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A leucistic platypus observed on the New England Tablelands of New South Wales

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ABSTRACT

Genetic mutations resulting in abnormal colouration occur across all vertebrate groups but are considered rare, especially in mammals. Hypo-pigmentary conditions can be separated into albinism, leucism and piebaldism. The impact of colour variation on an animal's risk of predation and its ability to blend with its surroundings is widely recognised. We report our observations of a white platypus (*Ornithorhynchus anatinus*) in a tributary of the Gwydir River in the upper reaches of the Murray Darling Basin, New South Wales, Australia. We describe our observations in the context of historical platypus records since 1835.

Keywords: albino, animal colouration, hypo-pigmentation, leucism, monotreme, Murray Darling Basin, *Myuchelys bellii*, New England Tablelands, *Ornithorhynchus anatinus*, white platypus.

Introduction

In many species of animal, aberrant variation in colouration is thought to be detrimental to survival and is rarely prevalent in populations (Gorta *et al.* 2021). Genetic mutations resulting in abnormal colouration occur across all vertebrate groups (Dunlop *et al.* 2020) but are rare, especially in mammals (McCardle 2012). Such mutations can be categorised as melanistic or hypo-pigmentary. Diminished pigmentation conditions include albinism, leucism and piebaldism (Abreu *et al.* 2013). Albinism is the absence of tyrosinase, an essential enzyme for melanin production (Lucati and López-Baucells 2017), resulting in pale skin, white fur or feathers and red eyes (van Grouw 2006). Leucism arises from a defective pigment transfer process, causing a lack of melanin in the skin, fur or feathers (van Grouw 2006; Lucati and López-Baucells 2017), and results in partially, or completely, white (or whitish) animals (Fertl and Rosel 2009; Abreu *et al.* 2013) with normal eye colour (van Grouw 2006). Piebaldism results from the localised absence of melanocytes in the skin, hair or feathers (Lucati and López-Baucells 2017). Animals with piebaldism exhibit irregular light or white patches (van Grouw 2006) and normal eye colour (Abreu *et al.* 2013).

The implications of hypo-pigmentation are not well understood, but it is widely thought that colour variants hindering crypsis increase visibility to predators and reduce chance of survival (McCardle 2012). Colour variants are naturally infrequent and poorly reported in the literature (Dunlop *et al.* 2020). Documenting instances of hypo-pigmentation in wild mammals provides valuable insights into the distribution and survival of these atypical individuals.

We report our observations of a white platypus (*Ornithorhynchus anatinus*) in the Gwydir River catchment in the upper reaches of the Murray Darling Basin, New South Wales. We describe our observations in the context of historical records of platypus since 1835.

Methods

We surveyed a 1120 m reach of a Gwydir River tributary on the New England Tablelands as part of ongoing monitoring of Western saw-shelled turtle (*Myuchelys bellii)*

populations. We conducted walking surveys during daylight hours (0600–2000 hours) along the streambank over two separate periods (23 February to 9 March and 17 March to 29 March 2021). Photos and video footage were captured using iPhones (11 Pro and 13 mini).

Three camera traps (Campark T85) were deployed from 16 to 22 September 2021 and 31 December 2021 to 6 January 2022 to monitor Western saw-shelled turtles. Cameras operated on time lapse mode, recording a single 20-megapixel image every 2 min.

We conducted a search of historical Australian newspaper articles in Trove (National Library of Australia 2022), using the term 'platypus' in conjunction with 'albino', 'piebald', 'leucistic', 'white' or 'cream'. We used the same search terms to retrieve records of platypus observations from State Government wildlife databases for Victoria, Tasmania, South Australia, Queensland and New South Wales, and the Atlas of Living Australia. We obtained records from the Australian Museum specimen catalogue with assistance from Sandy Ingleby, Mammal Collections Manager. We conducted internet searches for images of albino, piebald, leucistic, white or cream platypus (Google, Flickr, Creative Commons image search).

