

SUMMARY OF STATE HERITAGE PLACE

Entry in the South Australian Heritage Register in accordance with s14(1)(a) of
the *Heritage Places Act 1993*

NAME: Mount Wudinna and Environs

PLACE NO.: 17060

ADDRESS: Barngarla Country

Mount Wudinna Access,

Wudinna SA 5652

CR 6199/369 H641600 S53; CR/6196/869 F31595 A10; CR/5763/286
H641600 S51; CT/5897/848 D59272 A102; CT/5958/645 D69310 Q11 and
CR/5897/847 D59272 A101 and a public road (CT 5958/646 D69310
(Road) A13) Hundred of Wudinna

STATEMENT OF HERITAGE SIGNIFICANCE

Mount Wudinna and Environs is an exceptional example of granite inselbergs. Located on the northern Eyre Peninsula, Mount Wudinna and Environs is comprised of four major granite outcrops, each displaying well-preserved and sometimes unusual geological features formed in the granite due to compressive stresses and weathering. The granite outcrops provide excellent opportunity for research on the effect of these natural processes in the South Australian landscape and trace the evolution of the topography of the State through several geological features. These features associated with granite are highly likely to contribute to an understanding of the development of granite inselbergs over geological time and into the future as they continue to develop.

RELEVANT CRITERIA (under section 16 of the Heritage Places Act 1993)

(c) it may yield in formation that will contribute to an understanding of the State's history, including its natural history

Mount Wudinna and Environs has the potential to yield information, that will contribute to an understanding of South Australia's history through its geology. The area, has four major inselbergs; Mount Wudinna, Little Wudinna, Polda Rock and Turtle Rock, which display varied minor geological features. While many of these features are found at other sites across the State, including rillen (some displaying small scale relief inversion), domal sheet jointing, flared slopes (indicating cycles of weathering and erosion of both the outcrops and the surrounding landscape) and tafoni, Mount Wudinna and Environs displays many with a high level of integrity and intactness.

These minor geological features can assist in tracing the evolution of South Australia's geological development through evidence of erosion and compressive stresses. For example, while leading theories exist, the emplacement mechanisms for the Hiltaba Suite granites, which makes up Mount Wudinna and Environs, are still not fully understood. Mount Wudinna and Environs provides the opportunity to further research the emplacement of both it and other granite outcrops in the State. Additionally, the inselberg, particularly stepped slopes at Mount Wudinna, can trace the evolution of South Australia through evidence of several distinct weathering events over millions of years.

Several geological features at the site, such as A-Tents, vertical wedges and displaced slabs, demonstrate releases of compressive stresses, likely caused by minor tectonic events. The A-Tents at Mount Wudinna are particularly notable, being larger and thicker than comparable A-Tents at other granite outcrops. The presence of these features demonstrates that the place may be under continued or residual stresses and could provide insight into the formation of minor geological features, and the effect of such stresses on the inselbergs at Mount Wudinna and Environs and others in the State.

Mount Wudinna and Environs is highly intact as it has not been impacted by quarrying or agricultural practices. Though it will be affected by continuing weathering and tectonic events, such alterations further facilitates research on granite inselbergs.

DESIGNATION

Entry in the South Australian Heritage Register in accordance with S14(7)(a)(i) and s14(7)(b) of the Heritage Places Act 1993

STATEMENT OF DESIGNATION

Designated Place of Geological Significance

Mount Wudinna and Environs including Mount Wudinna, Turtle Rock, Polda Rock and Little Wudinna contains many minor geological features formed in Hiltaba Suite granite. Extruded granites formed the inselbergs and the varying surrounding granite outcrops which were weathered and shaped over millions of years by erosion and compressive stresses. This has formed minor geological features including rillen, domal sheet jointing, flared slopes, tafoni and spectacular examples of A-tents. The site contains excellent granite outcrops and is highly likely to contribute to an understanding of the geomorphology of granite inselbergs throughout the State.

Elements of Significance:

Elements of heritage significance include (but are not necessarily limited to):

- Mount Wudinna,
- Little Wudinna,
- Polda Rock,
- Turtle Rock,
- Erosional and compressive minor geological features associated with the above outcrops.
- Erosional and compressive minor geological features that may not be attached directly to the above outcrops such as boulders or blocks, sheets and A-tents.
- Granite exposures as identified on site plan.

Elements not considered to contribute to significance of place include (but are not necessarily limited to):

- Human-made objects, trails and roads (excluding portion of road identified in CT 5958/646 D69310 (Road) A13), vegetation, fencing and signage.
- Granite exposures not identified in site plan.

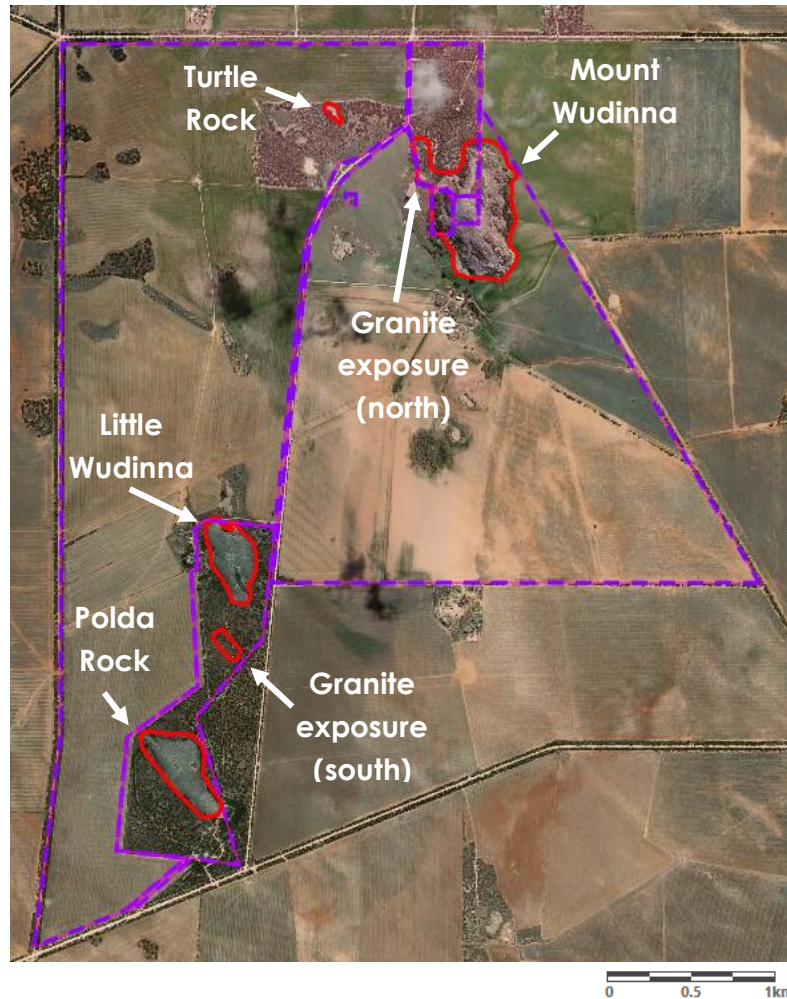
SITE PLAN, PHYSICAL DESCRIPTION & ELEMENTS OF SIGNIFICANCE

Entry in the South Australian Heritage Register in accordance with s14(2)(a) of the *Heritage Places Act 1993*

