

HISTORY AND TRADITIONS

HISTORY

EARLY INHABITANTS

Mankind has exploited the land now known as the United Arab Emirates (UAE) since the Late Stone Age (5500 BC) when the climate was wetter and more humid than it is today. Game such as gazelle and Arabian oryx would have been abundant on the savannah and neighbouring grasslands, and even in the deep sands the basic necessities of life would have been available. So, far from being an inhospitable desert, the land and waters of the region presented its ancient inhabitants with an enormous variety of exploitable, economically important resources. At this time the sea level in the Arabian Gulf was about half a metre higher than it is today.

The earliest known inhabitants of the UAE were probably skilled herders who would have used finely made stone tools. More than likely, they lived along the coasts and offshore islands in the winter, when fishing and shellfish gathering (including the harvesting of pearls) would have been the main pursuits, and moved to the interior in summer, where pastoralism and, eventually, horticulture, were practiced. This was a pattern of seasonal resource utilisation that was to be repeated throughout the history of the region. These were not an isolated people as there is ample evidence of contacts with the outside world, especially with civilisations to the north such as Mesopotamia (southern Iraq), indicated by finds of painted pottery ('Ubaid type') that originated in these areas.

While the stone tools of the UAE's early inhabitants have been found at dozens of sites from Ghagha' in the west to Khatt in the north, few settlements are known. Of these, undoubtedly the most impressive is a village on the island of Marawah, currently under excavation, while a group of major sites, including house remains, at Khor Al Manahil and Kharimat Khor Al Manahil, in Abu Dhabi's south-eastern deserts, confirm that the climate and environment were suitable for life in areas that are today marginal.

HAFIT TOMBS

At the end of the fourth millennium (c. 3100–3000 BC), the earliest in the form of above-ground tombs built of unworked stone (Hafit tombs) appear at two sites in



the UAE: Jebel Hafit (including Mazyad) near Al Ain and Jebel al-Emalah south of Dhaid. These collective tombs contain pottery (Jamdat Nasr type) imported from south-central Iraq. Other imported finds also point to foreign contact and it is thought that trade in copper from the Hajar Mountains was the likely motivation for communication with the outside world. Certainly early 'Archaic texts' (3400–3000 BC) from Uruk in southern Mesopotamia refer to copper from Dilmun, later identified with Bahrain, but as there is no copper in this area it is usually assumed that the precious metal came from further afield, i.e. the copper source which stretches from Fujairah in the north to lower Oman in the south. To date the settlements of the population buried in the Hafit tombs of south-eastern Arabia have yet to be discovered.

UMM AL-NAR

Around 3000 BC the arid climate that is evident today set in. The following era, known as the Umm al-Nar period (2500–2000 BC), was characterised by numerous oasis towns (e.g. at Hili, Tell Abraq, Bidiya, Kalba) dominated by imposing large, circular fortresses. These agriculturally based settlements were possible because of the domestication of the date palm (*Phoenix dactylifera*). Without this blessed tree, the shade necessary for the growth of other less hardy plants, including cereals, vegetables and fruits, would have been lacking. Water was available from the many wells that tapped the relatively abundant, shallow lenses of fresh water found throughout much of the UAE.

During this period, the dead were buried in round communal tombs of finely masoned stone blocks (there is a particularly fine reconstruction at Hili). Finds from these graves point to wide-ranging trade contacts with Mesopotamia, Iran, the Indus Valley, Baluchistan, and Bactria (Afghanistan). Significantly, textual sources from Mesopotamia referred to the area as Magan around this time, and the towers of the Umm al-Nar period may have been the power centres for the 'lords of Magan' against whom several of the Old Akkadian emperors (from southern Mesopotamia) campaigned in the twenty-third century BC. There is also ample evidence from this period of the first intensive use of the copper resources found in the Hajar Mountains. Certainly, by 2300 BC, bronze (an alloy of copper and tin) was becoming increasingly popular as a material for manufacturing tools.

In the late third millennium a distinctive industry arose in the manufacture of soft-stone vessels – generally bowls, beakers and compartmented boxes – decorated with dotted circles made using a bow drill.

WADI SUQ AND LATE BRONZE AGE

The Wadi Suq and Late Bronze Age periods (2000–1300 BC) were characterised by fewer towns, although those that continued to be inhabited on a full-time basis (such as Tell Abraq) showed no signs of a cultural decline. It seems, however, that

marine resources (fish and shellfish) became more important than they had been in the late third millennium. In addition, there was a change in burial customs to long, generally narrow collective tombs (as at Shimal, Ghalilah and Dhayah).

The hundreds of weapons found in these tombs are particularly interesting. In contrast to the daggers and spears characteristic of the Umm al-Nar period, the appearance of the long sword and bow and arrow, along with hundreds of cast bronze, lanceolate arrowheads with a raised flattened midrib, suggest an evolution in the technology of warfare during these periods. Other finds, such as gold and electrum plaques in the form of two animals, standing back to back, often with their tails curled up in a spiral, are indications of the accumulation of wealth, some of which may have been earned by long-distance trade in copper through Dilmun (Bahrain). At the same time, the number of soft-stone vessels deposited in tombs increased vastly and new shapes and decorations were developed.

IRON AGE

Domestication of the camel in the late second millennium BC revolutionised the economies of south-eastern Arabia, opening up new possibilities for transport. At the same time, the discovery of the principles of using sub-surface channels to transport water from mountain aquifers to lower-lying gardens (*falaj* irrigation) made possible the extensive irrigation of gardens and agricultural plots that resulted in a veritable explosion of settlement across the Oman Peninsula. This era (1300–300 BC) is termed the Iron Age, although iron was not widely used in this region at this period.

Fish and shellfish continued to be important in the diet of Iron Age inhabitants, although domesticated sheep, goat and cattle were kept, and gazelle, oryx, dugong, turtle and cormorant were exploited as well. Domesticated wheat and barley were cultivated and the date palm remained as important as ever.

There seems to have been some form of centralised power during this period. A cuneiform inscription from Nineveh in Assyria (northern Mesopotamia) speaks of the existence of at least one 'king' in the area, an individual named Pade, king of Qade, who lived at Is-ki-e (modern Izki in Oman) and sent tribute to the Assyrian emperor Assurbanipal in or around this time. Political and economic control by central bodies may also be implied by the appearance at this time of a tradition of stamp-seal manufacture. There is also strong evidence of foreign contacts and a pendant found at Tell Abraq, the earliest depiction of a boat with a lateen sail yet discovered, gives us some indication of how such contacts took place.

MLEIHA PERIOD

We know that in the late sixth century BC, the Persian Empire, under Darius the Great, extended its influence to the area, then known as Maka. However, by the third century BC south-eastern Arabia was free of foreign political influence.

