

THE KIMBERLEYS



IN A CONTINENT where remoteness is almost taken for granted, the Kimberleys are the quintessence of remoteness. Cut off from the rest of Australia by thousands of kilometres of desert, they seem in many respects to be an island that just happens to be attached to the rest of the continent.

Three concentric subregions form the physical framework of the region and have greatly influenced most of the activities of Europeans. The parallel sand ridges of the Great Sandy Desert gradually give way to the floodplain of the **Fitzroy River** which, together with the **Ord River**, forms a broad outer arc of mixed hilly and relatively even terrain within which most of the region's settlement has taken place. Within this arc, the strongly folded King Leopold and Durack ranges form a second, more sustained zone of very rugged terrain. Finally, the core of the Kimberleys is an old plateau surface now much dissected by streams, many of which show strong structural control and are replete with gorges, magnificent waterfalls and plunge pools. To the northwest is a deeply indented coast with scores of islands and shoals offshore which combine with a large tidal range to be a navigators' nightmare.

A low-latitude location and proximity to warm tropical seas yield a climatic regimen in which a short (4–5 months, November–March) wet, humid summer with daily maximum temperatures rarely under 30°C alternates with a somewhat longer, cooler and almost rainless winter. Two or three tropical cyclones cross the coast in most years, bringing high winds and torrential rains. Average annual rainfall totals, north of the **King Leopold Range**, are high (1554 mm on the Mitchell Plateau), but decrease sharply southeastward so that most of the outer arc receives between 790 mm (**Kununurra**) and 470 mm (**Halls Creek**) annually.

Such a seasonal concentration of rain falling on steep, rocky terrain results in an equally seasonal runoff pattern. Streams and rivers flood severely during the summer and most cease to flow in winter, although water supplies are retained in sandy reaches or waterholes. Vegetation also reflects this climatic pattern and is almost universally dominated by open eucalypt forest with a grass understorey. Rocky, skeletal soils predominate, although there are considerable areas of potentially arable, cracking clay soils along the lower courses of the Fitzroy, Lennard and Ord rivers. Given such physical characteristics and the isolation of the region, it is not surprising that the Kimberleys have offered but modest opportunities for Europeans, though Aborigines had evolved a lifestyle well adapted to such an environment.

French, Dutch and English names along the northwestern coast record early maritime knowledge of the region, but no European ventured inland until 1837–38 when George Grey spent a very uncomfortable summer in the Prince Regent River district. This expedition led indirectly in 1864 to an abortive attempt at European settlement, located at Camden Sound.

The first substantial European exploration of the region was by Alexander Forrest in 1879 and pastoral settlement began the following year. Sheep from further south were depastured on the lower **Fitzroy River** and the Lennard plains. **Derby** and **Broome** were both declared ports in 1883 and the latter soon became a pearling centre. At about the same time, leases in the **Ord River** and upper Fitzroy basin were taken up and stocked with cattle from the Northern Territory and Queensland by Panton and Osmond, the Duracks, the McDonalds and the Emanuels. A short-lived gold rush to **Halls Creek** in 1885–86 brought several thousand people, most of whom had left by 1888 when payable gold ran out. The settlements of **Wyndham** (the port) and Halls Creek persisted.

Sheep in the west and cattle in the east did well, but the pastoral industry was beset by problems, most of which were related to the great distances from markets and supplies. The three ports were seriously hampered by high tidal ranges and inadequate wharf facilities. Other problems were the Aborigines' newly acquired taste for beef and mutton, stock diseases, and soil and pasture loss from the best country along the rivers through overgrazing. The difficulty of establishing and maintaining something approaching normal family life in so remote a region was a major social problem. By 1900 the pastoral capabilities of the Kimberleys were reasonably well understood: the outer arc of country had been occupied but the ranges and the high areas north of them were too rugged and too remote, and their Aborigines too hostile and hungry.

The new century brought determined and partly successful efforts at finding cattle markets. By 1909 the famous but scarcely practical Canning Stock Route had been opened; some cattle were overlanded by a coastal route; others were shipped direct to transient overseas markets; but most went by sea to **Fremantle**. Eventually meatworks at **Wyndham** (1919) and **Broome** (1941) improved the situation greatly. Wool and sheep went by sea without much difficulty. The two world wars brought good prices that did much to offset transport and labour problems.