Mount Wudinna and Environs

PLACE NO.: 17060


Mount Wudinna Access, Wudinna SA, 5652




Mount Wudinna and Environs, Mount Wudinna Access, Wudinna SA, 5652, South Australia.
CR 6199/369 H641600 S53; CR/6196/869 F31595 A10; CR/5763/286 H641600 S51; CT/5897/848
D59272 A102; CT/5958/645 D69310 Q11, CR/5897/847 D59272 A101 and a public road (CT
5958/646 D69310 (Road) A13) Hundred of Wudinna

LEGEND

N ↑

 Parcel boundaries (Indicates extent of Listing)

 Outline of Elements of Significance for State Heritage Place – Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre.

Summary of State Heritage Place: 17060 4 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

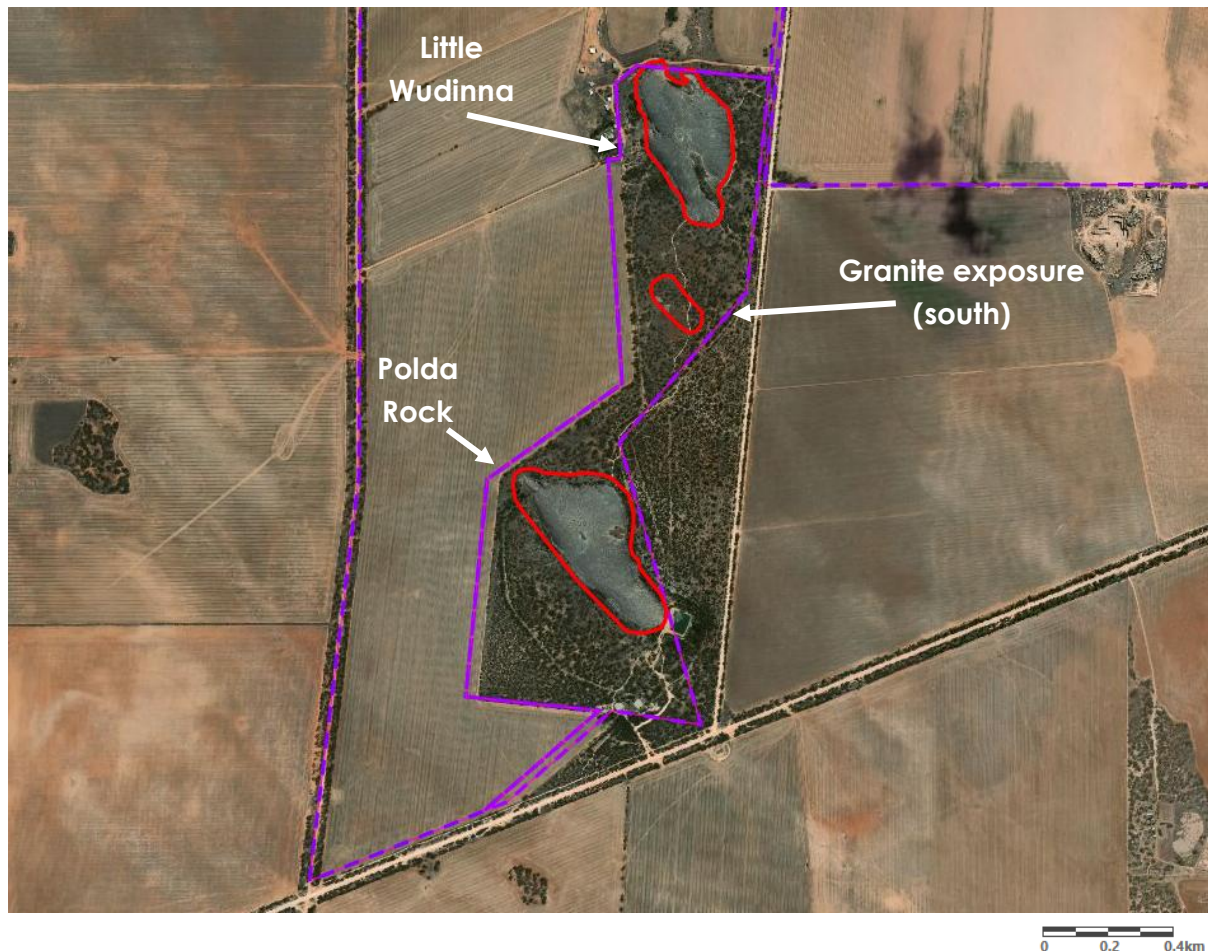
Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

SITE PLAN - DETAIL

NAME: Mount Wudinna and Environs


PLACE NO.: 17060




Mount Wudinna and Environs, Mount Wudinna Access, Wudinna SA, 5652, South Australia.
CR 6199/369 H641600 S53; CR/6196/869 F31595 A10; CR/5763/286 H641600 S51; CT/5897/848
D59272 A102; CT/5958/645 D69310 Q11, CR/5897/847 D59272 A101 and a public road (CT
5958/646 D69310 (Road) A13) Hundred of Wudinna

LEGEND

N ↑

 Parcel boundaries (Indicates extent of Listing)

 Outline of Elements of Significance for State Heritage Place – Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre.

Summary of State Heritage Place: 17060 5 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

