

Besides the value derived from a brightened classroom and direct social and educational value to the children carrying out the project, such a map may prove a valuable visual aid to other youngsters who are to use the same classroom later and who will gain map knowledge thru continual exposure to such a mural.

After the project was completed some professional geographers questioned the selection of the Mercator projection. Other projections should be carefully considered before making a selection. The choice of a correct projection may well be made a geography lesson with inquiries sent by a pupil committee to university cartographers asking for information as to what projection should be used.

RECENT CULTURAL CHANGES ON THE ISLAND OF NAURU*

GRAHAM H. LAWTON
University of Washington

The island of Nauru is a small isolated submarine mountain peak of coral formation situated in latitude $0^{\circ} 32'$ south of the equator and longitude $166^{\circ} 55'$ east of Greenwich. The island which has an area of 5,263 acres is oval-shaped approximately 12 miles in circumference and is surrounded with a coral reef which is exposed at low tide. The width of the reef varies from 100 yards to 200 yards, the widest portion being to the north whilst the narrowest skirts Anibare Bay to the east. On the seaward side the reef slopes away at an angle of approximately 45° into the deep water of the Pacific Ocean. In many places along the reef, particularly on the north and east, there are coral pinnacles, standing singly or in clusters, giving a rugged appearance to the coastline.

On the landward side of the reef there is a narrow strip of sandy beach from where the ground rises slightly forming a fertile belt of land ranging in width from 150 yards in some places to 300 yards in others and completely encircling the island. On the inner side of the fertile belt a coral cliff formation rises to a height of from 40 to 100 feet above sea level merging into a central plateau of pronounced undulations, ranging from a saucer shaped depres-

* Presented at the Salt Lake City Meeting of the Association of Pacific Coast Geographers, June, 1950.

sion to the west known as Buada Lagoon, the lowest portion of the plateau, to features rising to a height of over 200 feet above sea level. The plateau contains the phosphate deposits which give the island prominence. It originally consisted of high jagged coral pinnacles which have been concealed by Nature with phosphate. These pinnacles may rise from 30 to 50 feet from the floor of the old coral formation and the removal of the phosphate from among them leaves a rugged wasteland terrain.

CLASH OF EUROPEAN AND NATIVE CULTURES

Nauru provides an interesting illustration of an important geographic concept; that the significance of the physical conditions of the land depends upon the culture, or way of living, of the inhabitants. Different features of the physical environment offer different opportunities to different people. To the indigenous natives most of this island is a barren wasteland; the only part that is suitable for settlement is the narrow coastal belt on the seaward edge of the coral cliffs (see map). Here the coconut grows in abundance, and to the Nauruans this one tree is the most useful on the island. It provides food, drink, clothing, building material and oil. The husk is used for the making of coil ropes. Torches are made out of the dead leaves; the spathes are used for tinder, for making sieves for catching fry on the reef, and for catching fresh water off tree stems. The shells are used for holding water and toddy; the leaves and trunks are used for building material, for basket making, and the making of leaf puzzles; the flesh of the old nuts is useful for making copra and oil; the charcoal formed from the burnt nut is used for painting the face and body for dances and war.¹

Two other trees on the island are of importance to the natives; the pandanus for its fruit and the tamano which grows in the interior for its use in the construction of canoes.

To the European the central part of the island is a source of great wealth, the phosphate rock which is mined for export overseas. To extract the valuable raw material from the interior of the island the European has to depend on imports of equipment, food, and even labor. Agriculture on the island cannot support many people; the little that has been introduced in recent years is

¹Camilla H. Wedgwood, "Report on Research Work in Nauru Island, Central Pacific," *Oceania* Vol. VII No. 1, September, 1936.

limited to subsistence crops here and there but on a very small scale. The coastal strip which provides the Nauruan with his coconuts and pandanus fruit, is not able to supply the European with even his bare necessities. In this way, therefore, the island presents an interesting example of a clash of two different cultures, European and native. In the short span of fifty years the one has been superimposed upon the other with the inevitable result that the older and more simple culture has undergone gradual changes. The prediction has been made that the phosphate deposits may last for only another 70 years. The question that will have to be faced sooner or later is whether the Europeanized Nauruans will be able to exist on a coral island which contains no further attraction for the European.

DISCOVERY OF NAURU

It was this island that was first discovered by Captain John Fearn of the "Hunter" on a voyage from New Zealand to the China Seas in 1798. He described it as a beautiful little island and in his chronicle written in 1799 there is recorded the fact that he named it "Pleasant Island." Prior to 1888 when the island was proclaimed German territory as part of the Marshall Islands Protectorate, the Nauruans came into contact with Europeans from time to time, especially traders, escaped convicts, and deserters from whaling ships. Some of these men remained only for a short time but others settled down on the island and engaged in trading activities. From these men and from visiting whaling vessels the Nauruans acquired implements, steel tools, guns and ammunition, as well as a taste for alcohol. Ideas spread rapidly thru the island and the native economy underwent social and economic changes that were soon accelerated by the introduction of the Mission stations and the development of the phosphate industry.

