

THE PILBARA AND GASCOYNE



THE PILBARA CONTAINS many contrasting landscapes, from coastal plains and low dissected tablelands to the domed, spinifex-clad peaks and ridges of the Hamersley and Ophthalmia ranges. Several large rivers drain the higher country and pass through gorges before their valleys open onto the coastal plains. Being generally seasonal rather than perennial, their courses are lined with numerous deep pools flanked by white-trunked river red gums alternating with normally dry sections.

The region has some of the oldest rocks in Australia, up to 3500 million years old, and it is in some of these that fossil evidence of primitive, single-celled life forms has been found recently. In terms of its geological history, it is widely known for having the best succession of Precambrian iron formations in the world and it is in these that giant high-grade iron ore deposits such as Mount Whaleback, Mount Newman and Mount Tom Price are located.

Evidence of early human habitation of the area can be found at Gallery Hill on Abydos-Woodstock station: the Aboriginal rock engravings there are among the earliest artforms known in Australia. Later, though still important, Aboriginal sites are also to be seen at Nelson Point, **Port Hedland**; Skew Valley near **Dampier**; and Depuch Island. The first recorded European contact was in 1616 when the Dutch explorer, Dirk Hartog, left an inscribed plate on what was later known as **Cape Inscription**, naming the region Eendrachts Land after his ship. Other Dutch vessels followed, but Willem de Vlamingh's unfavourable report in 1697 might have deterred thoughts of settlement. Britain showed little interest in the region until after the settlement of the Swan River district, although the first British vessel known to sight Australia was the *Tryal*, commanded by James Brooke and wrecked off the **Montebello Islands** in 1622. British adventurer William Dampier in the *Roebuck* explored and named **Shark Bay** in 1699. It was left to the French navigators Nicholas Baudin in 1803 and Louis de Freycinet in 1818 and the British naval officer Phillip Parker King in 1818 to add further detail to charts of the coastline.

Land exploration began in 1839, ten years after European settlement of the Swan River Colony, when George Grey inadvertently reached the Gascoyne River while on a forced trek southwards from **Shark Bay** after being marooned. Francis Gregory explored the river further in 1857, but his most important contribution to the region was in 1861 when, using Nickol Bay (see Karratha) as a base, his expedition reached and named the Hamersley Range and the Ashburton, Fortescue, De Grey and Oakover rivers. His favourable report inspired colonist Walter Padbury to investigate the **Cossack** district in 1862 and a small group of settlers subsequently established themselves at the mouth of the De Grey.

Steady development followed despite losses of provision ships in 1867 and a cyclone in 1872 which killed huge numbers of sheep and almost destroyed **Roebourne** and **Cossack**. Between 1872 and 1892 Cossack was the headquarters of the pearling industry and remained a busy port until silting forced its closure in 1900. In the south of the region, **Carnarvon** was settled in 1876 and **Onslow** in 1880 as service centres for pastoralists. The European impact on the Aborigines was great with enslavement under contracts of indenture, blackbirding for the pearling industry, and massacres such as that at Flying Foam Passage in 1872 when 60 men, women and children were killed by Europeans.

Inland towns evolved as a result of growth in the mining industry. A copper mine began operations at **Whim Creek** in 1872 and auriferous reefs were discovered in the West Pilbara in

1877. The Pilbara Goldfield was proclaimed in 1888: named after a creek in the district, it was to give the region its name. Further goldfields were declared within the decade: the Ashburton in 1889 and the Gascoyne in 1897. **Nullagine**, associated with gold and some diamonds, became an important centre; while **Marble Bar**, with not only gold but substantial tin deposits, acquired a lasting pre-eminence in the east of the region.

During the interwar period the Pilbara relied mainly on the established pastoral and mining industries, though the **Wittenoom** blue asbestos development and the banana plantations on the Gascoyne at **Carnarvon** both had their origins in the 1930s. Despite the introduction of more suitable pasture grasses in the 1920s, the pastoral industry fared badly because of depressed wool and beef prices. Many leaseholders abandoned their properties.

