

series of species that do not descend to the profound depths. These latter may be designated arctic shallow-water forms, or, to use a different zoo-geographical description, arctic continental forms, though it is as well to remember that the depth on the plateaus averages about 400 metres. As in the case of the boreal plateaus, so here, too, we can distinguish between forms that keep entirely to less depths and those which chiefly inhabit the deeper portions. The bottom conditions of the plateaus are quite different from those that prevail in the abyssal region, since hard bottom is to be found as well as soft, whereas the floor of the deep basin consists almost entirely of soft materials; consequently the plateaus have a far greater abundance of attached animal forms.

Arctic  
shallow-water  
forms.

Currents, owing to the increased abundance of nourishment they bring with them, are likewise responsible for the greater profusion of attached forms on the arctic plateaus. To what extent they affect the distribution of animal-life may be seen by comparing the fauna of the west and east coasts of Spitsbergen. Römer and Schaudinn, who made careful researches in 1898, found that on the western side non-attached forms, especially echinoderms, were most in evidence, while on the eastern side, where strong currents flow through the sounds, attached forms predominated. Of this latter area Römer and Schaudinn write as follows: "Most of the rocks and large stones are covered with barnacles, while monascidians and synascidians form populous colonies on the bottom. Sponges, which are scarce on the western side, are represented by numerous species, and alcyonids inhabit the deeper channels. The shallower rocky localities accommodate large congregations of actiniæ. The animals, however, which, so to speak, hall-mark the fauna, and are developed in almost fabulous fashion, are hydroids and bryozoa. So dense are the thickets formed in some places by these organisms that the heavy dredge failed to reach the bottom, and merely brought up animals instead of bottom-material." Amongst these attached forms, moreover, there is, just as in the boreal region, a rich fauna of non-attached forms like worms, crustaceans, and molluscs. Römer and Schaudinn drew attention to the fact that the worms, crustaceans, and molluscs, in particular, did not show such a striking difference in their distribution around Spitsbergen as other groups, but were, on the contrary, fairly equally distributed between east and west. Nor are echinoderms absent on the eastern side, where in fact there are actually more species than