

**BETTER HERITAGE INFORMATION
SUMMARY OF STATE HERITAGE PLACE
Christmas Cove**



Christmas Cove SHP 14751, c. 2008.

Source: DEW Files

ENTRY IN THE REGISTER

Description or notes with respect to a place entered in the South Australian Heritage Register in accordance with either the *South Australian Heritage Act 1978* or the *Heritage Places Act 1993*.

The South Australian Heritage Council may correct errors or inaccuracies in the Entry in the Register in accordance with s21 of the *Heritage Places Act 1993*.

NAME: Christmas Cove

PLACE NO.: 14751

ADDRESS: Howard Drive, Penneshaw SA 5222

CR 5228/52 T110201 A91, CT 5981/854 D72454 A100

Hundred of Dudley

CONFIRMED IN THE SOUTH AUSTRALIAN HERITAGE REGISTER:

13 June 1996

DESIGNATED AS A PLACE OF GEOLOGICAL SIGNIFICANCE:

8 February 1996

S16 CRITERIA SATISFIED UNDER HERITAGE PLACES ACT 1993

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

(g) it has special association with the life or work of a person or organisation or an event of historical importance

COMMENTARY ON THE LISTING

Additional information provided as a part of the content of the South Australian Heritage Register in accordance with s14(6) of the *Heritage Places Act 1993* 'hold information in association with the Register'.

KNOWN AS: Christmas Cove [Including cliff & seabed of cove entrance]
[Designated place of geological significance]

ADDRESS Ngarrindjeri, Ramindjeri, Kaurna and Narungga Country*

*Although there is no native title determination or claim over any part of Kangaroo Island, Ngarrindjeri, Ramindjeri, Kaurna and Narungga Peoples all assert traditional interests over the island.

STATEMENT OF HERITAGE SIGNIFICANCE

Christmas Cove near Penneshaw on Kangaroo Island is of historical and scientific heritage value. Firstly it was the landing site in 1802 of several crew members and 'scientific gentleman' from *the Investigator*, captained by Matthew Flinders. Secondly, and perhaps more importantly, it has evidence of Permian glaciation in the north-eastern side of the Cove, which is of scientific importance to South Australia, being the only example of this type of geological formation in this State.

Validated 22 February 2000

STATEMENT OF HERITAGE SIGNIFICANCE (Proposed)

Christmas Cove is a 'partially exposed glaciated rock basin' from the Palaeozoic which is not demonstrated elsewhere in the State. This unique formation makes the place highly geologically significant, demonstrating evidence of Permian glaciation in the north-eastern and western side of the Cove that can be used to better understand the glacial event and how it shaped the State. The place is also closely related to the 1800's charting of the South Australian coastline by Captain Matthew Flinders and is reputed to be the landing point of HMS Investigator on Kangaroo Island in 1802.

STATEMENT OF DESIGNATION (Proposed)

Designated Place of Geological Significance

Christmas Cove demonstrates clear evidence of Permian (298-251 million years ago (Ma)) glaciations that likely contributed to the formation of the basin and have

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 Confirmed in the South Australian Heritage Register on 13 June 1996
 Draft BHI SSHP for Consultation 18 June to 18 September 2026
 The South Australian Heritage Council approved this BHI SSHP on (tbc)

scraped and gauged underlying Cambrian (538-485 Ma) bedrocks. Several examples of rocks transported from other locations, such as Cape Willoughby, and dropped by the movement of the glacier can be found scattered throughout glacial clays. Such evidence provides information about the movement, direction and duration of the glacial event and are highly important in furthering our understanding of Permian glaciations within South Australia including their movement and the climate that shaped the geology of the State.

Elements of Significance:

Elements of heritage significance include:

- Glacial rock surfaces and glacial sediment at the base of the cliffs on the northern side of the cove,
- Glaciated rock outcrops on the western side of the entrance channel to the cove,
- Striated rocks on the eastern cliffs,
- Solid glacial rocks, boulders and erratics,
- Glacial sediments,
- Three large erratic boulders known as Flinders Rocks,
- Cambrian polymict conglomerates and evidence of elongated pebbles in Kanmantoo Group bedrocks,

Elements not considered to contribute to significance of place include:

- Human-made objects, trails and roads, vegetation, fencing and signage excluding the plaque affixed to Flinders Rocks,
- Rock revetments and breakwaters, concrete boat ramp and floating pontoon jetties.

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

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

It may yield information that will contribute to an understanding of the State's history, including its natural history, as a significant landform and the only example of Permian glaciation in South Australia. (Criteria statement considered at provisional entry, not reconsidered at confirmation. If proposed criteria statement is approved by the SAHC this will be deleted from this document.)

(c) it may yield information that will contribute to an understanding of the State's history, including its natural history (Proposed replacement statement)

Christmas Cove is a partially exposed, glaciated rock basin, demonstrating clear evidence of Permian (298-251 million years ago (Ma)) glaciations. These

glaciations are believed to not only be deposited sediment and erratics but also played a part in carving out of the basin, likely scraping and gouging underlying Cambrian (538-485 Ma) bedrocks. Plentiful examples of rocks transported from other locations, such as Cape Willoughby, and dropped by the movement of the glacier, can be found scattered throughout the glacial clays. Such evidence has contributed to and supported hypotheses about the movement, direction and duration of the glacial event. Christmas Cove is a highly important site likely to further our understanding of Permian glaciations within South Australia including developing hypotheses of potential characteristics and passage of the glacial and climatic conditions at the time of deposition.