IMPORTANT DATES

c.5500 BC	Earliest evidence of Man in UAE, on Marawah Island.
5500–3000 BC	Occupation by skilled groups of herders using finely made stone tools (so-called 'Arabian bifacial tradition').
3000–2500 BC	Hafit period – era of earliest collective burials first noted on the lower slopes of Jebel Hafit in the interior of Abu Dhabi.
2500–2000 BC	Umm al-Nar period – era of first oasis towns (e.g. at Hili, Tell Abraq, Bidiya, Kalba) dominated by large, circular fortresses; burial of the dead in round communal tombs; wide-ranging trade contact with Mesopotamia, Iran, Indus Valley, Baluchistan, Bactria (Afghanistan); first intensive use of copper resources of Hajar Mountains; area referred to as <i>Magan</i> in Mesopotamian sources.
2000–1300 BC	Wadi Suq period and Late Bronze Age – an era which is characterised by fewer towns; change in burial customs to long, generally narrow collective tombs; close ties to Dilmun (Bahrain).
1300–300 BC	Iron Age – introduction of new irrigation technology in the form of <i>falaj</i> (pl. <i>afلاج</i>), subterranean galleries which led water from mountain aquifers to lower-lying oases and gardens; explosion of settlement; first use of iron; first writing, using South Arabian alphabet; contacts with Assyrian and Persian empires.
300 BC–0	Mleiha period (or Late Pre-Islamic A–B) – flourishing town at Mleiha; beginnings of local coinage; far-flung imports from Greece (black-glazed pottery), South Arabia (alabaster unguent jars); first use of the horse.
0–250 AD	Ed-Dur period (or late Pre-Islamic C–D) – flourishing towns at ed-Dur and Mleiha; extensive trade network along the Gulf linking up the Mediterranean, Syria and Mesopotamia with India; imports include Roman glass, coinage, brass; massive production of coinage by a ruler called Abi'el; first use of Aramaic in inscriptions from ed-Dur and Mleiha.
240 AD	Rise of the Sasanian dynasty in south-western Iran, conquest of most of eastern Arabia.
6 th /7 th cent. AD	Introduction of Christianity via contacts with south-western Iran and southern Mesopotamia; establishment of monastery on Sir Bani Yas by Nestorian Christian community; Sasanian garrisons in inner Oman and evidence for contact in the UAE shown by coins and ceramics from Kush (Ra's al-Khaimah), Umm al-Qaiwain and Fujairah.
630 AD	Arrival of envoys from the Prophet Muhammad; conversion of the people to Islam
632 AD	Death of the Prophet Muhammad; outbreak of the <i>ridda</i> movement, a widespread rebellion against the teachings of Islam; dispatch of Hudhayfah b. Mihsan by the Caliph Abu Bakr to quell rebellion of Laqit b. Malik Dhu at-Tag at Dibba; major battle at Dibba, collapse of the rebels.



637 AD	Julfar used as staging post for Islamic invasion of Iran.
892 AD	Julfar used as staging post for Abbasid invasion of Oman.
963 AD	Buyids (Buwayhids) conquer south-eastern Arabia.
c. 1220	Geographer Yaqut mentions Julfar as a fertile town.
14 th –15 th cent.	Close commercial contact between Northern Emirates and kingdom of Hormuz, based on Jarun island in the Straits of Hormuz.
1498	Portuguese circumnavigation of Cape of Good Hope by Vasco da Gama using Arab navigational information.
16 th cent.	Portuguese–Ottoman rivalry in the Gulf.
1580	Venetian traveller Gasparo Balbi's description of coast of UAE from Qatar to Ra's al-Khaimah; mention of Portuguese fortress at Kalba; first mention of Bani Yas in Abu Dhabi.
1666	Description of the East Coast of the UAE by a Dutch mariner sailing in the <i>Meerkat</i> .
1720s	Growth of English trade in the Gulf; increasing Anglo–Dutch rivalry.
1764	Sharjah and most of Musandam and the UAE East Coast, all the way to Khor Fakkan, under control of Qawasim according to Carsten Niebuhr, German surveyor working with the King of Denmark's scientific expedition.
1800–1819	Repeated English East India Company attacks on Qawasim navy.
1820	General Treaty of Peace between British Government and sheikhs of Ra's al-Khaimah, Umm al-Qaiwain, Ajman, Sharjah, Dubai and Abu Dhabi.
1820–1864	Survey of the Gulf resulting in the publication of the first accurate charts and maps of the area.
1930s	Collapse of the natural pearl market; first agreements signed by rulers of Dubai, Sharjah and Abu Dhabi for oil exploration.
1945–1951	Agreements for oil exploration finalised in Ra's al-Khaimah, Umm al-Qaiwain and Ajman.
1962	First export of oil from Abu Dhabi.
1968	British Government announced its intention to withdraw from the Gulf region; discussions begin on formation of a federation of the emirates.
1969	First export of oil from Dubai.
10 July 1971	Agreement reached amongst rulers of the emirates to form a union.
2 Dec 1971	Formation of the State of the United Arab Emirates.
2 Nov 2004	Sheikh Zayed, 1 st President of the UAE died.
3 Nov 2004	Sheikh Khalifa bin Zayed Al Nahyan elected as new President of the UAE.



Alexander the Great's conquests never touched the Arabian side of the Gulf, and none of his Seleucid successors were able to establish any sort of Greek dominance in the region. This era has been designated the Mleiha period (300 BC–0 BC) after a flourishing town at Mleiha, a sprawling settlement on the gravel plain south of Dhaid in the interior of Sharjah. To date, there are no other known settlements in the region attributable to this time span. At Mleiha the earliest post-Iron Age settlement probably consisted of 'arish, palm-frond houses, eminently suited to the hot climate of south-eastern Arabia. Dates were grown and wheat was harvested. Mleiha's dead were buried in mudbrick cists surmounted by a solid tower of brick and capped by crenellated stone ornaments, similar to the funerary towers of Palmyra (Syria) and the early periods at Petra (Jordan).

Some of the most interesting finds include far-flung imports from Greece (black-glazed pottery and Rhodian amphorae), and South Arabia (alabaster unguent jars). Several items (stone stelae, bronze bowls) are inscribed in South Arabian characters and several coins found at Mleiha are also of South Arabian origin, pointing to cultural links with this region. These were important finds in the light of stories of the Azd migration from Yemen to the region. The Mleiha period also witnessed the appearance of iron in large quantities for the first time in the archaeological record of this region.

ED-DUR PERIOD

The first century AD (ed-Dur period 0–250 AD) heralded a time for which considerably more literary documentation exists. The Roman writer Pliny the Younger (23/24–79 AD) completed his *Natural History* in 77 AD and to judge from his account of the peoples and places of south-eastern Arabia, combined with information from the second century AD map by Ptolemy, the area of the UAE was full of settlements, tribes and physical features. The town of Omana, at that time the most important port in the lower Gulf, has been linked with the ancient settlement of ed-Dur in Umm al-Qaiwain, a vast area containing private houses, graves, a fort and a temple (built of beach rock), along with areas of 'arish habitation. Overland caravan traffic between Syria and cities in southern Iraq, followed by seaborne travel to Omana and thence to India, was an alternative to the Red Sea route used by the Romans, as is clear from finds of Roman glass, brass and coinage.

While ed-Dur was the prime settlement, other minor sites have been found on the islands of Abu Dhabi, and in the interior Mleiha prospered. There was also a massive production of local coinage by a ruler called Abi'el, who appears to have been an important figure in the region during this era. That Aramaic was the language of the populations of Mleiha and ed-Dur at this time is confirmed not only by its use on coinage, but also by the discovery of other inscribed objects.

The Periplus of the Erythraean Sea, composed around 60–75 AD, tells us that pearls, purple dye, clothing, wine, a great quantity of dates, gold and slaves were exported from Omana.

Pearls were already in use in the prehistoric era, but it was during the Roman era that the trade reached new heights. Pearling was certainly practiced at ed-Dur, as the recovery of a bell-shaped, lead pearl-diver's weight, complete with iron ring attachment for a rope, attests. Moreover, stacks of pearl oyster shells were found outside the entrance to one of the monumental graves.

PRE-ISLAMIC ERA

The rise of the Sasanian dynasty in south-western Iran in 240 AD brought Sasanian influence to most of eastern Arabia, including the UAE, as is indicated by finds of coins and ceramics at Kush (Ra's al-Khaimah), Umm al-Qaiwain and Fujairah. Indian Ocean trade and communications with the Near East continued during this period. Contact with the outside world was reflected in the spread of religious influences at this time, influences that would have varied from Arab paganism to Sasanian Zoroastrianism and Nestorian Christianity. Certainly by the fourth or fifth centuries AD at least one Nestorian monastery, complete with carved stucco ornamentation, including several crosses, was established on Sir Bani Yas – an island off the coast of Abu Dhabi.

Sea faring and trading were still a mainstay of the coastal areas during this period. Ibn Habib in his *Kitab al-Muhabbar* records the staging of a 'fair' at Dibba, a major port now situated on the UAE's East Coast. Ibn Habib recounts that Dibba was 'one of the two ports of the Arabs [the other being Sohar] merchants from Sind, China, people of the East and West came to it. This fair was held on the last day of Tagab. Merchants traded here by bargaining'.