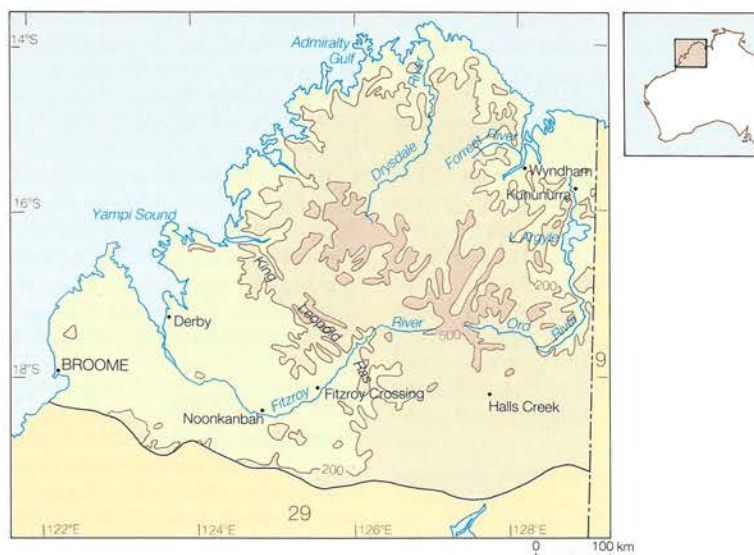
As early as the mid-1930s, two revolutionary but related ideas began to gain currency: the possibility of irrigated cropping and the damming of the **Ord River**. Kim Durack's modest experiments at Ivanhoe station were in some measure responsible for the 1945 establishment of a joint Western Australian and CSIRO research station near present-day **Kununurra**. The first commercial attempt, however, was at Camballin in 1950, where a New South Wales based group proposed to grow rice. In 1959 the Ord diversion dam was built with federal funding, followed by the main dam nine years later. Neither project has been markedly successful. Rice failed at Camballin, largely because of an inability to control water, while a more ambitious later scheme to grow grain sorghum also met with little success. The Ord experience has been rather more mixed. Denied sugar cane by Queensland's refusal to share the market, for a time (1963–74) cotton appeared to be the answer, only to be beaten by insect pests and the economics of distance. Long criticised by economists, cultivation on the Ord has been going through a painful period of trial and reassessment from which modest success with a wider range of crops has been achieved.

By the mid-1980s the Aboriginal outstation movement, which had begun in the mid-1940s, had enabled some Aboriginal communities to accumulate capital to acquire pastoral holdings. The Kimberley Land Council had taken over a number of properties on behalf of its people and Aboriginal groups are expected to be among the bidders when the state government offers for sale the properties sold to it by the Emanuels in 1985. Many decades of struggle for dignity and self-respect may at last be bearing fruit. While the last decade has brought new industries — diamond mining, oil exploration and tourism — which can absorb the imposts of distance, the economic mainstay is still cattle raising, sheep having all but disappeared. Even this traditional pursuit is threatened by increasing costs, especially those associated with the elimination of bovine tuberculosis and brucellosis. Radio, television, air services and better roads have relieved the personal isolation, but for most of the world the Kimberleys are still so remote as to be almost out of mind. Even to those who live there, they are still a frontier.

F.H. Bauer

SUGGESTED READING

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BROOME

[17°57'S 122°13'E]

Popn: 121 (1891) 908 (1911), 754 (1933), 2049 (1971), 3666 (1981). Named after Frederick Napier Broome, gov of WA 1883–89. William Dampier explored coast in 1688, was wrecked in Roebuck Bay in 1699; Phillip Parker King explored bay in 1818. Pearl oysters discov in the 1860s: approx 80 small boats were working grounds by 1874. Port declared and township estab in 1883, took over from Cossack as centre of pearling industry which grew to have more than 2000 workers (including 1700 Malays and Japanese) and approx 400 luggers. Blackbirding of Aborigs to become divers in the 1870s–80s, later replaced by indentured Malays and Filipinos. Submarine cable to Java opened in 1889 and teak cable station (RNE, now courthouse) built. Diving helmets and air pumps introduced c1900 to allow working of deeper water. Broome was perhaps world's leading pearling centre at its peak, but pearl beds depleted by the 1920s and pearl shell became more significant. Cyclone destroyed 20 luggers in 1935. Japanese air raid killed 70 in 1942. Pearl culturing industry estab in 1956 at Kuri Bay, and later at Cygnet Bay. Deep-water jetty opened in 1966, stimulated beef exports. In the mid 1970s, police magistrate invited 15 Aborig elders to advise him on cases concerning Aborigs. Tourism important in the 1980s, annual *Shinju Matsuri* (Festival of the Pearl) a major attraction. Dinosaur tracks 130m yrs old found at Gantheaume Point.