Study species

Platypus fur is usually a deep umber–brown on the dorsal surface of the head, body, tail and outer surfaces of the limbs, but reddish and almost black individuals also occur (Burrell 1927). Fur on the ventral surface 'ranges from silver through yellow to warm chestnut … being lightest on the chest and throat, and darkening posteriorly', and the dark skin of the extremities can be mottled with white (Burrell 1927, p.47). Platypus have a small patch of light-coloured fur below each eye ranging from yellowish-white to yellowish-brown (Burrell 1927; Serena and Williams 2010). Platypus are sexually dimorphic: males grow longer and heavier than females. Adult females cannot be differentiated from immature males based on size (Grant and Fanning 2007; Bino *et al.* 2015), and size can vary within and between populations (Grant and Fanning 2007; Bino *et al.* 2015). Males have spurs on the inner hind limbs (Grant and Fanning 2007; Williams *et al.* 2013).

Results and discussion

We observed a predominantly white platypus over a period spanning 28 months (26 February 2021 to 17 July 2023) (Fig. 1*a*). The platypus was observed on 10 occasions (Table 1) during monitoring surveys for *M. bellii* as part of the Turtles Forever conservation program (Streeting *et al.* 2022). The platypus was sighted from the stream bank eight times, and four of those occasions were captured on video. Photos and videos are available online – see Streeting *et al.* (2023). In spring 2021, two camera trap images of the white platypus (Fig. 1*b*) and three images of brown platypus were recorded on 22 September.

The white platypus was considered to have a leucistic form rather than albino because the feet, bill and tail were pigmented. The frontal shield and majority of the bill were dark. Fur on the dorsal surface of the body was pure white, and fur on the upper surface of the tail transitioned from white proximally to dark distally. The underside of the body and tail were not observed. There was an irregularly shaped white patch on the upper surface of the bill. The eyes and ears of platypus are housed in the facial furrow, which closes when the animal dives (Grant and Fanning 2007). The facial furrow of the leucistic platypus was lined with white fur. The platypus appeared to be fully grown, but sex and size were not determined.

Records of white platypus are infrequent, suggesting that hypo-pigmentation may be deleterious within wild populations. Most cases of platypus predation have been attributed

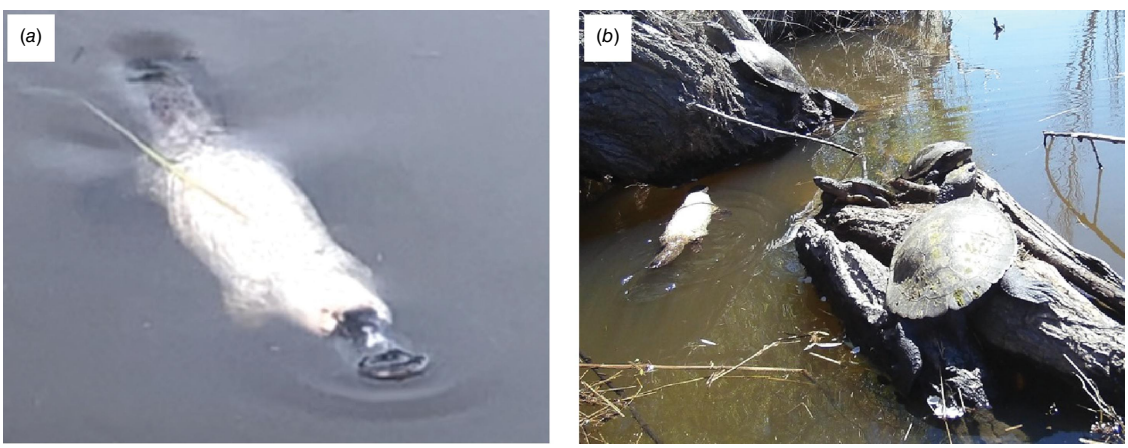

Fig. 1. (*a*) The leucistic platypus observed by the authors. (*b*) Camera trap image recorded 22 September 2021 showing the leucistic platypus on the surface of the water, with five basking Western saw-shelled turtles (*M. bellii*).

Table 1. Summary of our observations of a leucistic platypus, 2021–2023.

