

EUROPEAN EXPLORATION

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Abstract

Mt Lesueur was first observed and named from the sea by French explorers on the corvette *Naturaliste* in June 1801. Charles-Alexandre Lesueur was a topographical and natural history artist on the expedition. Europeans first traversed the Lesueur Area in 1839, and a party led by A.C. Gregory ascended Mt Lesueur in 1849. From 1850 onwards, Lesueur was avoided by travellers and pastoralists because of its rugged terrain and the abundance of poisonous plants (*Gastrolobium* spp.). 1850 was also the year that the Lesueur Area was first explored by a botanist, James Drummond, who delighted in finding a rich flora with many plants new to science. Neglected by all but a few bushmen and botanists for 100 years, the Lesueur area was prominently featured in a Ph.D. study by N.H. Speck written in 1958. Since the early 1970s, the area has been visited by an increasing number of botanists, naturalists and bushwalkers, as well as employees of mining and petroleum exploration companies.

On June 28 1801 the French corvette *Naturaliste*, under the command of Jacques Felix Emmanuel, Baron Hamelin, sailed north from Rottneest Island to rendezvous at Shark Bay with her sister ship the *Geographe* commanded by exploration leader Captain Nicolas Baudin (Cornell 1974; Marchant 1982). The two ships had been commissioned by the French Government to document the geography and natural history of all parts of the coastline of Australia not documented by Captain James Cook.

The *Naturaliste* sailed close to the coast at what is now Mullaaloo, Breton Bay, Lancelin Island and Jurien Bay, after which Captain Hamelin made out to sea to avoid the Abrolhos Islands (Marchant 1982). The expedition named Jurien Bay after Charles Marie, Vicomte Jurien, 1763-1836, a naval administrator. In addition, a flat-topped mesa and a prominent rolling hill to the north were conspicuous from the sea at Jurien and were named Mt Lesueur and Mt Peron respectively.

Mt Lesueur was named after Charles-Alexandre Lesueur, 1778-1846, (Figure 2.1) a trained topographical painter who joined the expedition as a volunteer gunner, but was appointed by Baudin as artist-sketcher when all three, officially-appointed artists left the expedition at Mauritius (Cornell 1974). Lesueur subsequently worked closely with the expedition's naturalist Francois Peron (1775-1810), after whom Mt Peron was named. Lesueur became a skilled naturalist in his own right, with special interests in marine life, travelling to America in 1815 and