COMING OF ISLAM

The arrival of envoys from the Prophet Muhammad in 630 AD heralded the conversion of the region to Islam, but the death of the Prophet in 632 AD was followed by a widespread revolt that was subsequently quashed by the army of the first Caliph, Abu Bakr. During this time, a battle at Dibba, on the UAE's East Coast, is said to have resulted in the deaths of over 10,000 rebels. Their graves can still be seen on the outskirts of the town.

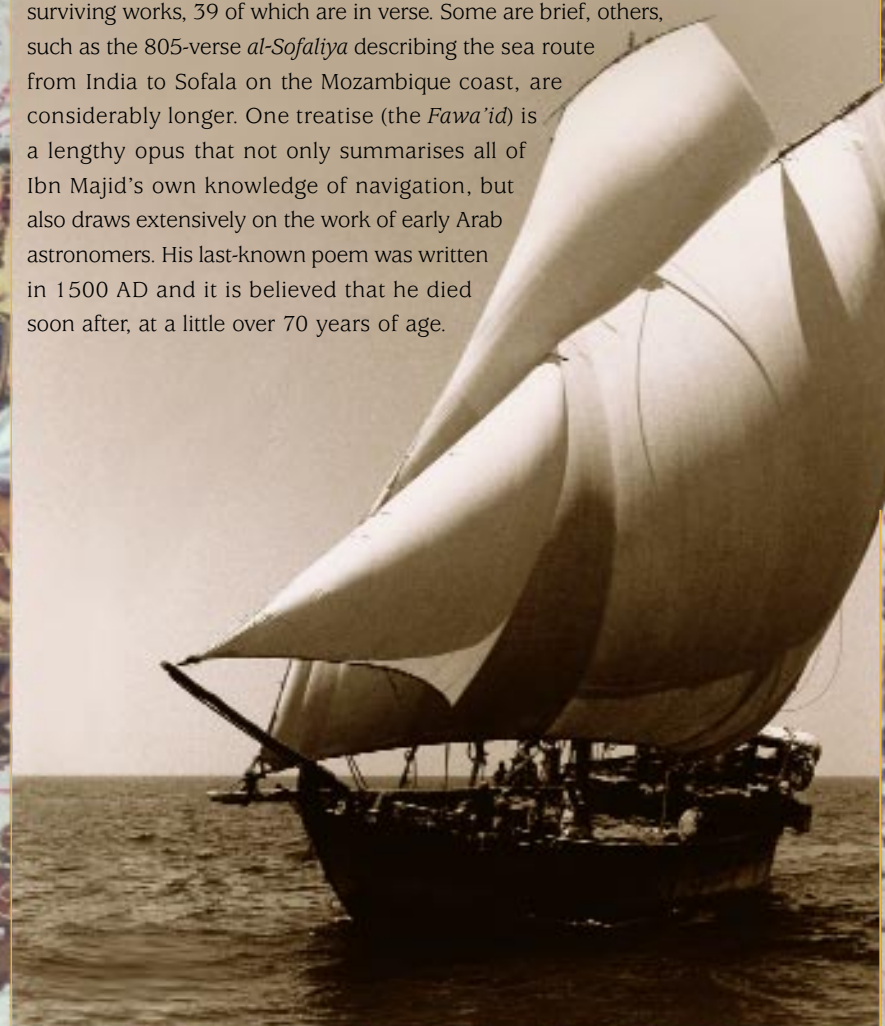
By 637 AD, the Islamic armies were using Julfar (Ra's al-Khaimah) as a staging post for the conquest of Iran. Indeed well-known historians of early Islam, such as al-Tabari, and local sources indicate that this area was of considerable interest to successive Umayyad and Abbasid rulers. In 892 AD we find Julfar being used again, this time as an entry point for the Abbasid invasion of Oman. In the tenth century the area of Oman and the UAE came under the control of the Buyid

We use 32 rhumbs and we have *tirfa*, *zam* and *qiyas* (measurement of star altitude) but they are not able to do these things nor can they understand the things which we do although we can understand what they do and we can use their knowledge and travel in either ships. We can easily travel in their ships and upon their sea so some have magnified us in this business and look up to us for it.

They acknowledge that we have the better knowledge of the sea and its sciences and the wisdom of the stars in the high roads of the sea, and the knowledge of the division of the ship in length and breadth.

For we divide the ship in length and breadth according to the compass rose and we have measurements of star altitudes. They have no similar division or any means of dividing from the prow of the ship to guide themselves; neither do they use star altitude measurements to guide them when they incline to the right or left. Hence they have to acknowledge that we know best in that.

Ibn Majid, the 'Lion of the Sea' and a legendary figure in UAE history, wrote the verse on the preceding page long before Vasco da Gama ever rounded the Cape of Good Hope or set foot in the Arabian lands from which Ibn Majid, his equally skilled father, grandfather and other forebears had been sailing and exploring throughout their working lives. The 'they' of whom he wrote were, of course, Europeans, and it is true to say that the Arabs had sailed into European waters long before the Europeans had mastered the art of crossing the Indian Ocean. Born in Julfar, close to present-day Ra's al-Khaimah, in around 1432–37, Ibn Majid came from a long line of intrepid sailors. His reputation as a navigator is based upon 40 surviving works, 39 of which are in verse. Some are brief, others, such as the 805-verse *al-Sofaliya* describing the sea route from India to Sofala on the Mozambique coast, are considerably longer. One treatise (the *Fawa'id*) is a lengthy opus that not only summarises all of Ibn Majid's own knowledge of navigation, but also draws extensively on the work of early Arab astronomers. His last-known poem was written in 1500 AD and it is believed that he died soon after, at a little over 70 years of age.



dynasty (reflected in the discovery of a hoard of Buyid coins in Ra's al-Khaimah in 1965). Julfar continued to be a port and pearling centre of considerable importance, mentioned by al-Maqdisi in the tenth, al-Idrisi in the twelfth and Yaqut in the thirteenth centuries. From here, perpetuating a 5000-year-old tradition, great wooden dhows ranged far and wide across the Indian Ocean, trading as far away as Mombasa in Kenya, Sri Lanka, Vietnam and China.

The growth of Sohar, an important trade emporium on the Batinah coast of Oman, resulted in a proliferation of domestic trade routes leading to Julfar in the north and Tu'am (Al Ain/Buraimi) in the west. By the fourteenth and fifteenth centuries, the UAE had established close commercial contact with the Kingdom of Hormuz based on Jarun Island in the Straits of Hormuz. But this relationship was upset in 1498 following the Portuguese circumnavigation of the Cape of Good Hope by Vasco da Gama using Arab navigational information.

PORTUGUESE PRESENCE

The Portuguese arrival in the Gulf had bloody consequences for the Arab residents of Julfar and East Coast ports like Dibba, Bidiya, Khor Fakkan and Kalba. A string of forts established in these towns, often described as 'Portuguese', are in fact better considered strongholds of local Arab sheikhs, allies of the Portuguese.

The Portuguese author Duarte Barbosa, writing in 1517, noted that the people of Julfar were 'persons of worth, great navigators and wholesale dealers. Here is a very great fishery as well, of seed pearls as well as large pearls'. The Portuguese traveller Pedro Teixeira mentions that a fleet of 50 *terradas* sailed from Julfar every year to the pearl beds. There was even a kind of pearl found near Julfar named after the latter, and it was the growing interest of the Europeans in 'Gulf pearls' that led to the tour of the Venetian state jeweller, Gasparo Balbi, in around 1580. Interestingly, his description of the UAE coast from Qatar to Ra's al-Khaimah includes the first European record of the Bani Yas tribe in Abu Dhabi.

