

History of Trade

EXHIBITION GUIDE



THE
TERRITORY
BOUNDLESS POSSIBLE





Introduction

A modern, thriving tropical city has emerged with a range of industries offering limitless growth potential.

Arriving in Darwin by air, you appreciate the vastness of the Northern Territory coastline, with a small jewel of a city on the edge of the immense mangrove-frilled harbour. But despite the city's apparent isolation, and Australia's short colonial history, the Territory's commercial connections go back a surprisingly long way and encompass a fascinating variety of commodities: trepang, pearl shell, buffalo, crocodiles, gas, and gold. The development of the Northern Territory's industries provides a fascinating insight into the development of the Territory itself.

It is thought that Portuguese explorer Gomes de Sequiera may have been the first European to map the North Australian coast line in 1525. Dutch and Portuguese seafarers were relatively common in the waters off the Territory, due to colonial territories in South East Asia. Many parts of the NT coast carry Dutch names for this reason. In 1644, another Dutch explorer, Abel Tasman,

created extensive maps of the northern coastline and named Groote Eylandt, a large island in the Gulf of Carpentaria which retains its archaic Dutch spelling.

European settlement of the north coast of Australia officially began in 1824, when the British Government established a military and trading post named Fort Dundas on Melville Island. Three other military posts were attempted but all were abandoned by 1849.

In 1862, John McDouall Stuart made a successful overland expedition to the Top End – the highway that now bisects the country from north to south is named in his honour. The town of Palmerston, later renamed Darwin, was surveyed by George Goyder in 1869. The north coast's tropical monsoonal climate was unfamiliar to the European settlers - their farming methods and lifestyles were unsuitable to the region and development was slow. Settlement was also limited by a lack of labour

and a number of administrative and political upheavals. Immigrants from many parts of the world arrived and were instrumental in the development of the town, as well as enriching its cultural life.

Darwin was bombed extensively during the Second World War, and a major cyclone devastated the city and surrounds in 1974. Despite these setbacks, a modern, thriving tropical city has emerged with a range of industries offering limitless growth potential. 'Darwinians' love their laid-back lifestyle and multicultural city, and by examining the development of trade and industry in the region, we can discover patterns emerging which can steer growth into the future. The north coast's proximity to Asia places it naturally as the gateway to international marketplaces, as it has been for centuries.

Front cover: Pearling luggers in Darwin harbour, 1920s. PH0238/0172, Peter Spillett Collection, Northern Territory Library.

Internal Trade and the Early Colonial Era

Australian Aboriginal culture has existed for at least 65 000 years. In pre-colonial times over 200 language groups lived mainly hunter-gatherer lifestyles across the continent.

An extensive network of historic trade routes connected many of these groups, including via canoes to island and coastal groups. Pearl shell from the WA Kimberly coast has been found as far away as the coast of South Australia, confirming the vast distances across which objects could be traded, long before European settlement.

Aboriginal groups exchanged resources, including coloured ochre (a soft stone, ground for paint used for ceremonial body painting and to create rock and bark paintings), shells and other natural hard surfaces, tools such as stone axes, and hunting and ceremonial items such as boomerangs and spear-throwers. Trading networks were sometimes incorporated into formal exchange systems. At times, large gatherings of people came together for 'exchange ceremonies' where regional delicacies and ritual objects were traded, news, songs and dances were exchanged, and intertribal marriages were arranged.

The traditional owners of the Darwin region are the Larrakia people; Larrakia country covers the area from the Cox Peninsula in the west to Adelaide River in the east. The Larrakia established the first trade in the region with neighbouring groups including the Tiwi, the Wagait, and the Wulna peoples.

The first European settlements in the Northern Territory were military posts. The British colonial government feared that other colonial powers already in the region such as France, Portugal or Spain might try to claim the north coast of Australia, and thought that by establishing military posts, settlement would follow. However, the unfamiliar climate, vast distances from British settlements on the east coast, and the unsuitability of the settlement parties for the long term development of townships, meant that the first three attempts at British settlement failed.

It wasn't until 1869 that the town of Palmerston, now called Darwin, was permanently settled. Forty four settlers first came to inhabit the township. Soon after, the South Australian Government, who had political responsibility for the Northern Territory at that time, committed to the building of the Overland Telegraph line. The telegraph line would span the country from the south to the north and revolutionise communications of the era. It was completed in two years, then an undersea cable from Java connected Australia telegraphically to the rest of the world. The building of the Overland Telegraph made great strides in opening up the country for further exploration and development.

In the early years, contact between settlers and Aboriginal Territorians was cautious, with some cooperative relationships established, but violence was common as divergent cultures clashed.

POST CARD
CORRESPONDENCE ADDRESS ONLY

*Can alligator skin
It is very
burn a rifle*



Loading a ship with supplies for Darwin. Note cartons of Victoria Bitter ale, 1940. PH0847/0218, William Henry Lillicrapp Collection, Northern Territory Library.



Goyder's camp – the first permanent European settlement in the Darwin region, 1870. PH0002/0161, Roger Nott Collection, Northern Territory Library.

PH 155/144
KODAK

A U S T R A L I A

Northern Territory Trade.

We are indebted to the courtesy of Mr. A. Searcy, Sub-Collector of Customs, for the following report of Customs Returns for the Quarter ending December 31st, 1885:

TOTAL REVENUE, £6,694 19s 9d.
SHIPPING INWARDS 21 vessels, tonnage, 19,975.

SHIPPING OUTWARDS 17 vessels, tonnage, 18,861.

IMMIGRATION. Europeans, 127; Chinese, 81. Total 208.

EMIGRATION. Europeans, 141; Chinese, 84. Total 225.

Excess of Immigration over Emigration 17.

IMPORTS Port Darwin, £32,613; Port Macarthur, £1776. Total—£34,389.

EXPORTS Gold, £11,772; Copper Ore, £6013; Tin Ore, £90; Trepang, £5146; M. O. Pearl Shell, £10; Sundries, £1338. Total—£19,466.

Staple Produce, £18,724; British and Foreign, £742. Total—£19,466.

Return of Trade for the Year ending December 31st, 1885.