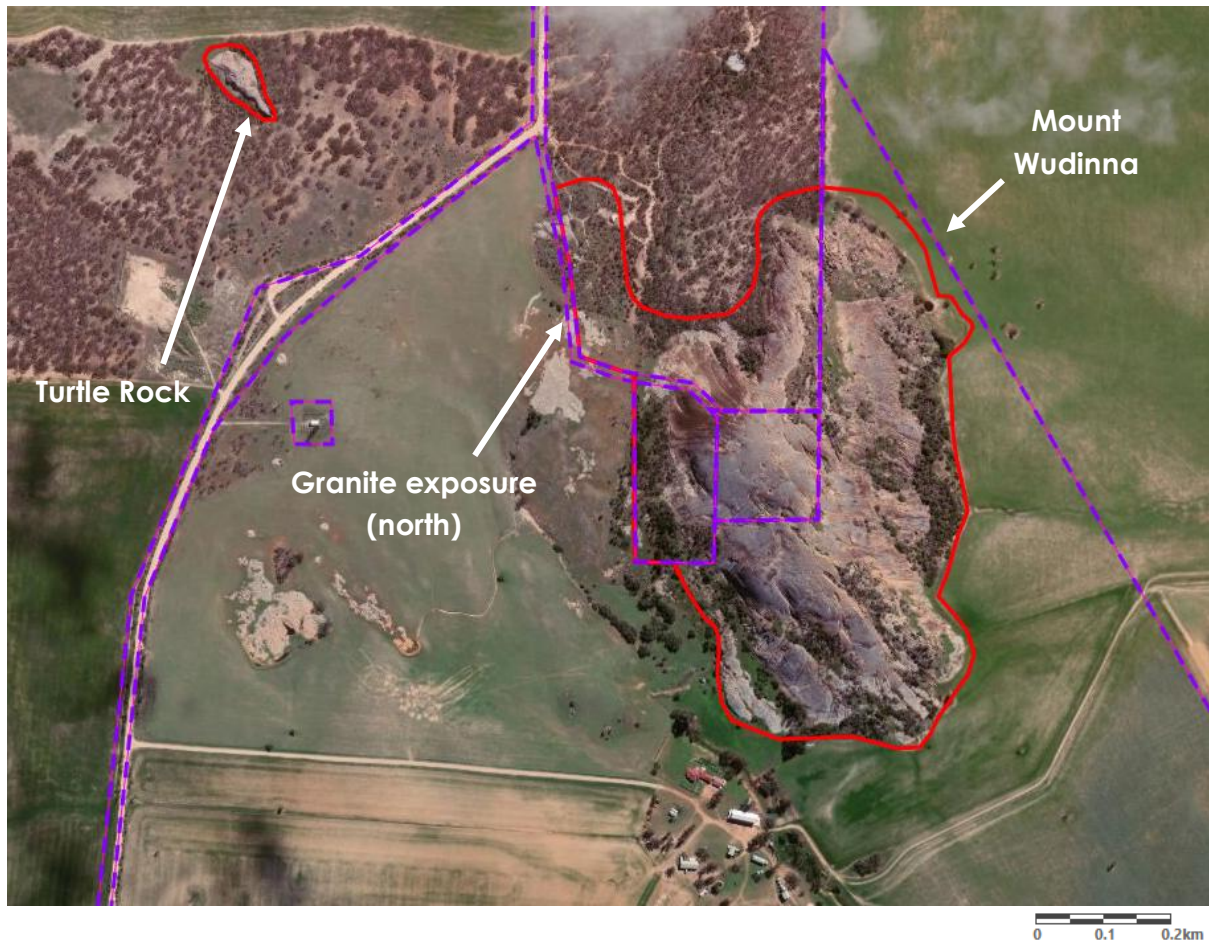
Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

SITE PLAN - DETAIL

NAME: Mount Wudinna and Environs


PLACE NO.: 17060




**Mount Wudinna and Environs, Mount Wudinna Access, Wudinna SA, 5652, South Australia.
CR 6199/369 H641600 S53; CR/6196/869 F31595 A10; CR/5763/286 H641600 S51; CT/5897/848
D59272 A102; CT/5958/645 D69310 Q11, CR/5897/847 D59272 A101 and a public road (CT
5958/646 D69310 (Road) A13) Hundred of Wudinna**

LEGEND

N ↑

 Parcel boundaries (Indicates extent of Listing)

 Outline of Elements of Significance for State Heritage Place – Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre.

Summary of State Heritage Place: 17060 6 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

Physical Description

Mount Wudinna and Environs contains several inselbergs including Mount Wudinna (sometimes referred to as Mount Weedina or Wudinna Hill), Little Wudinna, Polda Rock and Turtle Rock. It also includes a small granite exposure between Polda Rock and Little Wudinna and another to the northwest of Mount Wudinna. Each of the outcrops demonstrate weathering of the rocks that contrast with the surrounding plains.

The outcrops of Mount Wudinna and Environs are composed of the coarse-grained pink-red Hiltaba Suite granites that are of Mesoproterozoic age (1600-1575 Ma). The outcrops are the exposed tips of a deep, homogeneous intrusion of granite¹ that have become exposed due to weathering processes. The outcrops present at Mount Wudinna and Environs display minor and major weathering patterns in the form of tafoni, rillen, domal sheet jointing, flared slopes and less commonly A-tents.² Mount Wudinna is surrounded by a pitted platform which extends to the other nearby outcrops like Turtle Rock. It is highly likely that these outcrops are interconnected.

Mount Wudinna

Mount Wudinna rises approximately 60m above the surrounding landscape. It is the largest of the granites in the area of Minnipa and Kyancutta. Mount Wudinna is an inselberg known as a bornhardt, simply meaning an inselberg that is considered large. It is domal in shape with steep sides and is surrounded by several other minor geological features including platforms, smaller domes, rock knobs and 'whalebacks'³ that are also exposed above the surrounding plains.⁴

Mount Wudinna is an example of a 'stepped inselberg' and has flared slopes that demonstrate subsurface weathering.⁵ Other notable minor geological features at Mount Wudinna include but are not limited to:

- Sheets and suspended exfoliation layers,
- boulders,
- tafoni,
- large A-tents,⁶
- rillens,
- gnammas,
- vertical wedges,
- and flared slopes.



A-tent (Left), Suspended exfoliation layer (Centre), Sheets and boulders (Right) at Mount Wudinna

Source: DEW Files N.D., 1987, 1996

A 'trig point' (not significant fabric) denotes the highest point of Mount Wudinna.⁷ Low human-made walls (not significant fabric) on the west side of the hill, a water drain and an underground tank (not significant fabric) to the north were built by the South Australian Government in 1922 to collect water from the rock.⁸

Little Wudinna

Little Wudinna, also known as Little Weedinna Rocks, Little Wudinna Hill or Little Mount Wudinna, is a large domal inselberg.

Its most notable minor geological features include but are not limited to:

- Flared slopes,
- gnamma,
- rillen,⁹
- inverted rillen,
- vertical wedges,
- slabs, including displaced slabs,¹⁰
- boulders,
- and sheets¹¹

The rillen present on Little Wudinna are better than those at Mount Wudinna.¹²



Little Wudinna from a distance

Source: DEW Files 6 June 2025

Polda Rock

Polda Rock is a domal inselberg with low slopes, allowing for easy observation of the minor geological features of the granite. Notable features at Polda Rock include but are not limited to:

- Rillen,
- gnammas,¹³
- water eyes,
- a small A-tent,
- and flared slopes.

