

## Alec Chisholm and the extinction of the Paradise Parrot

Russell McGregor 

College of Arts, Society and Education, James Cook University, Townsville, Qld 4811, Australia.

Email: [russell.mcgregor@jcu.edu.au](mailto:russell.mcgregor@jcu.edu.au)

Rediscovered in 1921 after several decades of feared extinction, the resurrection of the Paradise Parrot was brief. Within a few decades more, the parrot was actually extinct, making it the only mainland Australian bird species known to have suffered that fate since colonisation. This article explores the reasons for the paucity and ineffectuality of attempts to preserve the species in the interwar years. By examining the contemporary state of ornithological knowledge on endangered species and the limited repertoire of conservationist strategies then available, the article extends our understanding of early twentieth-century discourses on avian extinction in Australia. It also offers an assessment of the conservationist efforts of Alec Chisholm, an amateur ornithologist who had a major role in the rediscovery of the Paradise Parrot and in subsequently publicising its plight.

Published online 12 March 2021

### Introduction

The Paradise Parrot of Australia was first brought to the attention of Western science by the zoological collector John Gilbert, who sent a skin to his employer, ornithologist John Gould, in 1844. Gilbert was so awed by the species' beauty that he asked to have it named after himself. Gould declined, instead naming it *Psephotus pulcherrimus*, which roughly translates as 'multicoloured and superlatively beautiful' (Fig. 1).<sup>1</sup>

Gilbert acquired that first specimen on the Darling Downs in what would later become the colony, and then state, of Queensland. The bird was then reasonably numerous there, as it was in adjacent parts of inland south-east Queensland. But the environmental transformations wrought by colonists, probably including the changed fire regimes consequent on Aboriginal dispossession, were deadly to the Paradise Parrot.<sup>2</sup> By the turn of the twentieth century, the species had dwindled to the point that many feared it might not survive. There were no confirmed sightings in the first two decades of that century.

In 1917, Alec Chisholm, a 27-year-old journalist and amateur ornithologist then resident in Brisbane, began investigating whether the species still lived (Fig. 2). After four years of false leads and mistaken identifications, he finally had positive news. On 11 December 1921, Cyril Jerrard told Chisholm that he had identified a pair of Paradise Parrots on his property near Gayndah in Queensland's Burnett district.<sup>3</sup>

Over the next few years, Paradise Parrots continued to be seen in the Gayndah area, although the population was evidently very small. Jerrard's last sighting of a Paradise Parrot was on 13 November 1927, and the last sighting he reported to Chisholm was by his neighbours on

Manar Park station in August 1929.<sup>4</sup> There were some plausible reports of sightings in the 1930s and 1940s, by Keith Williams, Eric Zillmann and Noel Ensor, although these were retrospective reports made decades after the events to which they referred.<sup>5</sup> There were no more authenticated sightings. Today known as *Psephotellus pulcherrimus*, the Paradise Parrot has the unenviable status of being the only mainland Australian bird species listed by the International Union for the Conservation of Nature as extinct.<sup>6</sup>

Although an exceptionally beautiful and therefore potentially charismatic species, the Paradise Parrot has not stirred the popular imagination in the same way as Australia's most celebrated extinct species, the Thylacine (or Tasmanian Tiger).<sup>7</sup> Perhaps a small parrot that looks much like several extant members of the same genus, however gorgeous, cannot compete in the publicity stakes with the weird semblance of a tiger that once roamed Tasmania's rugged wilds.<sup>8</sup> As against the vast cultural output devoted to the Thylacine, the Paradise Parrot has been the subject of a few poems and songs, some artworks, a children's book, and just one substantive study, *Glimpses of Paradise*, by ecologist Penny Olsen.<sup>9</sup> Since 2021 marks the one-hundredth anniversary of Jerrard's rediscovery of the species, it is timely to reflect on the bird's fate, particularly the failure to transform its rediscovery into its survival.

At the heart of this article lies a question that can be put fairly simply: why was the parrot's rediscovery followed by such meagre and ineffectual efforts to sustain it that fears of its possible extinction were quickly superseded by its actual extinction? Answering this question, however, is far from simple. It demands engagement with substantive historical issues concerning early twentieth-century

<sup>1</sup> Gould initially placed the species in the genus *Platyercus* but within a few months reclassified it into the genus *Psephotus*; Olsen (2007) p. 9.

<sup>2</sup> Olsen (2007) p. 218.

<sup>3</sup> Chisholm (1922b).

<sup>4</sup> Chisholm (1936) p. 317. C. H. H. Jerrard to A. H. Chisholm, 31 August 1929, Mitchell Library, MSS 3540, box 4976.

<sup>5</sup> Zillmann (2013) pp. 106–108. Olsen (2007) p. 231.

<sup>6</sup> In the IUCN Red List, the status of the Paradise Parrot moved from Threatened in 1988 to Extinct in 1994: <https://www.iucnredlist.org/species/22685156/93061054#assessment-information>

<sup>7</sup> Among the innumerable works devoted to the Thylacine, the most notable include studies by Beresford and Bailey (1981); Paddle (2000); Owen (2004); and a novel by Leigh (1999). See also Narraway and Stark (2015).

<sup>8</sup> On the attribution of charisma to nonhuman species and its implications for conservation, see Lorimer (2007).

<sup>9</sup> Olsen (2007) includes copies of most of the relevant artworks; on p. viii she specifies other textual works.



**Fig. 1.** Lithograph of two male Paradise Parrots by H. C. Richter, from John Gould (1848).

ornithological understandings of extinction, the contemporary social reach of conservationist aspirations and the efficacy of past conservationist practices. By engaging with those issues, I hope to deepen our understanding of early twentieth-century discourses on avian extinction in Australia. This is an under-researched field, so the article is more an exploratory foray than an attempt to pronounce definitively on the topic.

The article focusses on the 1920s and 1930s because these decades were crucial times for the Paradise Parrot. In 1921, the species was found to be still extant; but by 1940, the parrot was either extinct or so close to it that its end was certain. Through my exploration of this period, I devote considerable attention to Alec Chisholm since he had a prominent role in the rediscovery of the species, in publicising the parrot's plight and in mobilising the limited conservation measures that were taken. Necessarily, the article takes cognisance of the ecological factors that drove the parrot's extinction, but it does not attempt to offer new findings or insights on that topic. That has already been very capably done by Penny Olsen in *Glimpses of Paradise*. Rather, I seek to elaborate on

issues over which Olsen skates lightly, particularly the scientific and cultural milieu that shaped human interactions with the parrot during its crucial decades of rediscovery and demise.

