one male *Gasteruption assectator* emerged on 5.vii.2012 and this was followed by a female on 18.vii.2012. From another gall a female *G. assectator* emerged on 20.vii.2012. These specimens were identified by reference to Crosskey, 1951, *Transactions of the Royal Entomological Society of London* 102: 5, 247–301). Crosskey states that *G. assectator* had been previously recorded from Kent, is one of the commonest species of evanioids in Britain and has a wide host range within the solitary bees. *Gasteruption assectator* acts as cleptoparasite and predator, feeding on the host egg, food store and host larva – sometimes consuming the contents of more than one cell.

The specimens of *G. assectator* have been passed to Dr M. Shaw for inclusion in the collections at the National Museums of Scotland. – M. T. JENNINGS, 206 Lower Higham Road, Gravesend, Kent, DA12 2NN.