The outcrop is predominantly free of joints.¹⁴ Though, notably, when walking in some areas, a hollow sound is produced which indicates that erosional processes have formed slabs on the surface of the rock due to fractures called 'exfoliation joints'.¹⁵

A channel on the northwest end of the rock and a water catchment wall (not significant fabric) is built around the base of the rock and collects water. The channel feeds into three water tanks (not significant fabric) to the southeast of the rock, while the wall feeds into a dam (Polda Dam or Polda Rock Reservoir) (not significant fabric) and then into the three water tanks (not significant fabric). The system was built by the South Australian Government in 1919-22.¹⁶ The dam is said to be used by the landowner to potentially farm yabbies and marron.¹⁷ Polda Rock was used as a water supply for Wudinna town and built structures were restored in 2002.¹⁸

Summary of State Heritage Place: 17060 9 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025



A slope of Polda Rock with the retaining wall that encircles the entire granite outcrop

Source: DEW Files 6June 2025

Turtle Rock

Also known as the Dinosaur or Lizard Rock¹⁹ is a heavily pitted outcrop with overhanging flared slopes.²⁰ It is a moderately sized and dome-shaped whaleback inselberg.

Notable minor geological features at Polda Rock include but are not limited to:

- Flared slopes, particularly notable for meeting on a spur,
- gnammas,
- rillen²¹
- and inverted rillen.



Turtle Rock from Mount Wudinna

Source: DEW Files 5 June 2025

Elements of Significance:

Elements of heritage significance include (but are not necessarily limited to):

- Mount Wudinna,
- Little Wudinna,
- Poldo Rock,
- Turtle Rock,
- Erosional and compressive minor geological features associated with the above features.
- Erosional and compressive minor geological features that may not be attached directly to the above features such as boulders or blocks, sheets and A-tents.
- Granite exposures as identified on site plan.

Elements not considered to contribute to significance of place include (but are not necessarily limited to):

- Human-made objects, trails and roads (excluding portion of road identified in CT 5958/646 D69310 (Road) A13), vegetation, fencing and signage.
- Granite exposures not identified in site plan.

Summary of State Heritage Place: 17060 11 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

HISTORY, CHRONOLOGY, SITE DETAILS & PHOTOGRAPHS

Entry in the South Australian Heritage Register in accordance with s14(1)(a) of the *Heritage Places Act 1993*

History of the Place

Geological History

Mount Wudinna and Environs is composed of Hiltaba Suite granite, which is Mesoproterozoic in age, approximately 1600-1575 million years old (Ma) and is a part of the Hiltaba Suite. It is likely that the Hiltaba Suite granite was formed in the last volcanic event to have affected the Eyre Peninsula. The Hiltaba Suite granites often have a red or pink colour from abundant iron oxide inclusions. Areas of this geological formation can be found throughout the west and central sections of South Australia. The Hiltaba Suite intrudes into the larger Gawler Craton,²² the underlying basement rock covering much of the centre of the State,²³ though the mechanisms relating to this emplacement are still not well understood.²⁴



Informative sign at Mount Wudinna demonstrating the size of the Gawler Craton and location of Gawler Ranges Volcanics and Hiltaba Suite granites

Source: DEW Files 6June 2025

Summary of State Heritage Place: 17060 12 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

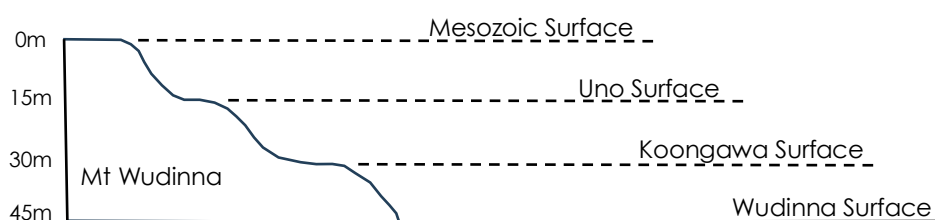
Designation retained by the South Australian Heritage Council 30 October 2025

Once emplaced, the Hiltaba Suite was then covered by sediment. Eventually, Mount Wudinna and Environs was exposed to the surface as the surrounding plains eroded faster than the granite rock. This was due to the few fractures that are present in the granite when compared to the surrounding rocks. Polda Rock and Little Wudinna, for example, have minimal fractures.²⁵ With fewer fractures, there was less opportunity for erosion to occur and the more fractured surrounding sediment eroded, leaving inselbergs exposed above the plains.

Over the millions of years since the granites were exposed, they have continued to be weathered, quite considerably in some places. The erosion of the inselbergs of Mount Wudinna remains unusual, with the few fractures and characteristics of the granite creating minor geological features such as gnammas, rillen and others. These features are often reflected in many other granite outcrops throughout the world.

Stepped slopes on the surface of Mount Wudinna demonstrate numerous potential exposures and periods of erosion on the rock surface. Mount Wudinna has a flat summit, showing heavy weathering through the presence of tafoni, corestones and gnammas.²⁶ It is believed that weathering at this level is from the Mesozoic (sometime between 261 and 66 Ma), and is the time when the mountain was first exposed.²⁷ Bands of weathering on the western piedmont approximately 30-35m above the plain and approximately 15m beneath the flat summit²⁸ are thought to be related to the early Cenozoic-aged (sometime between 66 Ma and the present) Uno Surface,²⁹ another weathering period. This was then followed by the even younger Koongawa Surface hypothesised to potentially be late Pliocene or early Pleistocene in age, where further weathering occurred, though this date is speculative.³⁰ Altogether, it is currently understood that Mount Wudinna underwent at least three erosion events since its Mesozoic-aged exposure.

Similar weathering events are reflected in other inselbergs at Mount Wudinna and Environs such as at Polda Rock.



Simplified diagram of potential erosion surfaces based on Twidale and Bourne (1975)

Source: Twidale and Bourne (1975)

Mount Wudinna and Environs have also been affected by compressive stresses that have formed A-tents, displaced slabs and formed fractures in sheets on the rock surface. A-tents preserved at Mount Wudinna are varied in age: some are very old, and some have formed as recently as 1985, demonstrating continued development of the rock.

Human History

Mount Wudinna and Environs is located on Barngarla Land. The Barngarla People live on the eastern side of the Eyre Peninsula prior to colonisation. Extending over a distance of 1100km or more, the Barngarla nation is believed to be the largest in South Australia.³¹ The Barngarla People had and continue to have a strong connection to the land.

The Barngarla People strongly resisted colonisation, though their numbers were greatly reduced due to introduced disease, deaths during acts of resistance by Barngarla People and retribution by colonisers, and loss of access to traditional foods.³² In the 1840s, the Barngarla people and the neighbouring Nauo People who lived on the south-western portion of the Eyre Peninsula, began attacking outlying sheep runs around the Port Lincoln district resulting in the temporary abandonment of many of these runs.³³

In 1844, surveyor and explorer John Charles Darke passed through the Wudinna area³⁴ and is recognised as the first European to sight Mount Wudinna which was then referred to as 'Granite Mount'.³⁵

In the first 20 years of colonisation at least a dozen European settlers and an unrecorded number of First Nations People were killed.³⁶ Many were disposed from their Country and would not return until many years later. By the 1930s, it was estimated that very few Barngarla or Nauo People lived in the southern Eyre Peninsula instead being found at Franklin Harbour, Streaky Bay, Gawler Ranges and Iron Knob, Whyalla, Port Augusta or Port Pearce. Often, they worked on farms or sheep stations or lived in fringe camps. In the 1940's, some Barngarla People were employed for extensive pipeline construction from Whyalla to the River Murray.³⁷ A Native Title determination for the Barngarla People was registered in 2016.

