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The Taino

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The first inhabitants of most of the Greater Antilles. including Jamaica, Cuba, Puerto Rico and Hispaniola, were an Amerindian group known as the Taino. Any overview of Jamaica's history must necessarily begin with an assessment of these people, examining their culture, communities and impact on human settlement. This is not easy to achieve because the history of the Jamaican Tainos is only partially known to historians and archaeologists owing to limited surviving ethnographic evidence and other absences in the historical and archaeological record. Thus, the Tainos left no written documents, and many sites that would vield information about Jamaica's human habitation before the arrival of Columbus have been destroved by modern property and infrastructural development. Archaeological information and the testimony of Spanish visitors and conquerors are less plentiful for Jamaica than for Cuba, Puerto Rico and Hispaniola. Poor genetic data (DNA) preservation in Jamaica is one consequence of a patchy archaeological record. This is complicated by the fact that modern Caribbean genomes mainly comprise evidence of European and African lines of descent rather than indigenous Caribbean ancestry.

Given the large gaps in the documentary and archaeological record, and in the biological proof relating to ancestry, it is tempting to infer Taino cultural patterns

in Jamaica from evidence relating to other Caribbean islands. Some historians have followed this approach to provide flesh on the bones of what is definitely known about the Jamaican Taino. There is some justification for this viewpoint because the Jamaican Tainos shared characteristics with their counterparts in Hispaniola. Thus early maps of Jamaica by both Tomaso Porcacchi Castilione (1576) and Gerard Mercator (1606) contained inscriptions suggesting that the Taino in Jamaica had the same laws, customs and religion as the people of Cuba and Hispaniola. However, modern archaeological research has increasingly emphasised the variety within Taino cultures in the Greater Antilles. This is why Irving Rouse, an acknowledged expert on this subject, divided the Tainos into three main groups: the Eastern Taino, from the Virgin Islands to Montserrat; the Classic Taino from Puerto Rico and the Dominican Republic; and the Western Taino or sub-Taino from Jamaica, the Bahamas and most of Cuba. Each of these subdivisions distinct characteristics as well as significant differences.

The Taino era was characterised by its self-contained nature. It is unusual in the history of Jamaica in being the one major phase of the island's history where external forces had a limited impact on internal activities. Some broad themes in the history of the Taino remain unclear. No information survives to show that the Tainos, once settled in Jamaica, had the impetus to migrate elsewhere in the Caribbean. Nor is there any evidence that the Jamaican Tainos were subject to threats or raids from outsiders. Evidence is fairly slim on connections between the Tainos of Jamaica, Cuba and Hispaniola. The broad

contours of Taino life in Jamaica are sufficiently known, however, to facilitate an informed analysis even though precise chronological information is unavailable. What follows in this chapter, therefore, is a description and analysis of an insular, distinctive society in Jamaica in the pre-Columbian era.

The peopling of Jamaica began much later than in other parts of the world such as the British Isles, continental Europe, the eastern Mediterranean Basin, Africa and Australia: there is no evidence that people from the Palaeolithic, Mesolithic or Neolithic periods ever lived in Jamaica. Moreover, for 6,000 years after other parts of the Caribbean were populated by Archaic Age people, Jamaica remained uninhabited. Exactly why Jamaica was neglected as a destination for human migrants when other Caribbean islands received flows of people many centuries earlier is unknown. Thus human habitation began on Cuba and Hispaniola centuries before people lived in Jamaica. People living on those islands must have known about the existence of Jamaica, but, for whatever reasons, they chose not to settle there.

Whether there was significant communication or trade across the Caribbean Sea between Cuba, Hispaniola and Jamaica before the Taino era is unknown, but the Tainos were adept at using canoes hollowed out from tree trunks to move from one place to another. They also had larger vessels called *piraguas*, capable of holding fifty people for longer voyages. They had sufficient seafaring skills to sail in these vessels to different locations in the Greater Antilles. Those capabilities were probably picked up on South American coasts, but there is no definitive account of how the Taino came to Jamaica. One theory is that they

originated in the Amazon Basin, moved to the Orinoco valley and then migrated to Guyana, Venezuela, the Lesser Antilles and eventually Jamaica and other islands in the Greater Antilles. Another hypothesis is that the Taino originated in the Andes and diffused partly into Central America and partly into the West Indies. But whether or not the Taino had South American origins, it seems that they may have come to Jamaica from Hispaniola whence they had migrated from Belize and the Yucatan peninsula before 2000 BC.

The pre-Columbian inhabitants, or Native Americans, of Jamaica used to be known as Arawaks; indeed, that designation was common in museum displays and publications until the 1970s. Few studies now refer to Arawaks in Jamaica: the preferred naming has changed to Taino. This is because it is now recognised that the Arawaks and Tainos are distinct ethnic groups, though their languages had some commonalities. The word Taino means 'men of the good' or 'noble'. Its origins are obscure. One suggestion is that the Taino used it to distinguish themselves in the eyes of the Spanish from the Caribs of the Lesser Antilles. An alternative view is that the Taino used this word to differentiate themselves from the Spanish. Whatever the case, the word 'Taino' was never used as an ethnic label by the natives of Jamaica or the Europeans who arrived there even though nowadays, as already mentioned, the Taino are regarded as a particular ethnic group.

Jamaica itself was named after the Taino word *Xaymaca*. The *ca* suffix of the island's name indicated that it was a place where the Jamai (or Yamaye) people lived. The Taino name for the island has always been retained. The

Taino named places in Jamaica, but few are known and hardly any have survived. Liguanea, which refers to the extensive plain that includes Kingston, was originally a Taino place name, deriving from the iguana which was once common in Jamaica. *Guanaboa* (meaning the fruit soursop) is another place name that survives from the Taino era. Other Taino place names still in existence when Columbus visited Jamaica in 1503–4 have now disappeared. These include the villages of Aguacadiba and Ameyro. Port Royal was called *Caguay* or *Caguaya* by the Taino. In 1774, Edward Long argued that the name was 'a corruption probably of caragua, the Indian name for the coratoe, or great aloe' found abundantly in the vicinity.