During World War II the Pilbara coast was vulnerable to Japanese air attack. Women and children were evacuated from **Port Hedland**, which then became an army town, and an RAAF base was established at Corunna Downs near **Marble Bar**. Port Hedland and the allied submarine base at **Onslow** suffered Japanese bombing raids in 1942. Onslow later became the service depot for the British atomic tests on the **Montebello Islands** in the 1950s.

Post war development saw a manganese export industry established at Woodie Woodie by 1953; commercial prawning began at **Exmouth** in 1959; the **Carnarvon** area opened for selection in the 1950s; and the salt industry began at **Dampier** and **Port Hedland** in 1969. Although the Royal Flying Doctor Service and air communications introduced in the 1930s had lessened the isolation of the Pilbara, the people were discontented. In 1946 Don McLeod led Aboriginal station workers in a movement for better wages that significantly heightened Aborigines' awareness of their inequality.

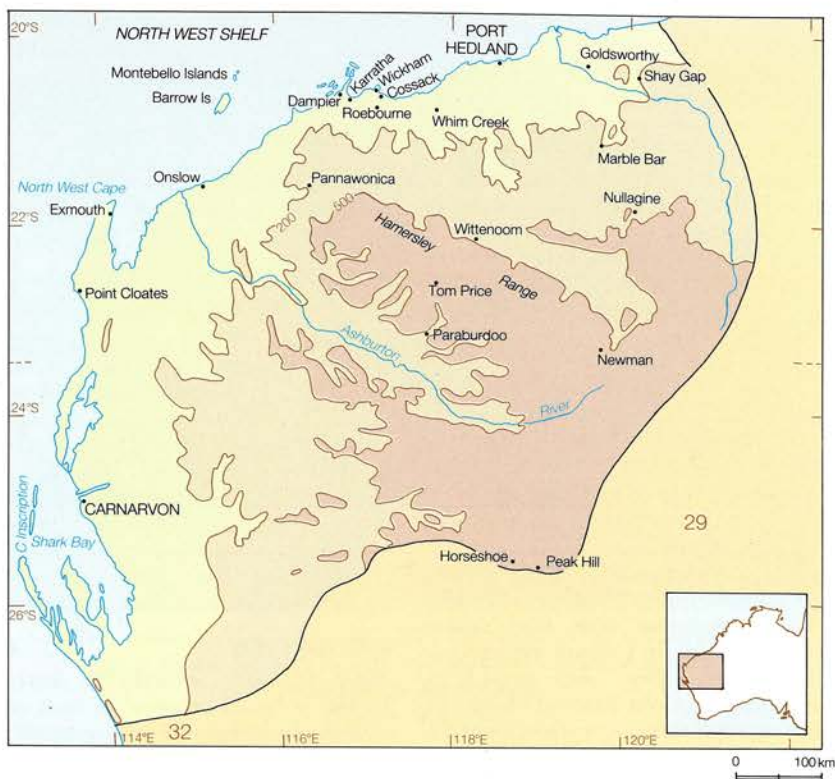
A change was on the way: iron ore discoveries in the 1960s transformed the Pilbara. Although the existence of huge iron ore deposits had been recognised in the previous century, it was not until the commonwealth government lifted its 1938 ban on iron ore exports in 1960 that mining companies were willing to take out exploration rights. Discoveries that followed in the mid-1960s led to modern company towns and mines at **Newman**, **Tom Price**, **Goldsworthy**, **Pannawonica**, **Paraburdoo** and **Shay Gap** in the 1960s and 1970s. The mining companies also built new railways and developed export facilities with accompanying residential areas: **Dampier**, Finucane (see Port Hedland), **Karratha**, **Wickham** and Cape Lambert. Old settlements at **Onslow** and Point Samson were revitalised and **Port Hedland** became Australia's highest tonnage port. The Pilbara's treasures were not confined to the mainland, however: oil was discovered on **Barrow Island** in 1964 and the huge natural gas reserves of the **North West Shelf** were first unlocked at North Rankin in 1971.

Despite its huge resources the Pilbara still has problems in attracting a permanent workforce, especially in the north and in the inland areas. Company-built homes in suburbs without cities provide no bulwark against the problems of isolation such as lack of employment for women and deprivation of the advantages enjoyed by southern city dwellers. The ports are vulnerable to labour problems as well as cyclones, and their prosperity is crucially dependent on overseas markets. The future is not entirely uncertain, however, for the Pilbara's natural beauty, its wonderful fishing and its superb winter climate now guarantee the region a seasonal tourist industry that can only increase in the future.