It was once believed the name 'Wudinna' was derived from 'Woodna', meaning 'boomerang'. Another possible alternative was that 'Wudinna' was a shortening of the phrase 'Cudji weedi deena tuna', loosely translating to 'spear stick into snake' that was eventually shortened to 'Weedideena'.³⁸ However, a book written in part by the Barngarla people of Port Lincoln called *Barngarlidhi Manoo – Speaking Barngarla Together* confirms that the name 'Wudinna' derives from 'Weedna' (alternatively Weedinna or Weedina³⁹), a First Nations word that means 'granite hill'.⁴⁰

Wudinna was settled by Europeans in 1861. Robert George Stanley laid claim to 10 square miles of land surrounding what was then known as Weedina Hill (Now Mount Wudinna).⁴¹ In 1896, W.A. Barns (also written as Barnes) and A.J. Inkster leased some of the surrounding area. Prior to the 1900s, pastoralists struggled to make a living in the northern Eyre Peninsula due to a lack of reliable water. Many survived around granite outcrops such as Mount Wudinna, Tcharkulda, and Cocata and Kolballa further South.⁴² The leases were transferred solely to W.A. Barns in 1905 and were subdivided in 1912 for agricultural use.

Around 1912 Wudinna Well, a small well south of Mount Wudinna, was constructed and several sites identified as possible locations for masonry tanks including a rock to the South of Wudinna (Likely referring to Polda Rock).⁴³ 1913 marked the beginning of major water collecting schemes in the region, first at Minnipa Hill, followed by Tcharkulda Rock and Yarwondutta Rock and Quarry (SHP 17059)/Yarwondutta Rock Tank (SHP 14225). Some of the water collecting devices were created by digging into the rock, such as at Yarwondutta Rock.

In 1914, rock quarrying was suggested as a means to provide materials for construction.⁴⁴ The following year, Wudinna township was surveyed and then in 1916 gazetted.⁴⁵

Elsewhere in the Eyre Peninsula, Yarwondutta Dam was constructed in 1915.⁴⁶ This government-funded water collection at Yarwondutta Rock and Quarry (SHP 17059)/Yarwondutta Rock Tank (SHP 14225) (and also at Kolballa) informed decisions for further collections at other granite outcrops within the State. At Yarwondutta Rock, the water tank was close to the granite outcrop which was found to be less suitable than having a tank that was sited further away, even wholly or partly above ground. Thereafter water collection tanks at places such as Mount Wudinna, Peella, Cocata and Polda, among others were designed in a more efficient manner.

Many water tanks in the Eyre Peninsula were built to aid in development of agricultural areas.⁴⁷ Government-implemented water conservation projects were completed at Polda Rock between 1919-1922 including walls, drains and three tanks.⁴⁸ Water channels were hand constructed and a reservoir was made to provide the Wudinna township with water,⁴⁹ still extant. The large reservoir to the southeast of Polda Rock was constructed in 1922. The reservoir provided water to the Wudinna township and to nearby farmers.

Also in 1919, an early version of the Polda Well Water Scheme, eventually shortened to Polda Scheme, was initiated to establish a permanent water source for the township. The scheme involved pumping water from wells in the area.⁵⁰ Discussions about the efficacy of the scheme continued into 1923. Water catchment systems in association with the inselbergs would continue to be built throughout the 1920s.⁵¹

Summary of State Heritage Place: 17060 15 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

Implementing the lessons learnt at Yarwondutta Rock and Quarry (SHP 17059)/ Yarwondutta Rock Tank (SHP 14225), water tanks were constructed at Mount Wudinna in 1922. A retaining wall and silt trap were also constructed as a part of the tank.

In 1929, along with previous plans to expand the Polda Rock water catchment area, plans were also made to construct channels to connect the Polda water catchments and those at Little Wudinna.⁵² The Polda Scheme would later be recommissioned in 1998.⁵³

In 1980, Mt Wudinna and Environs was recognised as a Geological Monument by the South Australian Division of the Geological Society of Australia. Areas outside of the State Heritage Place were quarried between 1992 and 2006 (Desert Rose Quarry) and during 1998 (Kopi Kop 6).

Researchers Ferris, Gray and Pain in their 1998 publication *Reconnaissance Granite Sampling of the Mesoproterozoic Hiltaba Suite granite on Northern Eyre Peninsula, South Australia for Dimension Stone* for Primary Industries and Resources SA noted significant minor geological features at Mount Wudinna, Polda Rock and Little Wuddina. Mount Wudinna's significant minor geological features were noted as: A-tents, flared slopes, rillen, gnammas and tafoni. Mount Wudinna was described as 'one of the most impressive granite landforms on [the] Eyre Peninsula' and was noted as one of the best geomorphological sites with granite inselbergs and was too significant to be quarried. Significant minor geological features at Polda Rock were determined as: A flared western slope, a small A-tent, numerous rillen and gnammas.⁵⁴ Finally, significant minor geological features at Little Wuddina were determined as: flared slopes, gnamma and rillen and it was 'deemed too significant for quarrying'.⁵⁵ Turtle Rock was not assessed by Ferris *et al.*

Chronology

Year	Event
~1600-1575	Mesoproterozoic. Hiltaba Suite formed.
Unknown	Covering of the Hiltaba Suite by sediment.
Unknown	Erosion of the surrounding sediment and exposure of Mount Wudinna and Environs.
~261 - 66 Ma	Mesozoic. Weathering of the first surrounding sediment layer, Mesozoic Surface.
~66 Ma - Present	Cenozoic. Weathering of the second surrounding sediment layer, the Uno Surface.
~3.6 - 1.9 Ma	Late Pliocene or early Pleistocene, weathering of the third surrounding sediment layer, the Koongawa Surface.

Summary of State Heritage Place: 17060 16 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

Eventually exposing the current Wudinna Surface.