residing there until 1837 (Bonnemains 1988). He was

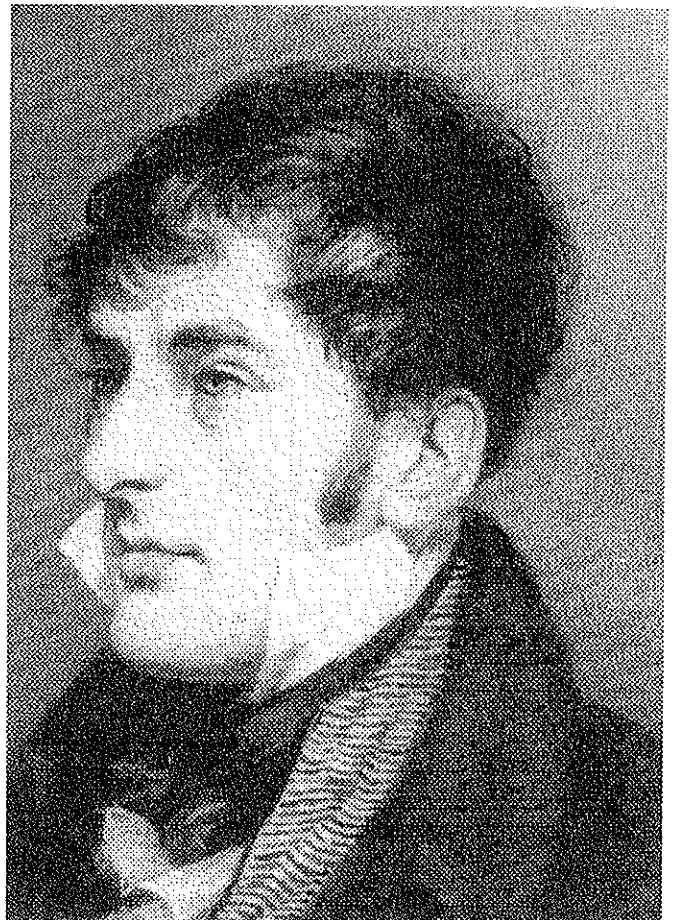


Figure 2.1
Charles-Alexandre Lesueur

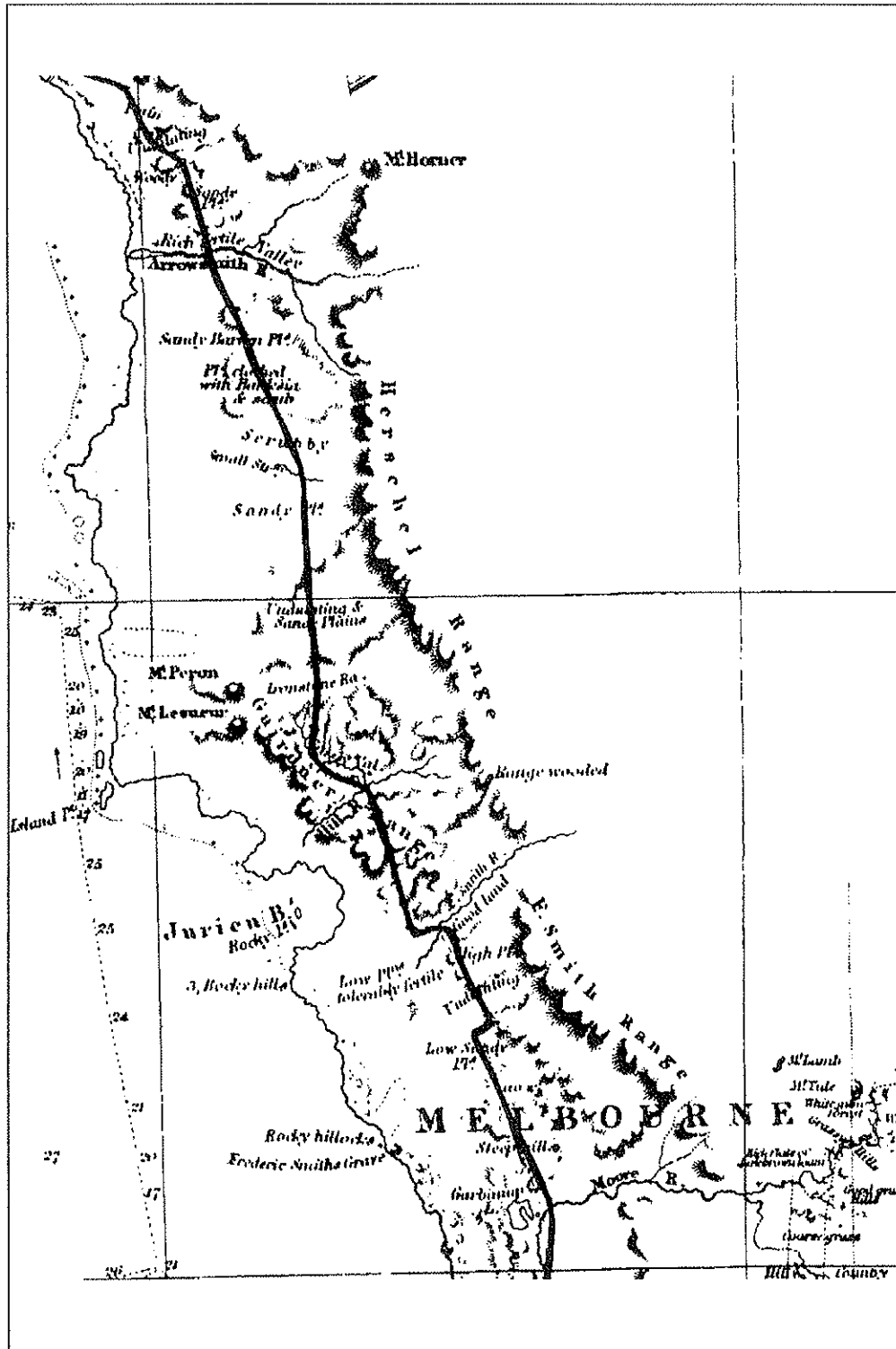


Figure 2.2

Portion of map and chart of the west coast of Western Australia compiled by John Arrowsmith, showing the route traversed through the proposed Lesueur Area by Captain George Grey and party in 1839 (Grey 1841).

appointed Curator of the Museum of Natural History at Le Have in March 1846, just nine months before he died.

Recently, a third prominent hill 1.5 km north-west of Mt Lesueur has been officially named Mt Michaud after Andre Michaud, botanist-gardener on the *Naturaliste* (Cornell 1974).

