may be as a result of differential erosion of the regular main land shoreline. None of these explanations seem to perfectly fit the situation but might represent a combination of the factors considered. They seem to be arranged at the N. N. E end of the bay. The prevailing winds strike the N. N. W exposures and one should find a similar situation here but it is not comparable with the N. N. E. section. My assumption is that the glacial action is no doubt mainly responsible. The outermost boulders are large and apparently are lying upon the sand surface. It is questionable how these boulder got out to their position by any of the above considered factors. The greater part of the bay represents a succession of damp sand bars and shallow intertidal pools which are apparently barren of animal form. This situation varies to the extent that the fresh water stream has deposited an alluvial fan of gravels and sands at the mouth of the stream and the fact that mud is better represented in the more protected areas of the bay. The numerous tidal channels are arranged in a somewhat N.W-S E direction across the bay and are the result of successive sand bar accumulations. The pools are barren and vary from 1 cm to 14 cm in depth. When the tide is either coming in or going out these parallel pools form water courses and the water have a directional movement until completely covered by higher tide. Except in some pools where there is not temporary outlet, all pools have movement throughout the period covered by low tide. There is no dominant life except a few fragment of Ulva. The sand bars are marked by ripples varying from 7 to 14 cm in width. Generally at the pool edge the water can be found to be occupying the ripple valleys and sands supersaturated. Size of ripple may have significance in distribution of animals. Here found the deepest area of bay are at the outer cliff area on both side where the water penetrates farther into the bay. The rain or shallow ponds may have some controlling significance. Macoma secta and macoma nasuta common as dead shells - Convus b. Cumingi. Approx eight in bay area and feeding on sands and shore line. This bird has the advantage over the gulls in that it can hold a clam in its foot while effecting to body. One two occasions observed a Phoca vitulina richardsii feeding among kelp and out 15 m from east rocks in channel of bay at low tide. A small group of approx 15 Melanitta perspicillata and melanitta deglandi are always found feeding above submerged algae on turned line at about the 12.00-3.00 m area. These birds will drift with the morning tide and then race back again to their usual position above the algae beds. 2 Aechmophorus occidentalis spend considerable time in same zone as seaters. The other dominant and conspicuous bird is the cormorants — Phalacrocorax pelagicus resplendens and (?) Phalacrocorax auritus.