### Photographs and specimens

The spectre of extinction haunted early twentieth-century ornithology. On the pages of Australia's leading ornithological journal, the *Emu*, the word 'extinction' appeared then almost as often as it does on the pages of that journal today. Contributors expressed grave concern for the many Australian bird species they believed to be on, or over, the brink of extinction. They showed keen awareness, too, of the record of extinctions overseas, including older losses such as the Dodo and Great Auk as well as recent extinctions such as the Passenger Pigeon, the last of which died in Cincinnati Zoo in 1914.

So Cyril Jerrard's rediscovery of the Paradise Parrot in December 1921 was momentous. Here was proof that one species feared to be extinct had not gone the way of the Dodo. Not only did it survive, it was still breeding. Less than a week after his first sighting, Jerrard saw the pair again, this time accompanied by five or six others that he took to be their recently fledged young. Three months later, on 18 March 1922, Jerrard capped off his observations by sending Chisholm several photographs of the birds on their termite-mound nest (Fig. 3). But nesting did not end productively. By early April, Jerrard realised that something had gone wrong during the incubation process. Once it was clear that the nest had been deserted, he opened the termite mound and found all five eggs had addled.<sup>10</sup> It was a dismal denouement to the hopes raised by his first sighting a few months earlier.

Jerrard's photographs of March 1922 were the first ever taken of Paradise Parrots. They were firsts for another reason, too. They represented the first time a photograph of an Australian bird was accepted as confirmation of a rare species' existence. Before then, standard practice was to take a specimen, that is, to shoot it and skin it. That is still the procedure under certain circumstances today, but in the 1920s, specimen collecting by amateurs was rife and the gun was as normal a birding accoutrement as a pair of field-glasses. But collecting was attracting increasing controversy. Indeed, the dispute between supporters and opponents of amateur collecting became one of the fiercest battles among Australian ornithologists in the 1920s.<sup>11</sup> The Paradise Parrot happened to be rediscovered at just the time ornithologists were battling over the rights and wrongs of converting living birds into dead skins.

Among the staunchest opponents of amateur collecting was Alec Chisholm. Several times in the 1920s, he clashed with the veteran South Australian ornithologist, Edwin Ashby, who maintained that amateur collecting was not only essential for the advancement of science but also admirable as a character-building exercise.<sup>12</sup> Yet Ashby also advocated the protection of birds, and the incongruity between that and his advocacy of skinning them provoked scathing criticism from Chisholm. The 'private collector', he declared, 'is heavily handicapped as a public instructor or propagandist' for conservation:

<sup>10</sup> Chisholm (1922b) pp. 9–11.

<sup>11</sup> Robin (2001) pp. 97–100.

<sup>12</sup> Ashby (1923); McGregor (2019) pp. 78–81.



**Fig. 2.** Alec Chisholm on Brisbane's Cleveland Pier around 1917, when he began searching for the Paradise Parrot (Mitchell Library, PXA 1772, box 3).

Always his moralising is damned by the force of bad example. Chastity is the first essential of any salvationist ... . The man who preaches private slaughter is on shifting sand as a public protectionist. His logic is bad; but even if it were good it would still be unconvincing to those whom science and scientists exist to serve, *viz.* the great mass of the people.

Chisholm acknowledged that a certain level of collecting was necessary for museums and public institutions, but collecting for personal use needlessly devastated both birdlife and the repute of ornithology. The 'average private collector,' he thundered, 'is a relic of barbarism and a perversion of civilisation. He is more; he is a relic of sin, masquerading under the honoured name of Science.'<sup>13</sup> Chisholm expressed himself robustly when he thought the issue warranted it.

As far as I know, no-one attempted to convert the Gayndah Paradise Parrots into skins. It is not clear why, for although the camera was beginning to displace the gun as an adjunct to field ornithology, that displacement had not yet progressed far. There were already plenty of Paradise Parrot skins in museum drawers and private collections, but in the case of other species, an abundance of specimens failed to curb collectors' craving for more. Nor did rarity

confer immunity to the collector's gun. To the contrary, old-school ornithologists were still insisting that authentication by a skin was essential in the case of rare species. A. J. Campbell in 1927 declared that 'except a specimen be procured, it is better not to record rare species merely from observations in the field.'<sup>14</sup> In the same year, Ashby published an article on two *Neophema* parrots, the Orange-breasted (now Orange-bellied) and Scarlet-chested, that he described as being among 'the rarest and least-known' of the genus as well as 'among the most radiant birds on the Australian list.' Rare and beautiful though they were, Ashby insisted that any new records of these species must be 'authenticated by a skin.'<sup>15</sup>

Fortunately for the Gayndah parrots, Jerrard took shots only with a camera, not a gun. In view of the collecting proclivities of many of his fellow ornithologists, perhaps it was fortunate, too, that Chisholm was the only one who journeyed to Gayndah to see them. He went there for just two days, 30 October and 1 November 1922. On the first day, he and Jerrard wandered for miles across the dusty, dry country without a glimpse of a Paradise Parrot. The next day, just as hot and uncomfortable, began just as unpromisingly. But at lunchtime, Chisholm got lucky. Alerted by an unfamiliar call, he looked up into a tall eucalypt and got his first sight of a Paradise

<sup>13</sup> Chisholm (1923).

<sup>14</sup> Campbell (1928a) p. 137. See also Campbell (1928b); this a letter to the editor of the *Emu*, which carries a response from the editor (Chisholm) disputing Campbell's insistence on the need 'to see a skin before a record can be accepted.'

<sup>15</sup> Ashby (1927b) pp. 1–2.



**Fig. 3.** A male Paradise Parrot at the entrance to its nest, photographed by Cyril Jerrard in March 1922 (National Library of Australia, PIC/8902/3 LOC Box PIC/8902).

Parrot, a female. Then he saw the male. He had been searching for the birds for the past five years, and here they were at last, as gorgeous as Gould and Gilbert had said they were.<sup>16</sup>

Even before he sighted the parrots, Chisholm pondered the causes of their precipitous decline (Fig. 4). He was not sure of the precise factors, but he knew they resulted from European settlement and included, especially, the excessive and poorly timed burning of grasslands, trapping for the aviary trade and the ravages of feral cats. Consequently, he mourned in the lavishly emotive style then fashionable among nature writers:

it seems moderately clear that the ‘most beautiful parrot that exists’ has been brought to the very verge of extinction by human agency, following upon Nature’s indiscretion in bestowing upon it the fatal gift of beauty without adequate means of defence or protection. It is all very lamentable. It is more; it is a national tragedy. Both the citizens and governing authorities of Queensland have neglected a definite duty—a duty to helpless beauty—in allowing these pretty birds to be sacrificed. Whether it is too late to make amends cannot well be said.<sup>17</sup>

When Chisholm wrote those words in 1922, Australian ornithology was orientated more to natural history than ecological science.

