



# Insect Itineraries

FROM SIERRA LEONE, WEST AFRICA  
TO SYDNEY, NEW SOUTH WALES

» DEIRDRE COLEMAN

There are two lice and a flea in the Macleay Museum at the University of Sydney. How tiny and insignificant, we might think, but these are highly prized specimens because of the people who collected them. The ‘when’ and ‘where’ of their capture add to their historical, scientific and cultural value. The flea was collected by Charles Darwin in Patagonia and given to the naturalist and collector, William Sharp Macleay, in the 1830s. The lice are even older, and the story of how they came to New South Wales is more complicated. They were collected in the South Atlantic Ocean near the Cape of Good Hope by Johann Reinhold Forster and his son George, naturalists on Cook’s second voyage. In Forster senior’s journal on board *HMS Resolution*, in an entry for 24 October 1772, we read of the killing of a wandering albatross and a description, *inter alia*, of two lice taken from its body — one male, one female. So how did these tiny lice travel to New South Wales? And what do their itineraries tell us about the acquisition and display of insects in the circuits of empire, crossing the globe alongside other specimens and commodities, including both free and enslaved peoples? We know that the Forsters, along with Captain Cook, sold specimens and artefacts to Sir Ashton Lever, a passionate collector and impresario who was

so bankrupted by the scale of his purchases that he opened a natural history museum in London’s Leicester Square, with admission available to anyone who could afford the fee. Unfortunately the museum’s revenue did not keep pace with Lever’s passions, so bankruptcy and dispersal followed, with several lots of his insects purchased in 1806 by Alexander

Macleay (1767–1848), father of William Sharp Macleay.

When Alexander

Macleay arrived in Sydney in 1826 to take up the post of colonial

secretary, the lice travelled with him. Sixty years old and a passionate entomologist, Macleay had served as the Secretary of London’s Linnean Society for 27 years from 1798 to 1825. In addition to the lice he brought with him approximately 60,000 entomological specimens, believed to be the finest private entomological collection in Europe at that time. His butterflies, moths and beetles, acquired at auctions in London for large sums over many years, are of great scientific and historical interest, but there is little documentation about them, and identification can be difficult. In 1888, Macleay’s nephew donated the family’s enormous collection to the University of Sydney, and the lice were lost from view until 1984, when they were rediscovered by one of the museum’s curators.<sup>1</sup> Since Alexander Macleay



(above)  
Detail of Fig. 9,  
p. 49

(right)  
Detail of Fig. 8,  
p. 49

never missed an opportunity to purchase items from either bankrupt or deceased enthusiasts, many more valuable insects await rediscovery at the University's Macleay Museum. In 1805, a year before the auction of Lever's collections, another entomologist Dru Drury (1725–1803) provided Macleay with an unparalleled chance to embellish his cabinet with spectacular exotics and rare type specimens. Drury was a wealthy silversmith who paid collectors all around the world to procure insects for him. He was particularly covetous of African insects

because of their rarity in English cabinets, but there was one trophy insect that he desired above all, the African Goliath beetle, one of the largest insects ever seen in eighteenth-century Europe. A single specimen, found floating in the river Gabon in equatorial West Africa, was brought to England in 1766 and sold to the anatomist William Hunter. This beetle, *Goliathus goliatus*, now sits in a cabinet in the Hunterian in Glasgow, dwarfing its companions (fig. 1). Hunter was generous, opening his collection to all curious naturalists and even

(top)

Fig. 1. William Hunter's Goliath beetle, Hunterian Museum, Glasgow, UK.

PHOTO: D. COLEMAN

(below left)

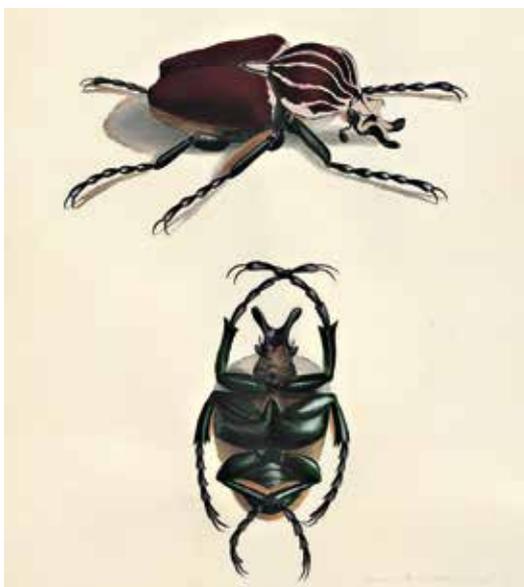
Fig. 2. Hand-coloured illustration of William Hunter's beetle specimen, *Goliathus goliatus*, by Sydney Parkinson (1745?–1771). Gouache on vellum; 32 x 25.5 cm.