Date	Time	Evidence recorded	Media (see Streeting *et al.* 2023)
26 Feb 2021	0924	Video (1920 × 1080, 30 fps, 3 s)	Media 01
28 Feb 2021	1308	Fieldnote (L. Streeting)	
5 Mar 2021	0707	Video (1920 × 1080, 30 fps, 11 s)	Media 02
	0708	Photo (12 MP, 4032 × 3024)	Media 03
6 Mar 2021	1900	Fieldnote (L. Streeting)	
24 Mar 2021	0926	Video (1920 × 1080, 30 fps, 25 s)	Media 04
	0927	Video (1920 × 1080, 30 fps, 18 s)	Media 05
28 Mar 2021	1904	Fieldnote (L. Streeting)	
22 Sep 2021	0818	Camera trap photo (20 MP, 5888 × 3312)	Media 06
22 Sep 2021	1242	Camera trap photo (20 MP, 5888 × 3312)	Media 07
Jan 2022	–	Fieldnote (R. Daugherty)	
17 Jul 2023	1720	Video (720 × 1280, 30 fps, 10.5 s)	Media 08
	1724	Photo (12 MP, 4032 × 3024)	Media 09
	1726	Photo (12 MP, 4032 × 3024)	Media 10

to foxes (*Vulpes vulpes*) and feral or domestic dogs (*Canis lupus familiaris*) (Grant and Fanning 2007). However, predation by white-bellied sea-eagle (*Haliaeetus leucogaster*) (Munday *et al.* 1998; Seale 2008), wedge-tailed eagle (*Aquila audax*) (Rakick *et al.* 2001) and grey goshawk (*Accipiter novaehollandiae*) (Richards 1986) have been reported. Predators known or likely to occur at the site include foxes, wedge-tailed eagles and white-bellied sea-eagles, but potential predators include brown goshawks (*Accipiter fasciatus*), little eagles (*Hieraaetus morphnoides*) and cats (*Felis catus*).

Our search for accounts of albino, piebald, leucistic, white or cream platypus yielded a total of 15 references (Tables 2 and 3). Several of these records refer to the same individual animals or specimens; consequently, we found 12 novel records spanning the period 1803 to now.

Records of white or albino platypus in scientific literature and newspapers, or held by the Australian Platypus Conservancy

The earliest record of an albino platypus was a second-hand account published in Bennett (1835, 1860). No date, locality or descriptive information is provided other than a 'perfectly white' albino platypus was 'once seen'. Burrell (1927) also refers to Bennett's record and to an albino specimen exhibited in the Mammal Gallery of the Australian Museum, Sydney. The Australian Museum does hold a single record (M.1139) of an albino platypus with 'feet and beak delicate pink' and 'eyes red', but the specimen is no longer in the collection and may have been lost or destroyed (Sandy Ingleby, Mammal Collections Manager, pers. comm.). The museum register does not indicate whether the specimen was a study skin, a mount or a wet specimen. The specimen is documented as being from the Manning River, New South Wales, and its registration date is 10 October 1896.

The Trove online archive has digitised records of Australian newspapers and Government gazettes for 1803–1954 and select newspapers to the present day. We found three anecdotal references to white or albino platypus. Anonymous (1940) and A.T. (1941) both reference a white or albino platypus in 'the MacDonald River, a tributary of the Hawkesbury'. Platypus can live for up to 21 years in the wild (Grant and Fanning 2007) and given the rarity of white platypus, it seems likely that the articles are reporting the same animal, approximately 22 months apart. The article by Anonymous (1940) also states that Taronga Zoo had an albino platypus in captivity in January 1940. There are currently no digital records pertaining to this animal (Jean Rice, Taronga Conservation Society Australia, pers. comm.). The third reference to an albino platypus attributed to Micky (1950) does not appear to be a direct observation.

A fourth reference alluding to a population of albino platypus near Canberra in the 1860s was also found in Trove. The article by Warden and Pryor (1979), published in *The Canberra Times* on 1 April 1979 (April Fool's Day) was later confirmed to be a fictitious prank (Warden 1979).

