streams fall, forming considerable lagoons. For some way beyond the only seaport is Bosa, which has only an open roadstead; and at the southern extremity of the Nurra come the Gulf of Alghero and the Porto Conte to the W., the latter a fine natural harbour but not easy of ingress or egress. The northern extremity of thè Nurra, **the** Capo del Falcone, is continued to the N.N.E. by the island of Asinara, about 11 m. in length, the highest point of which, the Punta della Scomunica, is 1339 ft. high. This small island serves as a

quarantine station. On the mainland, on the south shore of the Golfo dell’ Asinara, is the harbour of Porto Torres, the only one of any importance on the north-west coast of Sardinia.

*Geology.—*Geologically Sardinia consists of two hilly regions of

Pre-Tertiary rock, separated by a broad depression filled with Tertiary deposits. This depression runs nearly from north to south, from the Gulf of Asinara to the Gulf of Cagliari. Physically its continuity is broken by Monte Urticu and several smaller hills which rise within it, but these are all composed of volcanic rock and are the remains of Tertiary volcanoes. It is in the south that the depression remains most distinct and it is there known as the Campidano. In the north it forms the plain of Sassari. Both to the east and to the west of this depression the Archean and Palaeozoic rocks which form the greater part of the island are strongly folded, with the excep­tion of the uppermost beds, which belong to the Permian system. In the eastern region this was the last folding which has affected the country, and the Mesozoic and Tertiary beds are almost undisturbed. In the western region, on the other hand, all the Mesozoic beds are involved in a later system of folds; but here also the Tertiary beds lie nearly horizontal. There were, therefore, two principal epochs of folding in the island, one at the close of the Palaeozoic era which affected the whole of the island, and one at the close of the Mesozoic which was felt only in the western region. Corresponding with this difference of structure there is also a difference in the geological succession. In the western region all the Mesozoic systems, in­cluding the Trias, are well developed. The Trias does not belong, as might have been expected, to the Alpine or Mediterranean type; but resembles that of Germany and northern Europe. In the eastern region the Trias is entirely absent and the Mesozoic series begins with the Upper Jurassic.

Granite and Archean schists form nearly the whole of the eastern hills from the Strait of Bonifacio southwards to the Flumendosa river, culminating in Monti del Gennargentu. The Palaeozoic rocks form two extensive masses, one in the south-east and the other in the south-west. They occur also on the extreme north-western coast, in the Nurra. Cambrian, Ordovician and Silurian beds have been recognized, the Upper Cambrian consisting of a limestone which is very rich in metalliferous ores (especially galena and calamine). The Permian, which contains workable coal seams, lies uncon- formably upon the older beds and seems to have been deposited in isolated basins (*e.g.* at Fondu Corrongiu and San Sebastiano), like those of the Central Plateau of France. The Mesozoic beds are limited in extent, the most extensive areas lying around the Gulf of Orosei on the east and west of Sassari in the north. The Tertiary deposits cover the whole of the central depression, where they are associated with extensive flows of lava and beds of volcanic ash. The most widely spread of the sedimentary beds belong to the Miocene period.@@1

*Climate.*—The climate of Sardinia is more extreme than that of Italy, but varies considerably in different districts. The mean winter temperature for Sassari for 1871-1900 was 48° F., the mean summer temperature 73° F., while the mean of the extremes reached in each direction were 99° F. and 31·5° F. The island is subject to strong winds, which are especially felt at Cagliari owing to its position at the south-east end of the Campidano, and the autumn rains are sometimes of almost tropical violence. The lower districts are hot and often unhealthy in the summer, while the climate of the mountainous portion of the island is less oppressive, and would be still cooler if it possessed more forest. There are comparatively few streams and no inland lakes. Snow hardly ever falls near the coast, but is abundant in the higher parts of the island, though none remains throughout the summer. The rainfall in the south-west portion of the island is considerably greater than in other districts. The mean annual rainfall for Sassari for 1871-1900 was 24∙45 in., the average number of days on which rain fell being 109, of which 37 were in winter and only 8 in summer—the latter equal with Palermo, but lower than any other station in ltaly.

*Malaria.*—The island has a bad reputation for malaria, due to the fact that it offers a considerable quantity of breeding places for the *Anopheles claviger,* the mosquito whose bite conveys the infection. Such are the various coast lagoons, formed at the mouths of streams

for lack of proper canalization, while much of the harm is also due to the disforestation **of** the mountains, owing to which the rains collect in the upland vaïíeys, and are brought down by violent torrents, carrying the soil with them, and so impeding the proper drainage and irrigation of these valleys, and encouraging the formation of un- healthy swamps; moreover, the climate has become much more tropical in character. The mortality from malaria in 1902 was higher than for any other part of Italy—1037 persons, or 154 per 100,000 (Basilicata, 141; Apulia, 104; Calabria, 77; Sicily, 76; province of Rome, 27).