Date	No. of Vessels arrived.	Tonnage.	Passengers Inwards.	Total Value of Imports.	Vessels Leaving.	Tonnage.	Passengers Outwards.	Gold Exported.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Total Value of Exports.	Total Revenue.
From Aug 17 to Dec 31, 1884	21	19,975	428	£32,613	17	18,861	371	11,772	£11,772	109	£6,013	27	£90	18	£5,146	£19,466	£6,694 19s 9d
Year ended Dec. 31, 1881.	45	36,423	949	113,025	44	36,407	942	112,945	89,728	77,138	77,138	41	15,500	27	12,200	4,180	112,662
Year ended Dec. 31, 1882.	65	71,483	1,792	136,306	64	72,415	1,622	180,303	77,138	77,138	41	15,500	27	12,200	4,180	112,662	18,639 14 6
Year ended Dec. 31, 1883.	65	71,483	1,792	136,306	64	72,415	1,622	180,303	77,138	77,138	41	15,500	27	12,200	4,180	112,662	18,639 14 6
Year ended Dec. 31, 1884.	71	79,000	848	146,771	71	78,314	811	190,075	70,414	70,414	109	15,500	27	12,200	4,180	112,662	18,639 14 6
Year ended Dec. 31, 1885.	71	79,000	848	146,771	71	78,314	811	190,075	70,414	70,414	109	15,500	27	12,200	4,180	112,662	18,639 14 6

Newspaper article listing NT exports from Sub-Collector of Customs, A Searcy, Sat 9 Jan 1886 Northern Territory Times and Gazette Darwin, NT: 1873 - 1927, Sat 9 Jan 1886, Page 3. Image supplied by National Library Australia

In addition to the item Exports, £92,321, for 1885, in the above table, must be added Trepang and Tortoise-shell, shipped from Port Essington, valued at £5146, making the exports for the year £97,467.

Trepang

These odd-looking sea creatures were Australia's first international trade item!

Fishermen from Makassar in South Sulawesi and other parts of Indonesia visited the north coast of Australia regularly from around the mid-1700s. Fleets of praus (single-hulled sailing vessels) made their way to Timor and from there, made the 3-4 day sail to Marege – their name for the Top End coast. Here, they stayed for weeks or months at a time to harvest and process tonnes of sea cucumber or trepang. This marine animal is highly prized in Chinese cuisine and for traditional medicine and is common on the seagrass meadows off the NT coast. After being boiled, dried and smoked, the trepang were traded to merchants from southern China.

The Makassans traded cloth, tobacco, tools, rice, and alcohol, with coastal Aboriginal groups in return for the right to harvest trepang. They returned to the same camps year after year, establishing strong cultural links in the region. There is evidence of Aboriginal people also making the return journey to the Indonesian archipelago and even settling and intermarrying there. Gradually, Makassarese words began to enter the local languages and are still present in several Top End Aboriginal languages.

Technology and culture were also exchanged, with the method of creating seaworthy dugout canoes a notable example; these sturdier vessels gradually replaced traditional Aboriginal bark canoes after being introduced by Makassan visitors (or washing ashore). Oral history, songs, dances, and rock and bark paintings record and commemorate cultural

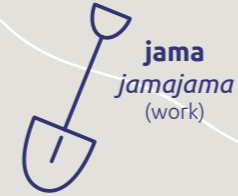
ties between coastal Aboriginal groups and the Makassans which persist to the present day.

Makassan trepang fishing continued until 1907 when the last trepanger left Arnhem Land. Overfishing, and the imposition of new Australian licensing, duties, and customs fees made the trade gradually less viable, and finally, illegal.

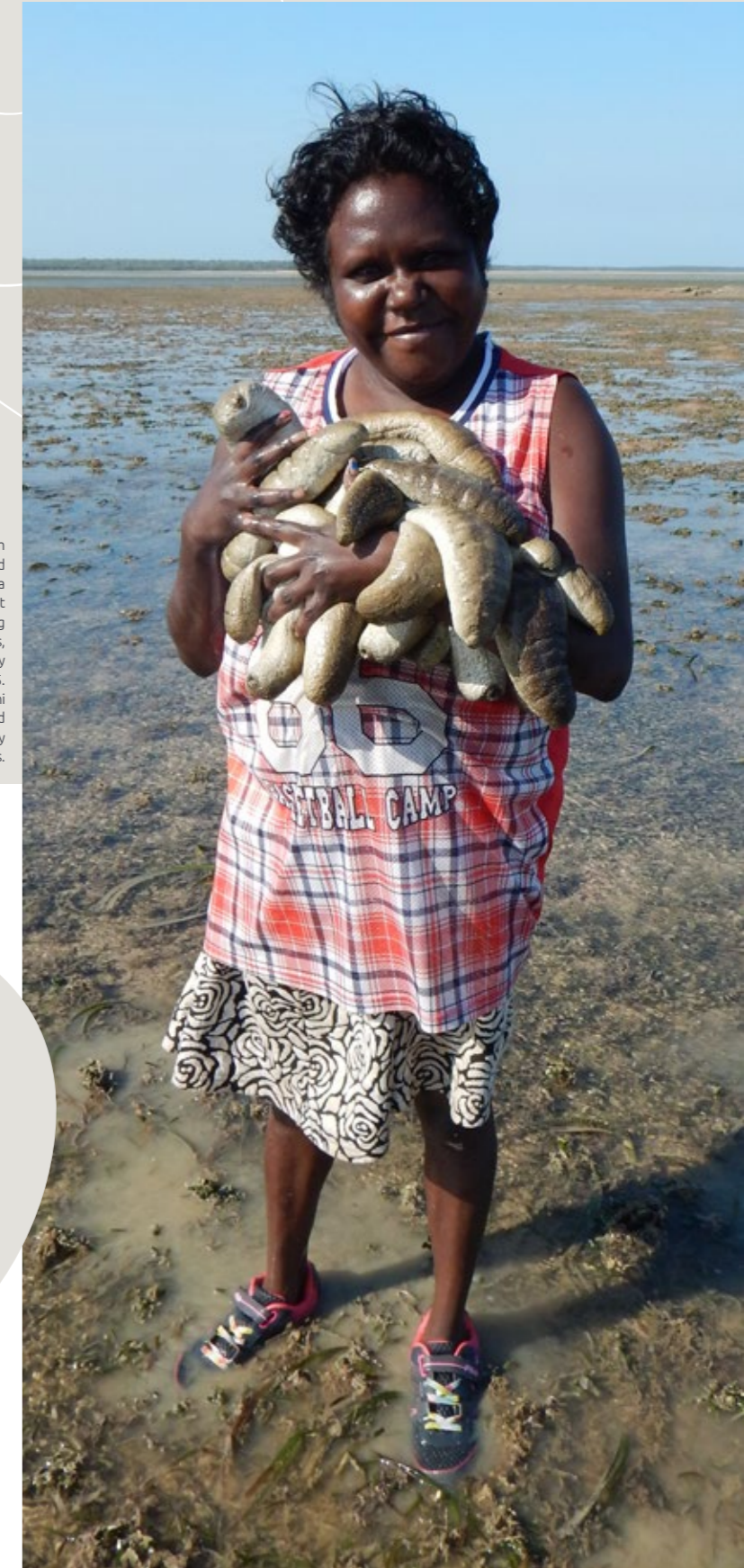
Wild trepang harvest has continued in a limited form for the Chinese market, but trepang is now being investigated for its potential to be 'ranched'. A joint venture is being established with Indigenous rangers from the Goulburn Island region: young trepang are hatched in an aquaculture facility and released into the wild to grow out. Local people then harvest the adult trepang by hand, creating valuable jobs and a sustainable, culturally-appropriate local industry. NT trepang are known for their quality and size.