BANI YAS

The ancestors of the bedouin, who made the sandy deserts of Abu Dhabi and Dubai their home, created date gardens and built themselves date-frond houses in the hollows of the dunes where adequate water was found. The '*arish*' habitations eventually formed about 40 settlements, some of which were inhabited all the year round. This arc of villages at Liwa was the focus of economic and social life for the Bani Yas, at least since the sixteenth century. By the early 1790s, however, the town of Abu Dhabi had become so important a centre of activity that the political leader of all the Bani Yas groups, the Sheikh of the Al Bu Falah (the Al Nahyan family, transferred his residence there from the Liwa. Early in the nineteenth century, members of the Al Bu Falasah, a branch of the Bani Yas, settled by the Creek in Dubai and established Maktoum rule in that emirate.

QAWASIM

While European powers like Portugal, Holland and eventually Britain competed for regional supremacy, a local power, the Qawasim, were gathering strength and at the beginning of the nineteenth century had built up a fleet of over 60 large vessels and could put nearly 20,000 sailors to sea. Their strength posed a serious challenge to the British, then emerging as the dominant power in the Indian Ocean, and in the first two decades of the nineteenth century a series of clashes between the two sides ended in the virtual destruction of the Qasimi fleet and the consolidation of British influence in the Gulf. Based on British claims that the Qasimi vessels had engaged in piracy, the area gained the name 'The Pirate Coast'. However, HH Dr Sheikh Sultan bin Mohammed Al Qasimi, Ruler of Sharjah, has argued in his book *The Myth of Arab Piracy in the Gulf* that the British offensive was based on a desire to control the maritime trade routes between the Gulf and India.

THE TRUCIAL STATES

Following the defeat of the Qawasim, the British signed a series of agreements with the sheikhs of the individual emirates that, later augmented with treaties on preserving a maritime truce, resulted in the area becoming known as 'The Trucial States'. The treaties with Britain meant that the sheikhs could not engage in independent relations with foreign powers, and were obliged to accept the advice of Britain in certain defined areas.

However, peace at sea facilitated uninterrupted exploitation of the ancient pearl fisheries in the lower Gulf, and once again fine pearls from the emirates were exported not only to India, but also to the growing market in Europe. The pearling industry thrived during the nineteenth and early twentieth centuries, providing both income and employment to the people of the Arabian Gulf coast.

On land, freed from the damaging effects of warfare at sea, but lacking any real economic resources, the emirates developed slowly. One of the greatest figures of the period was Sheikh Zayed bin Khalifa of Abu Dhabi, who ruled that emirate for over 50 years from 1855 to 1909, earning the title 'Zayed the Great'.

HARD TIMES

The First World War had already dealt a heavy blow to the pearl fishery, but it was the world economic depression of the late 1920s and early 1930s, coupled with the Japanese invention of the cultured pearl, that damaged it irreparably. The industry eventually faded away just after the Second World War, when the newly-independent Government of India imposed heavy taxation on pearls imported from the Gulf. This was a catastrophic blow to the area.

The population was resourceful and hardy; nevertheless, there is no denying the difficulties that they faced. Opportunities for education were generally confined to lessons in reading and writing, along with instruction in Islam from the local

THE DISCOVERY OF OIL

It is now over four decades since oil production first began in the United Arab Emirates. The story of oil, however, goes back much further. In the 1930s, the consortium of what became BP, Shell, Total, ExxonMobil and Partex, operating in Iraq as the Iraq Petroleum Company, turned their eyes to the Lower Gulf. Over the next few years, several concession agreements were signed, of which the most important was that with Abu Dhabi in January 1939. To handle those in the Trucial States, as the UAE was then known, IPC established a subsidiary, Petroleum Development (Trucial Coast), PD(TC), which drilled its first well at Ra's Sadr, north-east of Abu Dhabi, in 1951. Although dry, it was, at the time, the deepest well ever drilled in the Middle East.

PD(TC) drilled several other wells before finding traces of hydrocarbons at Murban, (now known as Bab), south-east of Abu Dhabi, in 1954. With its third well on this structure, completed in 1960, PD(TC) declared that this field was commercially viable and it went into production in 1963. The company was later renamed the Abu Dhabi Petroleum Company (ADPC).

Meanwhile, in 1953, BP had negotiated an offshore concession, assigned to a specially-created subsidiary, Abu Dhabi Marine Areas Ltd (ADMA). Surveys were carried out with the assistance of the famous French underwater explorer, Jacques Cousteau. The first well was drilled on a structure called Umm Shaif in 1958, and struck oil in massive quantities. With Das Island as the export terminal, Umm Shaif went into production in 1962.

Since then, many more important fields have been identified, while the Abu Dhabi National Oil Company (ADNOC), established in 1971, has now taken controlling shares in the concessions, with ADMA being replaced as operator by the Abu Dhabi Marine Operating Company (ADMA-OPCO) and ADPC by the Abu Dhabi Company for Onshore Oil Operations (ADCO), although foreign shareholders retain a share.

Memories of the early days of exploration are now fading fast. The results of the efforts of those, both UAE nationals and expatriates, who took part, however, continue to define the economy of the United Arab Emirates today.

preacher, while modern facilities such as roads, communications and health care were conspicuous only by their absence. Transport was by camel or boat, and the harshness of the arid climate meant that survival itself was often a major concern.

Zayed the Great's son, Sheikh Sultan, was in power in Abu Dhabi from 1922 to 1926, and then, after a brief reign by a brother, one of Sheikh Sultan's sons, Sheikh Shakhbut, came to the throne at the beginning of 1928.

NEW BEGINNINGS

In the early 1930s the first oil company teams arrived to carry out preliminary surface geological surveys and the first cargo of crude was exported from Abu Dhabi in 1962. With revenues growing year by year as oil production increased, Sheikh Zayed, the younger brother of Sheikh Shakhbut, who was chosen as Ruler of Abu Dhabi on 6 August 1966, undertook a massive programme of construction of schools, housing, hospitals and roads. One of Sheikh Zayed's early steps was to increase contributions to the Trucial States Development Fund, established a few years earlier by the British. Abu Dhabi soon became its largest donor.

In the meantime, Sheikh Rashid bin Saeed Al Maktoum, *de facto* Ruler of Dubai since 1939, had developed facilities for shipping along the Creek in a determined effort to replace pearling revenues. When Dubai's oil exports commenced in 1969 Sheikh Rashid was also able to use oil revenues to improve the quality of life of his people.

FEDERATION

At the beginning of 1968, when the British announced their intention of withdrawing from the Arabian Gulf by the end of 1971, Sheikh Zayed acted rapidly to initiate moves towards establishing closer ties with the emirates. Along with Sheikh Rashid, who was to become Vice-President and Prime Minister of the newly formed state, Sheikh Zayed took the lead in calling for a federation that would include not only the seven emirates that together made up the Trucial States, but also Qatar and Bahrain. Following a period of negotiation however, agreement was reached between the rulers of six of the emirates (Abu Dhabi, Dubai, Sharjah, Umm al-Qaiwain, Fujairah and Ajman) and the Federation to be known as the United Arab Emirates (UAE) was formally established on 2 December 1971. The seventh emirate, Ra's al-Khaimah, formally acceded to the new Federation on 10 February 1972.

ZAYED AND THE UAE

The prosperity, harmony and modern development that characterises the United Arab Emirates, led today by President HH Sheikh Khalifa bin Zayed Al Nahyan, also the Ruler of the Emirate of Abu Dhabi, and his fellow-members of the Supreme Council of Rulers of the seven emirates, is due to a very great extent to the role

played by Sheikh Zayed, both prior to the formation of the Federation and in the nearly 33 years that followed until his death in November 2004. The achievements of his career are well summed up elsewhere in this *Yearbook*, but a brief overview of his life and achievements is appropriate here.

Born around 1918 in Abu Dhabi, Sheikh Zayed was the youngest of the four sons of Sheikh Sultan, Ruler of Abu Dhabi from 1922 to 1926. He was named after his grandfather, Sheikh Zayed bin Khalifa.

At the time Sheikh Zayed was born, the emirate was poor and undeveloped and life, even for members of the ruling family, was simple.

