# JOHN GILBERT'S AUSTRALIAN COLLECTIONS

JOHN GILBERT WAS A PROLIFIC COLLECTOR OF ZOOLOGICAL SPECIMENS, MANY OF WHICH ARE LOCATED IN MUSEUM COLLECTIONS AROUND THE WORLD. ONE OF THE LARGEST OF THESE COLLECTIONS NOW RESIDES IN THE LIVERPOOL MUSEUM, IN ENGLAND. IN THIS ARTICLE, WE SEE HOW SOME OF THESE OLD MUSEUM SPECIMENS ARE PROVIDING CRUCIAL CLUES FOR MODERN NATURE CONSERVATION.

BY CLEMENCY FISHER

Behind the odd fact that one of the best nineteenth-century collections of Australian birds and mammals is in the Liverpool Museum (England), was the obsession of one man. The XIIIth Earl of Derby (1775–1851), of Knowsley Hall on the outskirts of Liverpool, was an ardent naturalist noted not only for his astonishing collection of living animals, but for his museum of preserved zoological specimens. He sent natural history collectors all over the world and purchased considerable material from such naturalists as John Gould. In this way, he obtained much of the best of the material assembled by distinguished collector John Gilbert.

In addition to being an enthusiastic naturalist, the Earl was very much a connoisseur of art as well. Not only did he buy zoological specimens from John Gould, he also bought many of the original watercolours of the plates for Gould's works on Australia and these are still at Knowsley Hall. It is always rewarding for a curator to be able to put into a visitor's hand the very specimens Gould and his assistants used when painting these originals, more than 150 years ago.

The Earl bequeathed his natural history collections to the people of Liverpool. After his death in 1851, this outstanding gift was housed in an old building in the city. Other specimens, both from the arts and sciences, soon began to flood in, and in 1861 the Liverpool Museum was purpose-built to incorporate these burgeoning collections. Although the building was almost totally destroyed by a fire bomb during the Second World War, the facade still remains, and most of the collections survived—despite having been stored in one of the Welsh mines, which are not generally noted for their sound environmental conditions. Indeed, such is the present quality of the collections—now spread over several museum and art gallery buildings in the Liverpool area—that National status was awarded in 1986.

The XIIIth Earl of Derby had a particular friend in the ornithologist, taxidermist and publishing entrepreneur John Gould (1804–1881), despite the fact that the two men were from opposite ends of the English class system. In

*Previous page*
*Main:* The dense vegetation of Two Peoples Bay is home to Gilbert's potoroo and the noisy scrub-bird.
Photo – Jiri Lochman

*Insets (Top to bottom):*
The 13th Earl of Derby, Edward Smith Stanley (1775–1851).
Photo – Clemency Fisher
Old specimens may be the only records of now extinct populations.
Photo – Doug Wechsler, VIREO, Academy of Natural Sciences, Philadelphia
Gilbert collected other forms apart from birds and mammals, like this Gurnard scorpionfish from King George's Sound.
Photo – Clemency Fisher

John Gould (1804-1881)

1838, Gould began to produce parts of a large-format, lavishly illustrated account called *The Birds of Australia and adjacent islands*. He soon realised there was not enough existing Australian material in museums in Britain for him to complete this account in any depth. Gould decided, therefore, to embark upon a major collecting expedition to Australia, and took along John Gilbert, a former taxidermist colleague of his. Gilbert was at a loose end, having recently been sacked as Curator at the Shrewsbury Museum for the dreadful crime of installing his wife in his living quarters at the museum.

From 1838 to 1845, Gould and Gilbert, between them, covered a huge area of Australia. This enabled John Gould to produce huge, gloriously embellished works entitled *The Birds of Australia* (eight volumes) and *The Mammals of Australia* (three volumes), on his return to England. It's interesting that relatively few new species of Australian birds or mammals have been discovered since Gould and Gilbert methodically quartered the country in search of new species. They arrived in Tasmania together, but soon split up. Gould visited South Australia and the south-east coast, whereas Gilbert's main

*Above:* Gould's plate of the noisy scrub-bird from *The Birds of Australia*. The text specifies that the first birds John Gilbert sent Gould were all males from "between Perth and Augusta", and so a very different population from those at King George's Sound.
Copyright – Liverpool Museum

*Right:* The noisy scrub-bird was rediscovered in 1961 by Albany school teacher, Harvey Webster.
Photo – Jiri Lochman

collecting sites were in the southern portion of Western Australia and the Cobourg Peninsula, on the north coast.