- ~65 – 50 ka First Nations People arrive in Australia. Gnamma on rock surfaces likely used as water sources.
- 1839- c.1860 Period of concerted First Nations resistance to colonisation, resulting in temporary abandonment of some pastoral leases on the Eyre Peninsula.
- 1844 Surveyor and Explorer John Charles Darke passes through the area. Mount Wudinna sometimes referred to as 'Granite Mount'.
- 1861 Wudinna settled by Europeans. Mount Wudinna sometimes referred to as 'Weedina Hill'.
- 1896 WA Barnes and AJ Inkster lease some of the area surrounding Mount Wudinna.
- Prior to 1900s Pastoralists use granite outcrops as water sources throughout the Eyre Peninsula.
- 1905 Leases transferred solely to WA Barns.
- 1912 Leases subdivided for agricultural use.
Several sites identified as masonry tank locations likely at Polda Rock.
- 1913 Water collection at Minnipa Hill, followed by Tcharkulda Rock and Yarwondutta Rock.
- 1914 Mount Wudinna considered for use as a quarry for building materials.
- 1915 Yarwondutta Dam constructed, funded by the government, inspired design for many other water catchments at other inselbergs on the Eyre Peninsula.
Wudinna Township surveyed.
- 1916 Wudinna Township gazetted.
- 1919- 1920 Walls, drains and water tanks built at Polda Rock.
- 1922 Large reservoir constructed at Polda Rock.
- 1922 Water Tanks built at Mount Wudinna including retaining wall and silt trap.
- c.1920s Hand constructed water channel and reservoir provided Wudinna township with water.
- 1980 Recognised as a Geological Monument by the SA Division of the Geological Society of Australia.
- 1992- 2006 Desert Rose Quarry (Kop 4) South of Mount Wudinna quarried.
- 1998 Kopi Kop 6, West of Mount Wudinna quarrying begins.

- 1999 Sections of Mount Wudinna and Environs are entered in the SA Heritage Register and designated as a place of geological significance.
- 2007 Granite most likely from Desert Rose Quarry used in the 'Australian Farmer' sculpture at Wudinna by artist Marijan Bekic.
- 2016 Barngala Native Title Claim determined over the area of Mount Wudinna and Environs.

References

Journal Articles

- Campbell, EM (1997), 'Granite Landforms' *Journal of the Royal Society of Western Australia*, Vol. 80, no. 3, pp.101-112.
- Esteban, L, Dewhurst, DN & Sarout, J (2022), 'Influence of mineral alteration intensity of Hiltaba granite and its vertical distribution on physicochemical containment for borehole disposal of Intermediate Level Waste in Australia', *American Nuclear Society International High Level Waste Conference*, Phoenix, Arizona, USA.
- McBriar, EM, Giles, CW & Mooney, MD (1980), 'Geological Monuments of South Australia Part 3', *Geological Monuments Subcommittee of the SA Division of the Geological Society of Australia*, pp.74-76.
- Olliver, J (2004), 'Padthaway Green granite', *MESA Journal*, Vol. 35, pp.44-45.
- Twidale, CR & Bourne JA (1975), 'Episodic Exposure of Inselbergs', *GSA Bulletin*, Vol. 86, no. 100, pp.1473-1481.
- Skirrow, RG, van der Wielen, SE, Champion, DC, Czarnota, K, & Thiel, S. (2018). Lithospheric architecture and mantle metasomatism linked to iron oxide Cu-Au ore formation: Multidisciplinary evidence from the Olympic Dam region, South Australia. *Geochemistry, Geophysics, Geosystems*, Vol. 19, pp.2673-2705.
- Timms, BV (2021), 'Pan Gnammas (Weathering Pits) across Australia: Morphology in Response to Formative Processes' *International Journal of Geosciences*, Vol. 12, pp.984-993.
- Timms, BV & Rankin, CJ (2015), 'The geomorphology of gnammas (weathering pits) of northwestern Eyre Peninsula, South Australia: Typology, influence of haloclasty and origins', *Transactions of the Royal Society of South Australia*, Vol. 140, no. 1, pp.1-18.
- Twidale, CR & Bourne, JA (2000), 'Rock bursts and associated neotectonic forms at Minnipa Hill, northwestern Eyre Peninsula, South Australia', *Environmental & Engineering GeoScience*, Vol. 6, no. 2, pp.129-140.
- Twidale, CR & Sved, G (1978), 'Minor granite landforms associated with the release of compressive stress', *Australian Geographical Studies*, Vol. 16, no. 2, pp.99-182.
- Summary of State Heritage Place: 17060 18 of 28
 Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
 Confirmed by the South Australian Heritage Council on 30 October 2025
 Designation retained by the South Australian Heritage Council 30 October 2025

Twidale, CR (2000), 'Granite outcrops: their utilisation and conservation', *Journal of the Royal Society of Western Australia*, Vol. 83, pp.115-122.

Government of South Australia (2008), 'SA Water's Long Term Plan for Eyre Region', SA Water. From: <https://www.sawater.com.au/__data/assets/pdf_file/0020/55262/Eyre-Region-Long-Term-Plan.pdf>.

Books and Book Chapters

Twidale, CR, Tyler, MJ & Davies, M (1985), *Natural History of Eyre Peninsula*. Royal Society of South Australia, Adelaide.

Twiddle, CR (1982), *Granite Landforms*. Elsevier Science, Amsterdam; New York.

Newspaper Articles

'Polda Water Scheme'. News, 14 May 1929, p.14.

'Geology and Research'. *The Advertiser*, 8 November 1916, p.11.

Australian Government (1992), 'Mount Wudinna and environs, Yaninee Wudinna Rd, Wudinna, SA, Australia', Department of Climate Change, Energy, the Environment and Water.
https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3Dwudinna%3Blist_code%3DRNE%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitu

Summary of State Heritage Place: 17060 19 of 28
Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
Confirmed by the South Australian Heritage Council on 30 October 2025
Designation retained by the South Australian Heritage Council 30 October 2025

de_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin
_region%3Dpart;place_id=6733 [accessed 1 May 2025]

Government of South Australia (N.D.), 'Gawler Craton', *Department for Energy and Mining*.
<https://www.energymining.sa.gov.au/industry/geological-survey/geology/gawler-craton> [accessed 4 June 2025].

Government of South Australia (N.D.), 'Polda Rock Reserve', *South Australia*.
<https://southaustralia.com/products/eyre-peninsula/attraction/polda-rock-reserve>
[accessed 8 May 2025].

Manning, GH (2012), 'W', *A Compendium of the Place Names of South Australia*.
<https://published.collections.slsa.sa.gov.au/placenamesofsouthaustralia/W.pdf>
[accessed 14 May 2025].

Monument Australia, (2025), 'Pioneers of Wudinna'. From: <
<https://monumentaustralia.org.au/themes/landscape/settlement/display/51991-pioneers-of-wudinna> [accessed 14 May 2025].

Murphy's Haystacks (2020), 'Murphy's Haystacks Inselburg - German for insel/island, berg/mountain'. <<http://murphyshaystacks.com/> [accessed 14 May 2025].