© NATIONAL LIBRARY OF AUSTRALIA, NLA.PIC-AN6122907

(below right)

Fig. 3. Moses Harris's drawing of William Hunter's Goliathus, dated 1767, from Drury's *Illustrations of Natural History*, vol. 1, Pl. XXXI.

COURTESY QUEENSLAND MUSEUM PHOTO: GEOFF THOMPSON





lending the Goliath to various friends and artists. Sydney Parkinson (c. 1745–1771) was one of several artists to make a coloured drawing of it before embarking with Joseph Banks on the *Endeavour* in August 1768<sup>2</sup> (fig. 2). Moses Harris, the foremost entomological artist of his day, also figured this beetle, in 1767. But by a somewhat underhand route his exquisite hand-coloured plate ended up in the first volume of Drury's three-volume set, *Illustrations of Natural History* (1770, 1772, 1782) (fig. 3). Accompanying Harris's illustration was Drury's story of how the beetle had arrived in England. When Hunter saw that his prize specimen had been figured without his permission, or even any acknowledgement that he was its owner, he was very displeased, commenting that Drury had behaved 'in a way which he should not have expected'.<sup>3</sup>

The chicanery of passing off the Goliath as his own was not enough for Drury; he must own one himself. To this end in the late 1760s he furnished travellers to West Africa with prints of the beetle, urging them to show the pictures around to the natives and entreating them to find a specimen. None was forthcoming, however, principally because the Goliath was not a coastal insect, as thought, but an inland one. Drury's luck changed in 1771 when Henry Smeathman (1742–86), a self-taught naturalist, volunteered to travel to the West African coast. Basing himself on the

picturesque Banana Islands off the southwest tip of the Sierra Leone peninsula, Smeathman collected specimens far and wide for a wealthy group of London-based naturalists. The chief movers of this African expedition were Drury, the young Joseph Banks (just returned from the first Cook voyage), and the Quaker physician John Fothergill. In 1775 Smeathman succeeded in locating and sending to Drury his very own Goliath beetle, named *Goliathus drurii* and figured on Plate XL in volume 3 of *Illustrations of Natural History* (1782). In 1805, at Drury's auction, this beetle cost the enormous sum of £12. 1s. 6d.<sup>4</sup> Long presumed lost, a lectotype<sup>5</sup> of *Goliathus drurii* has been found in the Macleay Museum, Sydney (figs 4–5). Other *Goliathus* beetles in the Macleay Museum appear to have come into the collections after 1838. One is a *Goliathus regius*, the other a *Goliathus cacicus* (figs 6–7). There are, however, other important African insects in the Macleay Museum collected by Smeathman and figured by Drury in the third volume of *Illustrations* (1782). These include Africa's largest butterfly, the magnificent and elusive giant African swallowtail, *Papilio antimachus*. This rare specimen, which Drury (truthfully) boasted had a wingspan of 'near eight inches and a half', was given pride of place as Plate I of volume 3, its outstretched wings bursting beyond the plate's perimeters (figs 8–9). Although my visit to the Macleay Museum was a brief one, with the help

(above left)

Fig. 4. *Goliathus drurii*

© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM

(above right)

Fig. 5. *Goliathus drurii*, matching Plate XL from Drury's *Illustrations of Natural History*, vol. 3.

PHOTO: BIODIVERSITY HERITAGE LIBRARY <HTTP://DX.DOI.ORG/10.5962/BHL.TITLE.61910>



(far left)

Fig. 6. *Goliathus regius*. The assigned location of Delagoa Bay, east Africa, is incorrect.

© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM

(left)

Fig. 7. *Goliathus cacticus*

© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM



of Curatorial Assistant Robert Blackburn we identified two more of Smeathman's African insects. One is a potential type specimen of *Mecynorrhina torquata*, described by Drury as a 'splendid and exceedingly rare' beetle which had flown on board a ship at Sierra Leone and was then 'taken on the awning on the following morning' (figs 10–11). The other is a lectotype moth identified as *Saturnia lucina* on Drury's Plate XXXIV, subsequently renamed *Bombyx lucina*, *Brahmaea lucina*, and most recently *Dactyloceras lucina* (figs 12–13).<sup>6</sup> In 1788 Drury boasted of his exotic insects that they were not just unique but 'in the highest and most exquisite state of preservation'.<sup>7</sup> Sadly, the same cannot be said of these insects today, but they are nevertheless in astonishingly good condition when we consider that they are nearly 250 years old and have been subject to a complex web of sales, loans, gifts, donations and exchanges.

In 1920 the President of the Linnean Society of New South Wales lamented the 'fragmentary history' of Alexander Macleay's collection, especially the scant details regarding the insects' acquisition. Notable is his omission of West Africa from his long list of origin countries, such as Brazil, India, North Africa, Australia, and the West Indies.<sup>8</sup> The fact that these African insects, many of them valuable types, have been completely overlooked may account for their good condition, but their long lives are also testimony to Smeathman's skills as a collector. Fly-catching in the tropics was (and still is) an extremely tricky and frustrating business. The preservation of insects in wet and humid conditions involved the painstaking removal of all moisture to prevent decay and discolouration. This was followed by the challenge of getting the specimens back to England in tolerable condition. Unless the collector travelled on

(below left)

Fig. 9. *Papilio antimachus* matching Plate I from Drury's *Illustrations of Natural History*, vol. 3.

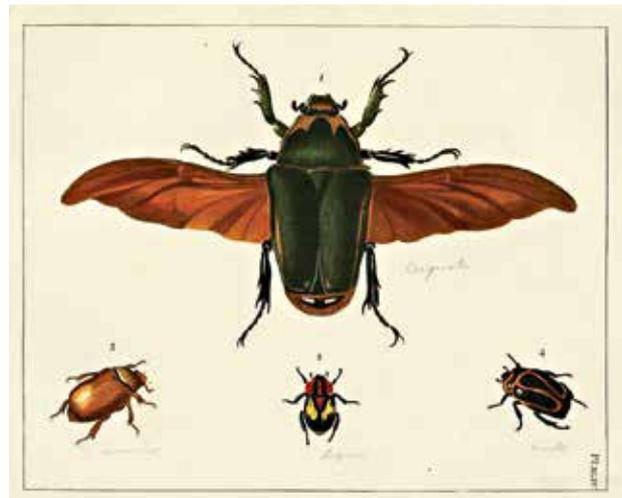
COURTESY QUEENSLAND MUSEUM PHOTO: GEOFF THOMPSON

(below right)

Fig. 8. *Papilio antimachus*

© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM





shipboard together with his boxes, the immense labour of collecting, preserving and packing the specimens could be lost in a moment. All it took was a ship captain's ignorance or the carelessness of sailors; and of course a rough sea often demanded the jettisoning of excess cargo. Also important was the location of the boxes on shipboard. When it came to the transport of plants, for instance, the 'putrid penetrating steam' of a ship's hold meant that the boxes needed to be kept well away from hatches which, when opened, too often proved fatal to all living things'.<sup>9</sup> As this sinister description of the hold suggests, the greatest obstacle to Smeathman's fly-catching success lay in the despatch of his boxes from Africa on slave ships. As the Quaker Fothergill explained to Linnaeus, these slave ships were laden 'with the wickedest of cargoes — men torn from everything that makes life worth while'. Venting his strong anti-slavery views, Fothergill described how the ships travelled to the West Indies via the Middle Passage, then back to England, a journey that involved long delays in which 'everything dies'.<sup>10</sup> There could be no guarantee of safe delivery at the journey's end. Drury too fretted in letters about his precious and valuable cargo, imagining it 'sweating in its voyage round by the West Indies',<sup>11</sup> a voyage which on average took two months. But in the end it was of course the 'practical naturalist' himself who ran the greatest risks.<sup>12</sup> Although Smeathman's expedition was potentially a lucrative one, with high prices driven even higher by the rivalry and acquisitiveness of his London-based sponsors, fly-catching in the