<sup>16</sup> Chisholm (1924a) pp. 30–31.

<sup>17</sup> Chisholm (1922b) p. 16.

<sup>18</sup> Olsen (2007) pp. 75–91.



**Fig. 4.** Alec Chisholm (right) with Professor Sydney Skertchly in Queensland around 1920, when he was still searching for the Paradise Parrot (Mitchell Library, PXA 1772, box 6).

Nonetheless, he understood that it was human-induced—more specifically, European-induced—environmental change that was impelling the Paradise Parrot toward extinction.

The ‘fatal gift of beauty’ had made Paradise Parrots highly prized aviary birds, and in the nineteenth century they were trapped in large numbers. Paradise Parrots adorned aviaries not only in Australia but in Britain and continental Europe as well. In all places, they were found to adjust very poorly to captivity, so captive birds commonly made the transition from aviary to parlour, where, stuffed and mounted, they met late-Victorian standards of tasteful decoration. They were also found to be extraordinarily difficult to breed in captivity, so the aviary trade was a one-way journey toward oblivion.<sup>18</sup>

Trapping for the aviary trade must have contributed to the demise of the Paradise Parrot. There can be little doubt, however, that its extinction was driven primarily by the environmental changes consequent upon colonisation, as Penny Olsen clearly explains in her 2007 book and as Chisholm and his fellow ornithologists realised, albeit rather more hazily, almost a hundred years

earlier. Yet while Olsen offers a convincing exposition of the ecological causes of extinction, she is much less successful in explaining why, after 1921, people failed to transform the Paradise Parrot's rediscovery into its survival. This follows from her unsophisticated historiography, placing emphasis on personalities rather than social processes as explanatory factors. That tendency reaches its peak in her needlessly negative depiction of Chisholm, whom she claims 'presided over the extinction of the Paradise Parrot.'<sup>19</sup> The following two sections of this article offer an alternative interpretation, not so much to resuscitate the reputation of Chisholm—as I have shown elsewhere, he was a quarrelsome and querulous man<sup>20</sup>—but rather to explain why efforts to preserve the parrot were feeble and ineffectual. As the American historian Mark Barrow shows, such explanations must be sought in the interrelations between science, society and culture.<sup>21</sup>

### Indeterminacies of extinction

Some early twentieth-century ornithologists maintained that extinctions, while regrettable, were an inevitable consequence of 'the natural law of evolution.'<sup>22</sup> Most, however, regarded extinctions as calamities that people were duty-bound to try to prevent. As Chisholm put it with characteristic passion in 1922, the 'extinction of a species is a ghastly thing' and the belief that certain species were doomed to disappear 'can well be left to the trappers and dealers, gentlemen who mix fatalism with finance.'<sup>23</sup> That same year, the Council of the Royal Australasian Ornithologists' Union (RAOU) expressed its 'full agreement' with 'the demand from learned societies that no species should be allowed to become extinct.'<sup>24</sup> It was a noble ambition but its implementation was impeded by two massive lacunae: a lack of reliable scientific knowledge on the degree of risk facing each threatened species—even, in some cases, of knowledge about which species were threatened—and a paucity of effective conservation strategies that might command support among politicians and other persons of power. Beyond those lay a still more obstinate obstacle in the ingrained values and assumptions of a settler colonial society that gave low priority to saving endangered wildlife.

These handicaps were not confined to Australia. They prevailed in similar settler societies such as those in North America. Environmental historian Thomas Dunlap recounts that in 1922—just a year after the Paradise Parrot was rediscovered—Whooping Cranes abandoned their last known nesting site in Saskatchewan, prompting fears that the species was, or soon would be, extinct. But, Dunlap observes, 'no one took action, not from indifference but because no

one knew what had to be done, or even how many cranes remained.'<sup>25</sup> American conservation biologist and historian, Curt Meine, elaborates on this point, explaining that although in early twentieth-century America there was growing interest in saving species from extinction, 'there was as yet no generally developed science or technique for sustaining or restoring viable populations of wild animals *in situ*.' Only from the 1930s, he argues, were effective rescue strategies devised, particularly under the inspiration of Aldo Leopold, and even then, Leopold's ecologically orientated proposals were very slow to be implemented.<sup>26</sup>

In his magisterial study of scientific understandings of extinction, *Nature's Ghosts*, Mark Barrow advances a similar time frame, with a similar lag between the aspiration to avert extinctions and the formulation of effective means of doing so. He looks in depth at not only the Whooping Crane but also other American birds that in the early twentieth century fell on, or over, the brink of extinction, including the Passenger Pigeon, Carolina Parakeet, Heath Hen and Ivory-billed Woodpecker. While scientific knowledge about these species was growing, especially as ornithology became increasingly ecologically orientated, scientists' capacity to offer and implement effective strategies for preventing extinctions was constrained by a combination of gaps in their knowledge, vested economic and political interests and deep-seated cultural values that demoted species preservation to low priority. Barrow discerns a gradual growth in conservationist lobbying in 1930s America, but notes that efforts to avert extinction in that decade remained modest, and it was not until after the Second World War, and especially the cultural shifts of the 1960s and 1970s, that the prevention of extinctions became prioritised as a societal aspiration.<sup>27</sup>

Australia was not precocious in this regard. It lagged. In the interwar years, ecological science was only beginning to penetrate Australian ornithology; most ornithological work was still conducted within older traditions of natural history; conservationist strategies remained rudimentary and usually uncoordinated; and those measures that were in place, such as the regulation of hunting, were often half-heartedly implemented.<sup>28</sup> Ornithologists had a reasonably sound understanding of what the main threats to Australia's birds were. Some were inclined to over-simplify by putting disproportionate blame on a single factor. A. J. Campbell, for example, maintained that feral cats were the principal drivers of avian extinctions, while Donald Thomson blamed pigs for impelling the Cassowary 'to join the Dodo, the Great Auk, and others of that melancholy company that have gone for ever and a day.'<sup>29</sup> By and large, however, ornithologists understood that it was such

<sup>19</sup> Olsen (2007) p. 164.