DERBY

[17°18'S 123°37'E]

Popn: 92 (1891), 165 (1933), 994 (1961), 2933 (1981). Named in 1882 after Lord Derby, secretary of state for the colonies. William Dampier made contact with Aborigs in area in 1688. Hinterland explored by Alexander Forrest in 1879. Cattle in district pioneered by the Duracks in 1885. MacDonald brothers drove stock from Goulburn NSW (over 6440 km) 1882–85: they arrived with only 30 head after world's longest

droving trip. Town site surveyed and named, port declared in 1883. Tidal wave from Krakatoa eruption in 1883 washed waiting cargo from beach. First airmail to Perth and first passenger service in northwest in 1921. In 1959 Air Beef estab a processing plant to package boned meat for export. In 1963 refrigerated trucks replaced aircraft and killing works were estab at Derby. New abattoirs and jetty built in 1966, former closed in 1980.

DRYSDALE RIVER

[14°58'S 126°56'E]

River discov and named by C.A. Burrowes in 1886. Drysdale River Mission estab by Benedictine monks from New Norcia at Pago in 1908 but moved to Kalumburu in 1932 because of water and soil problems. In 1932, an Aborig found round-the-world pilots Bertram and Klaasman 40 days after their seaplane crashed near Cape Bernier to the northeast; they were attempting to walk to Port Cockburn, abandoned over a century earlier but shown on their map.



Pearling luggers at Broome, one of the world's leading pearling centres in the early 1900s. About four hundred luggers were in use and 2000 men employed, many of whom were Malay or Japanese.

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Japanese bombed mission in 1943, killing several people. Drysdale R Nat Pk gazetted in 1974.

FITZROY CROSSING [18°11'S 125°33'E]

Popn: 88 (1933), 428 (1981). Named for road crossing of **Fitzroy River**. Area explored by Alexander Forrest in 1879; by L.A. Wells in 1896–97. Gogo station 18 km downstream founded in 1882 by Emanuel brothers as first in district. Telegraph office attacked and burned by Aboriges in 1894. WA govt took over 36 400 ha nearby for Fitzroy Pastoral Research Station. Aborig cattle raiders hid out in Geikie Gorge 29 km upstream leading to 1895 battle between raiders and police patrol. Geikie Gorge Nat Pk estab in 1967. Serious social problems among local Aboriges in the 1980s following depressed conditions in cattle industry and consequent unemployment.

FITZROY RIVER [17°27'S 126°30'E]

Named by Capt Stokes after Capt Robert Fitzroy in 1838. District examined by Alexander McRae in 1866: Fitzroy and Margaret rivers system explored by Alexander Forrest on 1879 expedition from De Grey R to **Overland Telegraph** line via **Ord River**. Early European settlers were mainly sheepmen from southern WA with first sheep stations near river mouth (Yeeda estab in 1880), then later further upstream. Experimental plantings of rice (1953–58) and safflower (from 1958) irrigated from pool in Uralla Creek led to Camballin project.

FORREST RIVER [15°09'S 127°50'E]

Reached by Stockdale in 1884 and named after Alexander Forrest, explorer of Kimberley region. Local

Aboriges prevented a pastoral company setting up and in 1898 drove out an Anglican mission. Mission re-estab in 1912 with a Qld Aborig, James Noble, as one of ministers: only Aborig in Anglican holy orders until 1975. Mission adjoined 1.6m ha Marndoc Aborig Reserve estab in 1911. At end of World War I, govt resumed 270 000 ha for allocation to returned servicemen for cotton and cattle. Dispossessed Aboriges in dispute with new settlers: Forrest R massacre in 1926 when **Wyndham** police killed and burned bodies of a number of Aboriges during punitive raid; led to royal commission. Settlement scheme failed and Forrest River station now owned by WA Aboriginal Lands Trust.