tropics often demanded the ultimate price. For this reason, only the most intrepid of naturalists would travel to a perilous disease environment such as the hot and humid West African coast. As Drury himself conceded, it was a shocking fact that the value of specimens was high precisely because of the 'exceedingly unhealthy' countries from which they came — places where collectors 'perished by the severity of the climate'.<sup>13</sup> Remarkably, after four years off the coast of Africa and then another four years in the West Indies, Smeathman returned to tell the tale of his eight years in the tropics.

The rediscovery of Smeathman's African insects in the Macleay Museum brings into conjunction the serendipitous historical connection between the two settlements of Sierra Leone and Botany Bay, with debates focusing on which place would be preferable for settling freed black slaves, and which for convicted white felons.<sup>14</sup> The literal and metaphorical entanglement of the delicate bodies of African butterflies, moths and beetles with those of slaves was very much on Smeathman's mind when he first arrived on the African coast in 1771, a time of unprecedented growth in British slavery.<sup>15</sup> In a letter to Drury, Smeathman jokes about the odd, foppish figure he cut amongst the hardened traders all around him — a flycatcher with nets, pins, pocket boxes, and (most unwelcome) anti-slavery sentiments. Unlike the brutal collectors of human souls, Smeathman figured himself as a romantic Cupid in pursuit of Psyche: exquisite butterfly and apt emblem of the soul. But the flycatcher did not take long to adjust to the

(above left)

Fig. 10.  
*Mecynorrhina torquata* in the Macleay Museum

© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM

(above right)

Fig. 11.  
*Mecynorrhina torquata*, matching Plate XLIV from Drury's *Illustrations of Natural History*, vol. 3.

PHOTO: BIODIVERSITY HERITAGE LIBRARY <HTTP://DX.DOI.ORG/10.5962/BHL.TITLE.61910>

prevailing ethos and economy of the coast. We see him building a house on the Bananas and marrying several times into the local mulatto trading dynasties. He also played golf and whist with the traders on Bunce Island, a British slave factory up the Sierra Leone River, taking charge of the slavers' bush picnics and excursions. When eventually the work of collecting on the mainland grew too dangerous for his health, and the preservation of specimens in the tropics too utterly exasperating, he stayed closer to home on the Bananas, rearing pigs, sheep, goats and fowls, and growing a garden for the provisioning of slave ships. He even considered slave trading himself, joking in a letter to Banks, who was quite unfussed about slavery, that he might turn into 'a dealer in souls as well as a merchant of butterflies and nettles', adding that the young botanist who had arrived to help him could 'turn some of his studies under Dr. Linnaeus to an advantage in examining whether some specimens of the *Primates* here, will be likely to meet with an agreeable reception from the collectors in our Colonies'.<sup>16</sup> The prospect of trading in the souls of men rather than butterflies, and the likening of West Indian slave-owners to natural history collectors, probably raised a smile from Banks, not least because the joke was a learned one, taking its cue from Linnaeus's controversial arrangement of homo sapiens amongst the apes and monkeys.<sup>17</sup>

If Smeathman's life and letters bring out the close connections between Linnaean natural history, collecting, and slavery, Drury's *Illustrations* dramatise the impact of Linnaeus on the pictorial representation of specimens. Gone are the lavish, baroque illustrations in which insects appear in their various metamorphoses, crawling or flying amidst the plants they feed upon.<sup>18</sup> Instead, Drury's insects are described, arranged, and named according to the new Linnaean system, with the plates organised formally in a grid pattern, as can be seen here in volume 3, Plate XIII, depicting the *Heliconiidae* (fig. 14). This new format of systematic display projected the insects as primarily scientific specimens, organised according to their genera. If such an arrangement enhanced Drury's professional identity as a serious collector in command of