Isolde Martyn

SUGGESTED READING

- J. Hardie, *Nor'westers of the Pilbara breed*, Port Hedland 1981.
 A. Kerr, *Australia's north-west*, Nedlands 1967.
 J. Olsen et al, *The land beyond time*, Sydney 1984.
 A. Trengove, *Adventure in iron: Hamersley's first decade*, Mont Albert 1976.



BARROW ISLAND [20°47'S 115°25'E]

Named after John Barrow, secretary of the Admiralty. Recorded on a map of Dutch East India Co of 1628. Abel Tasman mapped coast in 1644. Explored by Phillip Parker King in 1818. Declared a reserve in 1908. Petroleum exploration on island began in 1963 and oil field discov with WA Petroleum's 95th exploration well. Field was larger than Aust's only then existing field at Moonie, Qld. Commercial production of both oil and gas began in 1967: supplied 9 per cent of Aust's needs in 1970-71. Additional development in the 1978-80 period when 75 wells drilled.

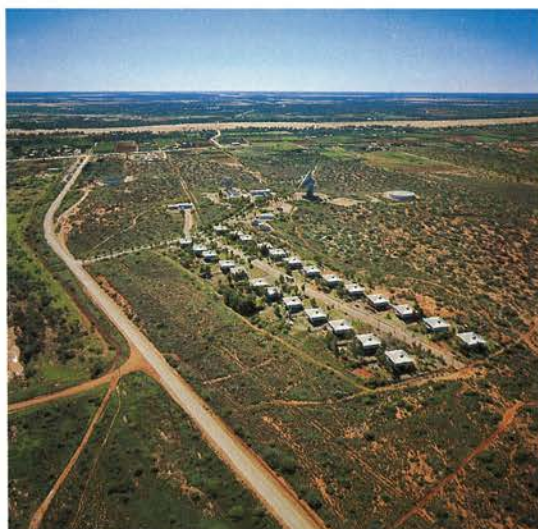
CAPE INSCRIPTION [25°29'S 112°58'E]

At north end of Dirk Hartog Island: named by Hamelin in 1801 after inscribed plates left earlier. Dirk Hartog landed in 1616 and left inscribed pewter plate. Found by Willem de Vlamingh in 1697 who took it back to Holland, leaving a replacement. That in turn removed by Louis de Freycinet in 1818 and taken to France. Returned by French govt in 1947; in WA Museum from 1950, now in Fremantle Maritime Museum.

CARNARVON [24°53'S 113°40'E]

Popn: 755 (1911), 2956 (1966), 5053 (1981). Named after Lord Carnarvon, secretary of state for colonies 1866-74. Expedition led by George Grey surveyed area in 1838-39. Hinterland explored by F.T. Gregory in 1857-58. First European settlers in Gascoyne district were A.Brown, J.H. Morgan and C.S. Brockman who drove 4000 sheep from York in 1876. Town site

surveyed in 1883; town proclaimed in 1886 as service centre for pastoral industry. Govt research station estab to assist banana planters from 1920 when first consignment sent south. Large area opened for soldier settler selection in the 1950s: bananas and beans



Overseas Telecommunications Commission earth station, Brown Range near Carnarvon. Photograph by Reg Morrison, c1980.

WELDON TRANNIES

became main crops, also tomatoes, pumpkins and other fruits and vegetables along Gascoyne R. Road from south improved in the 1950s, sealed in 1961 as alternative means of getting produce to southern markets. Whaling station operated 1950–62. Satellite tracking station of Overseas Telecommunications Commission, Radio Australia base, and space vehicle tracking station operated by NASA (1964–74) all in Brown Range. OTC station received first satellite television broadcast from UK in 1966. Standard earth station, one of four in world, estab for INTELSAT in 1969 to provide NASA with link to USA. Oil exploration in Merlinleigh Basin in the early 1980s.