<sup>20</sup> McGregor (2019).

<sup>21</sup> Barrow (2009).

<sup>22</sup> See for example Bennett (1925). Outside ornithological circles, an acceptance, even endorsement, of the extermination of certain native fauna seems to have been more widespread; Stubbs (2001).

<sup>23</sup> Chisholm (1922a) p. 188.

<sup>24</sup> Gray (1923) p. 208.

<sup>25</sup> Dunlap (2011) p. 107.

<sup>26</sup> Meine (2017) pp. 10–11.

<sup>27</sup> Barrow (2009).

<sup>28</sup> On the slow uptake of ecology in Australian science see Robin (1997) pp. 67–70; in ornithology in particular see Robin (2001). For the rudimentary state of interwar Australian ecological investigation see for example Roberts (1937a), Roberts (1937b) and Roberts (1938). On the limitations of contemporary conservationist advocacy and practice, see for example McGilp (1926) and Mattingley (1926).

<sup>29</sup> Campbell (1906); Campbell (1924); Thomson (1929).

factors as habitat destruction, introduced predators and competitors, hunting and trapping, and environmental change, interacting together, that pushed certain species toward extinction. Yet while they had a reasonable understanding of the threats to birdlife, their proposals for averting those threats seem (from the vantage point of the present) *ad hoc* and simplistic.<sup>30</sup>

Occasionally, ornithologists advanced more adventurous schemes. In a 1930 *Emu* article, Dr Spencer Roberts urged that the currently inadequate arrangements for ‘bird protection’ be superseded by more comprehensive strategies for ‘bird preservation.’ This, he explained, would put matters ‘on a different plane. It comes from a desire to perpetuate species which are in danger, and for its successful accomplishment requires a profound knowledge of where the birds breed, their habits, numbers and distribution.’ His proposal, probably influenced by the then-novel science of population ecology, entailed two major innovations: systematising the establishment of sanctuaries to preserve as wide as possible a diversity of habitats and categorising threatened species into four ‘classes’ depending on the degree of risk they faced and the extent of preservationist provisions they required.<sup>31</sup> Although not at the same level of sophistication as the conservation advocacy then coming out of North America, such as Aldo Leopold’s proposals, Roberts’ article shines out on the pages of the *Emu* for its innovativeness. It would be several decades before schemes such as his were implemented. Meantime, bird protection in Australia laboured under the constraints that Roberts critiqued.

A point Roberts stressed, and one that is reiterated by modern conservation biologists, is the need for solid scientific data on the abundance, distribution and fluctuations of avian populations. Historians Thomas Dunlap and Mark Barrow note that the lack of such data impeded attempts to avert extinctions in early twentieth-century America. The problem was far more acute in the more recently colonised and more sparsely settled lands of Australia, and ornithologists here were well aware that the huge gaps in their knowledge compromised their capacity to rescue threatened species.

The Paradise Parrot was only one of dozens of birds early twentieth-century Australian ornithologists considered possibly extinct, probably extinct, doomed to extinction or in some similarly precarious state. No one knew for certain which, if any, species was actually extinct and most flagged their uncertainty in some way. The avian taxonomist, Gregory Mathews, typically added a question mark: ‘? Extinct’ was his annotation against the Paradise Parrot (that he called the ‘Beautiful Parrot’) in 1917, as well as the Night Parrot and Western Whipbird, while the Noisy Scrub-bird he labelled ‘apparently extinct.’ On the Scarlet-chested Grass Parrot he wrote with a little more assurance, that ‘it seems to be absolutely extinct,’ although the ‘seems’ still allowed a touch of uncertainty.<sup>32</sup> Some ornithologists sometimes wrote with apparent finality. A. J. Campbell, for example, declared in 1915 that the Night Parrot ‘has

been exterminated,’ and the following year stated that the Chestnut-shouldered Grass-Parrot (now Turquoise Parrot) ‘is now extinct.’ Yet such declarations should not be taken at face value, for in the very same articles Campbell noted that ‘would be interesting to know’ whether these and several other ‘beautiful Australian Parrots still exist, or have been exterminated.’<sup>33</sup> Such inconsistencies signal, as clearly as Mathews’ question marks, the indeterminacies that hovered over avian extinctions.

‘Our knowledge is in many directions very scrappy,’ Edwin Ashby declared in his Presidential Address to the 1926 RAOU Congress, and ‘we are still absolutely in the dark as to the extent and limitations of the range of habitat of many of our birds.’ In this circumstance, he argued, it was impossible to ascertain whether a species was extinct or even, in many cases, under threat of extinction. Indeterminacy was all the greater for the fact that species consigned to probable extinction had a habit of reappearing. One was the Paradise Parrot that, as Ashby noted, ‘disappeared from its old haunts in Queensland, and for long was reckoned as extinct. Nearly 20 years later Chisholm recorded its rediscovery by Jerrard, in small numbers in one locality, and I venture to think that it is still in considerable numbers in the wide spaces of the interior.’<sup>34</sup> The final part of this statement may be judged unduly optimistic, although that is with the benefit of hindsight. Ashby’s main point, however, was both acute and accurate: ‘Australian ornithology, especially from the ecological side, is still in its beginnings.’<sup>35</sup> That, he knew, stymied attempts to save endangered species.

The Paradise Parrot was not the only species Ashby instanced. As well as several members of other families, he listed the Turquoise, Scarlet-chested, Orange-breasted and Regent Parrots as species that had been considered probably or almost extinct but later reappeared, some in substantial numbers. Of the Night Parrot he observed that collector Frederick Whitlock had recently obtained ‘authentic data of its occurrence’ in Central Australia.<sup>36</sup> In the interwar years, the Paradise Parrot was not alone in being resurrected from probable extinction. Contemporary ornithologists had no way of knowing that it, alone of the many supposedly doomed birds of the day, would be the only mainland species on the extinct list a hundred years later. They knew that the Paradise Parrot was in trouble, but they knew that many other species were too and that their own knowledge was too partial and patchy to pronounce definitively on which could survive and which would not.

Ashby’s explanation for the paucity of reliable knowledge about many species of birds was simple and straightforward: there was a scarcity of skilled observers. Immediately after pointing out the rudimentary state of avian ecology in this country, he stated that: ‘Much rarer than many of our supposedly extinct birds are trained, working field ornithologists. Where there is one worker to-day Australia needs hundreds.’ He acknowledged that some good ornithological research had been accomplished, often under trying conditions, ‘but all this work cannot be considered more than the

<sup>30</sup> See for example, Anonymous (1925).