## GILBERT THE COLLECTOR

Gilbert was a most remarkable collector, being not only an adept naturalist, but an indefatigable hunter. For those familiar with the noisy scrub-bird (*Atrichornis clamosus*)—or should I say unfamiliar, as it is the most frustratingly difficult bird to actually see—Gilbert's tally of shooting at least seven birds seems unbelievable. The noisy scrub-bird was thought to be extinct since the turn of the century. Its rediscovery, in 1961, was a result of searching areas where Gilbert (and, after him, others) had found them in the nineteenth century.

Gilbert was not only a good hunter, but a meticulous and intelligent field recorder, sending reams of detailed notes on all his findings to his employer. The text to the entry for the noisy scrub-bird in Gould's *The Birds of Australia* was taken directly from Gilbert's notes, which constitute the best account ever written about this bird's nineteenth-century distribution. In these notes, Gilbert recorded locations on the west coast where the noisy scrub-bird once

existed. He also wrote that he had collected birds in the King George's Sound area (now the town of Albany) of the south coast of Western Australia.

Two Peoples Bay, where the birds were eventually found, had been earmarked for development as a township. However, lobbying by ornithologists and conservationists, as well as the personal intervention of the Duke of Edinburgh, helped save this outstanding area. Since then, staff from the Department of Conservation and Land Management (CALM) have been trapping and translocating individuals to new sites—an arduous, frustrating and time-consuming business. Gilbert's field records were a kind of 'treasure map', providing clues to new places where these birds may have the best chance of flourishing—such as near Drakesbrook, perhaps, where a monument now stands to celebrate Gilbert's first discovery of this bird on 3 November 1842.

But the story of great Gilbertian discoveries at Two Peoples Bay does not stop with the noisy scrub-bird. On his first trip to Western Australia, in 1839, Gilbert had been on board the *Caledonia* when she dropped anchor in King George's Sound for two weeks. During this time he visited the Gordon Plains—almost a hundred kilometres inland—and managed to collect some important specimens at the Sound itself. One was of a tiny kangaroo, which Gilbert found to be:

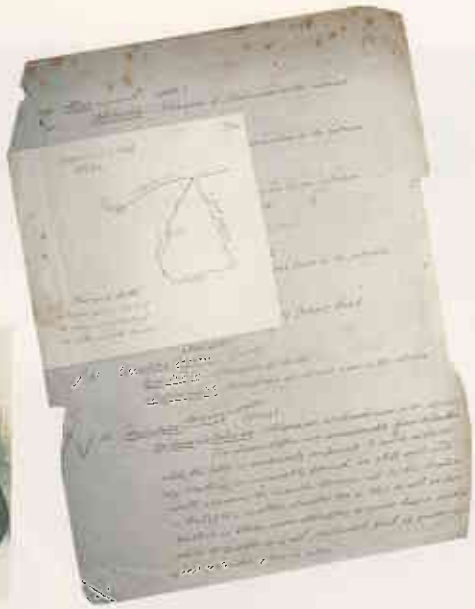
> "the constant companion of the *H. brachyurus* [the quokka], inhabiting with them the dense thickets of spearwood and rank vegetation surrounding swamps or small running streams".

Two years later, John Gould scientifically described this animal as *Hypsiprymnus gilbertii*, giving it the common name 'Gilbert's Rat Kangaroo'; it is now usually referred to as Gilbert's potoroo. Again, Gould quoted Gilbert's field notes extensively in the text for *The Mammals of Australia*, and in another gloriously illustrated folio volume which Gould produced in 1842, *A monograph of the Macropodidae, or family of kangaroos*. For many years, more modern naturalists considered Gilbert's potoroo to belong to an isolated population of the east coast long-nosed potoroo (*Potorous tridactylus*), but as only a few specimens of the former existed and the animal had not been seen alive since the 1870s, it was difficult to compare the two forms. As with the noisy scrub-bird, naturalists never really gave up hope of finding Gilbert's potoroo again, and, armed with copies of Gilbert's specimen labels and his notes and observations on the kangaroo's habitat, they searched extensively at various sites around King George Sound (the embayment adjacent to Albany).