The first recorded European party to traverse the Mt Lesueur area comprised Captain George Grey and five others (Grey 1841; Figure 2.2). They had been shipwrecked in 1839 near Kalbarri, and walked back to Perth under difficult circumstances and short of food. On April 13, after crossing the Eneabba Plain, they ascended from the north a "red sandstone range... thinly studded with blackboy trees". Grey named the range Gairdner's Range after Gordon Gairdner of the Colonial Office. They camped "in the neighbourhood of a forest", presumably the *E. wandoo* woodlands east of Mt Peron, and were provided by their native companion Kaiber with dry *Macrozamia* nuts for food. Some of the men looked for more, and ate several green nuts which made them violently ill during the night. The next day they travelled south some fourteen miles over "a range of high ironstone hills", before descending a further fourteen miles to the bed of a small river which Grey named the Hill River.

On November 7 1848, A.C. Gregory and party passed "a short distance to the east of Mounts Peron and Lesueur" while returning to Perth from the "Settler's Expedition", in search of pastoral country as far north as the Murchison River (de Burgh 1986). Regarding the Lesueur area, Gregory recorded "The valleys were wooded with red and white gum of large growth, but the hills provided little besides coarse scrub".

Gregory led another party northwards from Perth to the Geraldine mine on the Murchison River in 1849. On November 16, the expedition of men with horses, carts and equipment approached Mt Lesueur from the east and some of the party climbed to the top. The party included mounted policeman Johnston Drummond, son of the colonial botanist James Drummond, who may have noted the richness of the flora as worthy of his father's future attention. Descending Mt Lesueur, the party pitched camp at a spring in a nearby brook (Munbinea Creek). Gregory found exposed coal along the brook in the morning, after which they proceeded northwards beyond the Gairdner Range.

Early in 1850 two groups of the party returned to Perth from Geraldton. Both followed a shorter route than on the northward journey, traversing flatter terrain interspersed with swamps along the east edge of the

coastal limestone between Jurien Bay and Mt Lesueur, thence east along the Hill River and south towards Dandaragan.

Pressure for new land from pastoralists with overstocked leases in the York and Toodyay areas finally led to the official opening up of the new Victoria or Champion Bay district for settlement on 1 January 1851 (de Burgh 1986). However, as an emergency measure to counter overstocking and drought in 1850, the Government agreed to stocking the new northern runs prior to leasing. To assist the droving of stock overland to Geraldton, Assistant Surveyors A.C. and H. Gregory were made available as guides. Having previously encountered the difficulties traversing the rugged Mt Lesueur terrain, and noting the abundance of poison plants there, A.C. Gregory and pastoralist L. Burges were firmly of the view that the area was best avoided, a sentiment conveyed in a letter to the Surveyor General from Dandaragan on 13 October 1850:

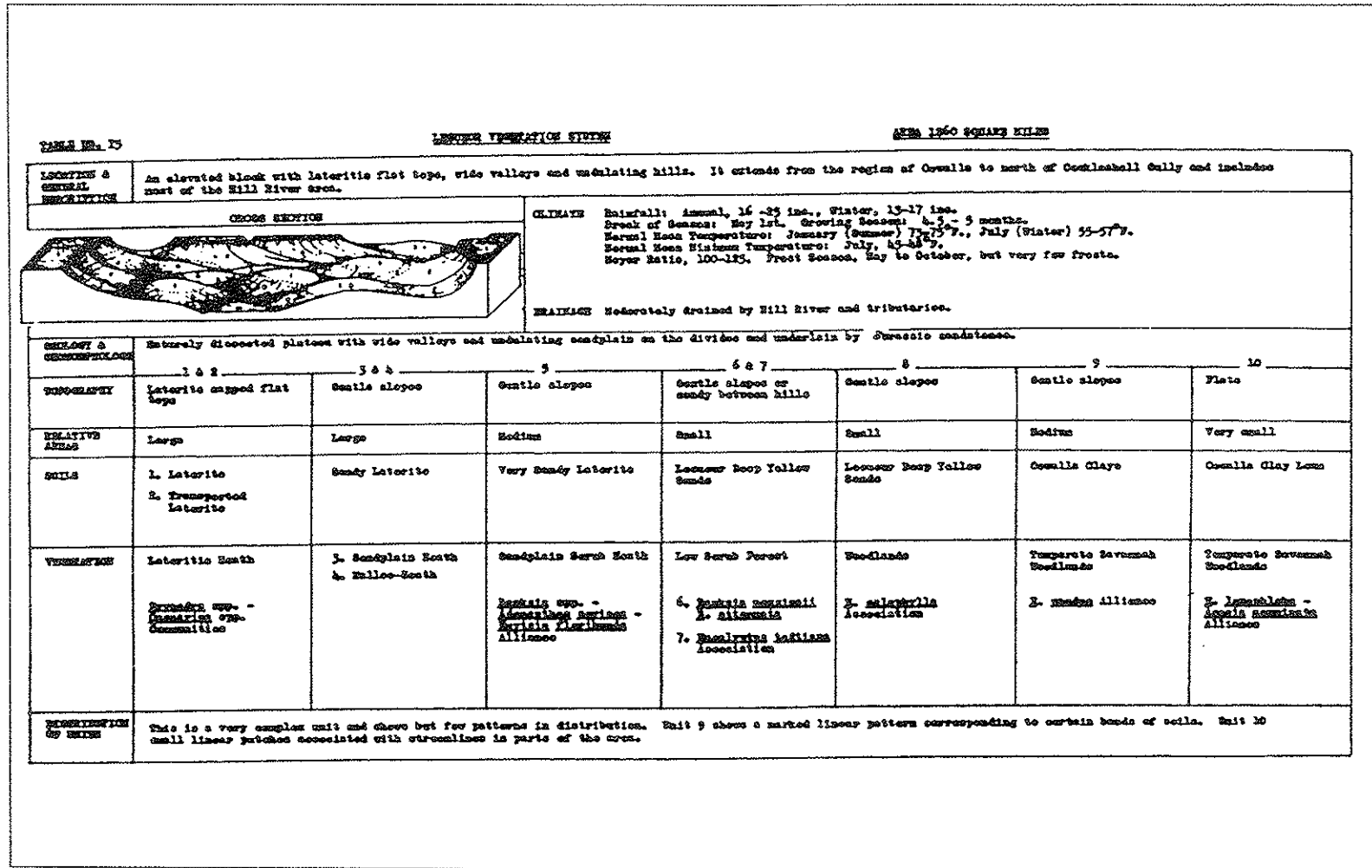
"On the 28th Mr L. Burges came up with his cattle and on the following day we started to decide the best manner of avoiding the Gairdner Range which is impracticable for carts from the rocky nature of the ground and at the same time abounds with a variety of the poisonous plant which renders it unsuitable for travelling with sheep. The route determined on is about N.N.W. from Dandaragan to the Hill River, to follow that stream bed down to within 7 or 8 miles of the Coast in Lat 30°20', then a northerly course along a chain of lagoons and swampy flats parallel to the coast as far as the Arrowsmith River.

This route by the Hill River is abundantly supplied at this season with water and grass at every ten miles, it involves a detour to the south of the Gairdner range and increases the distance 20 miles but the poisonous plant is so abundant on that part of the range of hills on which Mr Drummond has taken up his licence near Mt Lesueur that stock cannot be driven through it with safety..."

Thus from the outset of pastoral development, the Lesueur Area was regarded as unsuitable and thereby spared from agricultural clearing. Leases were nonetheless granted nearby, with James Drummond Jr taking out 10 000 acres near Munbinea on the Hill River in September 1850, as well as an extensive lease at Dandaragan. These two leases provided convenient bases for James Drummond Snr to pursue botanical exploration.

It is clear from letters written to Sir William Jackson Hooker at Kew in England that Drummond explored Mt Lesueur and environs fairly thoroughly (Drummond 1853). In about March 1850 he went from Toodyay north to Dandaragan with James Jnr (Erickson 1968). They proceeded north-west to investigate leases at the Hill River in the winter, and it is likely that James Drummond Snr explored and collected plants at Mt Lesueur at this time through to September. He

Figure 2.3
Topographical figure and table summarising the Lesneur Vegetation system (Speck 1958).



returned to Dandaragan and remained there until October 14, 1850, when he joined Gregory's droving party to Champion Bay (de Burgh 1986). A day after departure, the party split into two, the main body with the stock skirting around the south and west sides of Mt Lesueur as planned. The other party under A.C. Gregory, with J.S. Roe, J. Drummond Jnr, J. Drummond Snr and S.P. Phillips, rode north on the eastern side of the Gairdner Range and onwards to explore the Upper Irwin River area.