COSSACK [20°41'S 117°11'E]

Popn: 229 (1881), 60 (1933). Named Tien Tsien Harbour after barque chartered by Walter Padbury to deliver stock and stores to northwest pioneers. Name changed in 1871 when Gov Weld visited harbour in HMS *Cossack*. Became town site and port for Roebourne in 1872, a separate municipality in 1887. First stone building, the post and telegraph office, built in 1882. Early homes were of timber with galvanized iron roofs, anchored with steel cables attached to cement blocks as cyclone protection. Headquarters for pearling fleet until moved to Roebuck Bay (see Broome). Gold discov at Mallina in 1888; Pilbara rush that followed increased Cossack's importance as port. From c1900 harbour silted up and Point Samson became port for area. Development as historic site began in 1976, work completed for WA's 150th anniversary in 1979.

DAMPIER [20°40'S 116°42'E]

Popn: 1080 (1966), 2471 (1981). Named after William Dampier. Town built in 1965 by Hamersley Iron Pty Ltd, whose employees it mainly houses, as iron ore port. Rlwy to Tom Price completed and first iron ore shipment to Japan in 1966. Company had 20 months to construct Tom Price, Dampier, mine, port and rlwy. Large iron pelletizing plant opened in 1968, but closed in 1980 as finely crushed ore rather than pellets now exported. Port dredged in 1969 to allow for 100 000 tonne ore carriers. East Intercourse Is developed for improved port facilities 1970–72. In 1975, 415 ore carriers visited port. Cyclone Trixie hit port that year and repairs cost \$2m. Private rlwy to Paraburdoo opened in 1972. Dampier Salt Ltd project estab in 1969 with large evaporation ponds on tidal flats, first shipment in 1972. Onshore facilities for North West Shelf project begun in 1982.

EXMOUTH [21°55'S 114°07'E]

Popn: 880 (1966), 2583 (1981). Named after Viscount Exmouth RN by Phillip Parker King when he surveyed gulf in the *Mermaid* in 1818. Allied submarine base in World War II. Japanese air raid here in 1943 was the most southerly. Search for oil began in 1951. Some oil found at Rough Range in 1953 and, though not in commercial quantities, initiated widespread interest in petroleum exploration and search in region intensified through the late 1950s. Commercial prawn fishing began in 1959.

GOLDSWORTHY [20°20'S 119°30'E]

Popn: 381 (1966), 923 (1981). Named after R.T. Goldsworthy, colonial secretary in the 1880s. Mineral exploration began in 1961. Construction of 177-km rlwy to Port Hedland and the town of Goldsworthy followed discovs. Estab in 1967, this was the first 'iron ore town' of WA. Ore shipments, the first from the Pilbara, began in 1966. Rlwy extended to Shay Gap and Kennedy Gap in 1973. Town devastated by cyclones 1979–80.

HORSESHOE [25°27'S 118°34'E]

