



Bon Voyage? 250 Years Exploring the Natural World

Conference Report by Stephen Chapman

Bon Voyage? 250 Years Exploring the Natural World was the theme for a fascinating conference organised by SHNH in association with the British Ornithologists' Club and held at the World Museum Liverpool on 14-15 June 2018, marking the 250th anniversary of Captain James Cook's first voyage to the Pacific on HMS Endeavour. Cook's voyages influenced many areas of science and endeavour - from astronomy and geology to natural history and anthropology. The meeting drew people from around the world to listen and discuss the history of natural history exploration on land to sea worldwide - the risks they took, the discoveries made, their contributions to science.

Knowsley Hall

Ahead of the conference, on 13 June delegates visited Knowsley Hall, the home of successive Earls of Derby. It was the 13th Earl, Sir Edward Stanley (1775-1851), whose passion beyond horse-racing was his menagerie, aviary and natural history pursuits, endeavours that as a major landowner, and one of the richest in Britain, he was able to indulge. He built a large collection of birds, mammals and plants and became acquainted with John Latham, the foremost English ornithologist of his day. At the Zoological Society of London, Lord Stanley met Edward Lear and hired him to paint rare species in his own collection. He also became an avid collector of specimens from London and Liverpool dealers and collectors with live and dead specimens returning from overseas travels. Visitors to Knowsley included John James Audubon, Charles Lucien Bonaparte and John Gould.

After lunch, conference visitors were treated to a rare opportunity to examine close-up the paintings of Edward Lear who, besides entertaining children with his nonsense rhymes, was a very gifted artist. Guided by Stephen Lloyd, curator, we gathered in the library amongst cases of antiquarian portfolios and studied at leisure the finest works of L J Robins and Edward Lear.



The Conference

The 25 speakers covered a wide range of explorations and discoveries, the full programme being available at: <http://shnh.org.uk/events/past-meetings-events/> . My summary here focuses on selected papers, notably ones of a maritime and/or ornithological bias, that particularly attracted my attention. Jordan Goodman of University College, London, set the scene with his talk on Cook and Banks. What became clear was after the first voyage of the three-masted barque *Endeavour*, starting in 1768, how better organised things became. The vessels were small and cramped, but in 1776 *Resolution* was specifically built with collectors and collections in mind, with the space normally allocated to a certain degree of luxury for the captain being designed for the scientific work of the collectors. The captain was moved to a small-sized cabin. How far Cook voyaged and the progress in navigation made in those 12 years, with the ability to calculate longitude with greater precision using Harrison's marine chronometer, is amazing. Sydney Parkinson was employed by Joseph Banks to travel with him on Cook's first voyage to the Pacific, drawing thousands of plants and animals in very difficult conditions. He died at sea on that voyage and is commemorated in the common and scientific name of the Parkinson's Petrel *Procellaria parkinsoni*. On Cook's third voyage on HMS *Resolution*, a converted collier, David Nelson and William Anderson collected vast numbers of living plants to bring back to Kew to create the finest botanical collection.



Illustration: Joseph Smit, 1896. Catalogue of the birds in the British Museum. Volume 25
Majaqueus parkinsoni = Procellaria parkinsoni, Parkinson's Petrel

Edwin Rose, University of Cambridge, explained how Banks and Daniel Solander used the Linnaean system of classification to record and classify. Solander had a system he had developed while working at the British Museum to manage the huge amount of information collected. Rose also described the transport of breadfruit plants from the Pacific, that when established was used to feed the workers in the Caribbean sugar plantations as conflict prevented the supply of grain from America.

Preserving and transporting specimens in those early years brought its own challenges. Stanislav of the Natural History Museum recounted the evolution of preserving zoological specimens in spirit. For dry specimens, protection against insects was a pressing issue. A corrosive sublimate (mercury(II) chloride) was used at that time, and this continued to be used by taxidermists in Britain well into the 20th century, he explained.

The topic of preservation was picked up again by Leslie Overstreet of the Smithsonian Libraries when she addressed *The (Most Important) Books on the Beagle*. When it set sail in December 1831 on its second surveying voyage for the Royal Navy, HMS *Beagle* (a brig of 242t and less than 100 feet long) boasted a ship-board library of some 400 books on travel, exploration, natural history, navigation, and related subjects; most belonged to Captain Robert Fitzroy. Naturalist Charles Darwin brought some of his own as well.

Leslie showed that the two most important titles were small, obscure booklets that illuminate Darwin's work as a practicing naturalist, collecting specimens and describing them in his letters and subsequent publications: the Paris Muséum National d'Histoire Naturelle's *Instruction pour les voyageurs...* (1818) and Patrick Syme's *Werner's nomenclature of colours* (1821). She said that the methods of preserving and transporting specimens (dead or alive) were a crucial and sometimes controversial interest for naturalists through the centuries. From 1800 arsenical soap was widely used. This is reflected in the incredible number of such publications, particularly in the 19th century as these activities became more "institutionalized." Through much the same period, in their correspondence and publications naturalists had begun trying to define the colour terms used to identify and distinguish species, as well as the pigments used to illustrate them, initially by incorporating colour charts in their own books and eventually by setting forth standards intended for wide-spread adoption.