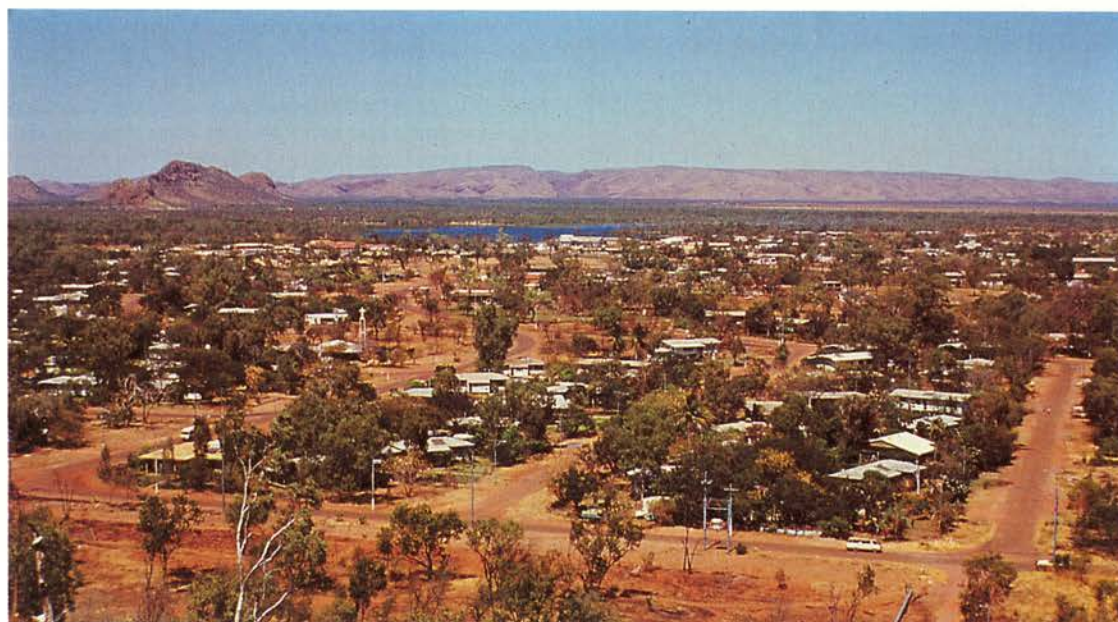
HALLS CREEK [18°13'S 127°39'E]

Popn: 63 (1911), 966 (1981). Named after Charles Hall who reported finding gold here in 1885. District explored by Alexander Forrest in 1879. Hall and Slattery made first payable gold find in WA here; other finds in area followed, leading to Kimberley rush of 1886. About 2000 diggers set out from Derby and **Wyndham** in 1886, but few struck it rich. By 1900s, a quiet trading centre for a few pastoralists and prospectors. New Halls Creek, estab in 1948, is 15 km from old township which soon became a ghost town.

KING LEOPOLD RANGES

[17°14'S 125°17'E]

Named after King Leopold II of Belgium by Alexander Forrest who explored district in 1879. In the 1890s, Aboriges, including Captain and Pigeon, killed policeman, freed Aborig prisoners and then evaded capture in ranges until 1897. This type of determined Aborig



The township of Kununurra was established in the early 1960s to house and cater for workers on the Ord River dam project. The rich Argyle mining venture, as well as a small tourist trade, has boosted the town's economy. Photograph by Mike Brown.

AUSTRALIAN INFORMATION SERVICE

opposition kept cattle industry out until late 1890s. F.H. Hann crossed ranges on his third attempt in 1898, becoming first European to reach summit of Mt Broome, and explored district extensively. Concept of Air Beef arose in 1949 because of physical barrier of ranges separating cattle stations from coast. Inland killing works estab at Glenroy, meat air-freighted to Wyndham or Derby. In 1963 Air Beef wound down when beef road built through ranges. Glenroy Abattoirs closed, burned out in 1966.

KUNUNURRA [15°45'S 128°43'E]

Popn: 930 (1966), 2081 (1981). Name: Aborig *kununurra* = 'big water' (i.e., Ord River). Kimberley Research Station estab near Ivanhoe homestead in 1945 as joint WA Dept of Agric and CSIRO project to investigate area's agric potential following earlier experiments by Kim Durack. Favourable report on potential of rice and sugar cane in 1955 led to Ord R scheme; new township of Kununurra and cotton ginnery completed in 1967. Pilot sugar farm of 80 ha estab near town in 1977: showed sugar grows well, but marketing problems have frustrated development plans. In 1982 preliminary studies for fuel ethanol plant based on sugar cane juice. Mining prospect involving lead, zinc and silver at Sorby Hills to north-west investigated in 1982.