the most up-to-date classificatory systems, he nevertheless wanted to give his readers more than just the insect's anatomical description and 'external figure'. The decontextualised artefact which had come to dominate networks of circulation and exchange might suffice for local insects, whose habitats were known or easily accessible, but more textual information was needed to reanimate the exotic, i.e. foreign, insects in which he specialised. This predilection ran counter to the general trend of most eighteenth-century taxonomists and collectors. Even the geography of specimens was neglected, with Linnaeus and Johan Fabricius using the vague descriptor 'In Indiis' to designate either the West or the East Indies. From the start of his entomological career, Drury was keen to avoid vagueness by restoring his exotic insects to their habitats. For instance, the 'Catalogue' of his 11,000 insects carefully noted the localities of many of his specimens. The fact that so many collectors were incurious about their insects struck Drury as a missed opportunity for enhancing the value of their collections.

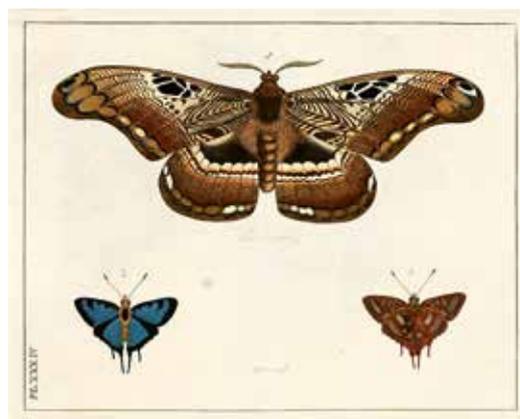
Drury took advantage of Smeathman's return to England in 1779 to offer his purchasers something new with his third volume: the natural histories of his African insects based on patient, eye-witness observation and detailed knowledge of specific



(top left)

Fig. 12. *Bombyx lucina*

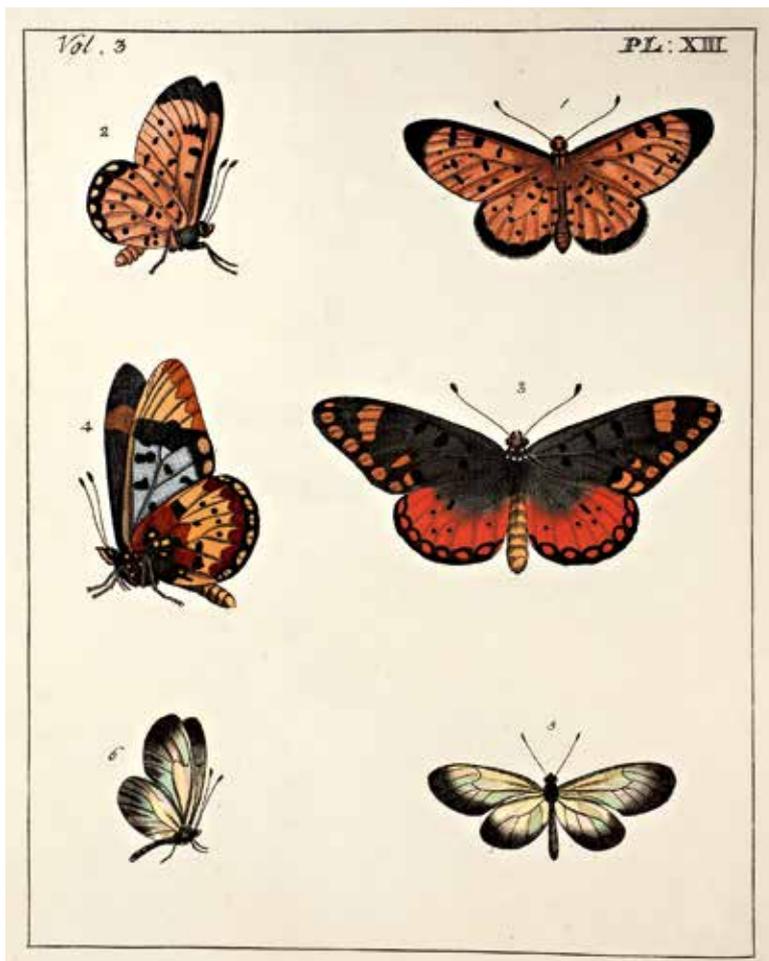
© SYDNEY UNIVERSITY MUSEUMS 2016 PHOTO: ROBERT BLACKBURN, MACLEAY MUSEUM



(left)

Fig. 13. *Bombyx lucina* matching Plate XXXIV from Drury's *Illustrations of Natural History*, vol. 3.