<sup>31</sup> Roberts (1930).

<sup>32</sup> Mathews (1916–1917) pp. 421–422, 464, 495–496; Mathews (1921–1922) p. 250; Mathews (1923) p. 118.

<sup>33</sup> Campbell (1915) p. 167; Campbell (1916) p. 251.

<sup>34</sup> Ashby (1927a) pp. 158–159.

<sup>35</sup> Ashby (1927a) p. 161.

<sup>36</sup> Ashby (1927a) pp. 158–159.

foundation upon which fuller and more accurate information is to be built.<sup>37</sup>

Others, too, remarked on the detrimental consequences of inadequate data. Keith Hindwood, perhaps Australia's most eminent amateur ornithologist, began a 1939 article with the observation:

Australia is such a vast continent that statements regarding the extinction, or near extinction, of any species should be made with due caution. Changes in climatic conditions, seasonal variations in food supply, and settlement influence the distribution of birds and often cause them to leave their known haunts. Only too often it is then assumed that they are on the verge of extinction. Twenty years ago this was said of some of the *Neophema* Parrots, and more recently of the Flock Pigeon (*Histriophaps histrionica*), but those species have been recorded in considerable numbers during the past few years. The absence of records signifies, more often than not, the absence of observers.<sup>38</sup>

Hindwood's point was not that the threat of avian extinctions should be downplayed. He was simply stating that the current state of ornithological knowledge was inadequate to allow accurate assessments of many species' survival prospects, and until that was remedied, it was premature to judge.

Cyril Jerrard agreed. In a 1926 *Emu* article, he quoted with approval a statement by naturalist D. W. Gaukrodger, that 'one begins to wonder whether there are not more of our so-called extinct birds still in existence if the many remote districts of the State were examined by similar careful observers.' The article in which this appeared was not about the Paradise Parrot but the Black-breasted Button-Quail, several of which Jerrard had found on his Gayndah property. He called it a 'nearly extinct species,' while the editor of the *Emu* designated it a 'bird which it was feared had become extinct.'<sup>39</sup> Having found on his own small grazing run two species widely feared to be extinct, Jerrard was surely justified in suggesting that the state of ornithological knowledge did not permit definitive pronouncements on the survival status of Australia's birds. Few, if any, of his ornithological colleagues would have disputed that.

Chisholm concurred with that broad consensus, although more explicitly than most, he warned that indeterminacy should inspire action, not complacency. Responding to the suggestion that species no longer seen may have found refuge elsewhere, he wrote in 1924:

Certainly it is possible ... that representatives of certain species, supposedly very rare, may have escaped to localities undisturbed by man. This point, however, either as a possibility or an assurance, is not one to inspire confidence so much as zeal—zeal for examining and gripping the whole subject [of bird preservation]. So I suggest again that the RAOU ... make a more definite attempt at this work, for the guidance of governments and public, to say nothing of bird students generally.<sup>40</sup>

After discussing the fluctuations in bird populations and ornithologists' inability to explain them, he continued:

I do not consider that this strange fluctuation is satisfactorily explained by the suggestion ... that various species have 'disappeared into the great unpeopled spaces of this sparsely populated continent.' The point has been made previously, and it has not been greatly strengthened by the finding of a few 'lost' birds here and there. C. H. Jerrard's discovery of the Paradise Parrot only slightly eased the tension in regard to this rare bird. And the shooting of a solitary Turquoise Parrot in South Queensland ... certainly does not indicate that numbers of these birds exist.<sup>41</sup>

While Chisholm disapproved of the pessimism of those who insisted that certain species were doomed inevitably to extinction, he also disapproved of the undue optimism that might be fostered by a belief that reservoirs of avian survival flourished in remote Australia.

### Words and actions

According to Olsen, Chisholm championed the Paradise Parrot 'but only with words.' In the preface to *Glimpses of Paradise*, she puts it more forcefully: 'I find it hard to forgive the parrot's self-styled champion, Alec Chisholm ... for so much talk and so little action.'<sup>42</sup> Yet Chisholm was a journalist: a professional wielder of words, whose specialty was communicating the conservationist message to a popular audience. He had no formal scientific training, no education beyond primary school, and few practical skills that might have enhanced the parrot's chances of survival, so it is difficult to understand what he should have done other than what he did best: write words appealing to the public conscience on the bird's behalf.

While Olsen criticises Chisholm for failing to take 'action' to preserve the parrot, she never specifies what action he should have taken. Nor does she indicate what action anyone else could or should have taken to save the bird. Yet in the crucial decades of the 1920s and 1930s, the repertoire of effective actions available to conservationists was extremely limited, as was the societal reach of conservationist principles. The options available to early twentieth-century Australian bird-lovers who sought to save endangered species can be summarised under five headings: relocation, provision of sanctuaries, captive breeding, protective legislation and public education. On the last three of those strategies, Chisholm was more active than Olsen's dismissive words suggest. His efforts were unsuccessful, but they were more extensive than anyone else's. I shall elaborate on each strategy in turn.

Relocation was never (as far as I know) suggested for the Paradise Parrot. It was recommended and implemented for some reasonably numerous species considered to be at risk, such as the Superb Lyrebird, numbers of which were relocated to fox-free Tasmania in the 1930s.<sup>43</sup> But it was impracticable for species as rare as the Paradise Parrot, the known population of which numbered no more than a few pairs.

The provision of sanctuaries, small refuges as well as large expanses such as national parks, was prominent on the agenda of

<sup>37</sup> Ashby (1927a) p. 161.

<sup>38</sup> Robinson and Hindwood (1939) p. 417. See also McGilp (1930) p. 173; Mack (1933) p. 225.

<sup>39</sup> Jerrard (1925) p. 123; Jerrard (1926) pp. 287–288.

<sup>40</sup> Chisholm (1924b) p. 151.

<sup>41</sup> Chisholm (1924b) p. 152.

<sup>42</sup> Olsen (2007) pp. ix, 164.

<sup>43</sup> Leach (1929) p. 213. Miller (1935) p. 230.