The Australian Platypus Conservancy has three records of white or albino platypus (Geoff Williams, Director, Australian Platypus Conservancy, pers. comm.). Two of the records are brief, second-hand accounts from unknown sources – one at Sandy Creek, Victoria (~2010) and the other at Yarra Junction, Victoria (~2000). The third record is a note in an informal report (June 2008) – Mary Johnstone reports sighting platypus in dams fed by the Tanjil River near Hill

Table 2. Accounts of albino, white or leucistic platypus in scientific literature, newspapers or held by the Australian Platypus Conservancy or the Great Queensland PlatySearch.

Year	Source	Locality	Account	Novel records
1835	Bennett (1835, p. 230)	–	'I have heard that an Albino specimen of this animal was once seen; it was stated to have been close to the water's edge at the time it was noticed, and to have been perfectly white. On the approach of the person who observed it, it dived, and although watched did not reappear.'	1
1860	Footnote in Bennett (1860, p. 98)	–	'* I have heard that an albino specimen of this animal was once seen; it was stated to have been close to the water's edge at the time it was noticed, and to have been perfectly white. On the approach of the person who observed it, it dived, and, although watched, did not reappear.'	–
1927	Burrell (1927, p. 48)	–	'An albino is recorded by Bennett, and one is exhibited in the Mammal Gallery of the Australian Museum, Sydney.'[A]	–
1940	Anonymous (1940), *The Daily Telegraph*, 28 January, p. 6	MacDonald River, a tributary of the Hawkesbury, NSW	'Farmer catches rare albino platypus. A rare, albino platypus was caught on Friday night in the MacDonald River, a tributary of the Hawkesbury. Mr. William Morris, 65, farmer, of St. Albans, saw the platypus swimming in shallow water. He caught it with his hands. Mr. Morris kept the platypus until last night. When he learned that Taronga Park Zoo did not want it, he put it back in the river. He said: 'I know the platypus is protected, but I kept this one because I thought the Zoo would like it. He is a great little fellow — a lovely creamy colour. 'It was great fun to watch him. He would wallow in a dish of water and spend hours combing his hair with his back legs. I'll miss him badly.' The secretary of the Zoo (Mr. Brown) explained yesterday the Zoo already has an albino platypus.'	2
1941	A.T. (1941) *The World's News*, 6 December, p. 23	MacDonald River, a tributary of the Hawkesbury, NSW	'WHITE PLATYPUS. Walking along the bank of the MacDonald River, a tributary of the Hawkesbury, I saw a white platypus. A number of people have seen this platypus, while some say that there is more than one in the vicinity. I once saw one in the Towamba River, on the far South Coast of N.S.W., and another in Matagana Creek, in the same locality.'	1
1950	Micky (1950) *The World's News*, 8 July, p. 21	Burragorang, on the Wollondilly River, NSW	'White platypus. ALBINO animals are rareties, but a white possum has just been picked up alive on the road to Barmedman. About 20 years ago an albino platypus lived in the lower valley, Burragorang, on the Wollondilly River. A couple of local youngsters used to feed and play with it but never attempted to capture it. Morons from the city shot the little fellow, whose tameness led to its death.'	1
1979	Warden and Pryor (1979) *The Canberra Times*, 1 April, p. 7 (but see Warden 1979)	Fictitious locality: Disraeli's Creek	'Disraeli's Creek: Ian Warden and Geoff Pryor visit a little-known scene of Australian history. Gold was discovered in the hills around Disraeli's Creek in the late 1860s. Before then the area was called Booroobubba, an Aboriginal word meaning 'white platypus'; and indeed, the very few people who lived in the area with any permanence did so in order to hunt, for its fur, the highly-prized albino platypus which thrived in the local creeks. This pallid* monotreme is now, alas, seldom found in New South Wales waters, having been efficiently hunted to satisfy the whims of the fashionable lasses of the 19th century. It may well be in danger of total extinction.'	–
~1999	Nattrass (2002)	Babinda Creek near Cairns, Qld	One record of an albino individual sighted about 1999 (Record ID: 93) in the Great Queensland PlatySearch	1
Unknown, ~2000	Australian Platypus Conservancy	Yarra Junction, Vic.	Purported sighting of a white or albino platypus, no accurate details of animal, location or date.	1
2008	Australian Platypus Conservancy	Tanjil River near Hill End, Vic.	An informal report from June 2008, a Mary Johnstone reports frequently sighting platypus in dams fed by the Tanjil River near Hill End, Victoria, from the 1970s to the mid 1990s. She sometimes saw an albino platypus ('creamy off-white with pink eyes') in the early 1970s and handled the animal on one occasion when dry ice was tipped into the dam to catch and remove eels. The albino platypus was apparently 'stunned' but recovered and was released and subsequently seen on several other occasions.	1
~2010	Australian Platypus Conservancy	Sandy Creek, Vic.	Purported sighting of a white or albino platypus, no accurate details of animal, location or date.	1
2021–2023	This paper	Uralla, NSW	A leucistic platypus was observed on 10 separate occasions. Photos and videos of the platypus were recorded (Streeting *et al.* 2023)	1

