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IS AUSTRALIA OVERPOPULATED?

CHARLES
DARWIN
In Tasmania

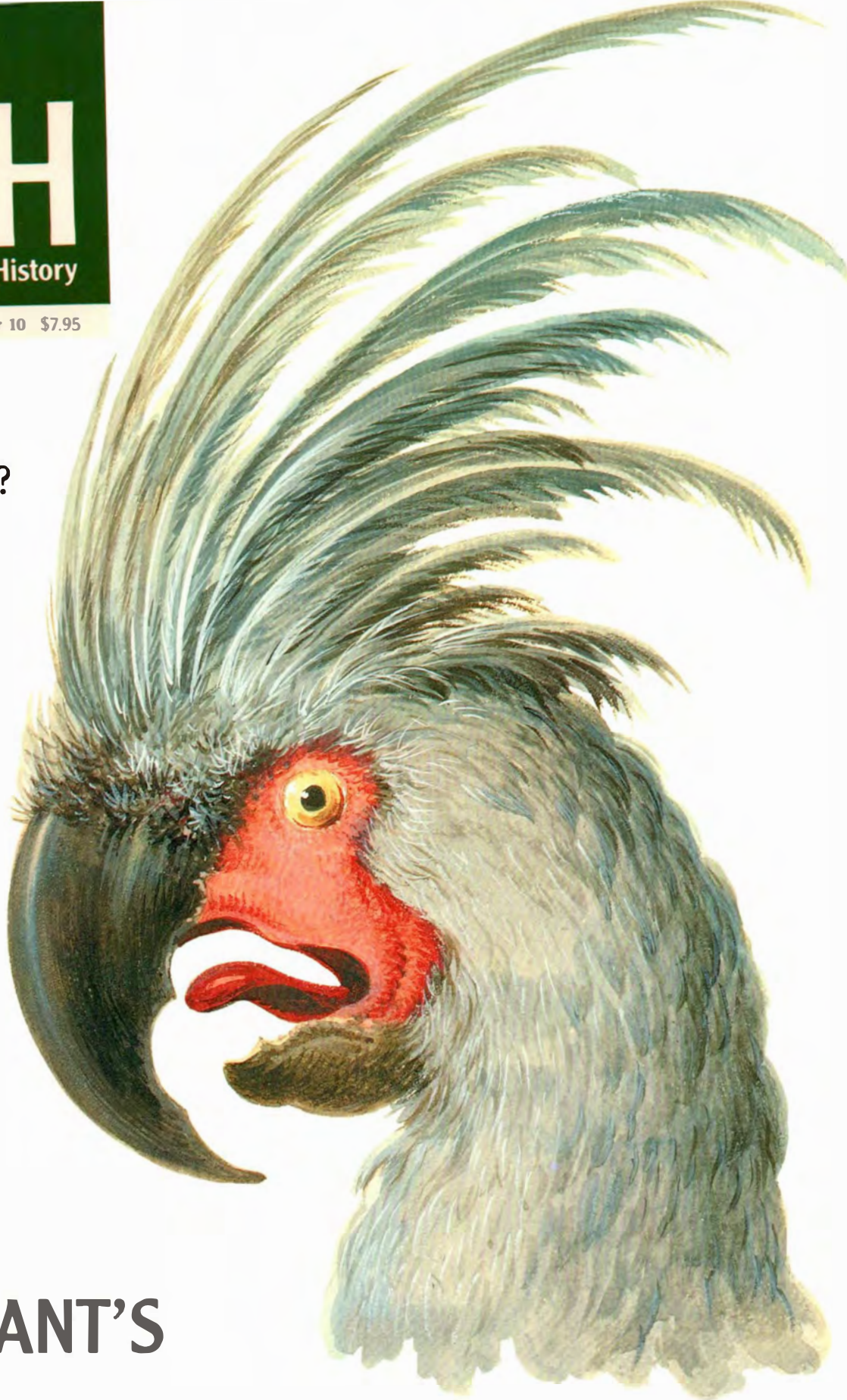
IN SEARCH OF A SIMPLE SOUL

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DILEMMA
Magpie Geese
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STORY

LE VAILLANT'S PARROTS

An Unnatural History?



T H E A U S T R A L I A N M U S E U M



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FLEVAILLANT

"Today we should remember Le Vaillant not as a 'liar', but as a man who made important contributions to ornithology. The conservation of parrots is a fitting memorial."