**Fig. 5.** Cyril Jerrard inspecting an abandoned Paradise Parrot nest in a termite mound near his property in the Gayndah district, 1922 (Mitchell Library, PXA 1772, box 6).

early twentieth-century conservationists. However, nobody recommended a sanctuary specifically for the Paradise Parrot. I cannot be sure why this was so, but it probably followed from the points made above, about the lack of crucial ornithological information, combined with the limited leverage available to contemporary conservationists. The only locale the Paradise Parrot was known still to inhabit was a patch of land already devoted to farming and grazing. The chances of such land being reallocated to conservation were effectively zero.

There was a precedent of a kind, but it highlights the distinctiveness of the Gayndah situation. In 1915, the incoming Queensland Labor government gazetted what was then by far the largest national park in the state, on the Lamington Tableland. There were already a few dairy farmers in the region, all members of the O'Reilly family, whose small holdings were thereby denied any opportunity for future expansion or development.<sup>44</sup> However, the vast expanse of the Lamington Tableland was still pristine rainforest, whereas almost all the Gayndah district had already been given over to economic enterprise. Moreover, while wildlife preservation was one motive behind the creation of the Lamington National Park, it was the area's aesthetic and recreational values

that clinched the declaration, as was the case generally for national parks in Australia at this time.<sup>45</sup> The Paradise Parrot was stunningly beautiful but among its misfortunes was the fact that its habitat was not, and failed to meet the aesthetic standards demanded for contemporary national park declarations. As Jerrard's photographs show, it was open, grassy woodland of a kind so common that Australians took it for granted (Fig. 5). Conservationists could make a case for saving a gorgeous bird, but preserving a prosaic landscape was, in the 1920s and 1930s, a bridge too far.

Captive breeding was a more plausible option. Chisholm and Jerrard planned to do so soon after the latter found an active Paradise Parrot nest in early 1922. To give the species its best chance of survival, Chisholm wrote that he and Jerrard 'thought the matter over, and came to the conclusion that it would be best to take some of the young from that nest in the public interest. It might be possible to have them breed under authoritative control.' The plan was abandoned when, in April 1922, Jerrard realised that that year's breeding attempt by the parrots had failed.<sup>46</sup>

That was the last opportunity for captive breeding. No active Paradise Parrot nest was ever made known to ornithologists again and there were no known Paradise Parrots in captivity. A few years

<sup>44</sup> Hutton and Connors (1999) pp. 70–71; O'Reilly (1940).

<sup>45</sup> Harper and White (2012).

<sup>46</sup> Chisholm (1922b) pp. 10–11.



later, at the 1926 RAOU Congress, Chisholm warned fellow delegates of the ‘national calamity’ of dwindling numbers of certain parrots, ‘particularly those of the genera *Psephotus*, *Neophema*, and *Polytelis*,’ recommending their rehabilitation ‘by breeding them in captivity with a view to releasing them in suitable areas.’ He put a motion to that effect, which was strongly supported by senior members of the RAOU and carried unanimously.<sup>47</sup> In accordance with that motion, ‘the RAOU wrote to the authorities in every State of the Commonwealth, asking that efforts be made to breed up rare Parrots in approved aviaries’ for subsequent release into the wild.<sup>48</sup> Perhaps Chisholm and his RAOU colleagues imagined the plan could readily have been implemented for species a little further from the brink of extinction, such as the Regent Parrot, but for the Paradise it depended on finding further breeding pairs. They hoped—or expected—such pairs to be found. None were. In any event, none of the state authorities approached by the RAOU implemented the recommended captive breeding programs for other endangered parrot species.

Although state authorities showed no inclination to take such active steps as captive breeding, they were more amenable to passing protective legislation. Chisholm had a hand in that, too. In 1918, he succeeded in having all *Euphema* and *Psephotus* parrots (thus including the Paradise) listed as totally protected under Queensland’s *Native Birds Protection Act*.<sup>49</sup> Two years later, he participated in a delegation from the RAOU, the Gould League of Bird Lovers and the Royal Society of Queensland who lobbied the Minister for Agriculture to enact more stringent bird protection laws. (Indicative of the shaky status of conservation at the time, responsibility for protecting Queensland’s fauna was in the hands of the minister responsible for agriculture.) The exact nature of Chisholm’s involvement in the passage of legislation that became the *Animals and Birds Act, 1921* is unclear, but it must have been substantial since at all three readings of the Bill in the Legislative Assembly and Legislative Council, he was singled out for special thanks for his contribution to the act. At the second reading, one of his pieces on the need for bird protection was read to parliament.<sup>50</sup> *Psephotus* parrots came under the act’s protection.

While they were advocates of fauna protection laws, contemporary ornithologists knew that such laws alone could not adequately safeguard threatened species. Many argued that the conservationist cause could be advanced more substantially by stirring the public conscience and cultivating a popular affection for birds.<sup>51</sup> That was Chisholm’s forte. Indeed, almost the entirety of his vast corpus of nature writings constitute an attempt to inculcate a conservation consciousness in the public by cultivating a love of living things. To that end, too, he took an active role in the Gould League of Bird Lovers, whose main purpose was to encourage children to cherish

and protect the birds around them, and he conducted nature studies classes in schools, especially during his early adulthood in Victoria and Queensland (Fig. 6).<sup>52</sup>

Chisholm ended his first newspaper piece on the rediscovery of the Paradise Parrot with a characteristically emotive plea:

The next move in the history of the paradise parrots rests with the people of Queensland. It is for them to say if ‘the most beautiful parrot that exists’ shall be wiped off the face of the earth. The governing authorities of the State have done their part—or at least done something—by according the lovely birds the total protection of the law; but this cannot be made effective unless Queenslanders are patriotic enough to say: ‘This slaughter of the Innocents has gone far enough.’<sup>53</sup>

The language is not that of twenty-first century conservationists but using words to mobilise public and governmental support for species facing extinction is as valid a tactic now as it was then. It was a tactic at which Chisholm excelled.

