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Introducing Shark Bay

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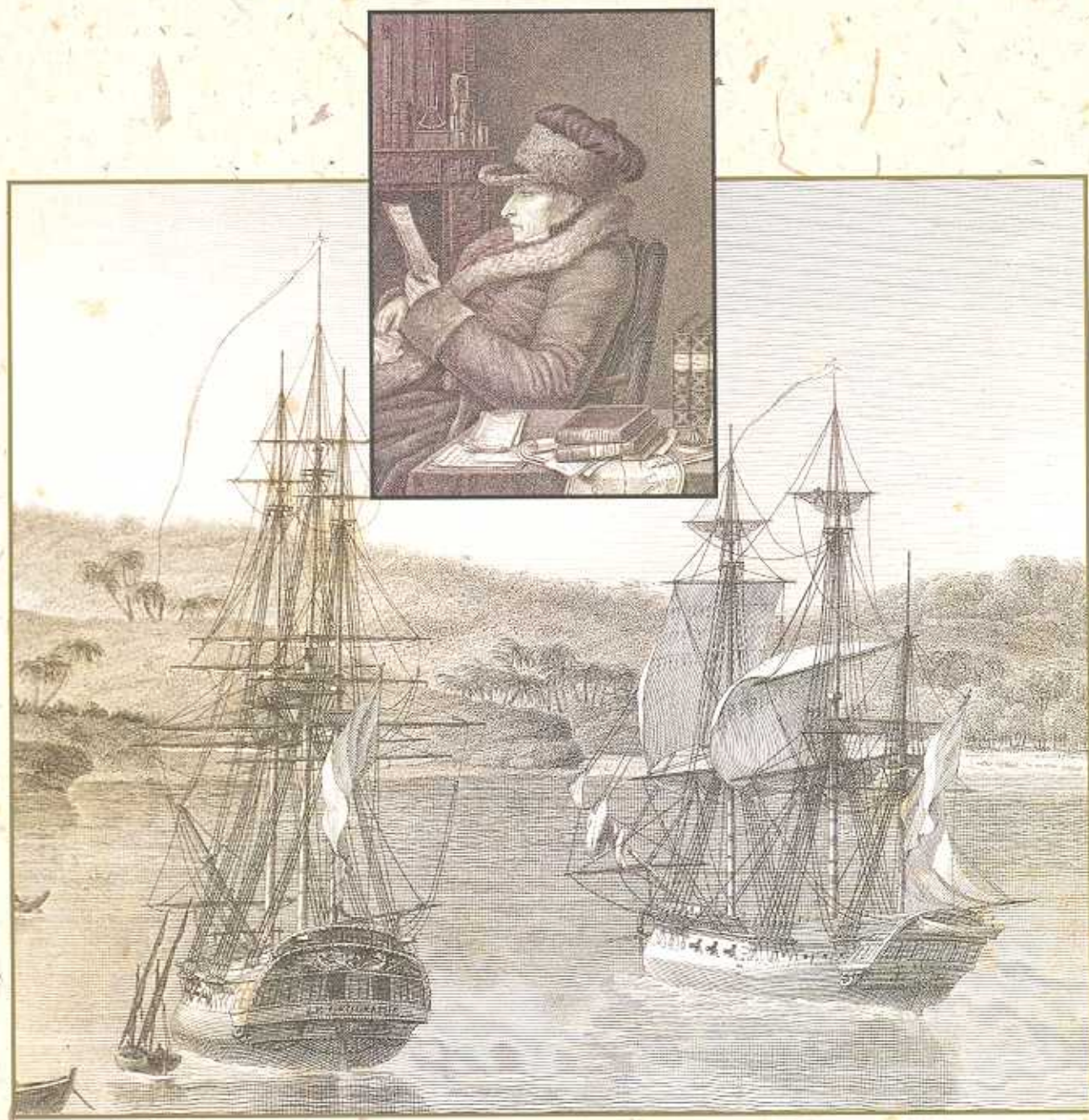
Home to Earth's microscopic master builders

PERON THE EXPLORER

Lost on Bernier Island



P E R O N T H E E X P L O R E R



by Barry Wilson

The map of Shark Bay shows the influence of early explorers. Many place-names in the Bay are French, derived from Baudin's expedition a quarter-century or so before British settlement. One of the scientists on that great journey was François Péron, whose name lives on in one of Shark Bay's peninsulas. What kind of man was Péron? Barry Wilson helps us find out.