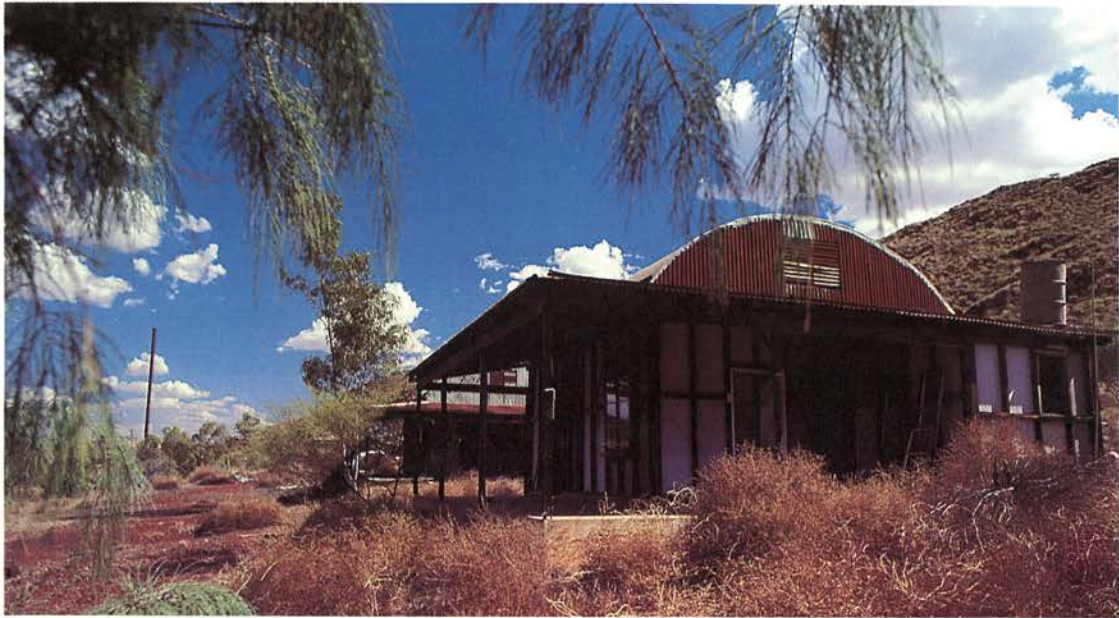
Named after the shape of a range of hills. Gold claim of 80 ha pegged in 1895; 2 small but rich reefs found in the 1900s, also much alluvial gold; nugget of 4106 g found; about 50 men worked the field in 1901. Gold lasted only short time as no equipment to work at depth in harsh conditions. Main WA manganese producer in the 1950s until surpassed by other fields: about 300 tonnes daily by road to Meekatharra thence to Japan in the late 1960s. In 1973 manganese freighted to Geraldton, then Newcastle, NSW. Horseshoe Lights goldmine producing again in 1983–84.

KARRATHA [20°44'S 116°51'E]

Popn: 44 (1933), 1838 (1971), 8341 (1981). Name: Aborig = 'good country' or 'soft earth', originally used for homestead on lease granted in 1866, one of the first in the northwest, at point where F.T. Gregory landed with settler expedition in 1861. Gregory's sailors collected pearl shells at Nickol Bay in first realisation of potential pearling. Geraldton to Nickol Bay stock route estab in 1866. Karratha station bought by Hamersley Iron as farm in 1966: Santa Gertrudis cattle bought for breeding. Town site resumed from property in 1968: town estab by company and WA govt in 1969. Became centre for iron ore personnel, govt employees and those working on North West Shelf natural gas project. Large onshore installations for last likely on Burrup Peninsula in the mid-1980s. Town became increasingly important as Dampier reached its growth capacity by 1973.

MARBLE BAR [21°10'S 119°43'E]

Popn: 244 (1911), 83 (1933), 357 (1981). Named after a red and white banded chert bar across river mistaken for marble by early European settlers. One of chief gold centres (with Nullagine) on Pilbara Goldfield when proclaimed in 1888. Rich alluvial gold discov in 1891 and popn reached about 5000. Town became good market for Pilbara pastoralists in the 1890s. Town declared in 1893; telegraph to Perth from 1894; large group of public buildings (RNE) from 1894–95 when became district headquarters for Pilbara. Rlwy to Port Hedland opened in 1913, closed in 1951. Record heatwave of 170 consecutive days over 38°C (100°F) in summer of 1923–24. Comet goldmine discov in 1936 and operated until 1955. Works later became centre for copper and asbestos treatment and supplied electricity to town until 1968. Operated as goldmine again in late 1970s. Town devastated by cyclone in 1941. Copper Hills mine to south processed copper ore to obtain copper sulphate 1959–63. Tin mined on



Miner's cottage at Marble Bar. Small-scale mining operations are still being carried out in the area, although the large-scale operations have ceased to operate.

Photograph by Reg Morrison.

WELDON TRANNIES

Mooyella field 1899–1907: revived in 1956 and mobile treatment plant was to operate in dry months from 1982. Rock from North Pole Mine 60 km to west contained indications of life forms of 3500m yrs ago.

MONTEBELLO ISLANDS

[20°25'S 115°32'E]

Named by Nicholas Baudin in 1801–02 after Duc de Montebello. *Tryal*, first known British ship to reach Aust, wrecked here in 1622: 97 people died on islands, 46 reached Batavia by boat; remains of wreck discovered in 1969 and numerous relics now on display in Fremantle Maritime Museum. Islands used by Aust fishermen and Japanese pearl divers until declared restricted area in conjunction with first British atomic bomb test in 1952: 2 other atomic devices exploded in 1956 before test site moved to Maralinga, SA (see Woomera).