Throughout the late 1920s and 1930s, as Sheikh Zayed grew to manhood, he displayed an early thirst for knowledge that took him out into the desert with the *bedu* tribesmen and into the sea with the fishermen and pearl divers, to learn about the people and the environment in which they lived. He later recalled with pleasure his experience of desert life and his initiation into the sport of falconry, which became a lifelong passion.

These travels provided Sheikh Zayed with a deep understanding both of the country and of its people. In the early 1930s, when the first oil company teams arrived to carry out preliminary surface geological surveys, he obtained his first exposure to the industry.

In 1946, Sheikh Zayed was chosen to fill a vacancy as Ruler's Representative in the Eastern Region of Abu Dhabi, centred on the oasis of Al Ain, approximately 160 kilometres east of the island of Abu Dhabi itself. The job involved not only the task of administering the six villages but also the whole of the adjacent desert region, enabling Sheikh Zayed to learn the techniques of government as well as deepening his knowledge of the tribes.

Sheikh Zayed brought to his new task a firm belief in the values of consultation and consensus, in contrast to confrontation. Foreign visitors, such as the British explorer Sir Wilfred Thesiger, who first met him at this time, noted with approbation that his judgements 'were distinguished by their acute insights, wisdom and fairness'.

Sheikh Zayed swiftly established himself not only as someone who had a clear vision of what he wished to achieve for the people of Al Ain, but also as someone who led by example.

A key task in the early years in Al Ain was that of stimulating the local economy, which was largely based on agriculture. He also ordered a revision of local water ownership rights to ensure a more equitable distribution, surrendering the rights of his own family as an example to others.

With development gradually getting under way, Sheikh Zayed commenced the laying out of a visionary city plan, and ordered the planting of ornamental trees that, now grown to maturity, have made Al Ain one of the greenest cities in Arabia.

Despite the lack of government revenues, Sheikh Zayed succeeded in bringing progress to Al Ain, establishing the rudiments of an administrative machinery, personally funding the first modern school in the emirate and coaxing relatives and friends to contribute towards small-scale development programmes. Oil production was to provide Sheikh Zayed with the means to fund his dreams, with the export of the first cargo of Abu Dhabi crude in 1962.

On 6 August 1966, Sheikh Zayed succeeded his elder brother as Ruler of Abu Dhabi, with a mandate from his family to press ahead as fast as possible with the development of Abu Dhabi. One of his early steps was to increase contributions to the Trucial States Development Fund, while when, in February 1968, the British announced their intention of withdrawing from the Arabian Gulf by the end of 1971, Sheikh Zayed acted rapidly to initiate moves towards establishing closer ties with the emirates, these efforts culminating in the establishment of the UAE. Sheikh Zayed was elected by his fellow rulers as the first President of the UAE, a post to which he was successively re-elected at five-year intervals.

The new state came into being at a time of political turmoil in the region. A couple of days earlier, on the night of 30 November and the early morning of 1 December, Iran had seized the islands of Greater and Lesser Tunb, part of Ra's al-Khaimah, and had landed troops on Abu Musa, part of Sharjah (see section on Foreign Policy).

Foreign observers, who lacked an understanding of the importance of a common history and heritage in bringing together the people of the UAE, predicted that the new state would survive only with difficulty, pointing to disputes with its neighbours and to the wide disparity in the size, population and level of development of the seven emirates.

Better informed about the character of the country, Sheikh Zayed was naturally more optimistic and the predictions of those early pessimists were shown to be unfounded.

During his years in Al Ain Sheikh Zayed had been able to develop a vision of how the country should progress. Once Ruler of Abu Dhabi, and then President, he had over three and a half decades to devote to making that vision a reality.

One foundation of his philosophy as a leader and statesman was that the resources of the country should be fully used to the benefit of the people. He saw them to be not as a means unto themselves, but as a tool to facilitate the development of what he believed to be the real wealth of the country – its people, and, in particular, the younger generation.

Within this framework, Sheikh Zayed believed that all of the country's citizens have a role to play in its development. Both men and women, he believed, should play their part. Recognising that in the past a lack of education and development had prevented women from playing a full role in much of the activity of society, he took action to ensure that this situation was addressed rapidly and, under his

leadership, the country's women came increasingly to play their part in political and economic life.

Another key feature of Sheikh Zayed's strategy of government was the encouragement of initiatives designed to conserve the traditional culture of the people, in order to familiarise the younger generation with the ways of their ancestors. In his view, it was of crucial importance that the lessons and heritage of the past were remembered.

He who does not know his past cannot make the best of his present and future, for it is from the past that we learn. We gain experience and we take advantage of the lessons and results [of the past].

If the heritage of the people of the UAE was important to Sheikh Zayed, so too was the conservation of its natural environment and wildlife. His belief in conservation of the environment owed nothing to modern fashions. It derived, instead, from his own upbringing, where a sustainable use of resources required man to live in harmony with nature. This led him to ensure that conservation of wildlife and the environment was a key part of government policy.

As in other areas of national life, Sheikh Zayed made it clear that conservation is not simply the task of government. He believed firmly that there was also a role for the individual and for non-governmental organisations, both of citizens and expatriates, applying this belief not just to concerns such as environmental conservation, but to other areas of national life as well.

Sheikh Zayed imbibed the principles of Islam in his childhood and they remained the foundation of his beliefs and principles throughout his life. He was a firm and dedicated opponent of those who sought to pervert the message of Islam to justify harsh dogmas, intolerance and terrorism. In Sheikh Zayed's view, however, such an approach was not merely a perversion of the message but is in direct contradiction of it. Extremism, he believed, has no place in Islam. In contrast, he stressed that:

Islam is a civilising religion that gives mankind dignity. A Muslim is he who does not inflict evil upon others. Islam is the religion of tolerance and forgiveness, and not of war, of dialogue and understanding. It is Islamic social justice which has asked every Muslim to respect the other. To treat every person, no matter what his creed or race, as a special soul is a mark of Islam. It is just that point, embodied in the humanitarian tenets of Islam, that makes us so proud of it.

He recognised, however, the necessity not only of eradicating terrorism, but of tackling its fundamental causes. Besides the international campaign against the types of terrorism, there should, he believed, be a strong international alliance that worked, in parallel, to exert real and sincere efforts to bring about a just and lasting solution to the Middle East conflict.

Sheikh Zayed was also an eager advocate of tolerance, discussion and a better understanding between those of different faiths and, in particular, was an ardent advocate of dialogue between Muslims and Christians.

In the realm of the foreign policy of the state, his firmly-held belief in eschewing rhetoric in the search for solutions led the UAE to adopt an approach of seeking to find compromises, and to avoid, wherever possible, a resort to the use of force, whether in the Arab arena or more widely. Under his leadership, therefore, the country became an important provider of overseas aid, both for the development of infrastructure and for humanitarian relief, whether provided through civilian channels, as with the reconstruction of Iraq following the defeat of the Saddam Hussein government in 2003 or, occasionally, by sending units of the UAE Armed Forces as international peacekeepers, such as to Kosovo in the late 1990s.

At the same time, the UAE, under his leadership, showed its preparedness to fight to defend justice, as was seen by its active participation in the war to liberate Kuwait from occupation in 1990–1991.

ARCHAEOLOGY REVIEW

As usual, the winter of 2004 and the spring of 2005 saw considerable activity from local and foreign archaeological teams, delving deeper into the history and prehistory of the United Arab Emirates.

One exciting discovery, made by a team from Germany's University of Tübingen, working in collaboration with Sharjah's Directorate of Archaeology, was the discovery near Jebel Buhais of probable stone tools from the Early Stone Age, or Palaeolithic, period. These have not yet been dated, and further fieldwork is required to try to identify related sites that contain material that can be subjected to radiocarbon dating. If their identification as Palaeolithic artifacts is confirmed, however, they could push the earliest known presence of man in the United Arab Emirates back by tens of thousands of years – or even more.

