

of the Canaries, a stretch of more than 40 degrees, or 2400 miles. A survey of the animal life on this long stretch of sea-floor is very interesting. As the temperature gradually falls toward the north the fauna changes. Some species are hardy, and are distributed over a greater part of the area; others can only live under more uniform conditions, and therefore have a more limited area of distribution.

Zoological oceanography has long recognised this, and zoological literature contains much information regarding the distribution of animals within our area of investigation. I will mention only one example, for which purpose I choose the excellent survey of the mollusca of Arctic Norway by G. O. Sars, recording the geographical distribution of 174 species of lamellibranchs and 366 species of gasteropods.

G. O. Sars on  
the Mollusca  
of Norway.

Of the 174 lamellibranchs no less than 128 or 74 per cent were known also from Great Britain; 119 or 70 per cent from the Mediterranean, and 56 or 32 per cent from boreal North America.

Of 366 gasteropods found in Norway, 225 or 62 per cent were also known from Great Britain; 133 or 36 per cent from the Mediterranean, and 77 or 23 per cent from the coasts of boreal North America. A great many species of molluscs have been taken in the Mediterranean as well as in Norway, and quite a number of forms are common to the faunæ of Norway and of North America.

Examining the conditions in various parts of the coast of Norway, we see that the Mediterranean species rapidly decrease in number as we go north from western Norway, for instance, from the latitude of Bergen towards the North Cape. While 119 lamellibranchs and 133 gasteropods are common to the Mediterranean and Southern Norway, Northern Norway and the Mediterranean have only 49 lamellibranchs (28 per cent) and 35 gasteropods (10 per cent) in common. Also south of the Mediterranean we find a similar decrease in the number of species common to both areas; thus only 5 species of lamellibranchs and 4 species of gasteropods are common to Madeira and Northern Norway.

A thorough understanding of the distribution of different animals, or of the different animal-communities, is, however, not obtainable by means of records of this kind, for it makes a world of difference whether a few specimens of a species have been found in a certain locality or whether it lives there in great quantities. A complete knowledge of the distribution of