

From a study of the list on pp. 654-5 we note the following points:—

(1) A certain number of genuine warm-water forms occur only in the upper hauls (200 to 0 metres) in the southern stations (50 and 63), such as: *Eucalanus attenuatus*, *Euchæta marina*, *Euchirella brevis*, *Haloptilus mucronatus*, *Scolecithrix danæ*, *Acartia danæ*, *Candace*, *Copilia*, *Sapphirina*.

(2) Some Atlantic deep-sea forms do not occur at the surface either in the Sargasso Sea or along our northern track; they do not enter the Norwegian Sea and are consequently distributed like the Atlantic bathypelagic fauna. Such are: *Amallophora affinis*, *Augaptilus squamatus*, *Phyllopus bidentatus*, *Bathypontia minor*.

(3) Some forms have a large vertical range in warm waters, like *Calanus gracilis* and *Pleuromma gracilis*.

(4) Other forms have a large vertical range in the southern as well as in the northern stations, like *Eucalanus elongatus* (see Stations 50, 63, 80, and 92).

(5) A peculiar group is composed of forms having at the boreal stations a large vertical range, but occurring at the warm southern stations only in deep water such as: *Calanus finmarchicus* (Stations 80 and 113 at all depths); *Euchæta norvegica* (Stations 80 and 113 at all depths, Station 92 only between 1000 and 500 metres, also, according to Nordgaard, Station 64, in 1250 metres, Station 62 in 1000 metres); *Metridia longa* (Stations 80 and 113 in all hauls); *Pseudocalanus elongatus* (Station 80 at all depths); *Scolecithricella minor* (Station 80 at all depths); *Heterorhabdus norvegicus* (Station 92 at all depths, and in deep water at Stations 50, 63, 80 and 113). All these forms occur in the Greenland Sea, where they also have a large vertical distribution (Damas and Koefoed).

(6) Certain forms recorded only from the deep hauls at Stations 80 and 113, where the temperature is lowest, such as *Euchæta barbata*, *E. glacialis*, *Calanus hyperboreus*, *Amallophora magna*. None of these occur in deep water at Stations 50 and 63, but, according to Nordgaard, *Calanus hyperboreus* and *Euchæta barbata* have both been taken at Station 62 in the Sargasso Sea in a horizontal haul at 1000 metres in great numbers, 65 specimens of *Calanus hyperboreus* being counted in a small part of the sample. These forms belong to the Arctic region in the Norwegian Sea, where according to Damas and Koefoed they are also deep-sea forms, except the surface species *Calanus hyperboreus*.