PHOTO: BIODIVERSITY HERITAGE LIBRARY <HTTP://DX.DOI.ORG/10.5962/BHL.TITLE.61910>



(above)

Fig. 14. *Heliconiidae* from Drury's *Illustrations of Natural History*, vol. 3, Pl. XIII.

COURTESY QUEENSLAND MUSEUM PHOTO: GEOFF THOMPSON

(right)

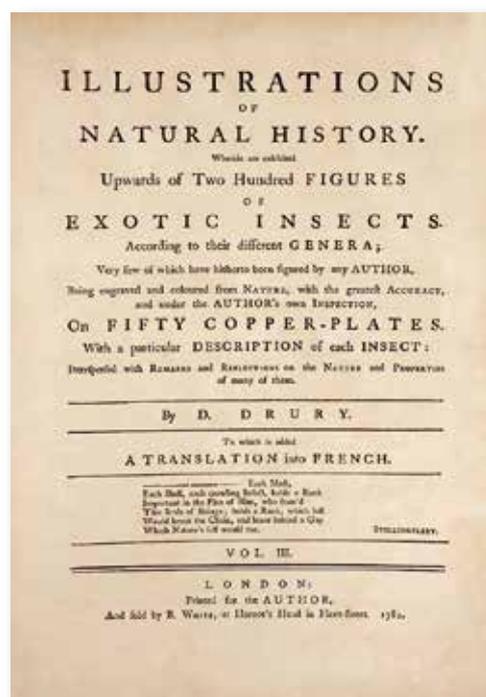
Fig. 15. Title page of vol. 3 of Drury's *Illustrations of Natural History*.

COURTESY QUEENSLAND MUSEUM PHOTO: GEOFF THOMPSON

localities and habitats. Such natural histories, Drury wrote, 'can only be known to those living on the spot, and who have speculation enough to observe them'. To this end he dedicated twelve pages to a section entitled 'Remarks on the Insects, contained in this work, communicated by Mr. Henry Smeathman'.<sup>19</sup> These remarks regarding the insects' 'manners', 'economy' and geography are poetical as well as informative, with certain species of butterflies described as 'congregating in the paths, and in the thick shade of a forest, ten or a dozen in a circle round a little puddle or moist spot'. While these butterflies might prefer the most 'gloomy recesses' sheltered from the breeze, others, like the *Heliconii*, delighted to 'bask and sport as much as possible in the sunshine, retiring towards sunset, in great crowds, to particular bushes'. These sun-loving butterflies were very difficult to catch during daytime because of the intense heat, but they could be found 'in great numbers in those places, where they breed', near towns and in open and

cultivated spots such as old rice plantations or cassava grounds.<sup>20</sup> Because West Africa, especially its interior, was *terra incognita*, such mini-narratives of Smeathman's wide-ranging adventures through ancient forests and across savannahs were highly engaging. Also of interest was the larger story of his 'cramped and embarrassed' circumstances in West Africa, and the general hostility of those 'assiduously engaged in the sole pursuit of wealth', i.e. the slave traders.

Volume 3 of Drury's *Illustrations* (fig. 15) reflects the global reach of European voyaging as well as the new knowledge generated by travel in the late eighteenth century. As a lover of entomology, Drury's personal quest was to figure and describe insects from all parts of the globe — Africa, the Caribbean, South America, and Asia — insects which had never before been seen in Europe. He was also keen to collect nondescript antipodean insects. In the last few years of his long life, Drury provided John William Lewin with financial backing and all the collecting apparatus he needed for his expedition to New South Wales, just as he had done thirty years earlier for Smeathman's expedition to Africa.<sup>21</sup> The international networks of correspondence and exchange which underpinned such ambitious global collecting can be seen in Drury's Letterbook where he cajoles his collectors in the field to



ever greater efforts, and schemes and colludes with his rich friends to get the best price for the specimens collected. With others such as Joseph Banks and John Fothergill, Drury was bent on pursuing his own little piece of immortality, even if that sometimes meant resorting to dishonest means in the process. Nor was this only a man's game. The Duchess of Portland, Britain's richest woman, contributed £100 to Smeathman's expedition in its second year, so keen was she to build on her already substantial collections of shells, corals and beautiful butterflies.<sup>22</sup>