Illustrations from Voyage de Découvertes aux Terres Australes (Paris, 1807) and Part 1 of the accompanying Atlas. (Courtesy of the Royal Society of Western Australia)

Nicolas Baudin's expedition to southern and western Australia, initially with the two ships *Naturaliste* and *Géographe*, was one of the great events in the history of science. It was sponsored by the Imperial Institute of France, aimed at exploring the southern and western coasts of the poorly known Australian continent and at providing new material to promote the standing of French science in Europe. In spite of controversy, mismanagement and appalling casualties, the expedition was successful. More than 100 000 specimens of animals were taken back to France, most of them collected at King George Sound and Shark Bay.

Death and desertion claimed the majority of the scientific personnel of the expedition. Of the 23 scientists who embarked, only three returned to France. François Péron was the only one of the original five zoologists to complete the trip and to him fell the task of writing up the zoological results. His work was illustrated by Charles Lesueur, who had joined the expedition originally as a gunner.

Péron died in Paris before the task was completed and it was finished by his ship-board colleague Louis Freycinet. (Freycinet later commanded the *Astrolabe* on a second scientific expedition in the region.) These works have great importance for Western Australian natural science. Very many of the local marine species, and some terrestrial species, were described and named in these publications and in the works of other scientists using the collections made by this expedition.

Writing in the preface to Péron's narrative (1809) the great French scientist Cuvier said, 'Péron and Lesueur alone, have discovered more new animals than all the naturalist voyagers of our times.'

MISGUIDED PROPHECY

Regrettably, only a handful of the species names introduced by Péron himself are technically valid - these being indicated in the text by the letter N. Cuvier also wrote:

'Owing to an irregular or false method of description which has been introduced into science [referring to the binomial Linnaean system], its progress has been much retarded. Travellers, and particularly



some of those of the school of Linnaeus have adopted it as more expeditious and easy, the consequence has been, that they have only acquired *relative* descriptions, scarcely sufficient for scientific explanations at the epoch when they studied, and which become more useless in proportion as new subjects are discovered: M. Péron knew how to get over this error. His descriptions, according with a constant and regular plan which has been formed, embrace all the details of the exterior organization of the animal, explain all its characters in an absolute manner, and will, in consequence, survive all the revolutions of methods and systems.' *

Sadly for Cuvier, this prophecy was misguided. The Linnaean system has since been universally adopted as the standard, and works like that of Péron which do not follow it have no standing in the science of naming animals and plants. Consequently, the names used by Péron in his technical volumes are not 'available', although subsequently the descriptions and illustrations have been used by other authors who based valid names on them. Only a few names introduced in the narrative follow the binomial Linnaean system and are in current use.

TWO VISITS

The *Géographe*, with Péron aboard, actually made two visits to Shark Bay, the first in June, 1801 and a return visit in March, 1803. Péron himself went ashore at several localities, most notably Bernier Island and Peron Peninsula. His narrative is full of entertaining and informative notes on his observations there.



'On the 27th [June, 1801] in the morning we ran in left of the continent, having on the right the isles Dorre and Bernier: the appearance of the continent in this part was as barren as that we had seen on the preceding days...the shore consisted of either white or red sand, and had no other verdure than here and there a few miserable looking shrubs. To this dismal sterility of the continent and the isles, may be pleasantly contrasted the productions of the sea, which are astonishingly numerous and in very great variety.'

'Among these numerous and harmless animals, were also a great many venomous reptiles...some of them are entirely of one colour, either grey, or yellow, or green, or bluish; others are striped in rings of blue, white, red, green, black, &c. &c. some are varied with large spots, more or less regularly disposed; others again are beautifully marked with small specks all over the body. One species is particularly remarkable for the colour of its head, which is of a bright purplish red; this is the sea-serpent with the red head, mentioned by Dampier, who first discovered it in these latitudes...'

