

would be improbable. However much depends on the siting of individual nests and I found sexuals in all stages of development in various nests of the two species in Abernethy forest on 13th June 1956. Nevertheless there is no record of hybridisation between the different species of wood ant, although this was assumed to occur by Donisthorpe and others so as to explain colour gradations between the opposed species '*rufa*' and '*pratensis*'.

*F. rufa* L. occasionally starts fresh colonies through the adoption of a fertilised female by a nest of one of the species of the *F. fusca* group. I have seen small mixed colonies of *F. rufa* and *F. fusca* and of *F. lugubris* and *F. lemani* on four occasions but such instances are comparatively rare. In the main, both *F. lugubris* and *F. aquilonia* spread by colony proliferation which can be temporarily accelerated by minor disturbance. Dissemination of these species is therefore very localised and, from all available evidence, wood ants are losing ground in Britain largely through woodland clearance. Burning and clear felling result in the greatest harm to these species which are most unlikely to return to areas from which they have been exterminated. Thus wood ants abound in the interwoven plantations and old forest along the upper Dee down to Ballater but appear to be completely absent from the extensive and long established plantations to the east of this area.

The known vice-county distribution is as follows :

#### FORMICA AQUILONIA

E. Sutherland	: Invershin*, Inveran, Glenrossal.
W. Ross	: Inverpolly, Baddagyle, Drumrunie, Rhiddoroch, Glen Einig.
E. Ross	: Amat, Loch Garve (L. Weatherill).
Westerness	: Loch Oich (L. Weatherill), Loch Laggan, Beasdale (A. W. Stelfox), Nevis* (Thornley, 1896).
Easterness	: Affric, Glen Strathfarrar (L. Weatherill), Plodda (L. Weatherill), Loch Ness, Slochd, Carrbridge, Abernethy, Glenmore, Rothiemurchus, Kingussie, Glen Tromie (R. L. Joseph), Kincaig.
Nairn & Moray	: Darnaway Forest, Dunphail.
S. Aberdeen	: Glen Tanar (A. Carlisle), Ballochbuie, Invercauld, Mar, G'en Lui, Derry.
Mid-Perth	: Dunan, Rannoch, Tummel.
S. Perth	: Trossachs, Aberfoyle, Leny, Chuallaich, Coninish, St. Fillans, Brig O'Turk, Loch Ard*.
Argyll	: Tynndrum, Loch Awe*, Taynuilt, Appin, Ardentinny (L. Weatherill), Loch Sween (L. Weatherill).
Cantire	: Artillagan, Ellory, Corranbuie.

#### FORMICA LUGUBRIS

E. Sutherland	: Inveran.
E. Ross	: Inchbae, Strath Vaich, Garve, Amat (L. Christie), Corrievallighan (E. Nelmes).