The earliest archaeological evidence for human habitation in Iamaica dates from the first half of the seventh century AD. Jamaica's first colonisers were Ostionoid people, from whom the Taino are descended. Alligator Pond in Manchester parish and Little River in St Ann parish are among the earliest sites of this culture. Ostionoid communities in Jamaica, clustered around the coast, appear to have been fairly short-lived. Around AD 900 a second wave of colonisers reached Jamaica. These were the Meillacans, whose occupation of Jamaica was of far longer duration: they were the main people living in Jamaica at the time of first contact with Europeans in the 1490s. Both the Ostionoids and the Meillacans had origins in the northeast part of South America. The migration of these people extended throughout the Greater Antilles, with a particular focus on settlement in Hispaniola.

It is likely that the Taino presence in Jamaica was originally an outgrowth of the Taino settlement on Hispaniola. Certainly, there is evidence that the Jamaican Tainos believed their origins lay in caves in a sacred mountain in Hispaniola. The causes of the migration are unknown, but it would seem to have been propelled either by difficult circumstances in the places of the migrants' origins – overpopulation, for instance, or belligerent neighbours – or by the willingness of huntergatherers to paddle in canoes across the Caribbean in search of new homes. It is plausible that the migration was partly related to raids by the Caribs on existing Taino settlements.

The Taino settled in different parts of Jamaica from about AD 1200. Over twenty-three Taino settlements have been discovered in Trelawny parish in the northwest of the island. Most of these are located in the area of the Martha Brae River basin, which provided ready access to fresh water. These sites include Taino settlements in Holland Hill, Braco, Rio Bueno, Pantrepant East and New Forest. The archaeological remains of these sites include ceramics, stone artefacts, burial sites and remains from a built environment; they include more than 1,000 artefacts from the Rio Bueno site.

The Tainos had various sites in the Kingston area, notably at Bellevue, Long Mountain, Hope Tavern, Jacks Hill and Chancery Hall. These are mainly situated in hilly areas: the Tainos preferred to settle on hill tops, where they could dig postholes to support their huts. No evidence survives of Taino settlement on the fertile flat lands of Liguanea Plain. Other Taino sites were situated close to beaches and the sea in St James, St Mary and St Ann parishes. Recent archaeological investigations, in 2014–15, have concentrated on the Taino hilltop settlement of Maima, near Nueva Sevilla, St Ann's Bay, which

appears to have been settled in a period designated White Marl after the type of ceramics produced (AD 950–1545). Houses here were constructed on terraces or platforms.

Much evidence about the location of Taino settlements has disappeared owing to modern building development, continuing investigations, using Geographic but Information System technologies to map and analyse data, and Global Positioning System imagery and digital maps, drawn from a satellite navigation system, to undertake ground site reconnaissance, will yield new information. Our knowledge of these sites will therefore increase in the future. However, no known skeletal remains of the Taino have been uncovered in Jamaica to permit studies of dental and skeletal morphology and DNA attributes. Detailed consideration of the Taino population is also lacking from scholarly literature. It is therefore difficult to estimate the size of the Taino population in Jamaica: it may have been as low as 20,000 but probably never exceeded 60,000. It is interesting to note, however, that Columbus, visiting Jamaica in the first decade of the sixteenth century, described the coast to be full of towns and noted that both coastal and inland regions were very populous.

Knowledge of the Taino language is limited: it will never be reconstructed on a significant scale. The Tainos did not write other than on the proto-writing of inscriptions on stone petroglyphs, which are discussed later in the chapter in the section titled Rock Art. The Taino language became extinct within a century after the Spanish came to Jamaica at the very end of the fifteenth century. Only around 200 words or phrases in the Taino language are known to exist; these are taken from Spanish and Italian sources of the fifteenth and sixteenth centuries. Some Taino words were

translated into Spanish and other languages after European colonisers reached the Caribbean in the sixteenth century. They include *huracan* (hurricane), *barbakoa* (barbecue), *kanowa* (canoe), *batata* (potato) and *hamaka* (hammock – originally a fish net in the Taino language). Linguists still debate whether the Taino language was a creole language or Arawakan dialect or, alternatively, an original language. It is thought that ciboney was a dialect of the Taino language spoken in Jamaica and also in Cuba.

Jamaica's Geography

The Taino settled in the third largest island in the Caribbean (after Cuba and Hispaniola). Jamaica is 146 miles long and between twenty-one and fifty-two miles wide; it covers an area of 4,213 square miles. Situated geologically on the Caribbean Plate, stretching across the Caribbean Sea from the Central American mainland to the north of Hispaniola and to the eastern West Indian islands, Jamaica is part of the archipelago of the Greater Antilles in the northern Caribbean Sea, which also includes Cuba, Hispaniola and Puerto Rico. The whole of the Greater Antilles comprises nearly 90 per cent of the total land area of the Caribbean. Jamaica's location in the western Caribbean is 100 miles west of Haiti, 90 miles south of Cuba and 300 miles from the nearest part of the Central American mainland. There are no small offshore islands near Jamaica, but a cluster of cays lies to its southeast and southwest. Some of these uninhabited cays are sand and shingle formations, while others have mangrove covering.