AROUND **350** SHARED WORDS ARE DOCUMENTED

Makassarese/Malay/Indonesian
East Arnhem Languages
(English)



Gail Ngalgungirr from South Goulburn Island collecting trepang for a trial community harvest with their trepang ranching partners, Tasmanian Seafoods Pty Ltd, 2015. Image supplied by Yagbani Aboriginal Corporation and Department of Primary Industry and Resources.



Trepang Fishers at Raffles Bay, 1842. This illustration of a trepanger's camp was drawn by the marine artist on board the vessel of French explorer Dumont D'Urville who visited the region in 1842. PH1077/0002, Early Northern Territory Prints Collection, Northern Territory Library.

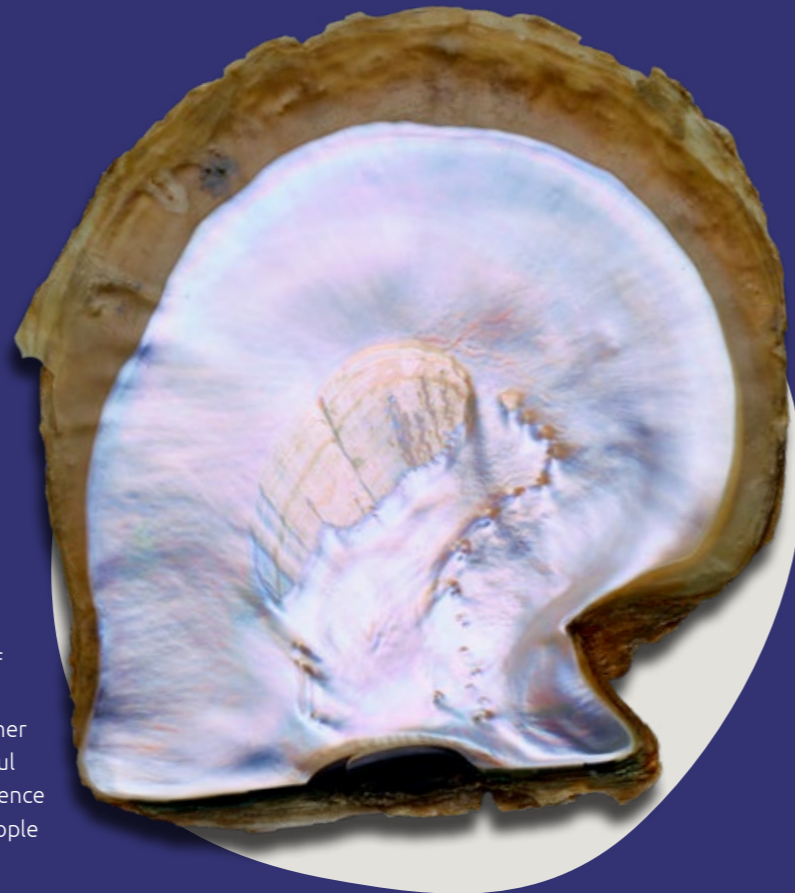


Pearling

The coastal pearling industry on Australia's north coast began in the late 1880s.

Aboriginal people have long recognised the beauty of pearl shell and it was one of the commodities traded between Indigenous language groups. The shells, rather than the pearls, were the objects of value, being useful for a range of practical and decorative purposes. Evidence exists of pearl shells being collected by Aboriginal people 22 000 years ago.

The coastal pearling industry on Australia's north coast began in the late 1880s. Early pearlers simply collected the abundant shells off the rocks at low tide. As the fishery grew, crews of divers were needed to reach the remaining stocks, with fleets of wooden vessels known as 'luggers' plying the northern waters. At first the industry centred around Broome on the north coast of Western Australia, but Darwin was an important port for the fleets and other pearl beds were discovered off the NT coast and in the Torres Strait. Skilled indentured labourers from all around Asia were brought to the north coast of Australia, often via Hong Kong or Timor, to work in the pearling industry. Divers from the Philippines, known as 'Manilamen' were among the first. Strict limitations were imposed on their living and working conditions; the pearling industry had a special dispensation from racist labour laws enacted by Australia in 1901. This was highly controversial but demonstrates the value of this industry at the time.



Following the Second World War, the pearling industry re-emerged and in 1956/7 the annual value of the Territory's pearl shell was estimated at \$250 000. A sudden flood of synthetic alternatives hit the marketplace in the 1960s and demand for pearl shell dropped away. Cultured pearl farming took its place, however, and new technology was brought in to maximise production. Nicholas Paspaley Sr established a joint-venture pearling project with the Kuribayashi family of Japan, a partnership that continues to this day, and unique pearl-growing techniques and facilities have been established on the north coast. Today, Paspaley is a globally-recognised brand and the family's diverse activities and businesses are some of the most successful in the Territory.