Until the discovery of these tools, the oldest-known settlement in the UAE was the Late Stone Age, or Neolithic, village on Abu Dhabi's western island of Marawah, which has been dated to around 7500 years ago, or 5500 BC. In a first for UAE science, the Abu Dhabi Islands Archaeological Survey (ADIAS) collaborated with the Forensic Science Laboratory of the Abu Dhabi Police to study a skeleton excavated at the site in early 2004. Unfortunately, the skeleton itself had deteriorated too much to permit DNA to be recovered, but the study showed that the skeleton was of a male, aged between 20–40. 'Marawah Man' is the oldest human being yet found in the Emirates.

Other work on the Neolithic period was also carried out in January and February 2005 by ADIAS, in association with the Department of Antiquities and Tourism in

Abu Dhabi's Eastern Region, the National Museum of Kuwait and the Archaeology Unit of Britain's Birmingham University, at sites in the south-eastern deserts of Abu Dhabi, where evidence of extensive settlement has been identified. Good winter rainfall in early 2005 led to temporary lakes appearing in the region, supporting the theory that the area may have had similar lakes during the Neolithic period, when the UAE's climate was much wetter than it is today. This would have meant that there was more vegetation and wildlife, which the Neolithic inhabitants could have exploited for food. Associated with this work, a study is being carried out, by scientists from Germany's University of Marburg, on the large sand dunes adjacent to the sites. This, it is hoped, will help to provide a date for the formation of the dunes, helping to reveal more information about the local environment during the Neolithic period.

Other studies on the Late Stone Age were carried out by the Sharjah Directorate of Archaeology and a team from the University of Tübingen. This focused on a study of rock outcrops at Jebel Buhais and on the edge of the nearby Hajar Mountains where rock outcrops contain raw flint that would have been used for the making of tools during the Neolithic period.

Moving into the Bronze Age, a seventh season of fieldwork was carried out early in 2005 in the Hili Archaeological Garden, in Al Ain, by a joint team from the Department of Antiquities and Tourism in Abu Dhabi's Eastern Region and France's CNRS. Further excavations were carried out at the Hili 'N' pit-grave, which now seems to have contained as many as 400 burials, dating to the late Umm al-Nar period, from around 2200 BC to 2000 BC. Imported pottery and artifacts from the Indus valley and the Makran coast of Iran and Afghanistan indicate the extent of the trading connections of the people of the UAE at that time. A careful survey in the surrounding area suggests that as many as 12 circular graves from the Umm al-Nar period may once have existed in the area.

The UAE's Bronze Age commenced around 3000 BC with the Hafit period, named after the mountain just south of Al Ain where many tombs dating from this time have been found. The Umm al-Nar period then began around 2500 BC, being followed by the Wadi Suq period, which lasted from around 2000 BC to 1600 BC. One of the largest Wadi Suq period cemeteries in the UAE is at Shimal, in Ra's al-Khaimah, where many different types of tomb are present from single burials to megalithic structures that were used for collective burials. During late 2004 and early 2005, a detailed study of the tombs was undertaken by a team from the National Museum of Ra's al-Khaimah, to gain a more detailed understanding not only of the structures themselves, but of the way in which building techniques developed.

Another study of the Bronze Age in the UAE, carried out by a team from Germany's universities of Marburg and Munich, in association with the Dubai Department of Tourism and Commerce Promotion, looked at the evolution of

the UAE's shorelines in the Dubai Internet City area. During construction work for a sewerage network inland of the Sheikh Zayed Highway, the remnants of an ancient mangrove swamp, around 7000 years old, was found. Work by the German team showed that the area had then been covered by sand around 5500 years ago, as the former shoreline gradually moved outwards. By the time of the Wadi Suq period, the coastline had retreated to roughly the location of Dubai Internet City, where a settlement was established on the shoreline. This, though, only lasted for a few hundred years, and the sea then retreated again, eventually reaching its present location. Similar evolution of shorelines can be detected along much of the UAE's Gulf coastline, with ancient infilled lagoons and tidal channels still being detectable from aerial photography. The shoreline studies provide important information on the past environment of the UAE's coastal areas, and are crucial to understanding the development of the patterns of human settlement over the last few thousand years.

Work on evidence of settlement in the Emirates during the Iron Age, which lasted from around 1300 BC to 300 BC, included a further season of excavations in early 2005 at the site of a fortified small town at Muwailah, near Sharjah International Airport. Dating from around 900 BC to 600 BC, the site was destroyed by fire in a single, catastrophic event, perhaps related to a foreign military invasion. Being excavated by a team from Bryn Mawr College, in the United States, in association with Australia's University of Sydney and the Sharjah Directorate of Archaeology, the Muwailah site has produced the earliest writing known from the UAE. Several kilometres inland, it was formerly thought to have been a township on the edge of the desert, but work in early 2005 in nearby areas showed that once a lagoon and inlet from the Arabian Gulf had existed not far away. This has prompted a complete re-evaluation of how the township operated – was it, perhaps, a seaport, rather than an inland settlement?

Another Iron Age site to receive attention was at Bithna, an important oasis that controls the major route through the Hajar Mountains to the East Coast, at Fujairah. Here a team from France's CNRS, in association with the Fujairah Department of Antiquities, undertook a fifth season of work. The Iron Age sites include a large fort and a temple and cultural centre, evidence that the importance of Bithna as a strategic location was recognised 3000 years ago, as well as in more recent times.

Most of the archaeological work in the UAE continues to be carried out by foreign teams and local departments engaged in their own research programmes. Over the last year, however, an increasing focus has been placed on the search for previously unrecorded sites as part of environmental impact assessments linked to various development projects. In Sharjah, survey work carried out in May at Al Wasit, between Sharjah and Ajman, identified the remains of an old lagoon, as well as pottery and shell middens that may also date to the Iron Age, further

evidence of the evolution of shorelines in the Northern Emirates. The site is due to be investigated by the Sharjah Directorate of Archaeology in late 2005.

In Abu Dhabi, teams from ADIAS carried out studies on the area designated for the expansion of Abu Dhabi International Airport and on the island of Sadiyat, just north of Abu Dhabi Island, prior to development work getting under way. One important result was the discovery on Sadiyat of a settlement from the Late Islamic period with numerous shells of the large mangrove-dwelling gastropod *Terebralia palustris*. Although this is common on sites in the Northern Emirates dating from the Late Stone Age to the late pre-Islamic period, *Terebralia* has only been found on three other sites in Abu Dhabi Emirate, and the species is now believed to be extinct inside the Arabian Gulf, although it is still present on the UAE's East Coast. The Sadiyat finds suggest that *Terebralia* survived into the Late Islamic period in Abu Dhabi, and further survey work is now being planned in an attempt to identify some of the reasons for its eventual disappearance. A detailed archaeological and environmental study of the complex of shallow lagoons and islands north-east of Abu Dhabi is now being planned.

For the third year running, archaeologists from both the UAE and overseas met in early April at a symposium organised in Al Ain by the Zayed Centre for Heritage and History, part of the Emirates Heritage Club. The annual meeting, also attended by academics from several of the UAE's universities and by members of the three Emirates Natural History Groups, from Abu Dhabi, Dubai and Al Ain, provides an opportunity to discuss recent discoveries and to plan future research.

Finally, turning back to the earliest days of the evolution of the Emirates, a display of fossils from the Late Miocene period, around five to six million years ago, was opened in Abu Dhabi in June. Organised by ADIAS, in association with the Environment Agency – Abu Dhabi (EAD), formerly ERWDA, the Abu Dhabi Company for Onshore Oil Operations (ADCO), Takreer and foreign oil company BP, the display puts on show for the first time some of the larger fossils discovered during fieldwork in western Abu Dhabi. These include a 2.5-metre-long elephant tusk, an elephant skull, the skull of an antelope, including its horns, and the skull of a crocodile. Western Abu Dhabi has the best fossil-bearing deposits anywhere in the world for terrestrial and freshwater animals from the Late Miocene period, and the key sites are now being scheduled for protection.