NEWMAN

[23°22'S 119°43'E]

Popn: 3906 (1971), 5466 (1981). Mt Newman reached by H.S. Trotman in 1896 and named after his employer. Ernest Giles had earlier traversed district in 1876. Mt Whaleback iron ore discov by prospector Stan Hilditch in 1956–57, but not made known until 1962. Development agreed on in 1964: export deal with Japan in 1965. Company agreed to build port, rlwy, mines and town. BHP joined venture in 1966. Town estab as company town in 1967, administered by local govt since 1981. Mining began and first ore train left Mt Whaleback on new 425 km rlwy to Port Hedland in 1969. In 1976, world's largest single open-pit iron ore mine. Beneficiation plant completed in 1979. In 1981, 4299 employees involved in state's

second largest iron ore project. Future of CSR iron ore project at Yandicoogina, 80 km to west, dependent on orders from Japanese steel industry.

NORTH WEST CAPE [21°47'S 114°10'E]

Named by Philip Parker King when exploring in *Mermaid* in 1818. Formerly known as Vlamingh Head and Cape Murat. Sighted in 1618 by Haevik von Hillegom in *Zeewolf*: first recorded landing by Willem Janz of *Mauritius* later in yr. Coast mapped by Abel Tasman in 1644. A 1963 US–Aust agreement led to construction of \$80m first stage of a communications facility (see Exmouth). Base named in 1968 after former prime minister Harold Holt. Much controversy over role of base, Aust access to it and likelihood of being target for nuclear attack. Cape Range Nat Pk estab on peninsula to south in 1965, extended in 1974. Ningaloo Reef Marine Park, adjacent to nat pk, being estab in 1985.

NORTH WEST SHELF [20°00'S 116°00'E]

Section of Aust's continental shelf off Pilbara and Kimberley coast. Intensive petroleum exploration followed earlier indications of oil in Exmouth Gulf area and on **Barrow Island**. Over 37m ha covered by exploration permits. Aeromagnetic surveys from 1963, seismic surveys from 1964. In 1971 first oil discov at Scott's Reef, 440 km off Kimberley coast, also gas finds at North Rankin, Goodwyn and Angel fields. By 1973, enough reserves estab to warrant continued development. Major natural gas discovery in North Rankin field off Pilbara coast in 1971: by 1983 estab as largest offshore gas find in Aust. Intended to supply liquefied natural gas for export to Japan as well

as gas for domestic market: 1500-km pipeline to **Perth** opened in mid-1980s. Massive resource development of major long-term national significance.

NULLAGINE [21°53'S 120°06'E]

Popn: 54 (1911), 91 (1947). Gold discov in 1886 by prospectors coming south from Kimberleys. District to south explored by W.F. Ruddall in 1897. One of major centres on Pilbara Goldfield (proclaimed in 1888), at one time larger than **Marble Bar**. Village founded in 1889. Large Chinese popn during boom yrs. Had 8 gold batteries by 1904. Some diamonds found in 1902, first in Aust. As well as gold, asbestos, antimony, manganese, copper, wolfram (tungsten ore) and beryl mined in district at various times.

ONSLow [21°38'S 115°06'E]

Popn: 145 (1911), 594 (1981). Named after Alexander Onslow, chief justice of WA. Original town founded in 1883, 3 yrs after estab of first sheep stations in area. Gold found in upper reaches of Ashburton River in 1890s. Town was on river, but destroyed by cyclone in 1926 and moved to Beadon Bay. Other cyclones damaged town 1934, 1961 and 1963: last had ground level winds of 232 km/h. Cyclone damage to jetty so recurrent in 1960s that rebuilding abandoned and lighters used in port. Once an important pearling centre. US submarine base in World War II attracted Japanese bombing in 1942. Main service depot for British testing atomic devices on **Montebello Islands**, 1952–56. In 1960s, port for copper ore from region: only highest grade ore could bear transport costs to coast. Service port for **Barrow Island** oil field. Trial solution mining of uranium at Manyingee Hill to south in 1981.