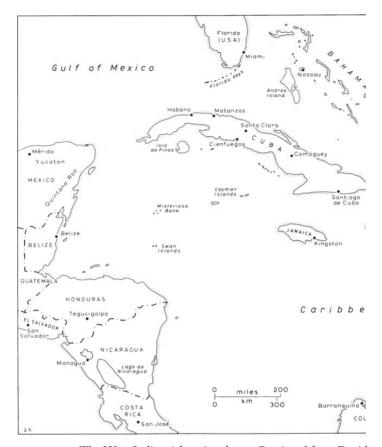


FIGURE 1.1 The West Indies: A locational map. Retrieved from David Watts, The West Indies: Patterns of Development, Culture and Environmental Change since 1492, 1987

Limestone and sedimentary and metamorphic rock types abound in Jamaica, but there is no volcanic rock. White limestone is the most common type of rock found in Jamaica, covering most central areas, with cretaceous rock in second place. Jamaica has a varied topography with rugged mountains rising high over the surrounding

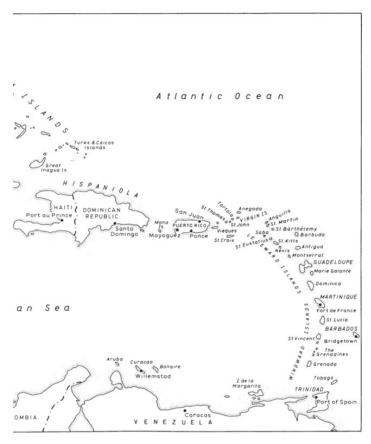


FIGURE I.I (cont.)

terrain. Around half of the island reaches heights greater than 1,000 feet above sea level, mainly in the island's central belt where the Blue Mountains dominate the landscape. These mountains, named after the blue shade appearing over them in the mist, spread for a length of 28 miles and a width of up to 12 miles, reaching a peak of 7,400 feet – the most elevated in the British Caribbean. The highest point of the mountains is known as Blue

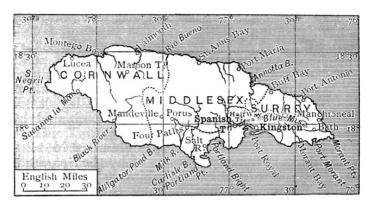


FIGURE 1.2 Jamaica: Elevation. Ilbusca/Getty Images

Mountain Peak. A steep gradient from the coastal plains leads up to the mountains. The Blue Mountains were heavily forested in the Taino era, being covered with mosses, lichen, ferns, trees and eight hundred species of endemic plants. A secondary mountain group known as the John Crow Mountains lies on a limestone plateau to the northeast of the Blue Mountains and further north lie the Dry Harbour Mountains. The west-central part of Jamaica includes many hills.

Jamaica has numerous rivers, rivulets and springs. The rivers there are mainly navigable for only short distances owing to their rapid descent from mountains to plains. Some rivers flow south (including the Rio Pedro, Plantain Garden and Yallahs Rivers), while others flow north (the Rio Grande, Martha Brae and Great Rivers). The longest river is the Rio Minho, which follows a course of fifty-eight miles from the centre of the island to Carlisle Bay on the central southern coast. Several scenic waterfalls flow down over rocks into rivers, the most spectacular being Dunn's River Falls, near Ocho Rios, now a major tourist attraction.



FIGURE 1.3 Dunn's River Falls, near Ocho Rios. DEA/V. Giannella/ De Agostini/Getty Images

Cataracts and cascades deliver additional water very rapidly into rivers, especially after high levels of rainfall. Lagoons, bars, salt ponds and other sand spit formations are found around the island's coasts. One of the best-known sand spits, known since the seventeenth century as the Palisadoes spit, later connected Port Royal with the outskirts of Kingston. Jamaica has several natural harbours, including Old Harbour, Port Royal Harbour and Port Maria Harbour. Kingston Harbour, measuring ten by two miles, is the seventh largest natural harbour in the world, with deep water coming almost up to the city shoreline.

Located within the tropics, some 18° north of the Equator, a hot and humid climate predominates in Jamaica, as it does throughout the Caribbean. Temperatures range from 23°C to 32°C throughout the year, with winter temperatures just

a few degrees lower than in summer. Diurnal changes in climate occur and the peaks of the mountains have temperatures somewhat lower than the coast. Sunshine is prevalent throughout the year for a daily average of 8.2 hours. Steady winds from the east predominate throughout most of the year but tropical storms and hurricanes occur periodically from July to late October, as is common throughout much of the Caribbean. Jamaica lies at the edge of the track of hurricanes, however, and only suffers a direct hit every ten or eleven years on average. Most hurricanes veer off towards Mexico or to the east of Jamaica instead. But tropical storms are more frequent, with torrential rain and winds causing serious danger to property and people. Jamaica has a trade wind season from December to April, with most winds blowing from the east.

Annual rainfall in Jamaica is heavily concentrated in May, October and November. February and March are the least rainy months. Thunderstorms in the late afternoon are commonly part of annual rainfall. The intensity of the rain can frequently lead to floods. But considerable variation exists in rainfall in different parts of Jamaica, with between 100 and 200 inches of rain falling per year on the north coast and in the Blue Mountains area and only forty inches annually elsewhere on the island. In some years, nevertheless, rainfall is much lower and droughts can occur. It is rare for Jamaica to have continuous rain throughout a particular day. The driest season is from December to April. Broadly speaking, Jamaica has a rainy windward coast, a dry leeward coast and a cool central region. The Caribbean tectonic plate is susceptible to earthquakes, though only two major ones have occurred – both of them long after the Tainos lived on the island.