Japanese pearlers with pearl shell, Darwin, 1910. PH0190/0023, Gilruth Collection, Northern Territory Library.



Hard Hat Diver, 1930. Photo supplied by Paspaley.



Paspaley pearl processors on board a lugger, 1920. Photo supplied by Paspaley.



Paspaley diver, 1990s. Photo supplied by Paspaley.

Agriculture/ Horticulture

Early European explorers of the Northern Territory persistently overestimated the large-scale agricultural capacity of the land and abundant seasonal rainfall. Many agricultural speculators invested money into the Territory but high cost and general shortage of labour, unfamiliar pests and diseases, poorly developed farming techniques, and largely ill-selected crops saw many failures during the early years from 1880-1910. The government of the time established several experimental farms and many different crops were trialled with varying results.

During the Second World War, Captain LA Campbell of the NT Force

First Australian Farms Company of the Australian Army Service Corps established 140 hectares of farmland south of Darwin. These military agricultural ventures produced 1.5 million kilograms of fruit and vegetables in 1944, and have been cited an example of the agricultural potential of the tropical north. Farming methods and supplies were limited during wartime so the available manpower of the Army was fully exploited, with a workforce close to two men per hectare. Many Aboriginal people who had been gathered together in the Army Control Camps were employed on these agricultural schemes.

An unique chapter in the history of agriculture in the Territory were the Humpty Doo rice farming trials, begun in 1952. The trials received funding from a syndicate of private national and international backers, including some Hollywood movie industry tycoons! Despite the hype, the enormous trial crop of 5500 acres was challenged by numerous problems, including migratory birds, water supply issues, extreme weather conditions, and poorly developed farming techniques and management. Different varieties of rice are now being grown across the tropical regions of the NT with the trials providing contemporary

NT Force First Australian Farms Company Adelaide River 1941. PH0411/0004, Larrakeyah Collection, Northern Territory Library.



farmers with some guidance. Cotton and other irrigated crops are also showing good potential.

The Arid Zone Research Centre was established outside Alice Springs to pioneer different crops and farming techniques for the unique climates of the Northern Territory. Lucerne was the first crop to be grown and by 1955 it was yielding an incredible two tons an acre and eight cuts a year, viewed by some to be the best quality in the country. Dates are being grown commercially in Central Australia with exciting export potential for off-season markets being developed in the Middle East.



Territory Rice silos, 1960. PH0088/0108, Norman C. Pearce Collection, Northern Territory Library.



Territory sorghum crops being harvested 2018. Image supplied by Northern Territory Farmers Association.

Top End conditions are perfect for growing mangoes - the NT's production accounts for about 51% of Australia's total crop.

Top End conditions are perfect for growing mangoes - the NT's production accounts for about 51% of Australia's total crop. An average crop over the last five years has been estimated at 60 000 tonnes, with the value of production approximately \$180 million per annum. Domestic demand is high but growers are investigating export opportunities. A recent expansion of the freight facilities at Darwin Airport is expected to significantly increase exports for NT mango farmers, and new direct flights to China will open up this important potential market where mangos are popular and once held symbolic cultural relevance.

Other fruit and grains do well in the sunny Top End climate, including a range of melons. In November 2018, a Chinese investment company bought two of the Northern Territory's biggest watermelon farms for \$27.5 million; one of the most significant horticultural deals in the NT's history. As scientific understanding of tropical commercial agriculture and horticulture grow, new opportunities continue to be explored across the Territory.



Mango orchards in rural Darwin 2018. Image supplied by Department of Primary Industries and Resources.

Cattle

In many ways, the development of the Northern Territory is the development of the pastoral industry.

It is a significant contributor to the economy and a fundamental industry in remote and regional areas. The cattle industry has also been important to Aboriginal Territorians and their contribution to the development of the industry cannot be underestimated.

Early NT pastoral efforts, such as at Springvale Station on the Katherine River, concentrated on sheep, rather than cattle. The climate and pastures did not suit sheep, and soon cattle began to be brought overland from Queensland to stock the vast new pastoral holdings and to feed the gold miners rushing to Pine Creek in the 1880s. Economic cycles of boom and bust characterised this period, and the pastoral leases, which came to be known as cattle stations, were slow to establish and changed hands many times.

A railway wharf built on Darwin harbour in 1884 allowed small numbers of live cattle to begin to be exported into Asia via ship to Hong Kong, Singapore and Java. The trade was slow to establish due to variable quality and quantity of supply, perhaps based on poor early understanding of tropical stock management and parasite control. To assist with developing this trade, an upgraded wharf was

completed in 1903. In 1911, there were 456 pastoral leases and permits granted throughout the Northern Territory and an estimated 459,780 head of cattle. The plan was for the pastoral industry to occupy and develop rural lands so that later the Commonwealth could resume control of some areas for settlement. Large cattle companies from around the world began to take notice of the Territory's potential, and two British companies in particular - Bovril's and Vestey's.

In June 1914, the Commonwealth contracted Vestey's to construct and operate a meatworks in Darwin. Technological advances of the day including a freezing plant were to be an integral part of the abattoir development but high labour costs, a major fire, ongoing trade union activity, and scarcity of materials caused the project's projected costs to skyrocket. Completed in 1917, the meatworks were operational for only three years. A range of factors, including variable supply chains, a global economic downturn and the First World War, all contributed to its closure. Surviving as a relic of the meatworks is its giant concrete water tank, now repurposed as a gymnasium for Darwin High School.

The 1920s were characterised by the Great Depression, which limited the further development of all industries in the NT despite much political will to do so. Due to the tough economic conditions, some pastoralists reneged on the conditions of their leases during this period – these generally required leaseholders to run minimum stocking rates,

for example. Throughout the 1930s, lease resumptions and conditions remained problematic, with a number of committees, enquiries and recommendations all grappling with the question of how best to develop the industry.

By 1937, around 3000 Aboriginal people were employed on Northern Territory cattle stations. Gradually, as Aboriginal rights were brought into line with those of other Australians, regulations were put in place regarding equal pay and conditions for Aboriginal workers on cattle stations.

The 1940s saw two significant developments for the pastoral industry: the completion of the Stuart Highway, linking the continent from south to north and the invention of the road train, by prominent Central Australian Kurt Johannsen. Road trains – prime movers towing two or more self-tracking trailers – helped cattle producers transport their stock to feedlots and markets and revolutionised the industry.