PANNAWONICA [21°42'S 116°22'E]

Popn: 1170 (1981). Company town built by Cliffs Robe River Iron Assocs from 1970 to exploit iron ore reserves discov in Robe R valley in the 1960s: 1680 employees in Pannawonica and associated port at Cape Lambert in 1981, but many lived in **Wickham**. Eastern Deepdale mine estab in 1982: new ore body worked and facilities built including 20-km extension to Cape Lambert rlwy.

PARABURDOO [23°12'S 117°40'E]

Popn: 2977 (1971), 2357 (1981). Named after Piraburdo station. Town developed 1970–72 in conjunction with iron ore mining. Operation, including rlwy to **Tom Price** (thence to **Dampier**), put on care and maintenance basis after decline in Japanese demand: finally came into production in 1973.

PEAK HILL [25°37'S 118°43'E]

Popn: 526 (1911), 46 (1947). In 1892, prospectors from Nannine found gold here: led to rush, but only minor field. Goldfield gazetted 1897. Shortage of water and lack of proper road were problems. At peak, had popn of about 800, warden's court and Miners' Inst. Area became known as 'the Balkan States' because residents became quarrelsome as gold dwindled. Rlwy opened in 1903, since closed.

POINT CLOATES [22°42'S 113°40'E]

Popn: 25 (1933). Norwegian Whaling Co estab here 1912–16: beginning of whaling in northwest. Nearly 3500 whales processed 1925–28. Whaling station destroyed by cyclone in 1945. Industry revived in 1949. Last catch in 1963: closed as result of protection of humpbacked whales. Part of whaling plant at **Babbage Is** later used for processing prawns.

PORT HEDLAND [20°18'S 118°35'E]

Popn: 360 (1911), 218 (1933), 1778 (1966), 7229 (1971), 12948 (1981). Named after Peter Hedland, pearler and captain of cutter *Mystery* who explored Mangrove Harbour in 1863. Dutch navigator Gerrit de Witt had been blown ashore nearby in 1628. Early pastoral development in district from 1863: 'town' founded then as pearling base, but not declared until 1896 after development with Pilbara gold rush of 1880s. Nearby Mundabullangana station (estab in 1872) sheared 120 000 sheep in one season late last century, but industry declined from c1900. Original port at Condon, first gazetted as Shellborough in 1872, now in ruins. One of main fishing and pearling centres until rise of **Broome**. Tantalite mining began at Wodgina, 60 km south, in 1905: world's main source in the 1960s. Rlwy to **Marble Bar** opened in 1912, closed in 1951: brought tin from mining in Marble Bar district to port. Manganese from Woodie Woodie first shipped from port in 1953. New prosperity since iron ore discov in Pilbara from 1964. Rlwy from **Newman** built in 1967–68, first ore carrier loaded in 1969. Port now on Finucane Is, linked to mainland by causeway. First salt shipped from port in 1969. Mica from Pippingarra station also exported through port in early 1980s. One of first Aust Inland Missions estab here in 1912: hospital estab in 1915. First Flying Doctor base in WA estab here in 1935. First flight across Indian Ocean (to Kenya) left here in 1939. Bombed by Japanese in 1942. Aborig strike on De Grey station in 1946 led by European Don McLeod: Aborig group involved purchased 5 pastoral properties centred on Yandecarra and Strelley stations, then formed mining company in 1955 which folded in 1962. These ventures encouraged Aborig confidence and self-reliance. Cyclone in 1975 badly damaged hospital: another severe cyclone in 1983, yr that Cyclone Emergency Centre estab. Hedland College estab in 1980.



A horse-drawn tramway in the main street of Roebourne. Photograph by E.L. Mitchell, c1910.