Large swathes of the mountainous terrain in central Jamaica are difficult to access even today, so in the Taino era little settlement would have taken place there (though, as we will see, the caves scattered throughout the mountainous areas were sought out for important Taino religious and customary practices). Jamaica is mainly covered by a karst landscape formed from the dissolution of soluble rocks, in which most drainage was situated underground. Deep gullies intersect the mountainous parts of Jamaica. Caves and sink holes are common among the typical karst landscape in the Cockpit Country in the centre of the island. The coastal plain is either flat or gently undulating savanna land. This is particularly true of the alluvial southwestern plains. At the eastern end of Jamaica and along the north coast, however, a narrow lowland fringe predominates. Few high headlands or sea cliffs are found in Jamaica.

During the Taino era, Jamaica was heavily forested with a mixture of wet and dry limestone forests, riparian woodland and rainforest. Much of this land was wilderness before the Taino arrived. Before the arrival of Columbus, Jamaica had several distinct landscape characteristics. The southern plains were arid, with a dry forest and a ground cover of shrubs and scrub. Wet limestone forest was common on many plateaux in central Jamaica, while wetter plains areas had lignum vitae, one of the world's hardest woods, and cotton trees. Some areas had mangrove or marshy swamps. Lush vegetation, abundant flora and fauna and a varied array of insects, birds, reptiles,

fish and animals were native to Jamaica before human habitation. Jamaica has over 200 species of birds, 100 different types of butterfly, many land crabs, snakes and crocodiles, but few indigenous mammals. Jamaica has a total flora of about 4,000 plants.

Community Structure

Taino people, for the most part, lived communally and peacefully: there is little evidence to indicate that they had the war-like attributes of the Caribs in the Lesser Antilles. However, James Knight's History of Jamaica (1746) referred to 'Warrs and intestine Divisions, which sometimes hap[pe]ned among them', suggesting that the Tainos' peaceful mode of living was sometimes punctuated by conflict. No modern academic studies have matter beyond Knight's explored this Hierarchical social divisions were an essential part of Taino settlements. The Tainos lived in tribes or chiefdoms under the leadership of a chief or cacique, usually a man but sometimes a woman, who wielded great power. These chiefs had control over labour, material goods and sometimes tribute. Numerous chiefs were part of Taino Jamaica, and the level of their authority varied.

Simple and more complex chiefdoms existed in Jamaica. Individual communities were sometimes part of a confederation of villages bound together by communal rules. Though village layouts have not been investigated for Jamaica, it is thought that the island had around 150 Taino settlements; these were divided into provinces ruled by *caciques*. In his eighteenth-century history of Jamaica, James Knight noted that 'the Island was divided,

in the time of the Native Indians, into twelve provinces . . . and they were Governed by their Respective chiefs, who were called Caciques, to whom they were very Submissive: but three of them had Superiority over the rest'.

Each community was divided into two broad hierarchical classes of people, one with a higher status than the other. An upper-class section of the community known as nitainos, including chiefs and warriors, ruled over a lower class referred to as naborias, who undertook most of the food gathering. We do not know whether the *naborias* comprised all of the labouring population or just certain subgroups. There is no evidence that the *nahorias* included slaves or servile persons. Status among the elite Taino was underpinned by matrilineal descent, and caciques were often chosen by women. Thus name, property and status were inherited from a mother or grandmother. This means that a cacique was descended from his mother's brother, while his successor would be his sister's son. The line of caciques was therefore based on hereditary descent. It was considered a great honour for a woman to become a cacique's wife.

Caciques stood out from the rest of the Taino population in two other respects. One was that they practised polygamy, took wives from other Taino communities and used the liaisons to solidify their power with neighbouring chiefs. The other was that they dressed elaborately in a manner appropriate to their standing by wearing fine clothing and jewellery, and possessed the most precious wooden and stone artefacts that formed an essential part of their system of beliefs. Caciques presided over meetings by sitting on ceremonial seats known as dubos. These were low seats or wooden stools, usually with four feet and an elaborately carved back. Ornately decorated with shell and

gold laminate, *duhos* were prestigious artefacts in Taino communities that acted as a symbol for the power of the *caciques*. The *duho* should be regarded as an anthropomorphic being. *Caciques* sitting on them were, according to Taino beliefs, sitting not just on an object of furniture but on a sentient being with a soul (known as a *zemi*). The *caciques*, accorded deference for their role in a hierarchical system, often wore headdresses with gold and feathers. They customarily entrusted their children to the care of priests, who instructed them about their ancestors.

The *caciques* organised religious ceremonies known as *areytos* to unite their communities in a village's central plaza to celebrate marriages and births, to mourn the dead and to mark major staging posts in the annual calendar. Feasting, drinking, music and dancing occurred at these elaborate ceremonies that lasted for several hours. Taino history and beliefs were represented on these occasions to instruct and remind the community of their values and traditions. Thus the histories of the *caciques*, their ancestors and their communities were celebrated at these lengthy ceremonies that brought together entire village communities as well as attracting interested outside observers.

Caciques played an important leadership role in every-day life. They controlled the production of subsistence and craft goods by allocating particular tasks to individuals and groups, gathering food from them, and redistributing food among their communities. Some caciques were wealthy women who gathered craft items that could be used for gifts or exchanges, but most of these chiefs were men. They often possessed great canoes as a symbol of their leadership position in communities. Caciques were respected as leaders in death as much as in life. When they

died, their bodies were cut open and dried over a fire for preservation. The *caciques* were deified in death and entered a spirit realm alongside their ancestors. The souls of dead *caciques* resided in trees chosen by the Taino communities as sites of reverence. An image or *zemi* was carved from the trees and placed in a special hut to be worshipped by villagers and protected by the *caciques*.