Widely publicised in the UAE through the local media, the archaeological discoveries also attracted overseas attention, both through the media and through papers given at international conferences or published in specialist journals. Two new books on UAE archaeology and palaeontology were published during the year, one being a collection of the papers delivered at the first Al Ain Symposium, in 2003, and the second being a history of the research into the country's Late Miocene fauna.

THE CAMEL

Uniquely adapted to the desert, the camel was the mainstay of the semi-nomadic lifestyle that was practiced by many of the UAE's inhabitants. The largest tribe in the UAE, the Bani Yas, roamed the vast sandy areas that cover almost all of the emirates of Abu Dhabi and Dubai. Other tribes, too, such as the Awamir and Manasir, shared this challenging environment for numerous generations, guarding their valuable knowledge of where to obtain water in the harsh terrain. The camel was both the reason for these lengthy excursions and the means by which they were carried out. Long periods were spent wandering great distances in search of winter grazing provided by dormant vegetation brought to life by intermittent rainfall. Once the arid summer approached, almost all the Bani Yas families, with the exception of fishing groups like the Al Rumaithat, returned to a home in one of the oasis settlements, many to tend and harvest their date gardens. Camel owners who had sufficient summer grazing close to their date palms were particularly fortunate as they could harvest whilst watering their livestock at the wells that supplied the local communities.

The camel was not just a useful mount and means of transporting possessions and goods on long treks across inhospitable terrain; it also provided food, clothing, household items and recreation, and at the end of the day was a primary source of wealth. In many cases camel milk and the products derived from it were the only protein available to *bedu* families for months on end. The camels were capable of surviving for long periods without water, but it was camels' milk that quenched the herders' thirst. Young male camels were slaughtered on special occasions to provide meat for feasts and informal camel races were held during the festivities. Camel hide was used to make bags and other useful utensils, while tents, rugs and items such as fine cloaks (*bisht*) were woven from camel hair.



A large date palm tree stands prominently in the foreground on the left, its trunk textured and brown, and its fronds reaching out against a clear blue sky. In the background, a range of reddish-brown mountains is visible under the same sky. The ground is sandy with some low-lying green desert vegetation. The overall scene is a typical desert oasis environment.

DATE PALM

Over the centuries, bedu families that had spent the winter searching for grazing for their camels returned in the summer to the oasis gardens in the hollows of the dunes to harvest the date crop.

The date palm was traditionally propagated from side shoots that grow out from the base of a mature trunk. Today, tissue-culture techniques are also used to propagate plants. In each case, the outer branches sprouting at ground level are trimmed every year and as the tree grows these branches are cut higher up, until eventually the trunk is formed. After three or more years, depending on the amount of available water, the date palm will flower in spring; flowers of the female tree must then be hand-pollinated with the panicles from a male tree, of which only very few are planted. Harvesting takes place during the hottest period of the year, between late June and early October, depending on the type of date tree – there are more than 50 varieties in the UAE alone.

Not so long ago, the harvested dates were essential for survival. Ripe dates were lightly boiled and compressed into a congealed substance called *tamr* that can be kept almost indefinitely because the high sugar content acts as a preservative. The dried palm fronds were plaited into containers in which the nourishing, vitamin-rich staple diet could be taken on journeys through the desert, into the mountains, or out to sea. The dates were also stacked in small storerooms with underlying drainage for collecting valuable date syrup. Palm fronds were used to build the walls and roofs of 'arish houses and as roof matting for the more sturdy coral-block constructions. Trunks supported the roofs of mudbrick and stone castles and towers. Even boats (canoe-like *shashah*) were made from the midrib of the palm frond. The palm trunk was also hollowed out to form a mortar for crushing wheat with the tree stump shaped into a pestle.

FISHING

Although modern fishing methods are employed in the fishing industry of today, traditional techniques remain popular with artisanal fishermen.

Extensive tidal shallows, which are characteristic of much of the Gulf coast, are ideal for fishing with traps or cast nets. Fish traps are of two types – the fixed, v-shaped *hadra* by which fish are guided along a stake-fence and into a small enclosure where they are harvested at low tide; or the small moveable *gargour* woven from palm fronds, weighted down by stones and baited to entice fish to enter through a narrow hole. In addition to fish, turtles and dugongs traditionally provided valuable protein – they are protected today. The latter were stalked through the shallows, generally from a canoe, but catching them depended ultimately on the hunter's ability to dive in and grapple physically with his prey. Turtle and bird eggs were also collected from well-known nesting beaches.

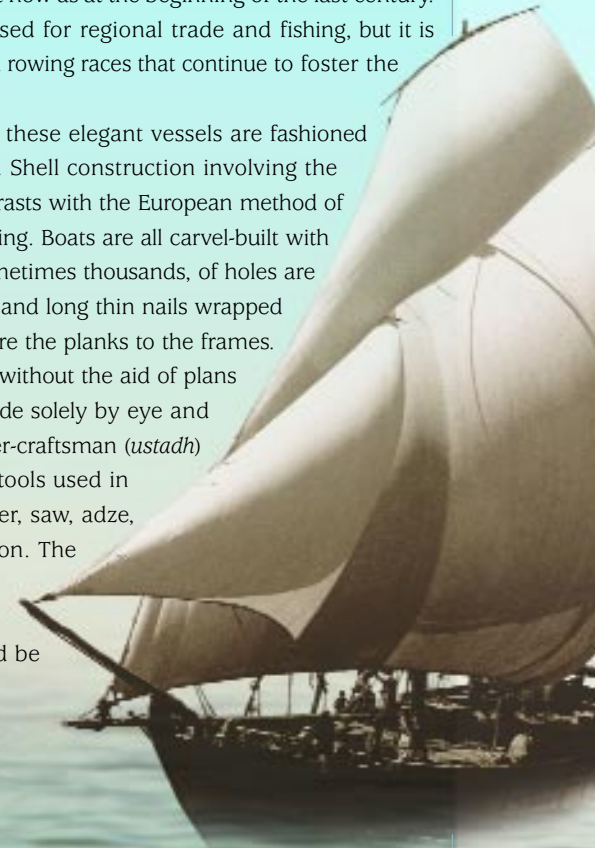
Sardines were the most profitable catch along the East Coast. Wooden boats manned by about 20 people were traditionally used to set a weighted net of about 100 metres in length parallel to the beach. For larger fish such as tuna or shark, heavier tangle nets and landlines were used. Fishermen on the East Coast also fished from palm-frond *shashah*.



BOAT-BUILDING

Dhow construction remains very much a living tradition in the Emirates with at least as many traditional craft being built now as at the beginning of the last century. Dhows with inboard motors are still used for regional trade and fishing, but it is the hugely popular traditional sailing and rowing races that continue to foster the traditional craft.

The construction methods by which these elegant vessels are fashioned have remained the same for centuries. Shell construction involving the fitting of planks first and ribs later contrasts with the European method of forming a skeleton of ribs prior to planking. Boats are all carvel-built with planks laid edge to edge. Hundreds, sometimes thousands, of holes are hand-drilled to avoid splitting the wood and long thin nails wrapped in oiled fibre are driven through to secure the planks to the frames. All the construction work is carried out without the aid of plans and drawings, measurements being made solely by eye and experience. A highly-experienced master-craftsman (*ustadh*) usually oversees the calculations. The tools used in building boats are very simple: hammer, saw, adze, bow-drill, chisel, plane and caulking iron. The building of a large vessel could take anything up to ten months, while a smaller one, a *shu'i* for instance, would be finished in one to four months.



A close-up photograph of a person's hand, wearing a red sleeve, sorting through a large pile of pearls on a red fabric surface. The pearls vary in size and luster, with some showing a distinct nacreous sheen. The hand is positioned on the left side of the frame, with fingers gently touching the pearls. The background is a deep red, textured fabric.