NATIONAL LIBRARY

ROEBOURNE [20°45'S 117°08'E]

Popn: 280 (1911), 136 (1947), 1688 (1981). Named after Surveyor-General John Roe when town proclaimed in 1866, first in northwest of WA. F.T. Gregory explored hinterland to south in 1861 and found good pastoral land. First European settlers were Withnells in 1864; more permanent settlement with arrival of govt magistrate in 1865. Serious smallpox epidemic among Aboriges in the late 1860s. Also in the late 1860s, pearl fisheries and mother of pearl industry became significant. Town became headquarters of govt resident when proclaimed in 1866. Profited from copper find at **Whim Creek** in 1872. Peter Warburton reached here in 1874 after travelling from **Overland Telegraph** line in NT. First school opened in 1873. Benefited from Pilbara gold rushes of 1880s: hospital built in 1880; post office, courthouse, gaol, police barracks, tramline to **Cossack** all built in 1887. Town lost trade when **Port Hedland** to **Marble Bar** rlwy opened in 1912. Considerable problems involving relations between police and Aboriges 1983–85.

SHARK BAY [25°24'S 113°38'E]

Named by William Dampier in 1699 when he caught a 3.4-m shark here. Bay charted by Dirk Hartog in the *Eendracht* in 1616. Willem de Vlamingh landed in 1697. In 1712 *Zuytdorp* wrecked on coast to south. Capt George Grey visited bay in 1839. First pearling base on WA coast estab here in 1850, continued until operations became centred on **Broome**. Shark Bay Salt Joint Venture estab in the 1960s. Expansion of fishing industry 1947–61.

SHAY GAP [20°28'S 120°05'E]

Popn: 853 (1981). Goldsworthy Mining 'iron ore' town named in 1970. Plan announced in 1971 to build 26 ha town to be 'first totally scientific town in the world' — no streets, artificial rain, vacuum sewerage, air conditioning. Town actually built on a sophisticated planning scheme with houses grouped in shadow generating clusters and with air conditioning from central plant. Severely damaged by cyclone in 1980. Private rlwy to **Port Hedland**.

TOM PRICE [22°40'S 117°47'E]

Popn: 549 (1966), 3426 (1971), 3540 (1981). Named after vice-president of Kaiser Steel Ltd. 'Iron ore' town near one of world's richest deposits. In 1952–53, Lang Hancock made aerial surveys, claiming to find iron ore deposit. Exploration undertaken, especially after Aust govt lifted export embargo in 1961. Tom Price deposit found in 1962, mine developed 1964–66 with 293-km rlwy to **Dampier**. Tom Price estab by Hamersley Iron as company town in 1965–66, expanded in 1970.

WHIM CREEK [20°51'S 117°49'E]

Popn: 207 (1911). Copper discov and mined in 1870s, shipped to UK. German copper miners active from c1900, interned or fled to outback during World War



Iron ore from Mount Tom Price's open-cut mine is transported by train to the port of Dampier, 293 kilometres north.

AUSTRALIAN PICTURE LIBRARY

II. Whim Creek Hotel built in 1898, only remaining building from early town. Copper mining resumed in 1963, ceased in 1964: some ore from open cuts, most from dumps. Evaluation of copper, lead, zinc and silver reserves in 1970s.

WICKHAM [20°40'S 117°08'E]

Popn: 2312 (1976), 2387 (1981). Named after J.C. Wickham of HMS *Beagle* who surveyed coast 1838–41. Town for Point Samson and Cape Lambert, ports for Robe River and **Pannawonica** iron ore mines. Town and port estab in 1971 by Cliffs Western Aust Mining Co Pty Ltd. Also beach resort for Pilbara region.

WITTENOOM [22°14'S 118°18'E]

Popn: 129 (1947), 876 (1966), 247 (1981). Named after Edward Wittenoom, pastoralist and politician with property in district. Mines Dept aware of asbestos in ranges from 1917; mined sporadically in 1930s; first systematic exploitation at Yampire Gorge in 1939, Lang Hancock involved. Main blue asbestos mine estab in 1943 and by 1950 had become sole Aust producer. Company estab township in 1947. Major mineral producer in Pilbara until early 1960s. Mine closed in 1966 for economic reasons after earlier govt attempts to close it because of health hazards. Many former employees and residents have medical problems as result of blue asbestos fibres in air. Now dependent on tourism, especially Hamersley Range Nat Pk, Wittenoom and Yampire gorges. New tourist town proposed in 1982–83, but had not eventuated by late 1985 despite medical problems caused by asbestos residue in existing town.