Today the Banana Islands are a remote tourist destination, but in the 1770s these picturesque islands were at the heart of slave embarkation. Wherever possible ship captains would avoid bringing their vessels too close to the continent's unhealthy, mangrove-studded coast with its big rolling surf, preferring to anchor more safely at off-shore islands, with their healthier air and cooling breezes. This history can be seen at Kent beach, the nearest point on the mainland to the Bananas. While a slave-master's house is now a local school, the grimly dark slave hole underneath is a reminder of the dreadful holding conditions awaiting slaves brought down from the interior to the coast. Small boats would then ferry them across to the Bananas, just as the boats now ferry tourists. There is also at Kent beach an extensive slave yard with some remnants of the perimeter walls and several ornate gateposts at the main entrance. Everything is crumbling away for want of archaeological work so that, in time, nothing will remain of this slaveyard. The slave factory on Bunce island, where Smeathman played golf and whist with the traders, is also very ruinous, although American funds have recently helped preserve what is left. Of the enslaved Africans themselves, shipped from Sierra Leone, there are few material remains. Fear of ship uprisings meant that most were taken on board naked, apart from meagre strings or strips of cloth for modesty's sake. This meant that very few personal goods crossed the middle passage. When so much has been lost, the survival of the frail bodies of insects collected from the West African slave coast prompts us to wonder about what these memorials of the past might mean. That these

insects, valuable in large part because of the risks of looking for them, would travel, in the end, within cabinets and across continents to Australia speaks to their high scientific value in the rarefied world of eighteenth- and nineteenth-century collectors. But the insects also point beyond themselves, to their fraught journeys across the middle passage. This lends them symbolic weight so that we too, like Drury and Fothergill, are haunted by their proximity to the suffering of so many Africans, captured and transported into the ownership of a new type of colonial collector. 🍷

### ACKNOWLEDGEMENTS

Historical taxonomy is a time-consuming and complex field, especially for the non-entomologist humanities scholar. For their specialist knowledge and for their enthusiasm, I would like to thank Geoff Thompson, Collection Manager, Insects, Biodiversity Program at the Queensland Museum and Robert Blackburn, Curatorial Assistant at the Macleay Museum.



DEIRDRE COLEMAN FAHA holds the Robert Wallace Chair of English at the University of Melbourne. Her study of Henry Smeathman's life and times, entitled *The Flycatcher:*

*Collecting, Slavery, and Empire in the Late 18th Century*, will be published in 2017.

1. See Ricardo L. Palma, 'Two Bird Lice (Insecta: Phthiraptera) Collected During Captain Cook's 2nd Voyage Around the World', *Archives of Natural History*, 18: 2 (1991), 237–247. For the neglect of the Macleay collections in the twentieth century, see Robyn Stacey and Ashley Hay, *Museum: The Macleays, their Collections and the Search for Order* (Cambridge: Cambridge University Press, 2007), pp. 42–46.
2. Parkinson had easy access to the specimen because he lived in Queen's Head Court, very close to Hunter's house in Windmill Street; see E. Geoffrey Hancock and A. Starr Douglas, 'William Hunter's Goliath Beetle, *Goliathus goliatus* (Linnaeus, 1771), Re-visited', *Archives of Natural History*, 36: 2 (2009), 218–230. See also their earlier 'Insect collecting in Africa during the Eighteenth Century and William Hunter's