The Tainos built houses from wood rather than stone; they did not use mud or wattle. A special rectangular house known as a *bohio* was situated at the heart of a village or *Yucayeque*, comprising thatched structures arranged around a central plaza or *batey*. Ordinary circular dwellings, known as *caneys*, were constructed from a wall of canes driven into the ground in the form of a circle. They were tied with *lianas*, which were filaments from large trees. The huts or houses were covered with straw or long grass; they contained few items of furniture. People slept on cotton hammocks (an invention of the Tainos) or mats made from banana leaves rather than on beds. Besides houses, Taino villages also had storerooms, platforms and work huts.

Taino people had dark golden-brown skin and black hair. They practised face and body piercing and tattoos, and painted their faces and bodies in red, white or black using pigments obtained from plants and coloured clays. In common with other people from the Antilles and South America, they did not wear much clothing, though they adorned parts of their bodies with palm fronds, coloured cotton capes and ornaments made from shell and gold. Men and female virgins were naked apart from a small cotton belt. Married women wore small woven cotton skirts. *Caciques* and

shamans donned fine vestments at ceremonies, with tropical bird feathers. During ceremonies, the Taino frequently played a ball game in the plazas similar to one also documented for Hispaniola, though no ceremonial ball courts have been excavated in Jamaica. The Taino also had musical instruments such as drums, wooden rattles and maracas made from gourds to enliven proceedings.

James Knight's *The Natural, Moral, and Political History of Jamaica* . . . (1742) described the Taino as

of a Dun Colour. They were not so tall, as Europeans, but Robust, Active, and well proportioned. The Men were beardless, and all went naked, Women, as well as the Men, except those that had Husbands. . . . Their heads were broad and flat; and their nostrils very large, not Naturally but made so, when they were Infants of about a Week old, by Squeezing or Pressing hard, with one hand behind the head, and the other on the face. They had long black hair, which hung down their Shoulders, and in general had very bad teeth.

Peter Martyr, an Italian historian and courtier in the service of Spain, never visited the Caribbean but considered, on the basis of information purveyed to him, the Jamaican Tainos to be 'of quicker wytte then in the other islandes, and more expert artificers and warrelyke men'. Taino men painted their faces with bright colours before any armed conflict in an attempt to frighten their enemies.

The Taino and the Natural Environment

The Taino were agricultural people who cultivated various crops in Jamaica, as well as gathering fruit from trees and fish from rivers and the sea. Their ancestors were already seasoned agriculturists when they arrived in

Jamaica with various plants and knowledge of numerous cultivation techniques. The plants and crops they brought with them originated from tropical lowlands east of the Andes. Taino agriculture mainly used a system of cultivation known as *conuco*. This involved clearing wooded areas and making enough space for crop production in fields. The soil was worked into large, loose mounds arranged in a way to facilitate drainage and sustained cropping. As in medieval England, some of the cultivated soil was left fallow in some years to recover its fertility. *Conucos* were usually three feet high, nine feet in circumference, and arranged in rows. Root crops were planted in the *conucos* with wooden hoes. After *conucos* had been constructed, they could be maintained relatively easily by planting, weeding and harvesting.

The variety of Taino food resources indicates that they had a nutritious diet, with a healthy mixture of fats, proteins and carbohydrates. They planted yams, sweet potatoes, corn, arrowroot and different types of squashes. The Taino ate peanuts, chilli peppers and coney (i.e. rodents); they also hunted birds and reptiles. Many fruits were consumed, including hog plum, guava, prickly pears, pineapple, papaya, bananas and golden apples. The seeds of these fruits were dispersed in a variety of ways. The Taino were skilled fishermen, using nets, hooks made of bone and shell, and canoes to gather fish and marine molluscs. They ate conch, oysters and crabs. These were gathered from the seashore and from mangrove marshes. Among the fish consumed were snapper, bass, parrot fish and grouper. During the Taino era, pigs, goats, cattle and sheep were absent from Jamaica. The lack of these large animals meant that roasting meat was uncommon. For the most part, therefore, the Taino diet was based on fish, vegetables and fruit. The foods they ate were available throughout the year without a strong need for storage or preservation.

The Taino gathered food on a daily subsistence basis, paying close attention to seasonal availability. It seems that men cleared the land and planted crops while women undertook the gathering of fruit and seeds. Stone grinders and pestles were used to reduce corn to meal and cassava to flour. Griddles, which have been found in caves and middens (rubbish heaps), were the main means of cooking, with charcoal as the fuel source, for cassava, sweet potatoes and other crops. The griddles were usually thick flat platters made out of clay. Boiling and baking rather than frying appears to have been the main means of preparing hot food by the Taino. Consumption of edible fruit along with cooked meat, fish and vegetables appears to have been carried out in a sustainable way.

The foodstuff most frequently consumed by the Taino was cassava (or manioc), a widely grown root crop in Jamaica which was an important source of carbohydrates. Such was the significance of this crop to the Taino that the name of their supreme deity *Yucahú* means 'spirit of cassava'. Grown widely in tropical climates, cassava provided the main everyday nourishment in Taino communities. It was planted in the heaped garden beds of the *conucos*, placed several feet apart from one another. Cassava is bitter and unhealthy to eat when raw, but when cooked it is a versatile foodstuff with a high calorific value. The pulp of the cassava bread was baked on clay griddles, while the boiled juice was used as flavouring when cooking.

Tapioca was the starchy liquid produced from cassava. Cassava bread, also known as bammie, is still prepared on a daily basis in Jamaica. It has the advantage over wheaten bread of staying fresh for weeks.