Continuing the theme of skin preservation, the French ornithologist Jean-Baptiste Bécœur's (1718-1777) father, was an apothecary. Bécœur studied pharmacy then devoted himself to natural history studying mainly insects and birds. He developed a method that preserved bird specimens and prevented them from being damaged by insect attack. His efforts helped revolutionize the conservation of birds and ornithology at the Paris Muséum. His method of conservation was based on arsenic but he died without publishing the recipe of the arsenical soap. It appeared again early in the nineteenth century. Bécœur's secret had been handed over to François Levaillant (1753–1828), who sold the recipe together with his collection of birds, animals and plants to the French government in 1797.

Zoë Varley in her talk on *Robert Fitzroy: Captain, Collector and Collaborator* emphasised the importance of Fitzroy's contribution to the overall success of the second voyage of the Beagle (of which he was captain), including the amassing of a distinct and largely overlooked zoological collection. The young and high flying Captain Robert FitzRoy, who incidentally developed the instrument for accurately measuring barometric pressure, closely collaborated with Darwin in the onboard task of collecting and documenting zoological specimens, which now largely reside at the Natural History Museum in London and in Tring.

Edward Dickinson, described how the French naturalist for the Paris Museum, Alcide d'Orbigny, travelled extensively in South America between 1826 and 1833. He visited Brazil, Argentina, Paraguay, Chile, Bolivia, Peru, Ecuador and Colombia and returned to France with an enormous collection of more than 10,000 natural history specimens. D'Orbigny wrote in great depth and brought major collections and exquisite drawings back to France. Several zoological and botanical taxa were named in his honour, including the Rusty-vented (or Creamy-breasted) Canastero *Asthenes dorbignyi*, a species in the family Furnariidae found in montane scrub in the Andes in Peru, Chile, Bolivia, and north-western Argentina, and the Grey-breasted Seedsnipe *Thinocorus orbignyianus*, in the Thinocoridae family, found in the temperate grasslands, subtropical or tropical high-altitude grassland, and swamps of Argentina, Bolivia, Chile, and Peru.

Robert Prŷs-Jones's talk stayed in the 19th century with a focus on how Wallace's Sarawak bird collection sheds light on the development of his ornithological knowledge. Alfred Russell Wallace spent eight years in the Malay Archipelago, visiting Sarawak, where he collected *ca* 100 bird species, early in the trip and spending longer there (15 months) than anywhere else. Robert drew on Wallace's field notebook *Birds collected in Borneo* and his revealing annotations on the labels on his specimens to analyse the identification problems Wallace faced in the field and how his ornithological knowledge and ability to identify the birds he collected evolved over time.

Carlo Bovolo of Fondazione Filippo Burzio, Turin, presented a paper that dealt with the Italian zoologist Filippo De Filippi (1814-1867) and his diplomatic and exploratory endeavour for the Kingdom of Italy. Professor Filippi sailed on the corvette *Magenta* as scientific director on a three-year around the world voyage. He died in Hong Kong of hepatitis and his assistant Enrico Giglioli was left to publish their findings. De Filippi's Petrel or Masatierra Petrel *Pterodroma defilippiana*, a seabird in the family Procellariidae, endemic to Chile where it nests in the Juan Fernández Islands, was named in his memory.

HMS *Dryad*, sister ship to HMS *Nymphe* took Edwin Jennings, taxidermist, to Auckland and Campbell Islands (see photo) in 1878, about the time that Joseph Hatch started exploiting seals and later penguins for fat and oil so explained Rosi Crane. That said the final conference paper before the reviewer had to leave focussed on 20th century natural history explorations made by museum staff on board the New Zealand government SS *Hinemoa* and other steamships. Rosi Crane, Honorary Curator, History of Science at the Otago Museum in Dunedin approached this by drawing on the resulting specimens that have survived. Commercial and scientific interests were served by a series of ad hoc expeditions which benefitted the museum collections until in 1895 and 1903 staff carried out the first scientific dredging in New Zealand. Then in 1907 a major scientific expedition utilized the ship's services setting up camp for the summer months on Auckland Island and Campbell Island: Rosi's slides depicted the wholesale slaughter of Elephant Seals *Mirounga leonina* for their oil, bringing the creature to the verge of extinction at the end of the 19th century. At this point the sealers switched to catching and processing young penguins *Eudyptes* at Nuggets Point on Macquarie Island. This in turn had devastating impact on their population. Such practices are outlawed today.



Caption: Between Auckland Islands and Campbell Island

Photo: © Tony Whitehead www.tonywhitehead.com

Conclusion by Chris Storey

The conference brought together a remarkably stimulating range of topics and styles of presentation. In addition to the papers highlighted by Stephen Chapman, areas of enquiry ranged from the naming of Australian animals (Jack Ashby “Contrary to the general laws of nature”: Europe’s earliest encounters with Australian animals), to Spruce’s voyages in Amazonia and the Andes (Luciana Martins, An ethnologist avant la lettre: Robert Spruce collecting in South America) and Deborah Wace’s artwork in response to the French D’Entrecasteaux Scientific Expedition to Recherche Bay, Tasmania in 1792-3 (Deborah Wace, Art and History in the French Garden at Recherche Bay).

The whole event, including the behind-the-scenes tours of the World Museum’s collections and the dinner at The Ship and Mitre, was a delightful reminder of the benefits of meeting with members of other societies dedicated to exploring and describing the natural world.

The BOC’s thanks go to all participants and the creative and indefatigable organizers and in the hope of more collaboration with SHNH in the future.