PARROTS, LIES & BIRD BOOKS: THE LEGACY OF LE VAILLANT

BY MURRAY D. BRUCE

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IN 1801, A 48-YEAR-OLD FRENCHMAN, François Le Vaillant, launched an ambitious publishing venture. He would simultaneously issue, in parts, three lavishly illustrated folio books of birds. Napoleonic France was at its zenith and there was a ready market for anything colourful, gaudy and expensive. Le Vaillant, as the most famous ornithologist of his day, was the perfect choice to attempt this feat. He had reached the pinnacle of his fame with books on his voyage of exploration to Africa but his observations were entangled in a fabrication of fanciful fiction. Now was his chance for scientific credibility.

This came with his book on parrots—

As if to reinforce the fictional side of his writings and later reputation as a 'liar', Le Vaillant's title page illustration is not a real species, but resembles his 'Rajah Lory-Parrot', a presumed variant of the Purple-naped Lory (*Lorius domicellus*) of the Moluccan Islands, Indonesia.

the first of its kind to treat these birds comprehensively, an achievement demonstrating Le Vaillant's supreme grasp of the subject. It was also a work that was destined to have an impact on parrot conservation in Australia more than a century and a half after his death. This is a somewhat ironic and interesting extension of a French ornithologist's work, considering the man never set foot in Australia!

Born François Vaillant in 1753 in Paramaribo, Surinam (South America), his father was the Consul for France (the 'Le' was added to his name later when he began his travels). His love of adventure and the mysteries of the natural world came early in life when he accompanied his parents, both keen naturalists, on journeys into the South American rainforests. At ten, his family returned to northern France to settle in their home city of Metz. François became an apprentice apothecary to a M. Bécoeur, who also then had the

largest private collection of European birds. By the time of his first visit to Paris in 1777, François was an excellent marksman, having notched up 14 years' experience in hunting, collecting and studying birds around Metz and neighbouring parts of Germany. For three years he studied the bird collections available in Paris and continued with collections in Holland.

Le Vaillant was anxious to explore and collect in an area hitherto unknown for its birds, in an effort to build up a collection, make a contribution to science and become famous. There was little support for him in Paris but his Dutch contacts and Dutch background in Surinam together with his familiarity with the Dutch language made the Cape Colony of southern Africa an ideal choice. He departed from Holland in December 1780, arriving at Cape Town in April 1781. He made two extensive journeys eastward and northward before returning to Europe with a col-



Le Vaillant, the eccentric 18th-century French ornithologist, shared his passion for nature with three wives and ten children.



lection of over 2,000 birds, plus mammals, insects, plants and ethnological material.

Back in Holland in November 1784 he sold most of his collections to a wealthy friend and Treasurer of the Dutch East India Company, Jacob Temminck. Interestingly, Temminck's son inherited the collection and sold it to the Dutch Government in 1820 to form the nucleus of a public museum in Leiden with himself as Director. In January 1785 Le Vaillant returned to Paris and presented to the natural history museum a stuffed giraffe he shot on his second journey. It was the first complete specimen to reach Europe and became a great exhibition prize for the Museum. It also demonstrated Le Vaillant's taxidermic skills, which greatly enhanced the value of the specimens he sold to rich, private collectors. He was now well on his way to becoming rich and famous.

THE EAGERLY AWAITED BOOK OF HIS TRAVELS appeared in 1790 as *Voyage de Monsieur le Vaillant dans l'intérieur de l'Afrique par le Cap de Bonne Espérance dans les années 1780, 81, 82, 83, 84 et 85*. It was a book that captured the public imagination and became a 'best-seller'. Many translations appeared within three years. It was also used and misused by the Revolutionary Government to compare the equality of French people with the image of the 'Noble Savage' (an idyllic lifestyle free of the trappings of civilisation) as presented by the philosopher Rousseau. Rousseau considered nature as not simply a philosophical principle and the source of all rational and scientific investigation, but also a criterion that could be used for the elimination of oppression and injustice. Le Vaillant was a more romantic follower of Rousseau's doctrines and even dedicated a bird to Narina, the attractive daughter of a Hottentot chief he had met, and named another after his servant. Because of his poor writing style, the book was edited anonymously by his father, who based it on notes, sketches and conversations with his son.

The French Revolution had stopped his hunting trips in the country but he was kept busy organising his collections and working on his books. During the Reign of Terror (1793–1794), during which people were executed for opposing the government, Le Vaillant was imprisoned for some months and only narrowly escaped the guillotine with the fall of Robespierre, an influential political figure, in July 1794. A sequel, his *Second Voyage...*, finally appeared in

A female Red-cheeked Parrot (*Geoffroyus geoffroyi*), named after Professor Geoffroy St Hilaire (zoology, National Museum of Natural History, Paris). Le Vaillant notes a male and female were brought back by Captain Baudin from Timor. However, this species was not definitely reported from Australia until 1914.