Sydney Morning Herald (2004), 'Wudinna'. <<https://www.smh.com.au/lifestyle/wudinna-20040208-gdkqm6.html>> [accessed 14 May 2025]

Wudinna District Council (N.D.), 'Other Attractions'.
<https://www.wudinna.sa.gov.au/touristinformation/attractions/other-attractions>
[accessed 15 May 2025]

Images

Denisbin (2004), 'Gnamma water holes on the top of Pildappa Rock water gathering holes near Minnipa Eyre Peninsula South Australia'. From: <
<https://www.flickr.com/photos/82134796@N03/>>.

Edmonds, S (2011), 'The other wave rock, Pildappa Rock - panoramio'. From: <
https://commons.wikimedia.org/wiki/File:The_other_wave_rock,_Pildappa_Rock_-_panoramio.jpg>.

Edmonds, S (2011), 'Murphy's Haystacks - panoramio'. From: <
https://commons.wikimedia.org/wiki/File:Murphy%27s_Haystacks_-_panoramio.jpg>.

Hubner, NK (1987), 'Weathering of joint blocks and stages in the formation of corestones' *The geologic story of Yosemite National Park. USGS Professional Paper No. 1595. United States Geological Survey, Reston, Virginia. 64 pp.* From: <
https://commons.wikimedia.org/wiki/File:Weathering_of_joint_blocks_and_stages_in_the_formation_of_corestones.jpg>.

Summary of State Heritage Place: 17060 20 of 28
Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
Confirmed by the South Australian Heritage Council on 30 October 2025
Designation retained by the South Australian Heritage Council 30 October 2025

Jhazerey (2018), 'Wave Rock on point'. From:
<https://en.wikipedia.org/wiki/File%3AWave_Rock_on_point.jpg>.

SARIG Map (N.D.), Department for Energy and Mining, South Australia

SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails', Broch 043.

State Library of South Australia (1906), 'Three men and a woman by Remarkable Rocks at Cape Du Couedic [PRG 280/1/1/297]'. From:
<<https://collections.slsa.sa.gov.au/resource/PRG+280/1/1/297>>.

SITE DETAILS

Mount Wudinna and Environs

PLACE NO.: 17060

Mount Wudinna Access, Wudinna SA 5652

FORMER NAME:	Weedinna Hill, Weedina, Granite Mount.		
DESCRIPTION OF PLACE:	Complex of several granite inselbergs including Mount Wudinna, Little Wudinna, Polda Rock and Turtle Rock and two areas of granite exposures.		
DATE OF CONSTRUCTION:	Mesoproterozoic – Approximately 1600-1575 million years old.		
REGISTER STATUS:	Provisionally entered and Designated as a Place of Geological Significance 11 November 1999. Confirmed 16 March 2000. Error in listing noted 10 April 2025 and reassessment requested by the South Australian Heritage Council.		
CURRENT USE:	Agriculture 1861- Present Tourism 1900s-Present Water collection 1919-Present		
LOCAL GOVERNMENT AREA:	Wudinna District Council		
LOCATION:	Street Name:	Mount Wudinna Access	
	Town/Suburb:	Wudinna	
	Post Code:	5652	
LAND DESCRIPTION:	Title	CR 6199/369 H641600 S53;	
	Reference:	CR/6196/869 F31595 A10;	
		CR/5763/286 H641600 S51;	
		CT/5897/848 D59272 A102;	
		CT/5958/645 D69310 Q11,	
		CR/5897/847 D59272 A101 and a	
		public road (CT 5958/646 D69310	
		(Road) A13)	
	Hundred:	Hundred of Wudinna	
	Encumbrance:	Barngarla	Native Title Claim (Determination)

Summary of State Heritage Place: 17060 22 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

Mining encumbrances: EL 6742 and
EL 6726 (Tri-Star Minerals Pty Ltd)

PHOTOS

Mount Wudinna and Environs

PLACE NO.: 17060

Mount Wudinna Access Wudinna SA 5652



A slope of Mount Wudinna, showing boulders and slabs.

Source: DEW Files 5June 2025

Summary of State Heritage Place: 17060 23 of 28
Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
Confirmed by the South Australian Heritage Council on 30 October 2025
Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

PHOTOS

Mount Wudinna and Environs

PLACE NO.: 17060

Mount Wudinna Access Wudinna SA 5652



A slope of Mount Wudinna, showing boulders, slabs and rillen.

Source: DEW Files 5 June 2025

Summary of State Heritage Place: 17060 24 of 28
Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
Confirmed by the South Australian Heritage Council on 30 October 2025
Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

PHOTOS

Mount Wudinna and Environs

PLACE NO.: 17060

Mount Wudinna Access Wudinna SA 5652



A slope of Turtle Rock, showing rillen and a portion of the flared slope (left).

Source: DEW Files 6June 2025

Summary of State Heritage Place: 17060 25 of 28
Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025
Confirmed by the South Australian Heritage Council on 30 October 2025
Designation retained by the South Australian Heritage Council 30 October 2025

OFFICIAL

PHOTOS

Mount Wudinna and Environs

PLACE NO.: 17060

Mount Wudinna Access Wudinna SA 5652



A slope of Poldas Rock, showing gnammas.

Source: DEW Files 6 June 2025

¹ Australian Government (1992), 'Mount Wudinna and environs, Yaninee Wudinna Rd, Wudinna, SA, Australia', *Department of Climate Change, Energy, the Environment and Water*. https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3Dwudinna%3Blist_code%3DRNE%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=6733 [accessed 1 May 2025]; and McBriar EM et al (1980), *Geological Monuments Part 3*.

² McBriar EM et al (1980), *Geological Monuments Part 3*.

Summary of State Heritage Place: 17060 26 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