- Collection', *Archives of Natural History* 34: 2 (2007), 293–306.
3. William Hunter, quoted in Hancock and Douglas, 'William Hunter's Goliath Beetle...', p. 221.
  4. See J. O. Westwood, *Illustrations of Exotic Entomology: Containing Upwards of Six Hundred and Fifty Figures and Descriptions of Foreign Insects, Interspersed with Remarks and Reflections on their Nature and Properties*, 3 vols (London: Henry G. Bohn, 1837), I, p. 55.
  5. A lectotype is a single specimen that is the name bearer of the species.
  6. When Drury first published, entomology was a simpler science than it is now. Over time the identity of many of his insects have been 'corrected', with changes to the genus happening quite regularly in many taxa. More information on the Lucina moth can be found at <[http://www.zobodat.at/pdf/Galatea\\_17\\_0189-0197.pdf](http://www.zobodat.at/pdf/Galatea_17_0189-0197.pdf)>.
  7. Quoted in Westwood, *Illustrations of Exotic Entomology*, I, p. vii.
  8. See 'The Society's Heritage from the Macleays', in *The Proceedings of the Linnean Society of New South Wales for the year 1920* (Sydney: The Sydney and Melbourne Publishing Company, 1920–21), vol. XLV, p. 570. The stunning section on entomology in Stacey and Hay, *Museum: The Macleays, their Collections and the Search for Order*, does not include many African insects, apart from a Goliath and a whistle cricket which Linnaeus used to name the species.
  9. See John Ellis, *Directions for Bringing over Seeds and Plants, from the East-Indies and other Distant Countries, in a State of Vegetation: Together with a Catalogue of such Foreign Plants as are Worthy of being Encouraged in our American Colonies, for the Purposes of Medicine, Agriculture, and Commerce. To Which is Added, the Figure and Botanical Description of a New Sensitive Plant, called Diona Muscipula: or, Venus's Fly-Trap* (London: L. Davis, printer for the Royal Society, 1770), pp. 1, 7, 9, 15, 17.
  10. John Fothergill to Linnaeus, April 1774, in *Chain of Friendship: Selected Letters of Dr John Fothergill of London, 1735–1780*, ed. by B. C. Corner and C. C. Booth (Cambridge, Mass.: Harvard University Press, 1971), p. 409.
  11. Drury to Smeathman, 20 Nov 1772 (p. 254), *Dru Drury Letterbook*, 1761–1783, Entomological Special Collections, Natural History Museum, London, call number SB.f.D.6.
  12. For the distinction between the scientific and the practical naturalist, see Anne Laurine Larsen, 'Not Since Noah: The English Scientific Zoologists and the Craft of Collecting, 1800–1840' (unpublished doctoral thesis, Princeton University, 1993), p. 44.
  13. Quoted in Westwood, *Illustrations of Exotic Entomology*, I, p. vii.
  14. See Deirdre Coleman, *Romantic Colonization and British Anti-Slavery* (Cambridge: Cambridge University Press, 2005).
  15. See Kenneth Morgan, 'Liverpool's Dominance in the British Slave Trade, 1740–1807', in *Liverpool and Transatlantic Slavery*, ed. by David Richardson, Suzanne Schwarz and Anthony Tibbles (Liverpool: Liverpool University Press, 2007), pp. 46–48.
  16. Smeathman to Banks, 12 April 1773, from Uppsala, Uppsala University Library, Wallers manuskriptsamling; The Waller Manuscript Collection, gb-01577.
  17. Many found the classification of humans with *Mammalia* offensive. Thomas Pennant rejected Linnaeus' system altogether on these grounds, complaining 'my vanity will not suffer me to rank mankind with *Apes*, *Monkies*, *Maucaucos*, and *Bats*, the companions Linnaeus has allotted us even in his last System'; see his Preface to *History of Quadrupeds* (London: B. White, 1781), pp. iii–iv.
  18. For a well-known instance of baroque illustration see Maria Sibylla Merian's *Metamorphosis insectorum Surinamensium* (Amsterdam: the author and Gerard Valck, 1705).
  19. Dru Drury, *Illustrations of Natural History*, 3 vols, (London: B. White, 1770; 1773; 1782), III, pp. xv–xxvi.
  20. *Ibid.*, III, p. xxii.
  21. Lewin set off for New South Wales in 1798, and in 1805 published *Prodromus Entomology. Or, a Natural History of the Lepidopterous Insects of New South Wales*. For more on Lewin, see Richard Neville, *Mr J. W. Lewin: Painter and Naturalist* (Sydney: NewSouth Publishing, 2012).
  22. For the Duchess of Portland's collecting activities, see Beth Fowkes Tobin, *The Duchess's Shells: Natural History Collecting in the Age of Cook's Voyages* (New Haven and London: Yale University Press, 2014).