For quotations the spelling, punctuation and capitalisation are exactly as in the original.

[A]We did not include the Burrell (1927) account of an albino platypus specimen exhibited in the Australian Museum as a novel record because we have included an Australian Museum record of an albino specimen in our database records (Table 3).

Table 3. Summary of records for albino or white platypus in Australian state and territory government fauna databases, the Atlas of Living Australia and the Australian Museum specimen catalogue.

Data source	Total platypus records	Records of albino platypus	Records of platypus with white patches
Queensland WildNet Database	848	0	0
New South Wales BioNet Atlas	5907	1	0
Victorian Biodiversity Atlas	6107	0	0
South Australia NatureMaps	66	0	0
Tasmania Natural Values Atlas	3581	1	2
Australian Museum catalogue	472	1	0
Atlas of Living Australia (excluding above records)	10818	0	4[A]
Totals	27799	3	6

Databases were accessed 29 April 2023, with the exception of the Australian Museum catalogue accessed 25 January 2022.
[A]Of the four Atlas of Living Australia records of platypus with white patches, none of the records mention aberrant colouration.

Fig. 2. (*a*) The cover of *Australian Geographic* (No. 12, October–December 1988) featuring the original platypus illustration by Rod Scott and (*b*) apparent altered version of Scott's illustration in which the platypus has been reversed and recoloured to be predominantly white (source unknown; image is prevalent in a Google image search for the term 'albino platypus').

End, Victoria, from the 1970s to the mid 1990s. She sometimes saw an albino platypus ('creamy off-white with pink eyes') in the early 1970s and handled it on one occasion when dry ice was tipped into the dam to catch eels. The albino platypus was 'stunned' but recovered and was released and seen on subsequent occasions. Personnel from the Australian Platypus Conservancy have extensively handled and examined hundreds of platypus during research and monitoring efforts and no other instances of albinism or conspicuous leucism have been reported.

Image searches

Our search of Google, Flickr and Creative Commons image repositories returned a single realistic image of a predominantly white platypus (Fig. 2*b*). The image appears to be an

altered and reversed version of an original illustration by Rod Scott, of a brown platypus that was featured on the cover of *Australian Geographic* (Number 12, October–December 1988) (Fig. 2*a*).

Database records

The results of our search of State Government Wildlife databases, the Atlas of Living Australia and the Australian Museum catalogue are presented in Table 3. Of 27 799 database records, there were three references to albino platypus and no records of leucistic or piebald platypus. Of the six records of platypus with 'white patches', four did not describe abnormal platypus colouration. The remaining two records lack sufficient information to categorise the animals. The record of a white platypus in the NSW BioNet Atlas (Table 3) notes that this individual was observed over a 10-year period, suggesting that white platypus can successfully survive in the wild for extended periods.