These days, around 220 pastoral leases cover approximately 602 000 square kilometres of prime grazing land in the Territory. Today, most cattle produced in the NT are exported live to Asia—to Indonesia as the primary market, as well as to Vietnam and Malaysia. Cambodia, Thailand, the Philippines and China are all developing markets with growth potential. Recent changes to legislation have begun allowing leaseholders to diversify their operations and this is creating many exciting opportunities for the pastoral industry.

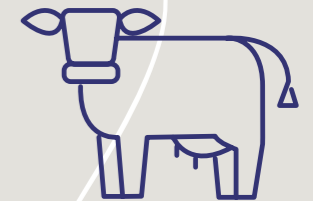


AROUND **220** PASTORAL LEASES COVER APPROXIMATELY **602 000 Km²** OF PRIME GRAZING LAND IN THE TERRITORY



488 000 HEAD OF CATTLE WERE EXPORTED FROM THE PORT OF DARWIN IN 2015

THE TERRITORY CURRENTLY HAS A TOTAL CATTLE HERD OF AROUND **2 MILLION**



SALES OF AROUND **500 000** CATTLE PER ANNUM

Cattle in the Territory's Barkly region. Photo supplied by Luke Bowen.



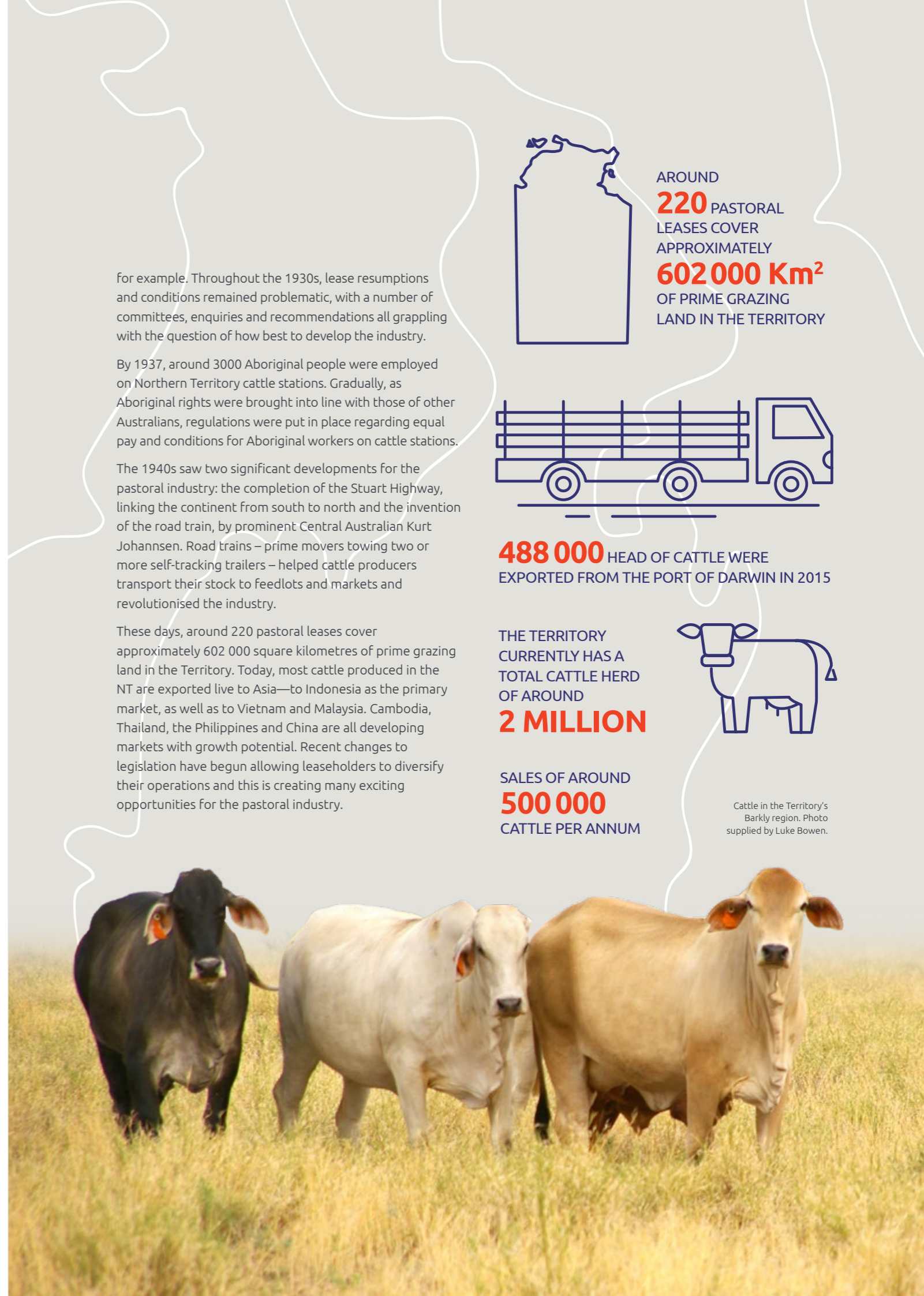
Cattle at the stockyards, Tempe Downs, 1918. PH0390/0013, Praisel Collection, Northern Territory Library.



Vestey's meatworks, Darwin, NT 1933. PH0708/0136, Charles Micet Collection, Northern Territory Library.



Early road train, Central Australia, 1950s. Photo supplied by Road Transport Hall of Fame.





Buffalo and cart, Darwin, 1921. PH0650/0142, S. S. Godfrey Collection, Northern Territory Library.



Buffalo hides hanging to dry at Mount Bundy Station, 1930. PH0352/0079, F. R. Morris Collection, Northern Territory Library.

Buffalo

In the early colonial period, water buffalo were brought to northern Australia from South East Asia as beasts of burden.

Escaped and abandoned animals soon bred into a large feral population whose economic potential has been recognised since the 1880s. Adventurous hunters braved harsh conditions to harvest the wild population's hides, assisted by hired or co-opted Aboriginal workers. The thick buffalo skins were in demand for industrial uses, such as making flat belting for steam engine drives. This early industry gradually diminished as cheaper synthetic alternatives became available.