Wood and various fibres were a significant part of Taino material culture. The Taino used bottle gourds as containers and as floats for fish nets. Containers were obtained from the calabash tree. Wild plantain leaves were used for thatch. Women wove baskets and garments out of feathers, fibre and other natural perishable materials. The baskets could be made of either wicker or banana leaves. Nearly all of the evidence for this has disappeared from trace: only one cotton belt, with beadwork, has survived from the Taino era in Jamaica. Woodcarving became one of the main practical and aesthetic achievements of the Taino's artisan practice. Lignum vitae, a heavy hardwood with an olive green colour, was used for woodworking. Other woods were cut and shaped to make canoes and spears. Wooden paddles were carved from large trees to facilitate the use of canoes. Cotton was cultivated to make hammocks and fishing nets. Stone mortars and pestles were used for grinding food ingredients.

The Taino also made use of stone axes, petaloid adzes, flint scrapers, chisels and handstones formed like pestles. Taino women developed pottery skills with clays, crushed shells and vegetable fibres to make cups, bowls, plates and jars. Some of these artefacts from the Taino era have been found at different Jamaican sites. Taino people made axe heads as cutting tools from river stones. These were sculpted into a petaloid or peardrop shape in various sizes. Axe heads were used for cutting food, but because

of their widespread practical use they could also be gifts or items of exchange. Many petaloid axes from the Taino era have been excavated in Jamaica. They were made from a variety of rock types, greenstone being the most favoured. The locations where axes have been found are often situated quite far from where the rock specimens could have originated, suggesting that the Taino engaged in domestic trade in Jamaica.

The Taino were highly skilled in using gastropod shells to make attractive objects that could be worn. Their advanced artisan skills involved the use of incision marks and carvings on the surface of shells to convey their ideas visually. The Taino exhibited technological ingenuity in using different kinds of stones, picks, wood and twine for their 'shellsmithing'. Awls and sanding stones were used regularly by the Taino as shell tools. To extract the snails that inhabited conches, craftsmen buried the shell in an ant hill as a non-corrosive way of cleaning the shell. They then removed the spire and outer whorl of the shell in order to expose the columella encasing. Small elliptical stones were inserted with twine to hang the decorated shell around a person's neck as an ornament. It is thought that women predominated among the shellsmiths. Many questions about how the Taino practised their shellsmith techniques still require answers. We do not know whether they had construction workshops, whether this activity was confined to a specific location on a site, how many of the ornaments were worn, and whether the decorative shells were distributed to particular groups.

Mythology and Religion

The Taino believed in a sacred cosmos that was closely connected to the landscape features of the world such as the sky and the earth but also linked to an unseen lower world. The Taino were pantheists who explained the origins of humanity and the natural world by deploying creation stories that connected people to deities and to the afterlife. The supernatural and the natural world were inextricably intertwined in Taino cosmology, which was underpinned by a belief in non-linear sacred time. Animism lay at the heart of Taino beliefs. Spiritual significance for these indigenous people resided in all sorts of places, seen and unseen - in flora and fauna, rocks, caves, animals, inanimate objects and human beings. The Taino believed strongly in ancestor worship: deceased relatives were honoured in ritual ceremonies in which various Taino deities would be invoked. Each of the Taino deities had names. They included Guabanex, who controlled wind and water; Guaca, the guardian spirit of the living; and Maroio, a rain and wind god.

A shaman or *behique* served as a ritual specialist in Taino communities to hear and understand instructions from plants, rocks and animals. *Behiques* and *caciques* both carried carved figures known as *zemis*, which were effectively village idols. These artefacts were usually made out of wood, clay or stone, but they could be formed out of shells and human bones. *Zemis* could be petroglyphs carved on rocks or stalagmites in caves or pictographs found as tattoos or on pottery. The supreme god *Yucahú* was represented by a three-pointed *zemi*, usually placed in a *conuco* to increase the yield of cassava.

A few zemis have been discovered. The first two were found in 1702 on Carpenter's Mountain, Manchester parish. Three others were located in the 1990s in an almost inaccessible cave near Aboukir in the Dry Harbour Mountains in St Ann parish. They comprised a spoon, a large staff and a pelican-shaped figure that appear to have belonged together for the purposes of the worship and ritual use of the cohoba. They are now housed at Jamaica's National Gallery in Kingston. All have been carbon-dated and predate the arrival of Columbus in Jamaica by at least a century. Believed to have numerous powers, these carved artefacts were sacred objects that incorporated idols and spirits. They could be invoked to cure the sick, control the weather, predict the future, assist women in childbirth, to bring rain, to extract revenge or to give advice in war and peace. They enabled the Taino to commune with their ancestors.

Zemis could represent male or female figures. They incorporated formal deities such as Yúcahu, mentioned above, and his mother Atabey, goddess of human fertility, or other minor deities. These had a rank order, from the most important down to the least significant. Zemis were also thought to have magical powers that helped the Taino to reach the goals incorporated in myths. Many rituals of Taino society in Jamaica were linked to the attributes associated with zemis, all of whom had names. The Taino communicated with them through food offerings, prayer and ceremonial rituals. Zemis were kept in special shrines placed apart from Taino houses.

Though the Taino had no place for formal worship, at ceremonies *zemis* were placed on *duhos* next to the *cacique* to indicate the connection between the spirit world and

leadership in Taino society. The importance attached to duhos was such that they were invariably hidden from sight when not in use, and sometimes stored in caves. The only preserved duho in the National Gallery of Jamaica is a hollowed-out wooden carved ceremonial seat found in a cave in St Catherine parish in the 1990s. Shaped like a wooden hammock, it could hold the reclining body of a cacique. Topped by a zemi head that originally had inlays for eyes, ears and mouth, with one ear inlay still in position, it has humanised feet at its base. Etched arms can be seen in the body of the seat. This carving has been carbon-dated from AD 1000 to 1170.