*Customs and Dress.*—The population of Sardinia appears (though further investigation is desirable) to have belonged in ancient times, and to belong at present, to the so-called Mediter­ranean race (see G. Sergi, *La Sardegna,* Turin, 1907). In the aeneolithic necropolis of Anghelu Ruju, near Alghero, of 63 skulls, 53 bdongtothe“ Mediterranean" dolico-mesocephalic type and 10to a Eurasian brachycephalic type of Asiatic origin, which has been found in prehistoric tombs of other parts of Europe. The race has probably suffered less here than in most parts of the Mediter­ranean basin from foreign intermixture, except for a few Catalan and Genoese settlements on the coast (Alghero and Carloforte are respectively the most important of these); and the popula­tion in general seems to have deteriorated slightly since pre­historic times, the average cranial capacity of the prehistoric skulls from the Anghelu Ruju being 1490 c.c. for males and 1308 for females, while among the modern population 60% of males and females together fall below 1250 c.c.; and the stature is generally lower than in other parts of Italy, as is shown by the measurements of the recruits (R. Livi, *Antropοmetria Militare,* Rome 1896). Anthropologists, indeed, have recently observed a large proportion of individuals of exceptionally small stature, not found in Sardinia only, but elsewhere in south Italy also; though in Sardinia they are distributed over the whole island, and especially in the southern half. In the province of Cagliari 29∙99% of the recruits born in 1862 were under 5 ft. 1 in., and in that of Sassari 21∙99%, the percentage for ten provinces of south Italy being 24·35. These small individuals present apparently no other differences, and Sergi maintains that the difference is racial, these being the descendants of a race of pygmies who had emigrated from central Africa. But the lowness of stature extends to the lower animals—cattle, horses, donkeys, &c.— and this may indicate that climatic causes have some part in the matter also, though Sergi denies this.

The dialects differ very much in different parts of the island, so that those who speak one often cannot understand those who speak another, and use Italian as the medium of communication. They contain a considerable number of Latin words, which have remained unchanged. The two main dialects are that of the Logudoro in the north and that of Cagliari in the south of the island.

The native costumes also vary considerably. In the south-east they have largely gone out of use, but elsewhere, especially in the mountainous districts, they are still habitually worn. In the Barbargia the men have a white shirt, a black or red waistcoat and black or red coat, often with open sleeves; the cut and decorations of these vary considerably in the different districts. They have a kind of short kilt, stiff, made of black wool, with a band from back to front between the legs; under this they wear short linen trousers, which come a little below the knee, and black woollen leggings with boots. They wear a black cap, about 1½ ft. long, the end of which falls down over one side of the head. In other districts the costume varies considerably, but the long cap is almost universal. Thus at Ozieri the men wear ordinary jackets and trousers with a velvet waistcoat; the shepherds of the Sulcis wear short black trousers without kilt and heavy black sheepskin coats, and the two rows of waistcoat buttons are generally silver or copper coins. The costume of the women is different (often entirely so) in each village or district. Bright colours (especially red) are frequent, and the white chemise is an integral part of the dress. The skirts are usually of the native wool (called *orbacia).* For widows or deep mourning the peculiar cut of the local costume is preserved, but carried out entirely in black. The native costume is passing out of use in many places (especially among the women, whose costume is more elaborate than that of the men), partly owing to the spread of modern ideas, partly owing to its cost; and in the Campidano and in the mining districts it is now rarely seen. The curious customs, too, of which older writers tell us, are gradually dying out. But the festivals, especially those of mountain villages or of pilgrimage churches, attract in the summer a great concourse of people, all in their local costumes. There may be seen the native dances and break-neck horse-races— the riders bareback—through the main street of the village. The people are generally courteous and kindly, the island being still

@@@1 See A. de la Marmora, *Voyage en Sardaigne,* vol. iii. (1857); J. C. Bornemann, “ Die Versteinerungen des Cambrischen Schichten- systems der Insel Sardinien,” *Nova Acta k. DC. Akad. Naturf.* vol. li. (1886), pp. 1-148, pls. i.-xxxiii., and *ib.* vol. lvi. (1891), pp. 427-528, pls. xix.-xxviii. ; A. Törnquist, “Ergebnisse einer Bereisung der Insel Sardinien,” *Sitz. k. preuss. Akad.* *Wiss.* (1902), pp. 808-829, and “ Der Gebirgsbau Sardiniens und seine Beziehungen zu den jungen, circum-mediterranen Faltenzügen,” *ib. (*1903*),* pp. 685-699; A. Dannenberg, “ Der Vulkanberg Mte Ferru in Sardinien,” *Neues Jahrb. f. Min.* Beil. Bd. xxi. (1906), pp. 1-62, pl. i.