NT buffalo were exported live in small quantities throughout the 1950s and 60s. Their wild state and enormous horns made this a fairly dangerous endeavour! Although export and quarantine restrictions affected the industry, markets expanded during the 1970s and soon included Papua New Guinea, Venezuela, Guyana, Cuba and Brunei.

Buffalo's suitability for the climate has led to continuing interest in its development as a dairy and meat

animal, with particular interest coming from Vietnam which is an export market for domesticated Territory buffalo. Investors are also alert to opportunities for the exploitation of the feral herd, estimated to be over 100 000 head. Trophy hunting is permitted with appropriate licensing and this is being investigated as a viable and sustainable source of revenue for remote Indigenous communities.

Gold

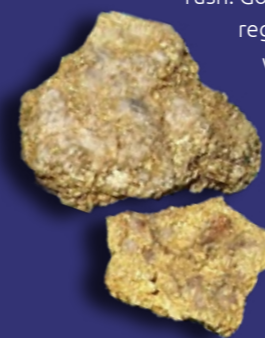
A number of gold mines operate across the Territory and gold continues to be one of the leading commodities for both exploration and mining in the NT.

Although in the history books the gold rushes of southern and western Australia are fairly well known, the NT also had its own gold rush which, given the remoteness and vast distances concerned, must have attracted only the most adventurous and enterprising characters.

Many Chinese people sought their fortunes on the Territory gold fields, and, until 1911, Chinese people outnumbered non-Chinese residents of Darwin. Chinese merchants, traders and farmers soon followed and were particularly valuable to the developing town of Darwin. A Chinese temple was established in Darwin in 1887 to serve approximately 4000 Chinese labourers, miners, gardeners and business owners.

Early gold mining focused on the Pine Creek region, 226km south of Darwin. A rail link from Port Darwin to Pine Creek was completed in 1889 and the town experienced an unprecedented boom. By 1899, up to 15 mines were operating in the area; a public school had opened; and the town's population peaked at around 3000. Gold mining in the Pine Creek region continued until the 1980s when production slowed.

Gold was also discovered in the Tennant Creek region in the 1930s. The township had been established in 1874 when the Overland Telegraph went through. Approximately 1000km south of Darwin, Tennant Creek is known as the location of Australia's last great gold rush. Gold mining grew steadily in the region until its peak in the 1970s, when there were around 20 000 residents and over 100 mines in the area. Most of Tennant Creek's gold mines had closed by 1985.



Gold miner at Pine Creek panning for gold, 1900. PH0677/0078, Northern Territory Legislative Assembly Collection, Northern Territory Library.



Gold Mine, Pine Creek, 1985. PH0730/1243, Northern Territory Government Photographer Slide Collection, Northern Territory Library.

A number of gold mines still operate across the Territory (the largest being the Callie mine in the Tanami region) and gold continues to be one of the leading commodities for both exploration and mining in the NT, with new deposits regularly being found across the Territory. There are over 800 documented gold occurrences in the NT.

Seafood

The world-famous barramundi is widespread across northern Australia and is common in the tidal waters off the Top End.

Fish are bountiful in the rich tropical waters of the Top End's seas and rivers. The world-famous barramundi is widespread across northern Australia and is common in the tidal waters off the Top End. Early in the history of Darwin, the fishing industry consisted of mainly Chinese immigrants who established a healthy local trade and were able, with their knowledge of drying and non-refrigerated storage techniques, to export a small quantity north to Asia.

The development of the commercial fishing industry in the Northern Territory was at first constrained by the distance to markets and lack of access to chilling or freezing

equipment. In the early 1950s, the Haritos family started a barramundi fishing and crocodile shooting business. In its first season, around 25 tonnes of barramundi was air-freighted to Sydney, Melbourne, Adelaide and Brisbane, but the market collapsed shortly afterwards. Commercial fishing for barramundi continued but did not reach significant proportions until the 1970s, when there was a rapid expansion. Gradually, concerns about overexploitation led to major river systems being closed to commercial fishery and a range of licensing, harvest limits, and seasonal controls being imposed on commercial fishing ventures.

Aquaculture enterprises are well-suited to the Top End's pristine environment, climate, and abundant natural resources. Humpty Doo Barramundi is one of the largest producers of salt water barramundi in Australia and a planned expansion will make it one of the largest in the world. A multi-billion dollar prawn farm is planned with sites across the NT and northern WA. Project Sea Dragon will deliver the world's largest integrated aquaculture development and at full scale will have the capacity to produce over 150 000 tonnes of black tiger prawns a year.



Fish and seafood were important food sources for Aboriginal people in pre-colonial times.



Humpty Doo Barramundi Farm from the air, 2018. Photo supplied by Humpty Doo Barramundi.



Black tiger prawn. Photo supplied by Northern Territory Department of Primary Industries and Resources.

Defence Industries

Darwin's strategic importance has been well understood since before the town existed and is the reason that early settlement attempts were based on colonial military outposts.

Its position makes it significant for both national defence and as a forward base for regional engagement.

From February 1942, the Second World War saw the extensive bombing of northern Australia by the Japanese, causing widespread damage. A significant military presence has existed in the Northern Territory ever since, with a US joint facility and several cooperative military partnerships in the region.

In 1961 a Japanese business owned by the Fujita family won the global contract to salvage tonnes of scrap metal from Darwin Harbour. The scrap was predominantly from the ships wrecked in the bombing of Darwin. The project took two years and made great progress in improving Japanese/NT relations as the local people came to appreciate the skill and work ethic of the salvage team.

Darwin's strong defence presence has allowed a network of defence support industries to develop including businesses which specialise in logistics, electronics, marine supply, and engineering. Many opportunities exist to expand these industries and several major projects are under consideration or underway. These include the development of a marine industry park, incorporating a proposed ship lift facility, allowing the lifting of vessels out of the water for dry docking and maintenance.



Japanese salvage worker and scrap metal, Darwin Harbour, 1950. PH0874/0154, Senichiro Fujita Collection, Northern Territory Library.



Contractors at work on Australian Navy assets in Darwin Harbour, 2018. Image supplied by Defence NT, Department of Trade, Business and Innovation.