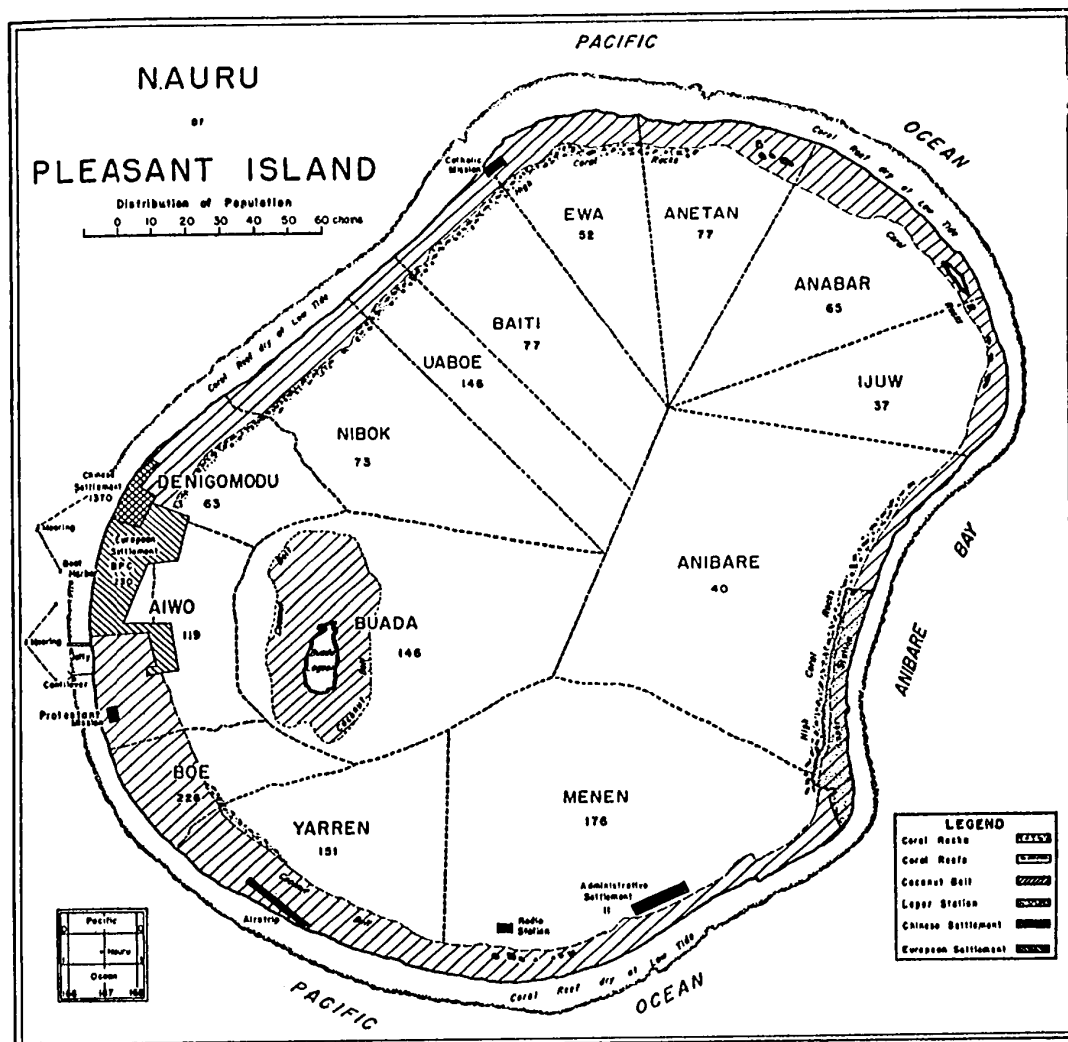
The missionaries were responsible for the early education of the Nauruans. The English language was taught in the schools and the church, and European customs and ideas were gradually introduced in the name of civilization.

The phosphates were discovered in 1900 but they were not worked until 1906. It was thru this natural resource of the island, of little interest and value to the Nauruans, that the island became known to the rest of the world. Its name could have easily been changed from "Pleasant Island" to "Treasure Island." New re-

sources had a new meaning to a new people. The Nauruans were swept along in the swift tide of change.