-
- 3 'Whaleback', Oxford Reference. From: <https://www.oxfordreference.com/view/10.1093/oi/authority.20110803121936925>.
- 4 Australian Government (1992), 'Mount Wudinna and environs, Yaninee Wudinna Rd, Wudinna, SA, Australia'; and McBriar EM et al (1980), *Geological Monuments Part 3*.
- 5 McBriar EM et al (1980), *Geological Monuments Part 3*.
- 6 Twidale, CR & Bourne JA (2009), 'On the origin of A-tents (pop-ups), sheet structures, and associated forms'.
- 7 SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails', Broch 043.
- 8 SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails'.
- 9 Twidale, CR (1971), *Structural Landforms*.
- 10 Twidale, CR, Tyler, MJ & Davies, M (1985), *Natural History of Eyre Peninsula*.
- 11 Ferris, GM et al. (1998), 'Reconnaissance granite sampling of the Mesoproterozoic Hiltaba Suite granite on northern Eyre Peninsula'.
- 12 SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails'.
- 13 Timms, BV (2014), 'Community ecology of aquatic invertebrates in gnammas (rock-holes) of North-Western Eyre Peninsula, South Australia'; and Timms, BV & Rankin, C (2015) 'The geomorphology of gnammas (weathering pits) of northwestern Eyre Peninsula, South Australia: typology, influence of haloclasty and origins'.
- 14 Ferris, GM et al. (1998), 'Reconnaissance granite sampling of the Mesoproterozoic Hiltaba Suite granite on northern Eyre Peninsula'.
- 15 SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails'.
- 16 SA Division of the Geological Society of Australia (2016), 'Central Eyre Peninsula Geological Trails'.
- 17 Ferris, GM et al. (1998), 'Reconnaissance granite sampling of the Mesoproterozoic Hiltaba Suite granite on northern Eyre Peninsula'.
- 18 Wudinna District Council (N.D.), 'Other Attractions'.
- 19 Murphy's Haystacks (2020), 'Murphy's Haystacks Inselburg - German for insel/island, berg/mountain'. <http://murphyshaystacks.com/> [accessed 14 May 2025].
- 20 Australian Government (1992), 'Mount Wudinna and environs, Yaninee Wudinna Rd, Wudinna, SA, Australia'.
- 21 McBriar EM et al (1980), *Geological Monuments Part 3*.
- 22 Esteban, L, Dewhurst, DN & Sarout, J (2022), 'Influence of mineral alteration intensity of Hiltaba granite and its vertical distribution on physicochemical containment for borehole disposal of Intermediate Level Waste in Australia', *American Nuclear Society International High Level Waste Conference*, Phoenix, Arizona, USA.
- 23 Government of South Australia (N.D.), 'Gawler Craton'.
- 24 Skirrow, RG, van der Wielen, SE, Champion, DC, Czarnota, K, & Thiel, S. (2018). Lithospheric architecture and mantle metasomatism linked to iron oxide Cu-Au ore formation: Multidisciplinary evidence from the Olympic Dam region, South Australia. *Geochemistry, Geophysics, Geosystems*, Vol. 19, pp.2673-2705.
- 25 Twidale, CR (1986), 'Granite Platforms and Low Domes: Newly Exposed Compartments or Degraded Remnants?', *geografiska Annaler: Series A, Physical Geograph*, Vol. 68, no. 4, pp.399-411.
- 26 Bourne, JA & Twidale, CR (2000), 'Stepped landscapes and their significance for general theories of landscape development'.
- 27 Twidale CR & Bourne JA (1975), 'Episodic exposure of inselbergs'.
- 28 Twidale CR & Bourne JA (1975), 'Episodic exposure of inselbergs'.
- 29 Twidale CR & Bourne JA (1975), 'Episodic exposure of inselbergs'.

Summary of State Heritage Place: 17060 27 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025

-
- ³⁰ Smith, DM (1976), 'The denudation chronology of the southern Gawler Ranges and adjacent areas', *PhD Thesis*, University of Adelaide, South Australia.
- ³¹ Iron Road (2015), 'Chapter 19, Aboriginal Heritage and Native Title', *Central Eyre Iron Project Environmental Impact Statement*.
- ³² Brock P & Gara, T (2018), 'Colonialism and its aftermath, A history of Aboriginal South Australia', Wakefield Press, South Australia.
- ³³ Brock P & Gara, T (2018), 'Colonialism and its aftermath, A history of Aboriginal South Australia'.
- ³⁴ Sydney Morning Herald (2004), 'Wudinna'. <<https://www.smh.com.au/lifestyle/wudinna-20040208-gdkqm6.html>> [accessed 14 May 2025]
- ³⁵ 'The J. C. Darke Expedition, 1844'. *Port Lincoln Times*, 7 September 1944, p.8; and Sydney Morning Herald (2004), 'Wudinna'.
- ³⁶ Brock P & Gara, T (2018), 'Colonialism and its aftermath, A history of Aboriginal South Australia'.
- ³⁷ Brock P & Gara, T (2018), 'Colonialism and its aftermath, A history of Aboriginal South Australia'.
- ³⁸ Manning, GH (2012), 'W', *A Compendium of the Place Names of South Australia*. <https://published.collections.slsa.sa.gov.au/placenamesofsouthaustralia/W.pdf> [accessed 14 May 2025].
- ³⁹ Manning, GH (2012), 'W', *A Compendium of the Place Names of South Australia*. <https://published.collections.slsa.sa.gov.au/placenamesofsouthaustralia/W.pdf> [accessed 14 May 2025].
- ⁴⁰ Monument Australia, (2025), 'Pioneers of Wudinna'. From: <<https://monumentaaustralia.org.au/themes/landscape/settlement/display/51991-pioneers-of-wudinna>> [accessed 14 May 2025].
- ⁴¹ Monument Australia, (2025), 'Pioneers of Wudinna'.
- ⁴² Twidale CR & Smith, DL (1971), 'A 'perfect desert' transformed: the agricultural development of Northwestern Eyre Peninsula, South Australia'.
- ⁴³ Department of Mines, South Australia (1912), 'Possible sites for water supply in the country of Le Hunte', Report Book no. 4/279.
- ⁴⁴ 'Geology and Research'. *The Advertiser*, 8 November 1916, p.11.
- ⁴⁵ Sydney Morning Herald (2004), 'Wudinna'.
- ⁴⁶ DEW Files
- ⁴⁷ Twidale, CR (2000), 'Granite outcrops: their utilisation and conservation', *Journal of the Royal Society of Western Australia*, Vol. 83, pp.115-122.
- ⁴⁸ Twidale CR & Smith, DL (1971), 'A 'perfect desert' transformed: the agricultural development of Northwestern Eyre Peninsula, South Australia'.
- ⁴⁹ Government of South Australia (N.D.), 'Polda Rock Reserve', *South Australia*. <https://southaustralia.com/products/eyre-peninsula/attraction/polda-rock-reserve> [accessed 8 May 2025].
- ⁵⁰ 'Water Supply from Polda Well', *Chronicle*, 18 October 1919, p.43.
- ⁵¹ 'Polda Water Scheme'. *Eyre's Peninsula Tribune*, 17 November 1922, p.2.; and 'Polda Water Scheme'. *News*, 14 May 1929, p.14.
- ⁵² 'Polda Water Scheme'. *News*, 14 May 1929, p.14.
- ⁵³ Government of South Australia (2008), 'SA Water's Long Term Plan for Eyre Region', *SA Water*. From: <https://www.sawater.com.au/__data/assets/pdf_file/0020/55262/Eyre-Region-Long-Term-Plan.pdf>.
- ⁵⁴ Ferris, GM et al. (1998), 'Reconnaissance granite sampling of the Mesoproterozoic Hiltaba Suite granite on northern Eyre Peninsula'.
- ⁵⁵ Ferris, GM et al. (1998), 'Reconnaissance granite sampling of the Mesoproterozoic Hiltaba Suite granite on northern Eyre Peninsula'.

Summary of State Heritage Place: 17060 28 of 28

Provisionally entered & Designated by the South Australian Heritage Council on 26 June 2025

Confirmed by the South Australian Heritage Council on 30 October 2025

Designation retained by the South Australian Heritage Council 30 October 2025