So, too, was stirring the reader’s emotions. As I explain in my biography of Chisholm: ‘Emotion was key to his approach to nature. He wanted Australians not only to observe and understand nature but also to love it and embrace Australia’s birds and animals as part of their own identity.’<sup>54</sup> His manner of engaging the reader’s emotions, especially in his early writings from around the time of the Paradise Parrot’s rediscovery, may not meet today’s tastes: his prose is flowery, even overblown at times, perhaps striving too hard for literary resonance. But it appealed to readers then, who appreciated his message that a love of living things went hand in hand with a desire to preserve them. That is a message that spans the century since. As the Norwegian environmental historian Dolly Jørgensen has recently and cogently argued, emotions are, and always have been, crucial motivators of efforts to save endangered species.<sup>55</sup>

The emotionality of Chisholm’s writing was advertised in the title of his first book, *Mateship with Birds*, published in 1922. And the contents match the title. It ends with a chapter headed ‘The Paradise Parrot Tragedy’ which, typically, blends history, natural history, anecdote and advocacy into lavish and image-laden prose aimed at rousing readers’ emotions toward the preservation of the parrot. The chapter concludes with a passage, characteristically replete with literary allusions, pleading not just for the Paradise Parrot but for all threatened species of parrots in Australia:

The question arises, then, what are the bird-lovers of Australia going to do about this matter of vanishing Parrots? Surely it is a subject worthy the closest attention of *all* good Australians! Meanwhile, let us, without reflecting on the claims of true science, dispute the dangerous idea that a thing of beauty is a joy for ever in a cage or a cabinet; and disdain, too, the lopsided belief that the moving finger of Civilisation must move on over the bodies of ‘the loveliest and the best’ of Nature’s children.<sup>56</sup>

<sup>47</sup> Kinghorn (1927) pp. 164–165.

<sup>48</sup> Anonymous (1927) p. 321.

<sup>49</sup> Leach (1918) p. 131. ‘*Euphema*’ was the name then given to a large genus which was later split into several smaller ones, including *Neophema*.

<sup>50</sup> *Debates of the Legislative Council and Legislative Assembly of Queensland (1921)* vol. 137, pp. 473, 658–659, 695; vol. 138, p. 1927.

<sup>51</sup> See for example McGilp (1930) p. 172; Berney (1931) p. 29.

<sup>52</sup> McGregor (2019) pp. 27–52; Kass (2018) pp. 170–174.

<sup>53</sup> Chisholm (1922c) p. 44.

<sup>54</sup> McGregor (2019) p. 2.

<sup>55</sup> Jørgensen (2019).

<sup>56</sup> Chisholm (1922a) p. 188.



**Fig. 6.** Teaching the lessons of conservation: Alec Chisholm (far left) addressing a crowd of school children and their parents at Goomeri, a small town near Gayndah, in 1921 (Mitchell Library, PXA 1772, box 6).

Chisholm knew that only by stirring the passions of his fellow Australians did endangered birds such as the Paradise Parrot have any chance of surviving, although that alone was not enough.

### Conclusion

Curt Meine, whose scholarship successfully bridges conservation biology and environmental history, makes a compelling case for understanding extinctions in cultural as well as environmental terms. Each threat to a species' survival, he explains, has 'a social and cultural dimension . . . . The persistence, demise, or recovery of a species is a manifestation of a human community's collective knowledge, ethic, economy, policies, practices, and ecological condition.'<sup>57</sup> This was as true a hundred years ago as it is today, and attentiveness to the first few points in Meine's list can help explain why efforts to sustain the Paradise Parrot after its rediscovery were so meagre and ineffectual. Ornithologists in interwar

Australia lacked basic knowledge about the species that modern conservation biologists consider essential: knowledge of numbers, habits, habitat, range and ecology. Rescue strategies for endangered species were rudimentary and commanded limited support in the corridors of power. The reigning social ethos privileged economic gain over avian loss. It was not that the Australian people at the time held no interest in, or affection for, Australian nature. They did. But their interest and affection did not extend so far as to actively and deliberately seize a small bird from the brink of extinction.

The person who most vigorously strove to change that was Alec Chisholm. Apart from a subverted attempt at captive breeding, his efforts were with his pen. To that extent, Olsen is correct in saying that he championed the Paradise Parrot, 'but only with words.' Yet, then as now, words are compelling conveyors of the conservationist message. Among other things, words are the means by which people communicate their emotional commitments and seek to elicit such

<sup>57</sup> Meine (2017) p. 11. See also Heise (2016).

commitments from others. As historians such as Jørgensen remind us, emotion, as well as scientific reason, impels our efforts to save species from extinction. Olsen presents Chisholm as a malign figure who ‘presided over the extinction of the Paradise Parrot.’ I suggest it is more apt to see him through the eyes of empathy, as a man who tried, with his pen, to turn public opinion in the parrot’s favour by eliciting an emotional commitment to its future. Although he failed to save the Paradise Parrot, he should be commended for trying to do so.

### Conflicts of interest

The author declares no conflicts of interest.

### Acknowledgements

Research for this article was partially funded by a 2016 David Scott Mitchell Fellowship awarded by the State Library of New South Wales.