BRITISH MANDATE AFTER FIRST WORLD WAR

During the first World War the island was occupied by an Australian force and under the Versailles Treaty Germany renounced all her rights and title in respect to Nauru in favor of the



principal Allied and Associated Powers, who agreed that a Mandate for the administration of the island should be conferred on His Britannic Majesty. On the 2nd of July, 1919, the Governments of Great Britain, the Commonwealth of Australia and the Dominion of New Zealand concluded an agreement which provided

that the Administration should be vested in an Administrator. The same agreement provided that the right, title and interest in the phosphate deposits of the island purchased by the Governments of Great Britain, Australia, and New Zealand from the Pacific Phosphate Company should be vested in and worked and sold under the direction, management and control of a board of three Commissioners called the British Phosphate Commissioners, one Commissioner being appointed by each government concerned.

DEVELOPMENT OF PHOSPHATE INDUSTRY

Thru this agreement the island became a "C" Mandate of the League of Nations and as such the resources of the island were not to be exploited but developed for, and with the help of, the Nauruans whose welfare was to be the first consideration of the Mandatory Power. Without this protection the valuable phosphate deposits in the central part of the island could have been developed without any regard to the welfare of the indigenous people. Because the Nauruans were not too interested in working for the Phosphate Commissioners it was necessary to introduce a labor force from China and the South Pacific islands to carry out the physical work of the mining operations.

Chinese were recruited from Hong Kong for a definite period of two years after which time they were permitted to return to China if they so desired. The Chinese were conveyed by sea free of charge to Nauru, were provided with adequate quarters, supply of rations as well as medical and hospital facilities. While legislation does not prohibit immigrant indentured employees from bringing wives and families to the island they are not encouraged to do so owing to unavailability of requisite accommodation. The village life of the Nauruans was not disturbed too much by the mining operations. Some adjustments had to be made to cope with the increased amount of work connected with the administration of the island. At first the Nauruans welcomed the Kanakas and the Chinese because they provided them with a market for any surplus fish that they might have. This brought them into closer contact with a money economy. The more they were employed the more money they had to spend at the European and Mission stores and this with the royalties they received from the Phosphate Commissioners in return for leasing the land inevitably led to an increasing dependence on a non-native source of food.

CHANGES IN NATIVE ECONOMY

It is not difficult to imagine the tremendous changes in the life of the Nauruan village that came as a direct result of the discovery of the phosphate rock. New people brought new equipment, new foods and new ideas. A small part of the island was soon transformed by mechanical equipment exposing the underlying coral pinnacles. New houses and buildings were constructed. Ships anchored off shore to supply all the wants of a new people. The native had less inclination to climb the coconut tree or to set traps between the breaks in the coral reef to catch the fish. He was given

TABLE I.² POPULATION

The following table shows the variations in the Territory's Population during the last ten years.

Year	Chinese	Europeans	Other Pacific Islanders	Total Immigrants	Indigenous	Total
1938	1,533	179	27	1,739	1,661	3,400
1939	1,512	171	44	1,727	1,733	3,460
1940	1,350	192	49	1,591	1,761	3,352
1941	584	68	193	845	1,827	2,672
1942	194†	7*	193†	394	1,848*	2,242
1943	Japanese Occupation Period 8.23.42 to 9.13.45					
1944	—	—	—	—	—	—
1945	‡	‡	17	—	589	2,247
1946	778	79	21	878	1,369	2,247
1947	1,163	192	31	1,386	1,379	2,765
1948	1,370	247	97	1,714	1,448	3,162

* Population at the date of the Japanese occupation 23rd August 1942.

† Estimated population at the date of the Japanese occupation 23rd August 1942.

‡ Apart from other Pacific Islanders and Nauruans, reliable figures are not available for this period.

a job to do, at first mainly administrative, for which he was paid a wage; this gave him the opportunity to exchange his earnings for European goods, food, clothing and new commodities.

The small size of the island, less than 9 square miles, and the fact that the total Nauruan population was never more than 1900 (see Table I), are the major reasons why the new ideas spread so rapidly and why the change in the native way of life was so effective in such a short time. The modern young Nauruan is a good imitator, a person without roots, and with but little sense

²Tables I and II and map data from "Report to the General Assembly of the United Nations on the Administration of the Territory of Nauru from July 1st, 1947, to 30 June 1948," published in Australia, 1949.

of social responsibility. He has assumed that European customs are superior to Nauruan customs simply because they are European and he has become contemptuous of the middle-aged and elderly people because of their interest in preserving the traditional customs, and native ways of living. There remains the task of linking the past with the present; of restoring that personal dignity and self respecting mode of life for which the peoples of Central and Eastern Pacific have long been noted while at the same time enabling the islanders to reap benefits from the complex European civilization with which they have been brought into contact. To this end Nauruans are being trained in medicine at the medical school at Suva, Fiji, while others are sent to Australia for a technical and professional training.