There may be a bias towards reporting conspicuous leucism or albinism cases, whereas less noticeable hypo-pigmentation cases may be underreported. Limited use of terms like 'leucistic' and 'piebald' in platypus reporting may underestimate the incidence of hypo-pigmentation. Although our search for white, leucistic and albino platypus records was thorough, it was not exhaustive. Nonetheless, it is evident that white platypus sightings are rare, and our report of a white platypus in the New England region of New South Wales is the only documented instance of a leucistic platypus that we know of. Our observation (this paper) brings the number of white or albino platypus records documented since 1803 to 13 novel individuals (Tables 2 and 3). Further research is needed to better understand how variations in pigmentation affect the ecology and survival of platypus.

Supplementary material

Supplementary material is available online.

References

Abreu, M. S. L., Machado, R., Barbieri, F., Freitas, N. S., and Oliveira, L. R. (2013). Anomalous colour in Neotropical mammals: a review with new records for *Didelphis* sp. (Didelphidae, Didelphimorphia) and *Arctocephalus australis* (Otariidae, Carnivora). *Brazilian Journal of Biology* **73**, 185–194. doi:10.1590/s1519-69842013000100020

Anonymous (1940). Farmer catches rare albino platypus. *The Daily Telegraph*, p. 6. Available at http://nla.gov.au/nla.news-article248237358 [accessed 3 May 2023].

A.T. (1941). White platypus. *The World's News*, p. 23. Available at http://nla.gov.au/nla.news-article139907028 [accessed 3 May 2023].

Atlas of Living Australia website. Available at http://www.ala.org.au [accessed 29 April 2023].

Bennett, G. (1835). Notes on the natural history and habits of the *Ornithorhynchus paradoxus*, Blum. *The Transactions of the Zoological Society of London* **1**, 229–258. doi:10.1111/j.1096-3642.1835.tb00622.x

Bennett, G. (1860). 'Gatherings of a naturalist in Australasia: being observations principally on the animal and vegetable productions of New South Wales, New Zealand, and some of the Austral Islands.' (J. Van Voorst: London.)

Bino, G., Grant, T. R., and Kingsford, R. T. (2015). Life history and dynamics of a platypus (*Ornithorhynchus anatinus*) population: four decades of mark-recapture surveys. *Scientific reports* **5**, 16073. doi:10.1038/srep16073

Burrell, H. (1927). 'The Platypus.' (Angus and Robertson: Sydney.)

Dunlop, J., Peacock, D., Moore, H., and Cowan, M. (2020). Albinism in Dasyurus species – a collation of historical and modern records. *Australian Mammalogy* **42**, 114–118. doi:10.1071/AM19014

Fertl, D., and Rosel, P. E. (2009). Albinism. In 'Encyclopedia of marine mammals', 2nd edn. (Eds B. Würsig, W. F. Perrin, J. G. M. Thewissen.) pp. 24–26. (Academic Press: Burlington MA, USA.)

Gorta, S. B. Z., Alting, B., Claridge, A., and Henderson, T. (2021). Apparent piebald variants in quolls (Dasyurus): examples of three recent cases in the spotted-tailed quoll *Dasyurus maculatus*. *Australian Mammalogy* **43**, 373–377. doi:10.1071/AM20058

Grant, T. R., and Fanning, D. (2007). 'Platypus', 4th edn. (CSIRO Publishing: Collingwood.)

Lucati, F., and López-Baucells, A. (2017). Chromatic disorders in bats: a review of pigmentation anomalies and the misuse of terms to describe them. *Mammal Review* **47**, 112–123. doi:10.1111/mam.12083

McCardle, H. (2012). Albinism in wild vertebrates. MSc thesis, Texas State University, San Marcos, Texas.

Micky (1950). White platypus. *The World's News*, p. 21. Available at http://nla.gov.au/nla.news-article136318691 [accessed 3 May 2023].

