

II. MATERIALS AND METHODS

The limits of the region studied do not correspond exactly with the geographical limits of Northern Europe but have been dictated for practical reasons to include those areas best known in detail from a myrmecological point of view. In this paper the British Isles, Channel Islands, Denmark and the whole of Fennoscandia with their related islands up to the political boundary between Finland and Russia are included. The Baltic countries, North Germany, Belgium, Holland, North France are excluded for practical reasons because of the lack of detailed information available from certain areas while the northernmost lands such as the Faroes, Iceland and Spitzbergen are known to have no indigenous ants at all.

The next decision to be made was the size and shape of the area units on which the presence/

absence of ants species were to be mapped. We have already suggested (BARONI URBANI & COLLINGWOOD 1975) that the use of geometrical grid maps, as recommended by the European Invertebrate Survey, could lead to misleading results in a biogeographical analysis because of lack of detailed information on the one hand and the presence of unnatural discontinuities due to human disturbance on the other. Therefore we adopted as a practical solution the use of area units often stemming from a compromise between geographical and administrative barriers. The 103 area units are mapped in Figure 1 and listed in table 1 and although they have probably never been used together in the same paper, and in the same way as in the present study, they have been widely employed in the literature and are well known

TABLE 1. List of Area units

British Isles	Norway	69 Värmland
1 Peninsula	35 Østfold & Akershus	70 Dalarna
2 Channel	36 Hedmark	71 Gästrikland
3 Thames	37 Opland	72 Hälsingland
4 Anglia	38 Buskerud	73 Medelpad
5 Severn	39 Vestfold	74 Härjedalen
6 S. Wales	40 Telemark	75 Jämtland
7 N. Wales	41 Aust-Agder	76 Ångermanland
8 Trent	42 Vest-Agder	77 Västerbotten
9 Mersey	43 Rogaland	78 Norrbotten
10 Humber	44 Hordaland	79 Åsele Lappmark
11 Tyne	45 Sogn og Fjordane	80 Lycksele Lappmark
12 Lakes	46 Møre og Romsdal	81 Pite Lappmark
13 Munster	47 Sør-Trøndelag	82 Lule Lappmark
14 Leinster	48 Nord-Trøndelag	83 Torne Lappmark
15 Connaught	49 S. Nordland	
16 Ulster	50 N. Nordland	Finland
17 W. Lowlands	51 Troms	84 Alandia
18 E. Lowlands	52 Finnmark wi	85 Regio aboensis
19 E.Highlands	53 Finnmark ne	86 Nylandia
20 W. Highlands		87 Karelia australis
21 N. Highlands	Sweden	88 Satakunta
22 North Isles	54 Skåne	89 Tavastia australis
23 Channel Islands	55 Blekinge	90 Savonia australis
	56 Halland	91 Ostrobotnia australis
Denmark	57 Småland	92 Tavastia borealis
24 South Jutland	58 Öland	93 Savonia borealis
25 East Jutland	59 Gotland	94 Karelia borealis
26 West Jutland	60 Gotska Sandön	95 Ostrobotnia media
27 North-west Jutland	61 Östergötland	96 Ostrobotnia kajanensis
28 North-east Jutland	62 Västergötland	97 Ostrobotnia borealis S
29 Funen	63 Bohuslän	98 Ostrobotnia borealis N
30 Lolland, Falster, Mön	64 Dalslän	99 Kuusamo
31 South Zealand	65 Närke	100 Lapponia kemensis W
32 North-west Zealand	66 Södermanland	101 Lapponia kemensis E
33 North-east Zealand	67 Uppland	102 Lapponia enontekiensis
34 Bornholm	68 Västmanland	103 Lapponia inarensis