'While the general attention was still occupied on so many different objects, we discovered all at once a vast shoal of whales, which came towards us with great rapidity. Never had we seen so extraordinary a spectacle. The amazing number of these sea monsters, their gigantic size, their quick evolutions, and their spouting up the water, all appeared to me to be surprizing, but less so than to see these mighty Colossi springing perpendicularly above the waves, and standing, if I may be allowed the expression, on the extremity of their tails, spreading their vast fins, and then falling again on the bosom of the waters, and thus sinking beneath the waves in the midst of torrents of foam and eddies...The evening wasted fast while we were observing these stupendous objects; and night compelled us to let go the anchor, when every eye was still fixed on the whales sporting on the ocean.'



Banded hare-wallaby (*Lagostrophus fasciatus*) is now restricted to Bernier and Dorre Islands.
Photo - M&I Morcombe

Right: Aboriginal campsite on the Peron Peninsula, overlooking the islands of Bernier and Dorre.

Below: Striped kangaroo (*Kangurus fasciatus*, N.), as drawn by Lesueur, is today known as the banded hare-wallaby.

'On the 28th of June, we anchored opposite the Isle of Bernier, on which I landed the following day...no country probably is more curious than that which is our present subject...These shores are totally uninhabited, nor did we perceive any trace of a human being ever having been on this island.

'One single species of Mammiferae was all that we remarked; this was the striped kangaroo (*Kangurus fasciatus*, N.) the smallest and the most beautiful among the species of this extraordinary kind of animal in New Holland; this species is characterized more particularly by the conic form of the body, by the disproportion of the feet, and by the pouch in which the young ones are carried and suckled. The striped kangaroo breeds in great numbers on the three islands of Bernier, Dorre, and Dirck-Hartighs [now extinct on the latter], but we could not discover any of them on any part of the continent or on the other islands which we successively explored...'

SHELLS AND SNAILS

Péron was a great shell-collector, and the specimens he gathered during the expedition later became the basis for descriptions of many new species described and named by other scientists like Lamarck and Ferussac. Shark Bay was the source of a large proportion of them. These specimens, many of them types, may be studied today in the collections of the natural history museum in Paris. Examples of the few valid species names

introduced by Péron occur in the following quotation from his narrative (indicated by the letter N):

'Among the curious univalves which belong exclusively to this part of Endracht Land, I ought to mention a beautiful species of *Trochus* or *Sabot* (*Trochus smaragdinus*, N.) of the deepest and most lively green; also a kind of *Patelle* [a limpet], which from its size, I named *Gigantea*; a very beautiful *Volute* (*Voluta nitosa*) covered with small white spots, which look like so many little flakes of snow; and particularly a *Cone* or *Rouleau* (*Conus dorreensis*, N.)...'

The first published reference to the native land snails of Western Australia was the following note by Péron in his 1807 volume: 'Two species of land shells extremely numerous, but all dead, occupied great stretches of the interior of the island [Bernier], one was a small species of *Helix*, the other belonged to the genus *Bulimus* of M. de Lamarck.'



LOST ON BERNIER

It seems that Péron was a typical 'absent-minded professor'. He was accident prone and kept getting himself lost when he went ashore, to the despair and frustration of Nicolas Baudin, the expedition commander. Writing in his own journal Baudin referred to him as 'Citizen Péron, the most thoughtless and most wanting in foresight of anyone on board'. Péron's own account of one such incident follows:

'All these observations, with the collections which I have here described, are the fruits of many labours, and many dangers, which twice had nearly cost me my life. I have mentioned that on the 29th of June, in the morning, I landed on the isle of Bernier, with the commander and several of my friends. While they were occupied on the sea-shore, I went alone towards the interior of the island, to pursue my researches for the divers productions, and on the nature of the soil. Impelled by my zeal, and the pleasure I had in the important discoveries which I was making, if I may be allowed the expression, at every step, I lengthened my course almost as far as the southern point of the island. The sun already began to sink beneath the horizon, when I perceived the necessity of returning to the spot where our long-boat was moored.