Zemis pervaded other aspects of Taino life. They were thought to honour guests with their favour and were displayed at important gatherings where the Taino played bateye, a ritualised ball game, or at meetings where important transactions - exchanging wealth or consolidating alliances - were undertaken. Zemis were also kept as fetishes in Taino homes. There is virtually no European testimony about the role of zemis in Jamaican Taino society. But Spanish evidence from Hispaniola suggests that most Taino people would possess zemis with the bones of deceased parents and other relatives. Caciques spoke to these spirits and gave them the names of their fathers or other ancestors. This was almost a form of idolatry. Caciques were buried in wooden zemis carved out of trees; these held ancestral spirits and this form of burial was intended to lead to rebirth. The interment of caciques was conducted with great respect, with men and women singing over the grave for a fortnight and recounting his or her life, work and actions.

Caciques and behiques communed with ancestral spirits by taking cohoba powder, a very strong hallucinogenic substance made from the ground seeds of a mimosa-like tree. This was usually inhaled as part of a religious ceremony conducted either at the cacique's bohio, usually situated at a distance from a town, or at other venues associated with deities and supernatural significance. Sacred objects were usually assembled for these ceremonies. Extensive preparations were made for the cohoba ceremony. The caciques fasted and eschewed bodily pleasures for several days beforehand. They dressed elaborately for the ceremony in ornate regalia, wearing capes and jewellery. It was common practice for caciques to vomit to cleanse their stomach before the ceremony began. The souls of the caciques rather than ordinary Tainos were deified in this process. There was a distinction between the soul in earthly life, which was called Goenz, and the soul of the departed, known as Opea.

Religious ceremonies followed an established pattern. Before the *cohoba* ceremony, the shaman purged himself with a vomiting stick. This was necessary to remove any undigested food from the stomach. Sometimes a stone tongue compressor was placed at the back of the throat to facilitate this process. Then the *cohoba* powder was prepared carefully. Ground from the seeds of native trees, the powder was mixed with crushed shell and tobacco and placed above a *zemi* on a wooden platform. Carved spoons were made to ladle the powder, which was lit and the smoke was inhaled through the nostrils using a forked nose pipe known as a *tabaco*. This was made from wood, pottery, bird bones or manatee. The powder had a psychedelic effect, inducing trances that could continue

for several hours. This was the first use of drugs in Jamaica to produce a heightened sense of consciousness. *Behiques* used the trances induced by the *cohoba* powder to contact the spirits for help in healing the sick. They chanted with the patient while seeking to make contact with spirits. Often this ritual, effectively a séance, was conducted among a select few individuals. Some Taino stone sculptures depict shamans inhaling the powder.

Rock Art

The Taino practised rock art either in caves or on sites near rivers or the sea. Caves were places from which human beings originated according to Taino mythology; the sun and moon were also born there. Caves also served as burial chambers and as places where the caciques could store zemis and other sacred objects. Subterranean human activities were therefore important in Taino culture for their contact with the spirit world. The remoteness of caves underscored the mystery of contacts with the hidden great beyond. Unsurprisingly, therefore, one of the principle means of artistic expression for the Tainos lay in rock art, often buried deep in narrow caves. Examples can be found in Jamaica and other islands where Tainos settled. Most recently, rock paintings attributed to Taino culture in the fourteenth century have been found on the tiny uninhabited island of Mona, situated midway between Puerto Rico and the Dominican Republic.

Ostionoid and Meillacan people were linked to rock art, but it is difficult to date their sites or paintings. Half of the known rock art sites in Jamaica are situated on the south coast where the dry climate has helped to ensure their preservation. Pictographs depicted birds, tree frogs, turtles, fish and reptiles. These paintings are usually found on the ceilings or walls of caves, which were sights of sociocultural and iconographic significance accessed only by the caciques and the behiques. Pictographs were created by the application of coloured pigments to cave walls. Sometimes bat excrement, which had absorbed natural minerals coloured yellow, red and brown from cave floors, was used for these paintings. On other occasions, charcoal was applied. The artists dipped their fingers in the bat guano or charcoal and dragged them across the cave walls. They drew systematic, carefully wrought designs with finger incisions that depicted people and spirits. Sometimes pictographs were created in stages, with fading imagery being touched up.

Petroglyphs were rock carvings incised into stalagmites, boulders and rocks at the entrance to caves; they frequently have anthropomorphic, zoomorphic and abstract motifs. The painted outlines of ancestral spirits appear on many petroglyphs. These carvings represented symbols that underpinned the daily life, religious beliefs, and social and political organisation of the Tainos. They appear to have reflected polytheistic beliefs, but archaeologists have found it difficult to unravel their precise meaning. Petroglyphs often have faces with eyes and mouths. Incised geometric designs are common. The positioning of these dyed or painted images in or near caves reflected the Tainos' cosmological view that caves, or ossuaries, were suitable repositories for the dead and for inscribing markers to the spirit world of their ancestors.

One Jamaican site with a large concentration of surviving Taino cave art is Mountain River Cave, located near Cudjoe's Hill, in St Catherine parish, to the northwest of Spanish Town. Fairly inaccessible today in a thickly wooded area, this cave has 148 identifiable pictographs on its ceiling and four or five petroglyphs. The pictographs comprise a combination of zoomorphic figures (including frogs, birds, turtles, iguanas and flamingos) and anthropomorphic figures (dancing figures, squatting figures, standing figures with a weapon in one hand, and a man with ceremonial costume and headgear). The figures may include representations of caciques. They appear to have been painted with a bituminous black compound. The paintings were not undertaken with any attempt to tell a story through a mural; instead, they seem to be individually painted figures. Precise dating of these artefacts is virtually impossible, but they have a relative date range of between AD 1000 and AD 1450. There is no evidence of human material culture in the vicinity. It was probably the case therefore that caciques and shamans visited the cave to perform their religious ceremonies, and artists painted the figures, in a location remote from Taino communities.