1795, but only after the fervour of revolution had subsided. For this book Le Vaillant hired a professional writer, Casimir Varon, who was very liberal with the text. Le Vaillant's desire to increase his popularity, as well as the emotional upheaval of imprisonment, may well explain his deliberate oversight of Varon's wilder flights of fantasy. The sequel was also a best-seller, with many translations issued. Both books ran into several editions during Le Vaillant's lifetime.

In spite of such artistic license, few travel books have captured as much public attention or stimulated and focused as much interest in Africa. By contrast, the Scottish explorer of Ethiopia and the Blue Nile, James Bruce, published an accurate account of his travels in 1790. Although this too was a best-seller, he was not believed and was scathingly satirised by vulgar comparisons with the adventures of the fictional Baron Munchausen, created by Rudolph Raspe. Le Vaillant's success during the French Revolution, the Reign of Terror and the rise of Napoleon suggests it was a welcome diversion for his readers. Today these books would be described as 'travel journalism' with,

Eclectus Parrot (*Eclectus roratus*). Le Vaillant stated that this was a male, but it is now known that males are predominantly green and females red. This is unusual in birds.

Of the 'Blue-faced Parakeet' (Rainbow Lorikeet, *Trichoglossus haematodus*, most probably from the Moluccas or New Guinea) Le Vaillant says "Mr Holthuysen could not tell me from which part of India this specimen of his collection came." On the question of its being specifically distinct from the 'Blue-headed Parrakeet', Le Vaillant says "let us then leave these questions unanswered, rather than poorly solved, for natural history has too many of these conjectures already!"





in Le Vaillant's case, a racy narrative skimming over truth and inaccuracies alike to keeping the reader engrossed. Le Vaillant's writings have also been described as literary gems that enchant the true ornithologist, for both his *Voyages* were replete with bird observations and the author's youthful enthusiasm.

Le Vaillant was now ready for his first and most famous bird book, *Histoire naturelle des oiseaux d'Afrique*. It was issued in 51 parts from 1796 to 1812 and formed six volumes (a seventh remains unpublished). Other editions and two German translations also appeared. The book reveals Le Vaillant's familiarity with European bird collections and his taxidermic skills. However, in a critical review in 1857, the Swedish ornithologist C.J. Sundevall pointed out that, of the 284 species included, at least 50 came from outside Africa and another ten were based on artefacts (specimens composed of the parts of two or more species). For example, in 1806 Le Vaillant described—and claimed to have observed feeding on a carcass—a cuckoo from South Africa that was revealed many years later to occur only on the island of Java where it is now endangered (the Sunda Coucal, *Centropus nigrorufus*).

Edgar L. Layard, in his *Birds of South Africa* (1867), dismissed Le Vaillant as a liar, on the strength of Sundevall's conclusions. Later workers have been kinder and pointed out that, by overlooking the faults, Le Vaillant's contributions laid the foundation for African ornithology. In the second edition of Layard's book, the author R.B. Sharpe said "it is greatly to be regretted that [Le Vaillant's] work contains a large number of species introduced into the book as African which are in reality inhabitants of totally different countries; in fact, on many occasions he admits the circumstance. The late M. Jules Verreaux, who knew [Le Vaillant] personally, told us that it was quite by accident that these extraneous species were introduced into his work, that his intentions were perfectly honest, but that many of his specimens were lost, and were not at his disposal when he wrote his book in Europe. He consequently figured many species in his book which he fancied that he had seen in Southern Africa, and that he had no deliberate intention to deceive. In the case of several species which were made up of two or three different kinds of birds, Verreaux stoutly held that [Le Vaillant] was himself deceived, and that he really believed the specimens placed in his hand to be individuals of some

A variant of the Red Lory of the Moluccan Islands (*Eos bornea*). Le Vaillant says this bird is "more commonly found on Borneo Island." Salvadori, in the parrot volume of *Catalogue of birds in the British Museum* (1891), records that he thinks this to be an artificial bird, but without explanation.