Gas

Natural gas, used to generate electricity and in a range of industrial applications, was discovered in Central Australia during the 1950s and 60s.



An area known as the Amadeus Basin, which takes up much of the southern third of the NT, contains significant quantities of oil and gas. A gas fired power station was constructed near Alice Springs to provide electricity to the town in 1973. In the 1980s as Darwin's electricity demands increased, an earlier decision to build a coal-fired power station was deferred while a bold infrastructure proposal was investigated: to build the longest gas pipeline in Australia, bringing Central Australian gas to Darwin.

Construction of the 1673km Amadeus Basin to Darwin Pipeline began in 1984, built in five sections and by four construction companies, overcoming challenging conditions and tight deadlines. It was completed less than three years after the initial feasibility study was accepted and remains an essential part of the network of gas infrastructure in the Territory. Connecting pipelines have added other gas fields to the onshore supply network. In turn, Darwin has been established as northern Australia's oil and gas operations and maintenance

hub with extensive infrastructure, networks and expertise to service Australian and growing international energy demands.

Additionally, globally-significant offshore oil and gas resources of more than 30 trillion cubic feet exist off the coast of northern Australia. In 2012, the Japanese company INPEX announced its ambitious Ichthys project - to extract gas from an underwater basin north of Western Australia and process it at a purpose-built facility in Darwin before exporting to Japan and Korea. The LNG processing plant, the longest subsea gas export pipeline in the southern hemisphere, and three state-of-the-art offshore facilities represented at \$55 billion dollar investment by INPEX.

Recent legislative changes have initiated new interest in onshore gas with reserves of unprecedented size (estimated to be 500 trillion cubic feet) in the Beetaloo Basin, 500km south east of Darwin.

Construction of the Amadeus Basin to Darwin Pipeline, 1984. PH0730/1488, Northern Territory Government Photographer Slide Collection, Northern Territory Library.



LNG tanker the Pacific Breeze. Photo supplied by INPEX.

Crocodiles

Living alongside crocodiles has always been part of life for Territorians. Many NT Indigenous groups consider them sacred and treat them with wary respect. Early European approaches to crocodiles reflected attitudes of the time: that they were a resource to be exploited, as well as a frightening pest. Hunting was common and high prices attracted the adventurous. After the Second World War there were high prices and a high global demand for skins. That, and the widespread availability of .303 rifles and men experienced in using them, saw saltwater crocodiles hunted almost to extinction in the 1950s and 60s. The saltwater crocodile was protected in 1971, and strictly-controlled crocodile farming commenced in 1979, along with a 'problem crocodile' program where large animals are captured alive and used as breeding stock.

In 1985, collection of wild crocodile eggs for farming began and in 1987 a change in legislation allowed the export of the first skins. Global

regulatory requirements for exporting crocodile products are stringent, due to crocodiles being classified as a 'threatened species' despite their extremely healthy numbers across the wild and farmed populations of the NT. Farming continued to expand and export markets for crocodile skins grew with crocodile leather products in demand by the fashion industry. In the 1990s, wild harvesting regulations were expanded to include hatchlings, juveniles and adults.

In 2014-15, the 'production' crocodile industry was valued at \$25m, however, an Ernst and Young report estimated that the broader crocodile related industry was valued at \$106.7m, including tourism and retail outlets, egg collection in remote communities, and veterinary services. Skins produced in the NT are highly sought-after in fashion houses in Japan, France, and Italy, and the high-end fashion products made from them are imported into the USA. Skin exports are continuing to rise and global demand remains high.



Three men holding a crocodile skin, 1919. PH0155/0144, Percy Brown Collection, Northern Territory Library.



Large mounted hind foot of a saltwater crocodile

Living alongside crocodiles has always been part of life for Territorians.



The famous 'Birkin' bag by Hermès – some of the most expensive versions of this iconic handbag are made from Northern Territory saltwater crocodile skins, and retail for AUS\$100,000.



Men loading a crocodile aboard M.V. Maroubra, Daly River, NT, 1930. PH0382/0069, J. T. & A. Turner Collection, Northern Territory Library.

Minerals

The NT has some of Australia's largest deposits of minerals, including uranium, zinc-lead, bauxite, phosphate and manganese.

In the early days of colonial settlement and during the northern gold rushes, other minerals were discovered in the Northern Territory. Significant early finds included copper, discovered at Pine Creek and Daly River, and mica found at Harts Range. Tin was located at Mount Wells near Pine Creek in 1882, and wolfram at Hatches Creek in 1892.

Early mining efforts in the Territory were limited by a range of factors: the distance from settlements, remoteness, the extreme seasonal weather, high prices for goods and services, and fluctuating metal prices due to world events. The early mining industry was also rife with speculators, who took up mineral licences without the capital or experience required to develop the sites. The government encouraged the industry and constructed supportive infrastructure such as batteries and plants for mineral extraction and processing, but with most mines being worked by individuals rather than companies, operating expenses spiralled and the early industry floundered.

Uranium mining in the Northern Territory began at Rum Jungle in 1949 where it continued until 1971. Other major uranium finds were made at Narbarlek, and in the Alligator

Rivers region, east of Darwin. A Commonwealth enquiry investigated the environmental aspects of development of these deposits. Mining was allowed, with strict environmental conditions imposed, and Aboriginal title was granted over a substantial part of the region, as well as legislation creating Kakadu National Park.

Today, it is copper, rare earths, lithium, tungsten, zircon sands and potash that are being developed as potential export industries with emerging technologies creating high demand for these commodities.

At the start of 2019, there are 16 mining projects working through the environmental assessment and development approvals processes, and about 20 others are in various stages of feasibility studies. Eight of the 16 proposed projects have a mine life of 10 years or more, and five have a mine life of 20 years or more. These projects are estimated to have a capital expenditure of approx. AU\$7 billion and will require approximately 5000 workers during the construction phase and 3200 workers during the operational (production) phase.



Mount Wells Tin Mine, 1882. PH0111/0070, Foelsche Collection, Northern Territory Library.



Drilling for uranium sampling, 2017. Photo supplied by Northern Territory Department of Primary Industries and Resources.



Mineral sands are loaded into a separator. Photo supplied by Northern Territory Department of Primary Industries and Resources.