Pottery and Wooden Carvings

Extensive remains of pottery and wooden carvings have been found in Jamaica that originated in the Taino era. Clay pots, mortars and pestles, bowls, effigy vessels and *buréns* (cassava vessels) are among the objects produced by pottery. Decorative motifs were common. Three incised design elements were common on the pottery made by the

Tainos: continuous line, dashed line and punctate motifs. Apart from pottery, the Taino were expert carvers. The Taino carved stones into three points; the two points at the end of the stone represented a human or an animal, often with a grotesque face, and hunched legs that archaeologists refer to as frogs' legs. Women played the leading role in making Taino pottery, joining strips of wet clay in circular patterns, hand modelling the clay, and then using fingers and pointed tools to incise details. The finished dry pottery was fired in large, open pits in the ground. Taino potters had a good knowledge of local clays. They used crushed shell, vegetable fibres, sand or ash to temper the clay before firing. The pottery was usually burnished by using pebbles.

Pottery remains are found either in caves or in open-air sites where middens remain. Most of the pottery produced on the island between AD 650 and AD 900 was called redware. Thereafter a thicker pottery called white marl was produced. Redware sites are mainly situated next to sandy beaches, but the locations are relatively few in number and the deposits shallow. Sixteen open-air sites with redware pottery have been reported for Jamaica, but only three have been excavated. Open-air redware sites include Calabash Bay and Sandy Bank on the south coast and Little River and Cardiff Hall Beach on the north coast. White marl sites are common throughout much of Jamaica, especially in St Ann, St Mary and Clarendon parishes.

Wooden carvings have been recovered from caves in Jamaica, where they had probably been placed as ritual deposits needed for ceremonies. The relative dryness of the atmosphere in caves has helped to preserve these objects. They were carved with stone and shell tools on a very hard wood such as lignum vitae. Iconographic

details can often be discerned on these wooden carvings, but their ritual and symbolic meaning is hard to assess. Many carvings include spectral figures or skulls that may represent human beings or animals; they are a reminder of the foreboding of death that played an important religious and cultural role in Taino life.

The earliest published depiction of a Taino wooden image is shown in a cartouche on a map of the West Indies dated 1752 by Captain John Henry Schroeter, a plantation surveyor who had served as a captain of the garrison at Fort Balcarres in Trelawny parish. Two wooden *zemis* were found near an estate in Jamaica some time before 1757. In 1792 three wooden carved objects were found in a cave near Carpenter's Mountain, Vere parish, as mentioned before; these were presented to the British Museum in 1799. Since then, only nine Taino carvings have been found in Jamaica, including those referred to above at the National Gallery of Jamaica.

The best-known wooden carving to survive from the Taino era is the 'birdman' sculpture, a seemingly unique wooden idol that has no parallel among wooden artefacts found elsewhere in Caribbean islands where the Taino settled. The 'birdman' sculpture has an avian head of a long-billed bird, and arms and legs outstretched from a human body. The legs on this carving have bands, which appear to represent cotton bandages. This anthropomorphic carving, one of the three objects found in 1792 mentioned above, has been interpreted in several ways. One argument is that the bird is a depiction of the Jamaican crow. Another interpretation is that the 'birdman' sculpture is a mixture of the animal and human world, specifically resembling the mythic woodpecker

who created the first reproductive woman and a symbol of masculine potency (owing to its bare teeth, erect penis and testes). Whether one of these 'readings' of the iconography of the 'birdman' sculpture is accurate cannot be proven in our present state of knowledge.

Burials

Since 2016, archaeological investigations have been conducted into burial sites at White Marl, situated eight miles west of Kingston. This was a large village lying in an important area for social networks near Kingston Harbour, Spanish Town and the Rio Cobre and French rivers. White Marl was the first Jamaican site to reveal evidence of house structures as well as human burials in middens. Our knowledge of burials in precolonial Jamaica is scanty. Initial investigations at White Marl leave many questions unanswered about the limited, fragmentary remains found. Radiocarbon dating indicates that the three bodies located point to a long occupation of the site over about four centuries (AD 1221-1641). The analysis of these bodies suggests that burials occurred in small ovalshaped pits without a large number of grave goods, and, through estimating carbon isotope values from tooth enamel, that a plant diet predominated among these people comprising arrowroot, palm fruit, maize and wild beans.

The Taino Village at Maima

The most significant archaeological investigations dealing with the Taino era in Jamaica have been undertaken on the north coast. Columbus came across the Taino village of Maima in 1503–4, situated on a hillside overlooking the

coastal plain of St Ann's Bay. Archaeological investigations were carried out there in 2014 and 2015, though previous work on this site had been undertaken periodically from the 1940s onwards. The site is now part of Seville Heritage Park. The expert archaeological view is that the Taino village of Maima was created as part of the Meillacan migration to Jamaica beginning around AD 950-1000. It is thought that the terraces on this hilltop settlement were part of a Meillacan settlement pattern brought to Jamaica. Excavations show that the Taino at Maima constructed terraces and platforms on the hillside filled with mixed clay, marl and limestone aggregate. Excavations have identified postholes, indicating that house structures had been built on these foundations. These were of a fairly small size, suggesting that the Taino had a nuclear family structure rather than an extended family residential pattern. White marl ceramic bowls have been recovered from the site along with petaloid adzes, handstones, flat-surface cobbles, vessels with geometric incisions, and four anthropomorphic or zoomorphic pieces that may represent zemis. Faunal remains indicate that fish and shellfish from a nearby reef were the main source of protein at this site. Hutia, large cavy-like rodents, were also raised or hunted.