LAKE ARGYLE [16°16'S 128°47'E]

From 1883–85 Patsy Durack and brothers overlanded approx 3800 head of cattle to area and estab Argyle Downs: Durack family homestead built in 1886, moved to site of present tourist village in 1971 when original site flooded as Lake Argyle filled. Mary Durack, writer, was brought up here and wrote of district experiences. Lake Argyle, then the largest reservoir in Aust, created when Ord Dam completed in 1971 as part of Ord River scheme. Diamonds found to southwest by Ashton Mining Co: agreement for mining reached in 1981, marketing through De Beers began in 1983. District finds probably constitute largest diamond deposit in world, but mostly of industrial rather than gem quality. Full production began in early 1986 with a predicted yield of 25m carats per yr for 20 yrs.

NOONKANBAH [18°30'S 124°49'E]

Station occupied by Europeans for 90 yrs or more. Used as World War II air base. Aborigs gained control over station and its management in 1979–80. Aborig community opposed Amex application to search for oil at Pea Hill, sacred site classified by WA Museum. Govt and company agreed Pea Hill inviolable, but not surrounding area. Aborigs prevented work on leases until large police force and convoy of drilling equipment organised by Court govt forced the issue in 1980. No oil was found.

ORD RIVER [15°33'S 128°41'E]

Named after Harry Ord, gov of WA 1877–80, by Alexander Forrest in 1879 on journey from northwest coast to Overland Telegraph line. Durack family investigated land in district in 1882, moved cattle into area in 1885: Osmond and Panton estab their station in 1884. Royal commission on irrigation estab in 1939: concluded in 1941 that Ord could be dammed. Research station set up in 1945 (see Kununurra). WA govt requested commonwealth funds in 1949 for dam and closer development of region. Feasibility study in 1958, plans submitted in 1959. Diversion dam opened in 1963 when first farms allocated. First stage of project, with 30 farms, completed in 1967 with township of Kununurra. Reservoir to impound Ord R waters to form Lake Argyle opened in 1972: supplied water to Kununurra Diversion Dam, also has hydro-electric capacity. Early district hopes pinned on cotton, but needed expensive pesticides and some insects became resistant. Sorghum, sunflowers and rice tried. Sugar more successfully grown, but met fierce competition from Qld sugar lobby and other marketing problems. Aust govt decided in 1982–83 against funding next stage.

WYNDHAM [15°27'S 128°06'E]

Popn: 32 (1891), 458 (1947), 1509 (1981). Named by John Forrest after son of Lady Barker, wife of Gov Broome. Formerly known as Anton's Landing. Cambridge Gulf surveyed by Phillip Parker King in 1818. Demand for port to serve Kimberleys goldfields (see Halls Creek) and pastoral stations led to founding of town in 1886. Telegraph line from Perth built in 1888, but faced problems with Aborigs who made spearheads from insulators. Govt meatworks estab in 1919, became privately owned in 1967. Flying Doctor base for Kimberley region estab here in 1935. Attacked by Japanese aircraft in 1942 but no casualties. New settlement has grown up 5 km east of old town. Port now serves Ord River irrigation scheme.

YAMPI SOUND [16°11'S 123°30'E]

Name: Aborig *yampee* = 'fresh water': first recorded by Wickham and Stokes in 1838. In the late 1890s pearling luggers discov islands of iron ore in Yampi Sound. Qld govt in 1915 and Japanese interests in the late 1930s planned development, but schemes failed: area first surveyed and stores and living quarters estab in 1930, but depression prevented further progress. Broken Hill Proprietary Co open-cut iron ore mine on Cockatoo Is opened in 1950: first shipment to Port Kembla in 1951. Township also estab. In 1954, Broken Hill Proprietary Co also acquired leases over Koolan Is: open-cut mine operating by 1964. Then, major WA producer and remains one of largest ports for loading ore: 58 overseas vessels entered sound in 1979–80. Cockatoo Is operation closed late 1984.