Le Vaillant perpetuated an error by stating the Seven-coloured Parrotlet (*Touit batavica*) was common on Java. Its original describer, Boddaert, gave it the scientific name '*batavica*' (Batavia = Jakarta) in 1783. Possibly both were misled by reports of Sonnerat "who saw this Parakeet on Luçon Island" and "describes it in his voyage to New Guinea". But this is impossible as this bird comes from South America.

species which he remembered to have seen in South Africa." After all, such faults were not unusual in his day. Australia has the famous example of Pierre Sonnerat who claimed in 1772 to have found the Laughing Kookaburra (*Dacelo novaeguineae*) in New Guinea (hence the name), where it has never been recorded. Sonnerat had used this and other species to enhance the results of his covert expeditions during which he and his uncle smuggled spice plants to Mauritius in an attempt to break the Dutch monopoly in the East Indies (now Indonesia).

Today Le Vaillant is not as well known as he should be because he adhered to Count Buffon's older method of French nomenclature, rather than the system of scientific nomenclature introduced by the Swedish botanist Carolus Linnaeus (the one still used today), which rapidly gained a foothold in France after the death of the influential Buffon in 1788. Even though others stole the credit for Le Vaillant's new species, often recognising his discoveries by adopting the distinctive French names, Le Vaillant refused to adopt the 'artificial' systems of Linnaeus and his followers. Indeed, he used his books to criticise that system by drawing on his extensive field experience with African and European birds. He was interested in the behaviour of birds and had no interest in the anatomical studies of the 'cabinet' naturalist.

During this controversy with his French compatriots, and with his *Birds of Africa* still being issued, he began his new enterprise in 1801. Le Vaillant had studied more bird collections and seen more birds in the field than any of his contemporaries, and what better way to demonstrate this than by issuing grand, illustrated works! But there was another reason behind his new venture. The famous artist Jacques Barraband had introduced the new process of copper engravings partly printed in colour with retouching by hand (already used experimentally in Le Vaillant's African volumes), and a large rival work exploiting this technique was about to begin publication. With Barraband's plates and Le Vaillant's texts, three separate works emerged: *Histoire naturelle d'une partie d'oiseaux nouveaux et rares de l'Amerique et des Indes*; *Histoire naturelle des oiseaux de paradis et rolliers* (1801–1806), including a supplement (1818); and the third and most famous, *Histoire naturelle des Perroquets* (1801–1805). His work on parrots was issued



in 24 parts and formed two volumes with 145 plates featuring 90 species of parrots. It is regarded as the cornerstone of parrot literature and so impressed two Frenchmen that they each published a supplementary volume: A. Bourjot St Hilaire in 1837–1838 and C. de Souancé in 1857–1858.

IT IS DIFFICULT TO IMAGINE HOW THIS eccentric 18th-century French orni-

thologist who had never been to Australia could have an impact on the conservation of Australian parrots. Strangely enough, this is indeed the case, for in 1988—over a century and a half after Le Vaillant's death—and on the other side of the world, a unique presentation copy of Le Vaillant's great work on parrots was acquired by the conservationist Lord Alistair McAlpine. He obtained it from Sydney antiquarian Brian Chester, who had purchased it



Le Vaillant described the Eastern Rosella as "Indisputably one of the most beautiful of the rich parrakeet tribe". The specimen illustrated was owned by Madame Josephine Bonaparte. She had a profound influence on the natural sciences and her estate boasted a unique array of plants and animals from around the world including kangaroos, Dwarf Emus (now extinct) and Black Swans.

Bloody Parrot Swindle

Le Vaillant gives a detailed and well-argued discussion of what might cause variegation or spotting in the feathers of parrots. He kept a live Chestnut-breasted Macaw for two years and noted that extra red feathers appeared with each moult. At that time some naturalists believed that "such spotted



Chestnut-breasted Macaw (*Ara severa*).

Parrots have undergone a particular process, invented by savages. This process, they ascertain, involves plucking the feathers from the bird and then rubbing the new growth with the blood from a species of tree-frog which is common to Guiana". Instead, Le Vaillant believed that disease was the cause. He was remarkably close to the truth, for recent work by Rosemary Low, Curator of Loro Parque in the Canary Islands and author of *Parrots of South America* (J. Gifford Ltd, London, 1972) puts the condition down to a nutritional disorder. She has mentioned that it can be diet-induced by adding fish oil to the diet of hand-reared birds. This practice was followed by Amerindians who collected nestlings, hand-reared them and sold them to bird-traders, who paid a premium for unusually coloured birds. The condition need not be a permanent one, as appropriate diet can result in the development of normally coloured feathers. Given that the microstructure of feathers and details on how colour in feathers is formed are only relatively recently known, Le Vaillant's reflection is quite interesting.

