Richards, 1953

The most obvious remedy is to remove the rotting seaweed, but the authorities concerned have preferred spraying and trench-digging. Even if no action were taken the flies would probably have ceased to be a nuisance when colder weather reduced the activity of the adults.

In London the flies have been attracted into premises where certain organic solvents—notably trichlorethylene and chloroform—are used. This is a well-known characteristic of *C. frigida*, and perhaps of some of the other species. They appeared suddenly and in large numbers in west-central districts, and later spread to the north-east, and east to Rochester. They were also reported from East Grinstead. In view of the very large numbers on the south coast, and the prevalence of southerly winds during the period, it seems likely that the flies were wind-borne. It has been suggested that they may be breeding in the London area in some other medium than seaweed, but apart from the entire absence of any evidence of this, two other difficulties would remain : (*a*) how the flies got there in the first place to start this new and unique colony ; (*b*) how they managed to conceal their presence until a big population had been built up, and then appeared simultaneously and in large numbers over a wide area.

Their nearest normal breeding place on the Thames Estuary is Canvey Island, where suitable sites are limited, and numbers of flies not abnormal.

Mr. G. A. Brett showed a series of lantern slides of this insect.

Dr. B. P. Moore and **Mr. B. J. Southgate** exhibited a selection of entomological specimens mounted in plastic (polymethylmethacrylate) blocks. The mounts had been prepared by means of a new cold-casting technique, to be described in detail in a forthcoming issue of the *Museums Journal*.

Dr. J. D. Carthy exhibited specimens of *Satyrus semele azorinus* (Lepidoptera : Satyridae), an endemic Grayling from the island of Pico, Azores, taken in August and September, 1952, during the Queen Mary College Expedition's stay on the island, and illustrated his communication with colour slides of the habitat of the butterfly.

This subspecies was described by Strecker in 1899. Le Cerf (1935) proposed a separate subspecies for each of the Azorean islands of San Miguel and Pico. Rebel (1940) considered the subspecies too variable to warrant this further subdivision, despite the sea barriers which must affect the spread of such a poor flier.

On Pico the butterfly is found in large numbers on pastures at 3,000 ft., being found lower down when the ground is open. Like many island species it is darker and smaller than the Continental form. The white band on the underside of the hind wing of both sexes remains, however, clearly marked and may serve some purpose in attracting individuals into groups, which will constantly be dispersed by the oceanic winds.

Professor O. W. Richards made a communication on commensalism of *Desmometopa* (Diptera : Milichiidae) with predacious insects and spiders.

He said the species of *Desmometopa* (Diptera : Milichiidae) are well known to be facultative commensals of various predacious insects and spiders (Summary—Hennig, 1937, *in* Lindner, *Flieg. pal-Reg.*, **60***a* : 16–17). Biro first observed a Papuan species sitting on the thorax of an Asilid fly. When the host captured prey, the *Desmometopa* licked it. The same observer noted *Desmometopa* in Europe licking honey bees which formed the prey of crab spiders. This observation has often been repeated both with spiders and with Reduviid bugs. In France, during August, 1953, similar observations were made at Montfort, Dordogne.

(1) A specimen of the Reduviid. *Rhinocoris* (= *Harpactor*) *cuspidatus* Rib. ♂ (det. Mr. R. J. Izzard) was observed sucking a worker honey-bee on the flowers of *Origanum*, 8. viii. On the dead bee were 2 ♀ of *Desmometopa sordidum* (Fall.).

(2) A specimen of the same bug was seen on flowers of *Origanum* without prey, 9. viii. On the dorsum of the pronotum a male and female of the same fly were sitting. This is apparently the first record in Europe of the association in the absence of prey.

(3) A very large and conspicuous, orb-wearing spider, *Argiope bruennichi* (Scop.) ♀ (det. Mr. G. H. Locket) was captured in a pill-box together with the centre part of her web, 16. viii. The spider was eating a honey-bee worker. Five or six hours later it was noticed that there were six small flies (*Desmometopa sordidum* ♀♀) still alive in the box with the spider. The flies must have been sitting on the dead bee or on the web (most probably on both). They did not become entangled in the part of the web brought away in the pill-box.

Mr. R. B. Benson showed a photograph and a slide of the froth-balls exuded from mines of larvae of the archaic sawfly *Blasticotoma filiceti* Klug (Blasticotomidae) in the stems of Lady Fern (*Athyrium filix-femina* (L.) Roth.).

He mentioned that this species had been known to occur formerly in the Royal Horticultural Society's Gardens at Wisley, Surrey, and that this year it had been rediscovered in Britain at Goldsitch Moss in North Staffordshire by Mr. James Edwards, and also in Kew Gardens by Mr. A. H. G. Alston (see 1953, *Ent. mon. Mag.* **89** : 304).

Mr. D. Leston made a communication illustrated by mounts, drawings and lantern slides on the value of the tracheation of the wings in the classification of the Hemiptera : Heteroptera.

He said the value of wings in the classification of Heteroptera had previously been under-estimated, perhaps because of the lack of a consistent interpretation of veins and wing-areas. The present work was to some extent based on Tanaka (1926, *Annot. zool. Jap.* **11** : 33–57), the only earlier worker to have fully exploited tracheation in interpretation.

The tracheation is much reduced and no primary branches (Rs, M1, M2, PCu, etc.) are present. Three folds, anterior, vannal (or claval) and jugal, divide the tracheae into groups : (1) ante-anterior, Sc (when present), R and M ; (2) ante-vannal, Cu only ; (3) ante-jugal, 1V, 2V only. The post-jugal area contains only atracheate veins. The anterior fold, in fore wings, is the embolium of some authors ; its presence in hind wings has not previously been noted. The vannal fold is bifid in hind wings but the posterior bifurcation is secondary ; the bifurcation often encloses one or two atracheate veins, the Inter-vannals. C is absent (save perhaps in Reduviidae) from both wings and Sc (save in Reduviidae and related groups) from hind wings. Surprisingly, the modified fore wing (hemelytra) contains a fuller set of tracheae than the membraneous hind wing, suggesting that modifications for flight (not necessarily, however, for speed) are more far-reaching than those concerned with body cover.

Almost all cross-veins are atracheate and the complex courses of some veins make interpretation impossible without examining tracheae. The Reduviid wings suggest an anterior shift by all tracheae and capture by adjacent, preformed veins : there is no doubt that, in the phylogeny of the group, tracheation has preceded venation but subsequently the veins have become fixed and tracheation has shown a tendency to wander. No difficulty is found in homologising wings of Heteroptera with those of other groups, but the anterior fold might be a unique feature (against this view, the presence of the anterior fold in both wings