PEARLING

Pearling has been an important economic activity in the region since ancient times, but the trade fluctuated throughout the centuries. At the end of the nineteenth century pearling was flourishing yet again, and an increasing number of able-bodied men participated in diving expeditions (*ghaus*) during four months in the summer, those of the Liwa-based subtribes of the Bani Yas migrating 'home' to tend their date gardens further inland in the winter. By the beginning of the twentieth century there were, according to one calculation, over 1200 pearling boats operating out of the area now known as the UAE, each carrying an average crew of 18 men. The pearling fleet leaving harbour must have been a wonderful sight, but this level of participation meant that during the summer more than 22,000 men were absent on the pearl banks. Long periods away from home placed enormous responsibility on the women of the family, both economically and socially.

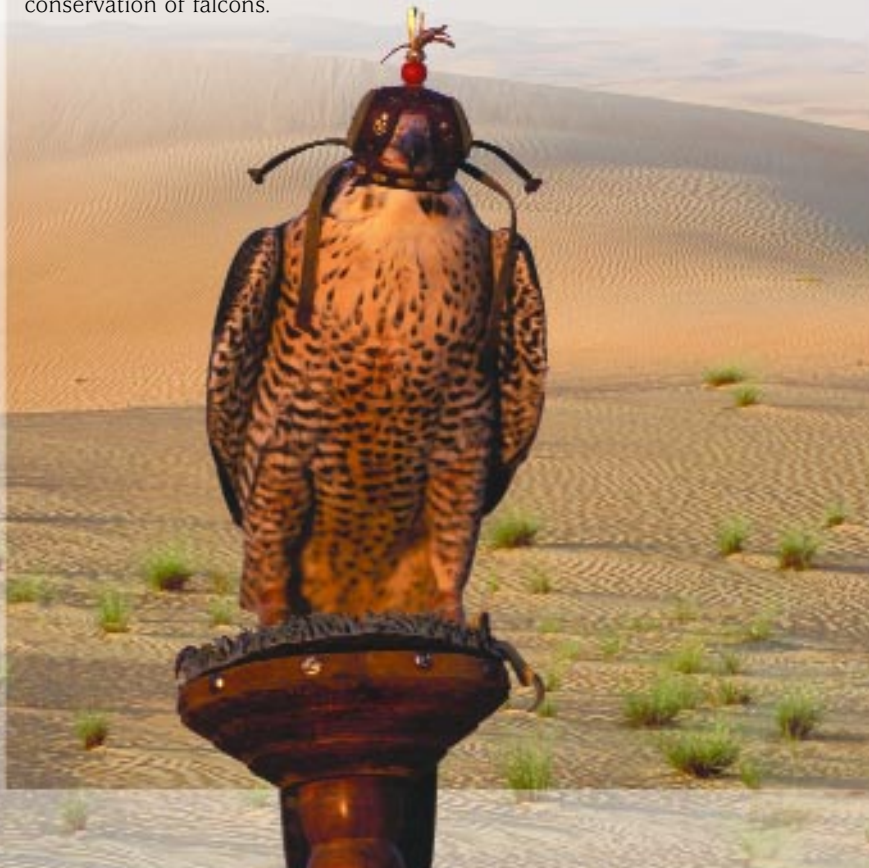
For the men, conditions on board the pearling boats were tough and the work was arduous. The profits from a good season's harvest made it all worthwhile, but bad seasons were followed by spiralling debt. Many of the Bani Yas men formed cooperatives, all the crew jointly owning a boat and sharing the proceeds of the sale of the pearls according to an established arrangement: the biggest share to the captain (*nakhuda*), a larger share to the divers than the haulers, and some money left aside to finance preparations for the following year. Over several generations, some tribes involved in pearling became tied to particular locations, and coastal towns such as Abu Dhabi, Dubai and Ra's al-Khaimah thrived. All were badly affected by the collapse of pearl markets in the 1940s.

FALCONRY

Falconry, once an important way of supplementing the diet of the UAE's desert inhabitants, is now enjoyed as a traditional pastime. The most popular hunting birds remain the saker falcon and the peregrine falcon. These were traditionally trapped along the coast during their autumn migration, trained, used for hunting, and then released in the spring.

Once the falconers managed to capture one of the highly prized birds, they had only two to three weeks to train it before the migrating houbara bustards started to arrive. This was done by developing a strong bond of trust between a wild captured bird and its handler, a unique skill that commands the respect of falconers worldwide. Ideally, the training of the falcon was completed by the day when the first houbara arrived and the bedouin would hunt the bustards with his falcon throughout the winter months. Although houbara were the favoured quarry, falcons were also used in the past to take stone curlews and hares, and sometimes with salukis to hunt gazelle.

Today, many birds are caught abroad and imported. In fact, most falconry now takes place outside the Emirates, and the UAE is a leader in research into conservation of falcons.



HORSES

Ancestor of today's racing thoroughbreds, the Arabian horse has played a noble part in the history of Arabia. Excavations at Mleiha in Sharjah show that over 2000 years ago prized stallions, decorated with gold trappings, were buried close to their owners, evidence of their place in local society. The loyal, gentle and stout heart of the Arabian horse has been the inspiration of much of the finest Arab poetry. Today, the UAE is one of the world's top breeding centres for the breed, and is playing a major role in its preservation. The UAE also sponsors special races for Arabian horses in many countries, including Britain, Germany and Australia. Lacking the speed of the thoroughbred, the Arabian horse is noted for its ability to endure hardship and to be ridden over long distances. Some endurance races last over a distance of 100 kilometres or more. Riders from the Emirates are among the world's top practitioners of this sport, which tests both man and horse to the limits (see the section on Sport and Leisure).



MUSIC, DANCE AND POETRY

Songs were composed to accompany different tasks, from hauling water at the well, to diving for pearl oysters out in the Gulf. In the latter case, a professional song-leader (*naha'an*) would launch into song and all the divers and haulers joined in as they worked. Each song had a rhythm for a particular task and became an inspiration for good team work.

Evening campfires were an occasion for exchanging news, for story telling and for reciting poetry, especially vernacular or *nabati* poetry. The spoken word has always been the superior art form of the tribal people, who lacked the raw materials used elsewhere for more tangible forms of artistic expression. Today, although life has changed utterly, *nabati* poetry remains a popular mode of expression and the poet a much-revered figure in UAE society.

During festival celebrations singing and dancing also took place and many of the songs and dances, handed down from generation to generation, have survived to the present time. Young girls would swing their long black hair, swaying in time to the strong beat of the music. Men would re-enact battles fought or successful hunting expeditions, often symbolically using sticks, swords or rifles.



TRADITIONAL USES OF PLANTS

At one with the desert and its wildlife, the *bedu* of the UAE were familiar with the medicinal properties of many plants. Seeds of *Cassia italica*, the senna plant, are used as a laxative and the *bedu* claim it will heal any kind of stomach pain. Seeds of the desert squash, *Citrullus colocynthis*, are highly acclaimed as a cure for diabetes. The bitter sap of the milkweed, *Calotropis procera*, was even dried and used to fill aching hollow teeth, while the woody parts of this plant were burned to make charcoal, which was an ingredient for gunpowder in the old days. Poultices made of the leaves were applied to joints to heal rheumatism. The leaves also served as fertiliser – dug into the ground around the roots of an ailing palm tree, they help to make the tree more vigorous. *Salsola imbricata* and several *Suaeda* species were dried and powdered to be used as snuff to clear sinuses.

The best-known cosmetic use of a plant is that of henna to dye hair and to decorate hands and feet on special days like weddings and Eid celebrations. To make the henna paste, crushed dried berries and leaves are mixed with medicinal herbs, including one containing a blue dye, and applied to the skin in intricate designs. Poultices of the henna plant leaves are also used to calm headaches. The poisonous plant *Rhazya stricta* is used in small quantities to settle gastro-intestinal problems. An important plant for combating fevers is *Teucrium stocksianum*, a most fragrant herb, similar to a sage. The seeds of garat, *Acacia nilotica*, are ground to a powder to dry out second-degree burns.