In November 1994, a Gilbert's potoroo was found at Two Peoples Bay in a trap set for a research project on quokkas. This momentous occasion has been suitably celebrated (see 'Lost and Found', *LANDSCOPE*, Autumn 1995). Subsequent trapping studies suggest that the population seems to be small but stable. The potoroos taken into captivity to provide a breeding nucleus have endeared themselves (despite their appalling table manners, as exemplified by an astonishing food-hurling technique) to all their visitors—particularly those who have crossed the world just to see them.

## CLUES TO REDISCOVERY

Gilbert's specimens and manuscripts are scattered in libraries or museums throughout the world. They are now being extensively researched and catalogued for publication, as it is becoming increasingly obvious that they contain information crucial to the



*Left:* Gilbert often drew little sketches with his notes to illustrate points he wanted to emphasise.

*Far left (top):* Gould's original pencil sketch of the broad-faced rat kangaroo for the plate in *The Mammals of Australia.*
Photos – Clemency Fisher

*Far left (below):* Gilbert's rat kangaroo. Gilbert's specimen labels and field notes gave present-day conservationists excellent clues to where this animal might still exist.
Photo – Liverpool Museum

rediscovery of rare animals in locations where they are not presently known to exist, or even clues that might lead to the rediscovery of other species thought to be extinct.

A favourite pastime of many conservationists is to imagine what they would most like to be rediscovered. But even the most optimistic would probably agree that the pig-footed bandicoot—an impossible physical combination of the beautiful and the namby-pamby, with its glorious ears and match-stick legs—is beyond hope. A close relative of Gilbert's potoroo was (or is) the broad-faced potoroo (*Potorous platyops*), described by Gould from specimens collected by Gilbert near Northam, and from King George's Sound (Albany). This animal has not been seen since the 1870s. However, Gilbert's specimen localities and his notes, which indicate that the animal inhabited thickets surrounding salt lakes, may give enough clues to the Sherlock Holmeses of the conservation world in any future searches for the animal.

*Below:* Gilbert's rat kangaroo (now Gilbert's potoroo), a species that was rediscovered in November 1993.
Photo – Jiri Lochman

The most useful set of Gilbert's notes covering Western Australia, both for birds and mammals, is now in the General Library at the Natural History Museum in London. The notes are beautifully written in ink, and Gilbert often embellished his observations with little sketches, such as the page with a diagram of the extensive burrow system made by the ash-grey mouse (*Pseudomys albocinereus*). This particular page also gives the only known field description of the long-tailed hopping-mouse (*Notomys longicaudatus*). Gilbert recorded that:

> "the Kortung is invariably found in stiff soil, and mostly choosing the mounds

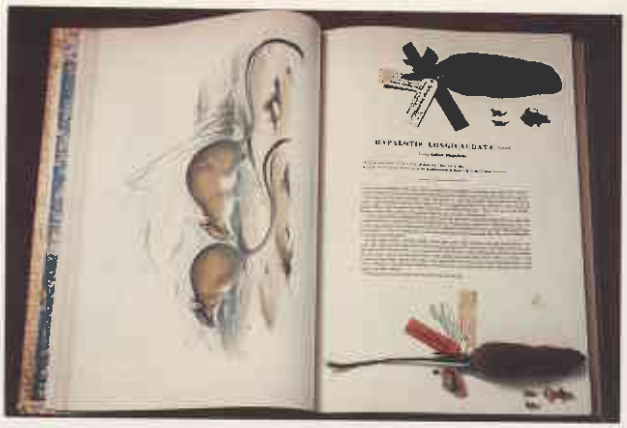
thrown up by the Boordees [Burrowing Bettongs] or Dalgytes [Bilbies]; another character is, this is not so destructive in stores, never attempting to gnaw bags or packs".