Thus, Drummond Snr was able to describe in detail many of the plants of the Mt Lesueur area in his letters to Hooker. Vivid descriptions of Pine Banksia (*Banksia tricuspis*), Lesueur Hakea (*Hakea megalosperma*), Staghorn Bush (*Daviesia epiphyllum*), Gairdner Range Starbush (*Asterolasia drummondii*) and others were provided (Table 5.1).

About a week after the departure of Gregory's October 1850 droving party, Major Logue led another in their footsteps (de Burgh 1986). On a hot late October day, after crossing Cockleshell Gully west of Mt Peron, Logue's party came across and named Diamond of the Desert Spring. It was a small oasis flanked by flooded gums in a limestone hollow surrounded by banksia kwongan. The Spring became an important camp on what soon became a well-travelled stock route.

In October 1855, Walter Padbury and Mounted Constable William Goldwyer (O.I.C. of Dandaragan Police Station) went north from Drummond's Munbinea lease and explored the Cockleshell Gully/Diamond of the Desert Spring area. Within three weeks Padbury took up a 20 000 acre lease at Cockleshell. He also purchased Yatheroo, south of Dandaragan, in the same year. The Cockleshell Gully lease was managed by William Bashford in the 1860s, and then by Padbury's wife's nephew John Grigson from 1869 onwards (de Burgh 1986). The Grigson family is still there today.

The establishment of Padbury's and Drummond's pastoral leases on the major route between Perth and Geraldton meant that the Lesueur Area was thoroughly explored by the end of the 1850s, but neglected thereafter except by keen bushmen and botanists. The Stock Route was officially gazetted in 1889 at the instigation of Alexander Forrest (de Burgh 1986). A reserve for horse breeding in the Mt Peron-Cockleshell Gully area was gazetted in 1913.

Botanical exploration was to lapse for 80 years after James Drummond's pioneering collections. Government Botanist C.A. Gardner first visited Mt Lesueur and Cockleshell Gully in June 1931, and subsequently in June 1935, January 1941 and October

1946 before writing an article extolling the botanical values of the area in the inaugural issue of *The Western Australian Naturalist* (Gardner 1947). N.H. Speck and A.M. Baird examined the flora and vegetation of Mt Lesueur in the 1950s (Speck 1958). In his thesis, Speck proposed a new Lesueur Botanical District because of the distinctive vegetation, landforms and soils of the Lesueur area. He was the first to accurately describe the Lesueur Vegetation System and he strongly urged the creation of a national park.

A summary of the Lesueur Vegetation System was provided in a topographical figure and table (Figure 2.3) and in the following text:

"The Lesueur Vegetation System (1,260 sq. miles). -

This is the exceedingly complex pattern of vegetation, soils and landforms of the Dandaragan Block.... It consists of a laterite capped plateau underlain by Jurassic sediments, dissected to form wide valleys bounded by breakaways, and undulating sandplain.

Its relief, complexity of soils, moderate rainfall and its geographical location give the very great variation in microhabitats that make it a great ecotonal area of the southern forests and woodlands, the northern sand heaths, and the Eremean Savannah Woodland and Mallees.

These factors have all combined to produce one of the richest floristic areas of the State. It is known, from data produced in the final chapter of this paper, that more than 110 species of Proteaceae are to be found in the Mt Lesueur environs. Figures are not available for the complete flora but the number is known to be very great.

Until recent years the area remained inaccessible and almost entirely undeveloped. Although much of this area is not suitable for agricultural development some of the adjacent Hill River country is and this is bringing encroachment and consequent destruction of an extremely rich floristic area. It is gratifying to learn that certain areas have been set aside as national reserves. This is not enough. If our rich heritage is to be preserved, the reserve must enclose all of the various ecological habitats and not only those parts that are useless for agricultural or pastoral development." (Speck 1958, pp 295-6).

Another twenty years elapsed before detailed botanical studies were initiated by A.J.M. Hopkins and E.A. Griffin. It was not until 1985 that the first comprehensive floristic study of Mt Lesueur itself was published. The present paper provides the first published list of the flora and analysis of the vegetation, fauna and landscape of the entire Lesueur Area. It draws upon data acquired by Griffin and Hopkins, as well as other botanists, CALM scientific staff and reports prepared by Martinick and Associates, environmental consultants to CRA. In 1973 the W.A. Museum published results of a fauna survey of part of the Lesueur Area. Additional fauna studies were carried out by staff and students of the Western Australian College of Advanced Education in 1980 and 1981, and consultants to the mining companies commenced fauna studies in 1988.

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