Munday, B. L., Whittington, R. J., and Stewart, N. J. (1998). Disease conditions and subclinical infections of the platypus (*Ornithorhynchus anatinus*). *Philosophical transactions of the Royal Society of London. Series B, Biological Sciences* **353**, 1093–1099. doi:10.1098/rstb.1998.0268

National Library of Australia. 2022. Trove. Available at http://trove.nla.gov.au/ [accessed 22 January 2023]

Nattrass, R. (2002). The Great Queensland PlatySearch. Internal report (NatureSearch). (Queensland Parks and Wildlife Service: Qld, Australia.)

New South Wales BioNet Atlas. Available at http://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet [accessed 29 April 2023].

Queensland WildNet Database. Available at http://www.qld.gov.au/environment/plants-animals/species-information/wildnet [accessed 29 April 2023].

Rakick, R., Rakick, B., Cook, L., and Munks, S. (2001). Observations of a platypus foraging in the sea and hunting by a wedge-tailed eagle. *Tasmanian Naturalist* **123**, 3–4.

Richards, G. C. (1986). Predation on a platypus, *Ornithorhynchus anatinus* (Monotremata: Ornithorhynchidae), by a goshawk. *Australian Mammalogy* **9**, 67. doi:10.1071/AM86011

Scott, R. (1988). *Australian Geographic* **12**, October–December, Cover image. Australian Geographic Society.

Seale, J. (2008). Sea-eagle takes platypus. Field Notes. *Boobook* **26**, 6.

Serena, M., and Williams, G. A. (2010). 'Conserving Platypus and Water-Rats: Information and guidelines.' (Australian Platypus Conservancy: Wiseleigh Vic.) Available at http://www.tweed.nsw.gov.au/files/assets/public/documents/environment/waterways-amp-coastline/conserving-platypus-information-and-guidelines.pdf [accessed 17 May 2023].

South Australia NatureMaps website. Available at http://data.environment.sa.gov.au/NatureMaps/Pages/default.aspx [accessed 29 April 2023].

Streeting, L. M., Bower, D. S., Dillon, M. L., Spark, P., Gough, M., Skidmore, A., McDonald, P. G., Delaney, H., Burns, A., Watson, S., Dissanayake, D. S. B., Georges, A., and McKnight, D. T. (2022). Optimising the hatching success of artificially incubated eggs for use in a conservation program for the western saw-shelled turtle (*Myuchelys bellii*). *Australian Journal of Zoology* **70**, 74–82. doi:10.1071/ZO22014

Streeting, L. M., Daugherty, R., Burrows, S., Bower, D. S., Watson, S., Daugherty, N., and Dillon, M. L. (2023). Media files for: A leucistic platypus observed on the New England Tablelands of New South Wales. figshare. doi:10.6084/m9.figshare.c.6751722

Tasmania Natural Values Atlas website. Available at www.naturalvaluesatlas.tas.gov.au[accessed 29 April 2023].

van Grouw, H. (2006). Not every white bird is an albino: sense and nonsense about colour aberrations in birds. *Dutch Birding* **28**, 79–89.
Victorian Biodiversity Atlas website. Available at http://www.environment.vic.gov.au/biodiversity/victorian-biodiversity-atlas [accessed 29 April 2023].
Warden, I. (1979). Gang Gang - A ripping prank (hee hee!). *The Canberra Times*, p. 3. Available at https://trove.nla.gov.au/newspaper/article/110938847 [accessed 27 January 2022].
Warden, I., and Pryor, G. (1979). Disraeli's Creek: Ian Warden and Geoff Pryor visit a little-known scene of Australian history. *The Canberra Times*, p. 7. Available at http://nla.gov.au/nla.news-article110938200 [accessed 27 January 2022].
Williams, G. A., Serena, M., and Grant, T. R. (2013). Age-related change in spurs and spur sheaths of the platypus (*Ornithorhynchus anatinus*). *Australian Mammalogy* **35**, 107–114. doi:10.1071/AM12011

Data availability. Data used in this manuscript are available from the Australian state and territory government fauna databases, the Atlas of Living Australia, the Australian Museum specimen catalogue and the National Library of Australia Trove archive. Photos and videos of our observations are available online (Streeting *et al.* 2023).

Conflicts of interest. The authors declare no conflicts of interest.

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