Very few specimens of the long-tailed hopping mouse were ever collected, and it has not been seen since the turn of the century. Gould's plate of the animal in *The Mammals of Australia* was drawn from specimens collected by Gilbert at Moore River, and these are still in the collections at the Natural History Museum in London. Thankfully, most of Gilbert's mammals in this collection still have their original labels, with the exact localities where they were collected. This is also true of Gilbert's specimens in the Liverpool Museum, and the illustration in the book shows the two long-tailed hopping-mice in the collections there. One of these two was collected by Gilbert near Toodyay, where it might never otherwise have been known to exist.

Gilbert concentrated on collecting birds and mammals, but, in those days, any collections from unknown lands were worth money as well as scientific prestige. Gould encouraged Gilbert to collect other vertebrates, as well as insects and shells, for customers in Britain. The gurnard scorpionfish, from the collections at the Natural History Museum in London, was the first of its kind ever collected—again from King George's Sound (Albany), where Gilbert discovered many fish new to science. Many of his lower vertebrate and invertebrate specimens have yet to be properly assessed, and it is probable that these will provide as many clues to researchers as his bird and mammal specimens have.

## PIECING THE PUZZLE

Gilbert died in Queensland in 1845, while a member of the second Leichhardt expedition; he was only 33. His early death, before he had any possibility of acquiring professional clout among the usually upper-class members of the British scientific fraternity, meant that he was given very little credit for his discoveries. In fact, it has taken nearly twenty years of painstaking research in museums all over the world to put the record straight. We now know that nearly eight per cent of all Australia's mammals and birds were first collected by John Gilbert, but much further research needs to be done on this still-enigmatic figure of an Englishman.



*Right:* Very few specimens of the long-tailed hopping-mouse were ever collected. This plate in Gould's *The Mammals of Australia* was drawn from Moore River specimens collected by Gilbert.
Photo – Liverpool Museum

*Below right:* Some of John Gilbert's Australian birds and mammals at Liverpool Museum. These specimens, collected between 1838 and 1845, were in many cases (those with red labels) the first known individuals of species new to science. The Liverpool specimens are in generally good condition, and most still have Gilbert's original field labels.
Photo – Liverpool Museum

It should be mentioned that many of Gilbert's specimens of taxonomic or ecological importance may have lost their labels, and, therefore, may not immediately appear to be of significance. Using curatorial clues, such as cross-referencing against his notes, looking at the style of taxidermy and even at the way the knot from the missing label was tied, curators can put the jigsaw-puzzle back together again. In this way, many an old specimen of outward insignificance has actually been proved to be of great consequence.

It is imperative that museum collections are looked after properly. In the case of Liverpool, it seems very fitting that one of the latest Trustees elected to look after the well-being of the Liverpool Museum, as part of National Museums & Galleries on Merseyside (NMGM), is the XIXth Earl of Derby—great-great-great-great grandson of the XIIIth Earl, who founded the whole affair. The Countess of Derby, a trained conservator, sits on NMGM's Development Trust Committee. This committee is helping to raise funds to greatly improve the Liverpool Museum and the storage of its unique collections in the 21st century.

However, some of Gilbert's specimens exist in many other museums. A subsequent article will give an account of some of the most important of these, and how to find them; from pig-footed bandicoots in Victoria, to Leichhardt's rat-kangaroos in Sydney, fat-tailed dunnarts (caught by Gilbert's then assistant, a military station cat) in London, rufous songlarks in Dublin, splendid fairy-wrens in Oxford and Gilbert's thickheads in Philadelphia.

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# LANDSCOPE

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*Noisy scrub-birds are rare in museum collections. This one, from a Dutch Museum, was probably collected by John Gilbert. See page 36.*

*This year, The Hills Forest celebrates its fifth birthday. Find out what's been happening there in our story on page 10.*

*The Kimberley region of Western Australia has some weird and wonderful landforms. Read all about them on page 16.*

*Mount Bakewell looms over the old town of York, but it is more than just a prominent landmark. Find out why on page 42.*

*The northern quoll is just one of WA's marsupials that have been part of a recent conservation status review. See page 22.*

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## REGULARS



## COVER

*Get down on the ground, scramble through the leaf litter and compost in your garden, and discover the fascinating world of insects. 'Insects in the Garden', on page 28, shows how these seemingly insignificant creatures help keep the ecosystem running smoothly and how they are a vital part of nature's life-cycle.*

*Illustration by Philippa Nikulinsky*


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