— Graeme Phipps
Taronga Zoo

from a private French library. This remarkable copy, which had been presented to the famous zoologist and administrator of the Paris natural history museum, Count Bernard Germain Etienne de la Ville de Lacépède, includes 14 life-sized watercolour head-studies, a frontispiece and a special hand rendering of 143 of the original engravings by Barraband and Pieter Barbiers, with foliage and flora.

The incentive to contribute to parrot conservation, as well as make this historic work available once more, soon led to plans to produce a facsimile, which Brian Chester and Lord McAlpine published in 1989 in two editions. The total of 158 colour prints, with original French letterpress plus the text translated into English for the first time (a vast improvement on the often misleading contemporary English translations of Le Vaillant's travel books that did not help his reputation in England), and presented in two hand-crafted boxes, has been selling at an after-publication price of \$20,000. Also available is a single-volume library edition for \$375 (smaller format, without the French letterpress). The proceeds of the sales of these new editions, expected to total around \$3.5 million, are earmarked for the conservation of parrots through a special captive breeding program at the Pearl Coast Zoo at Broome in Western Australia.

Set up by Lord McAlpine, breeding pairs of all but the rarest of threatened species are kept in a complex of smaller aviaries away from the main public areas. Foreign species are also represented. The breeding program features incubators and brooders for hand rearing young birds, while nesting material is replenished in the breeding aviaries to encourage reneesting (double brooding) during each breeding period. Pearl Coast Zoo has bred more of the threatened Hooded Parrot (*Psephotus dissimilis*) than any other zoo in the world. This gives an opportunity for a future release program.

Graeme Phipps, General Curator of Taronga Zoo in Sydney, provided the ornithological commentary and updated nomenclature for the reprinting. He points out that three of the species featured by Le Vaillant are now extinct and half of Australia's amazing variety of parrot species may be extinct within the next century unless drastic action is taken *now*. The Royal Australian Ornithologists Union's report *Threatened birds of Australia* (1990) lists 11 species of parrots, including two already considered extinct (the Paradise Parrot, *Psephotus pulcherrimus*, and the Norfolk Island Kaka, *Nestor productus*). The remainder, although from different regions of Australia, share the common problem of having specific habitat needs and retreating under the onslaught of habitat change by humans.

Biologically, parrots have a slow



Is Le Vaillant's macaw Cuban or Hispaniolan? This question is somewhat academic now that the macaws of both islands are extinct.

breeding and replacement rate but can, if not too disturbed, maintain stable populations within a given area. This means larger parrot species that are unable to adapt to changes face an unpredictable future if their habitat is destabilised. A major problem worldwide for the survival of many parrot species is that not enough is known about them in the wild. Field studies have often provided a key to survival and the development of population management plans (for example, locating preferred nesting sites, understanding feeding habits and preferred food plants). The Puerto Rican Parrot (*Amazona vittata*) is the classic case. However, in too many cases the survival of a species may only come from captive breeding programs to ensure a viable stock of individuals in order to maintain some degree of genetic diversity (a captive gene pool). This is a key role for zoos. Reintroduction into the wild of captive-bred stock may be possible.

Parrots are popular as pets and the trade in live birds is now threatening to increase the likelihood of population crashes of whole species or significant parrot populations. The pet trade is blamed for the demise of the world's rarest parrot, Spix's Macaw (*Cyanospitta spixii*) of north-eastern Brazil,

with 1990 reports indicating only one wild specimen known to still survive! Unfortunately, most parrots live in tropical rainforests and deforestation is an added—if not the major—threat. While most parrots are hardy and long-lived birds that adjust well to captivity, an ever-increasing number may be doomed to survive only in captivity, if they can be saved at all.

An exception may be the ongoing efforts to save New Zealand's flightless Kakapo (*Strigops habroptilus*) by establishing populations on uninhabited, vermin-free islands (a successful technique for other endangered New Zealand birds). There may be a middle ground. While a number of species have been pushed to the brink of extinction, with some famous examples of recovery, it is also important to breed species in captivity whose numbers are still reasonably secure, not only to develop and improve breeding techniques, but perhaps also to keep some species from getting on the critical list.

Lord McAlpine's captive breeding program deserves all the support it can get. We can't afford to lose any more parrot species nor can we afford to lose too much time tackling the problem. There are a number of such programs for parrots around the world and this is one of the few groups where the support of aviculturists may be considerable.

Le Vaillant, who inspired this import-

ant contribution to parrot conservation, possessed a lifelong passion for his birds that continued until his death in 1824. Today we should remember Le Vaillant not as a liar, but as a man who made important contributions to ornithology. The conservation of parrots is a fitting memorial to one of the great pioneers in the study of birds. ■

Suggested Reading

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