Unfortunately night comes hastily upon us in these latitudes; and to add to the misfortune, I missed my way among the downs and brambles. Although I was loaded with different subjects which I had collected, I walked at a great pace till about eight o'clock in the evening; but instead of finding myself at the eastern point, where I had set out, I discovered by the dashing and force of the waves, that I was on the western shore. I felt myself exhausted by fatigue, and fell to the earth overpowered by weariness and emptiness, not having either eaten or drunk since the morning, and having walked the whole of the day. The extremity to which I was reduced, for an instant re-animated my courage and strength; I rose and continued my course to the east, by crossing the north point, and again pursued my way until eleven o'clock at night; when entirely overcome by fatigue, and perspiring at every pore, I again sunk on the ground, and, totally unable to proceed, I resolved to pass the rest of the night on the spot, even though I might perish in the midst of this frightful desert. I soon fell into a sound sleep, and did not awake till three o'clock in the morning, when I was almost frozen with cold; the air was extremely sharp, and though it was much as I could do to raise my benumbed limbs from the earth, I determined to continue my way.

The twilight began to appear, when I heard the report of a gun at a distance. This filled my heart with emotion and joy, and

renewed my hopes and my courage; and about six o'clock in the morning, I found myself among my friends. I then learnt, that finding I did not return in the evening, and expecting that I had lost my way, they had requested the commander to let some of them remain on the shore to wait for me; and that M. Picquet, the ship's lieutenant, had been ordered to stay on the land till the rising of the moon, which would be about ten or eleven o'clock at night, and then they were to repair on board, whether I had returned or not; that, notwithstanding these orders, M. Picquet could not resolve to abandon me; but had caused great fires to be lighted in every direction, to shew me my way, and that, as soon as day broke, himself at the head of his men, had set off to seek me, all determined not to quit the island till they had lost all hopes of ever seeing me again.

These particulars made me sensible, how much I was indebted to the generous zeal and affection of my shipmates; and the contrivances which their foresight had suggested, deserved my most grateful acknowledgements.

Péron had a similar misadventure on Peron Peninsula when he went ashore there on the return visit in March, 1803. The naturalist had persuaded his colleagues to cross the peninsula and again they became lost. When they eventually returned to the ship in a very stressed state Péron begged Baudin to allow him to rest before he made his

report because he 'could hardly talk and remain standing'. Unimpressed, Baudin wrote in his journal that night:

'This is the third escapade of this nature that our learned naturalist has been on, but it will be the last, for he shall not go ashore again unless I myself am in the same boat.'

And yet it was François Péron who lived to return to Paris and was given the task of writing up the scientific and narrative accounts of the expedition. Poor Baudin died of tuberculosis during the return voyage.

The name François Péron stands prominently in the history of Australian natural science. It is fitting that it should be preserved as the name of one of Western Australia's newest national parks where this indefatigable man had explored and gathered specimens nearly two hundred years ago. □

* Sources of quotations:
Péron, 1809. *A Voyage of Discovery to the Southern Hemisphere*, English Edition, Richard Phillips, London.
The Journal of Post Captain Nicolas Baudin, Commander-in-Chief of the Corvettes Géographe and Naturaliste. Translated from the French by Christine Cornell, Libraries Board of South Australia, Adelaide, 1974.

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Bernier Island

Dorre Island

Cape Inscription

Cape Peron

Herald Bight

Shark Bay Marine Park

Francois Peron National Park

MONKEY MIA

Big Lagoon

Fauré Island

DENHAM

PERON PENINSULA

FREYCINET

Dirk Hartog Island

Eagle Bluff

Lharidon Bight

NANGA PENINSULA

USELESS LOOP

Shell Beach

Hamelin Pool

Steep Point

REACH

EDEL LAND

Freycinet Estuary

Zuytdorp Cliffs

TAMALA





The vibrant colours and ancient shapes of Aboriginal art. Shark Bay primary schoolchildren celebrate in paint the abundant marine life that surrounds them.