### References

- Anonymous, (1925) Bird protection, *Emu*, **24**(4), 306–309. doi:10.1071/MU924306
- Anonymous, (1927) Notes and comments, *Emu*, **26**(4), 320–322. doi:10.1071/MU926320
- Ashby, E. (1923) Private collections and permits, *Emu*, **22**(3), 210–216. doi:10.1071/MU922210
- Ashby, E. (1927a) Some unsolved problems of Australian avifauna, *Emu*, **26**(3), 158–161. doi:10.1071/MU926158
- Ashby, E. (1927b) Two *Neophema* parrots, *Emu*, **27**(1), 1–5. doi:10.1071/MU927001
- Barrow, M. (2009) *Nature’s Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Ecology*, Chicago.
- Bennett, A. G. (1925) The question of birds becoming rare and their protection, *Emu*, **25**(1), 29–31. doi:10.1071/MU925029
- Beresford, Q., and Bailey, G. (1981) *Search for the Tasmanian Tiger*, Hobart.
- Berney, F. L. (1931) Bird protection, *Emu*, **31**(1), 29. doi:10.1071/MU931029
- Campbell, A. J. (1906) Domestic wild-cats v. native birds, *Emu*, **5**(4), 201–202. doi:10.1071/MU905201
- Campbell, A. J. (1915) Missing birds, *Emu*, **14**(3), 167–168. doi:10.1071/MU914167
- Campbell, A. J. (1916) Reminiscences of a field collector, *Emu*, **15**(4), 250–253. doi:10.1071/MU915250B
- Campbell, A. J. (1924) Domestic cats gone wild vs bird protection, *Emu*, **23**(3), 175–177. doi:10.1071/MU923175
- Campbell, A. J. (1928a) The Elegant and Rock Parrots, *Emu*, **27**(3), 137–138. doi:10.1071/MU927137
- Campbell, A. J. (1928b) Distribution of *Neophema*, *Emu*, **27**(4), 292–293.
- Chisholm, A. H. (1922a) *Mateship with Birds*, Melbourne.
- Chisholm, A. H. (1922b) The “lost” Paradise Parrot, *Emu*, **22**(1), 4–17. doi:10.1071/MU922004
- Chisholm, A. H. (1922c) Discovery of the Paradise Parrot, *Queenslander*, 12 August, 44.
- Chisholm, A. H. (1923) Private collecting—a criticism, *Emu*, **22**(4), 311–315. doi:10.1071/MU922311
- Chisholm, A. H. (1924a) Seeking rare parrots, *Emu*, **24**(1), 25–32. doi:10.1071/MU924025
- Chisholm, A. H. (1924b) Fluctuations in bird-life, *Emu*, **24**(2), 151–152. doi:10.1071/MU924149D
- Chisholm, A. H. (1936) Various bird problems, *Emu*, **35**(4), 317–323. doi:10.1071/MU935317
- Debates of the Legislative Council and Legislative Assembly of Queensland (1921) vols 137 and 138.
- Dunlap, T. (2011) *In the Field, Among the Feathered: a History of Birders and Their Guides*, New York.
- Gould, J. (1848) *The Birds of Australia*, vol. 5, London.
- Gray, Z. (1923) Honorary Secretary’s report for year ended 30/6/1922, *Emu*, **22**(3), 205–208.
- Harper, M., and White, R. (2012) ‘How national were the first national parks? Comparative perspectives from the British settler societies’, in *Civilizing Nature: National Parks in Global Historical Perspective*, ed. B. Gissibl, S. Höhler & P. Kupper, New York, pp. 50–67.
- Heise, U. (2016) *Imagining Extinction: the Cultural Meanings of Endangered Species*. Chicago.
- Hutton, D., and Connors, L. (1999) *A History of the Australian Environment Movement*, Cambridge.
- Jerrard, C. H. H. (1925) Black-breasted Quail, *Emu*, **25**(2), 123. doi:10.1071/MU925120E
- Jerrard, C. H. H. (1926) The rare Black-breasted Quail, *Emu*, **25**(4), 287–288. doi:10.1071/MU925287
- Jørgensen (2019) *Recovering Lost Species in the Modern Age: Histories of Longing and Belonging*. Cambridge, Mass.
- Kass, D. (2018) *Educational Reform and Environmental Concern: a History of School Nature Study in Australia*. Oxford.
- Kinghorn, J. R. (1927) Minutes of the Twenty-fifth Annual Congress of the RAOU, *Emu*, **26**(3), 162–171. doi:10.1071/MU926162
- Leach, J. A. (1918) Stray feathers, *Emu*, **18**(2), 131–136.
- Leach, J. A. (1929) Lyrebird—Australia’s wonder bird, *Emu*, **28**(3), 199–214. doi:10.1071/MU928199
- Leigh, J. (1999) *The Hunter*. New York.
- Lorimer, J. (2007) Nonhuman charisma, *Environment and Planning. D, Society & Space*, **25**(5), 911–932. doi:10.1068/D71J
- Mack, G. (1933) *Neophema chrysogaster* near Melbourne, *Emu*, **32**(3), 225. doi:10.1071/MU932221G
- Mathews, G. (1916–1917) *The Birds of Australia*, vol. 6, London.
- Mathews, G. (1921–1922) *The Birds of Australia*, vol. 9, London.
- Mathews, G. (1923) *The Birds of Australia*, Supplement no. 2, London.
- Mattingley, A. H. E. (1926) Bird protection, *Emu*, **25**(3), 208–211. doi:10.1071/MU925208
- McGilp, J. N. (1926) Protection of Australian birds, *Emu*, **26**(1), 73–75. doi:10.1071/MU926073
- McGilp, J. N. (1930) Economic value of birds, *Emu*, **29**(3), 172–174. doi:10.1071/MU929172
- McGregor, R. (2019) *Idling in Green Places: a Life of Alec Chisholm*, Melbourne.
- Meine, C. (2017) De-extinction and the community of being, *The Hastings Center Report*, **47**(4), S9–S17. doi:10.1002/HAST.746
- Miller, R. S. (1935) Branch reports: Victoria, *Emu*, **34**(3), 229–230.
- Narraway, G., and Stark, H. (2015) Re-animating the Thylacine: Narratives of extinction in Tasmanian cinema, *Animal Studies Journal*, **4**(1), 12–31.
- O’Reilly, B. (1940) *Green Mountains*, Brisbane.
- Olsen, P. (2007) *Glimpses of Paradise: the Quest for the Beautiful Parakeet*, Canberra.
- Owen, D. (2004) *Tasmanian Tiger: the Tragic Tale of how the World lost its Most Mysterious Predator*, Baltimore.
- Paddle, R. (2000) *The Last Tasmanian Tiger: the History and Extinction of the Thylacine*, Cambridge.
- Roberts, S. (1930) The preservation of our birds, *Emu*, **29**(3), 195–200. doi:10.1071/MU929195
- Roberts, N. L. (1937a) Some ecological aspects of bird life, pt 1, *Emu*, **37**(1), 48–55. doi:10.1071/MU937048

- Roberts, N. L. (1937b) Some ecological aspects of bird life, pt 2, *Emu*, **37**(2), 150–156. doi:[10.1071/MU937150](https://doi.org/10.1071/MU937150)
- Roberts, N. L. (1938) Some ecological aspects of bird life, pt 3, *Emu*, **37**(3), 186–196. doi:[10.1071/MU937186](https://doi.org/10.1071/MU937186)
- Robin, L. (1997) 'Ecology: A science of empire?' in *Ecology & Empire: Environmental History of Settler Societies*, ed. T. Griffiths and L. Robin, Melbourne, pp. 63–73.
- Robin, L. (2001) *The Flight of the Emu: A Hundred Years of Australian Ornithology 1901–2001*, Melbourne.
- Robinson, F. N., and Hindwood, K. (1939) The bustard, *Emu*, **38**(4), 417–418. doi:[10.1071/MU938413G](https://doi.org/10.1071/MU938413G)
- Stubbs, B. (2001) From 'useless brutes' to national treasures, *Environment and History*, **7**(1), 23–56. doi:[10.3197/096734001129342397](https://doi.org/10.3197/096734001129342397)
- Thomson, D. (1929) Will our Cassowary disappear? Queensland's bird nears extinction. *Herald* (Melbourne), 6 April, 17.
- Zillmann, E. (2013) Recollections of the last known authentic sightings of the Paradise Parrot, *Australian Field Ornithology*, **30**, 106–108.