Emerging Industries, 2019 and beyond

The Territory is particularly suitable for space launches and this growing industry is beginning to establish in the Top End.

Most significantly, the region's proximity to the equator makes it easier for rockets launched here to achieve 'escape velocity' and minimise propellant use or maximise payload. These efficiencies make the Territory a cost-effective location. Other features of the Territory that make it ideal for the space industry are its low incidence of earthquakes, its sparse population, and predictable

weather patterns. Recently, a private company, working in partnership with Aboriginal Traditional Owners, has been working to establish the Arnhem Space Centre, the first facility of its kind in Australia. The Northern Territory Government recently signed a Memorandum of Understanding with the South Australian and Australian Capital Territory governments and is now working with the Australian Space Agency.

Renewable energy has enormous potential in the Territory, with extensive solar energy infrastructure already in place due to the suitability of the climate and geography. At one time, Central Australia boasted the southern hemisphere's largest solar power station. In the NT's coastal

regions, tidal energy is also being explored, with a proposed project in development to assess how best to harness this predictable and stable form of hydropower.

International education is an emerging growth industry which the Northern Territory is keen to support and develop. Over 2500 international students from 70 different countries currently study in the Territory, mostly in Darwin. The top five countries of origin for students are: Nepal, India, the Philippines, China, and Bangladesh. Higher Education enrolments make up 61% of all enrolments in the Territory followed by vocational education and training (VET), schools, and English language courses.



Darwin City at sunset.

Darwin is as close to Singapore and Manila as it is to Sydney and Melbourne. Eight national capitals, 36 trading ports, 69 international airports and nearly half a billion people are within four hours' flight of Darwin. The Northern Territory has one international airport, Darwin International Airport that operates 24/7.

The deep water Port of Darwin provides modern freight handling facilities, a dedicated bulk liquids berth and links with an intermodal road-rail network. Reduced shipping times between Darwin and Asia gives Darwin a trade advantage, particularly in relation to the export of bulk commodities.

Development of the Northern Territory's trade and industry has been beset by difficulties. Bureaucratic red tape, conservative policies, global events and sheer bad luck have, at times, limited the economic progress of a region which all agree has great potential and boundless opportunities.

The History of Trade Exhibition and guide curated for the Arafura Games Business Engagement Program, Department of Trade, Business and Innovation, April 2019.

Many thanks to Jared Archibald, Curator of Territory History at the Museum and Art Gallery of the Northern Territory, and Samantha Wells, NT Heritage Coordinator at the Northern Territory Library.

Grateful thanks to the National Critical Care and Trauma Centre for their generous sponsorship.

References

Books and Journals

- Ahmad M, Wygralak AS and Ferenczi PA, 2009. Gold deposits of the Northern Territory (Second Edition) Northern Territory Geological Survey, Report 11 (Second Edition update by Wygralak AS and Scrimgeour IR). Accessed online at <https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/81547> on 16/11/2018
- Forrest, Peter & Forrest, Sheila, 1953- 1999, Northern Territory: 100 years, Northern Territory News, Darwin
- Kelly, JH, Beef in Northern Australia, ANU 1971, accessed online at <https://openresearch-repository.anu.edu.au/bitstream/1885/115053/2/b13680018.pdf> on 16/11/2018
- Kerwin, Dale 2010, Aboriginal dreaming paths and trading routes: the colonisation of the Australian economic landscape, Sussex Academic Press, Brighton, UK
- Knight, J. G. 1880, The Northern Territory of South Australia, E. Spiller, Government Printer, Adelaide accessed online at <http://nla.gov.au/nla.obj-113283268> on 16/11/2018
- Powell, Alan, 1982, Far country: a short history of the Northern Territory, 2nd ed, Melbourne University Press, Carlton, Vic
- Redmond, Anthony, 2012. Indigenous Participation in Australian Economies II Chapter 3. Tracking Wurnan: Transformations in the trade and exchange of resources in the northern Kimberley, Australian National University E-Press, accessed online at <http://press-files.anu.edu.au/downloads/press/p182561/html/imprint.html?referer=254&page=2#> on 16/11/2018
- Walker, Alan and Zorc, R. David, 1981, Austronesian Loanwords In Yolngu-Matha Of Northeast Arnhem Land, Northern Territory Department of Education and School Of Australian Linguistics, Darwin Community College, accessed online at <http://press-files.anu.edu.au/downloads/press/p71311/pdf/article071.pdf> on 16/11/2018
- Other publications
- Northern Territory Office of the Administrator 1999, Northern Territory Chronicle 1974 - 1998, Office of the Administrator, Darwin.
- A History of Trade 1908-07-09. The Bulletin, vol. 29, no. 1482, pp. 2.
- Northern Territory Times and Gazette, Darwin NT : 1873 – 1927, Sat 9 Jan 1886, Page 3

Online Sources

- Queensland Museum Network: <https://blog.qm.qld.gov.au/2012/05/16/indigenous-science-australia-had-ancient-trade-routes-too-2/>
- Homepage of the NT Buffalo Industry Council Inc.: <http://buffaloaustralia.org/web/nt.html> on 2/11/2018 (accessed online 26/11/2018)
- Northern Territory Barramundi Fishery Environmental Management System presentation, accessed online at http://www.oceanwatch.org.au/Backup/wp-content/uploads/2011/01/BarraEMS_Dec2010.pdf (accessed online 22/11/2018)
- Northern Territory Government Crocodile Strategic Plan 2015-2021: https://business.nt.gov.au/_data/assets/pdf_file/0008/239039/crocodile-strategic-plan.pdf (accessed online 28/12/2018)
- ABC News website: <https://www.abc.net.au/news/2016-08-29/how-buffalo-became-iconic-top-end-animals/7793966> (accessed online 28/12/2018)
- Presentation, Mining Developments in the Northern Territory, at Gabfest 2019 (4-5 Feb 2019) https://core.nt.gov.au/_data/assets/pdf_file/0005/378518/PotentialMiningDevelopments.pdf
- The Australian Water Buffalo Handbook, Barry Lemcke 2017, Department of Primary Industries and Resources, <https://www.agrifutures.com.au/wp-content/uploads/publications/17-003.pdf>, accessed online 28/12/2018)

ISBN 978-0-646-80134-6

Proudly
sponsored by