SECOND WORLD WAR

The recent War in the Pacific tended to accelerate the changes that were already beginning to revolutionize the social and economic life of the indigenous people. The importance of the island to the food producing Dominions of Australia and New Zealand was recognized by Germany in the early years of the war. In December of 1940 a German raider shelled the island damaging port and island installations after sinking five phosphate ships. After Pearl Harbor Japanese planes bombed the island continually. Europeans and Chinese were evacuated in February 1942. In August of the same year Japanese forces occupied the island, demolished the installations and used much of the mechanical equipment for barricades and coastal defenses. The administrator and four European companions were murdered, and more than 1,200 Nauruans were removed to Truk Atoll in the Carolines group. The island thus became a Japanese fortress not because of its strategic location in the Pacific, but because of its economic importance to the Allies.

On September 13, 1945, the Japanese forces numbering 3,735 surrendered to the Australian Imperial Forces. The Nauruan population which stood at 1,848 at the time of the invasion had been reduced by malnutrition, starvation, disease and war atrocities to 1,278 when the Australians returned. They had been an enslaved people and all their social, political, economic, and educational advances had not only come to a stop but the suffering and the damage of five years of war had brought new problems. Possession of a strategic raw material, developed over a period of forty years,

had made them the very first target in the Pacific in World War II. Along with many other native peoples of the Pacific Ocean the Nauruans suffered in a war which had no meaning to them.

TABLE II.² OCCUPATIONAL DISTRIBUTION OF POPULATION AT 30TH JUNE, 1948, NAURU
(1) *Non-native Population*

Employment	Europeans			Chinese		
	Males	Adults Females	Children	Males	Adults Females	Children
Employed by—						
Administration	8	5	2	16	—	—
British Phosphate Commissioners	123	57	46	1,351	1	2
Missions	2	1	3	—	—	—
Total	133	63	51	1,367	1	2
	Men	Women	Children	Total		
Summary—						
Europeans	133	63	51	247		
Chinese	1,367	1	2	1,370		
	1,500	64	53	1,617		

Note.—With few exceptions women and children are dependents of employed males.

(2) *Indigenous Population*

Indigenous Population at 30th June, 1948	1,448
Less women, children and boys under sixteen years	1,037
	411
Male population over sixteen years	
Less—	
Inmates of leper station	3
Invalids and senile	9
*Unemployed	35
	47
Male population in employment at 30th June, 1948	364
Subdivision of employees as follows—	
Employed by Administration	209
Employed by British Phosphate Commissioners	116
Employed by Nauru Co-operative Society	39
	364

* Unemployed for personal reasons. However, several operate as private fisherman and fruiterers.

The five years of war brought destruction to the island; coconut trees were destroyed; installations became defense works. The program of rehabilitation and reconstruction in the last few years has given many Nauruans many opportunities of employment. Of the 411 male Nauruans over 16 years of age in June 1948, 209 were employed by the Administration. Another 116 were employed by

² Ibid.

the British Phosphate Commissioners (See Table II). An even closer link was in this way forged with the European way of living.

This shipment of phosphate which had of necessity stopped during the war years was resumed on July 30, 1946; new royalty payments became effective a year later. The Nauruans received 13d per ton instead of 8d, which gave them more purchasing power for the consumers goods in the European stores. This increase may well be the death blow to any further dependence upon the old methods of obtaining food. New ideas brought with them new demands and the native economy which had been so closely related to the immediate environment is now more dependent upon the supplies that are brought to the island by ships from Australia, New Zealand and China.

THE FUTURE FOR THE NAURUANS

What of the future? The island is now under the United Nations International Trusteeship system with the governments of Australia, New Zealand and the United Kingdom as supervisory powers.

In April of this year a United Nations Commission was sent to the Southwest Pacific to investigate the political, social, economic and educational problems of the Trusteeship territories. Already much has been done to provide the Nauruans with medical and educational facilities and more and more are they being given the opportunity to work out their own problems thru their native councils and village meetings. One of their greatest problems, however, has been inflicted upon them. The impact of the western world came because of one resource; once that resource has been used up, which at the present rate of consumption may come within the next 70 years, what is to happen to the Nauruans? Will they be content to return to their fishing traps and their coconut trees? If the island cannot provide them with the opportunity to live the life to which they have been brought by influences from without, it surely is the task of those who are responsible for the transformation of the native economy to see that they are not deserted in a time of need. We have brought them new ideas; it may be necessary now to think about providing them with a new land.