It is also a 'partially exposed glaciated rock basin' from the Palaeozoic (Era encompassing the Permian), not found anywhere else in the State. The carved-out glacial basin at Christmas Cove displays the effect of the glacier on the surrounding landscape through preserved geology and erosion in the area since the Permian. Further evidence of glacial movement is present in scoured rocks, sediments and glacial erratics.

Several features at Christmas Cove provide evidence for glacial movement affording excellent opportunities for research that is likely to greatly build on existing glacial research providing new insights into palaeoenvironments and their development.

(g) it has special association with the life or work of a person or organisation or an event of historical importance

It has special association with the life and work of a person of historical importance, being a landing site in 1802 of Matthew Flinders and some of the crew of *The Investigator*. (Criteria statement considered at provisional entry, not reconsidered at confirmation. If proposed criteria statement is approved by the SAHC this will be deleted from this document.)

(g) it has special association with the life or work of a person or organisation or an event of historical importance (Proposed replacement statement)

Christmas Cove is the probable location of the first recorded landfall of Captain Matthew Flinders and selected crew from the sloop HMS *Investigator* on Kangaroo Island. On 21 March 1802, Flinders came ashore with several crew members and 'scientific gentleman' during his expedition to map the coast of Australia.

The landing was the first by Europeans on Kangaroo Island and led to the colonisation of the Island by sealers and escaped convicts from c.1806 and

enslavement of Aboriginal women and children. In July 1836 Kangaroo Island became South Australia's first free-settled colony, when the first colonists waited 5-6 months at Kangaroo Island until a site for the capital of South Australia was identified and surveyed by Colonel William Light in December of the same year.

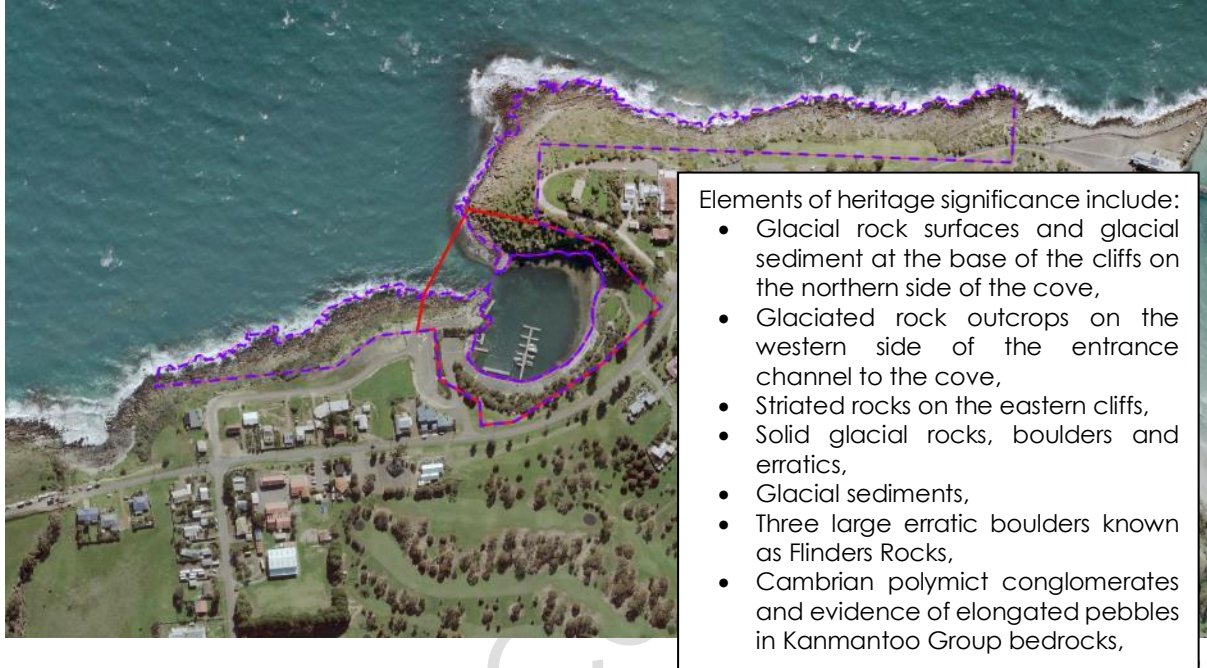
The landing by Flinders and crew allowed for the development of the culture and community found today on Kangaroo Island. 'Flinders Rocks', three glacial erratics, one of which is embedded with a memorial plaque on the beach, marks the reputed landing site.

SITE PLAN

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw 5222



Christmas Cove (CR 5228/52 T110201 A91, CT 5981/854 D72454 A100 Hundred of Dudley)*

N ↑

LEGEND

 Parcel boundaries (Indicates extent of Listing)

 Outline of Elements of Significance for State Heritage Place

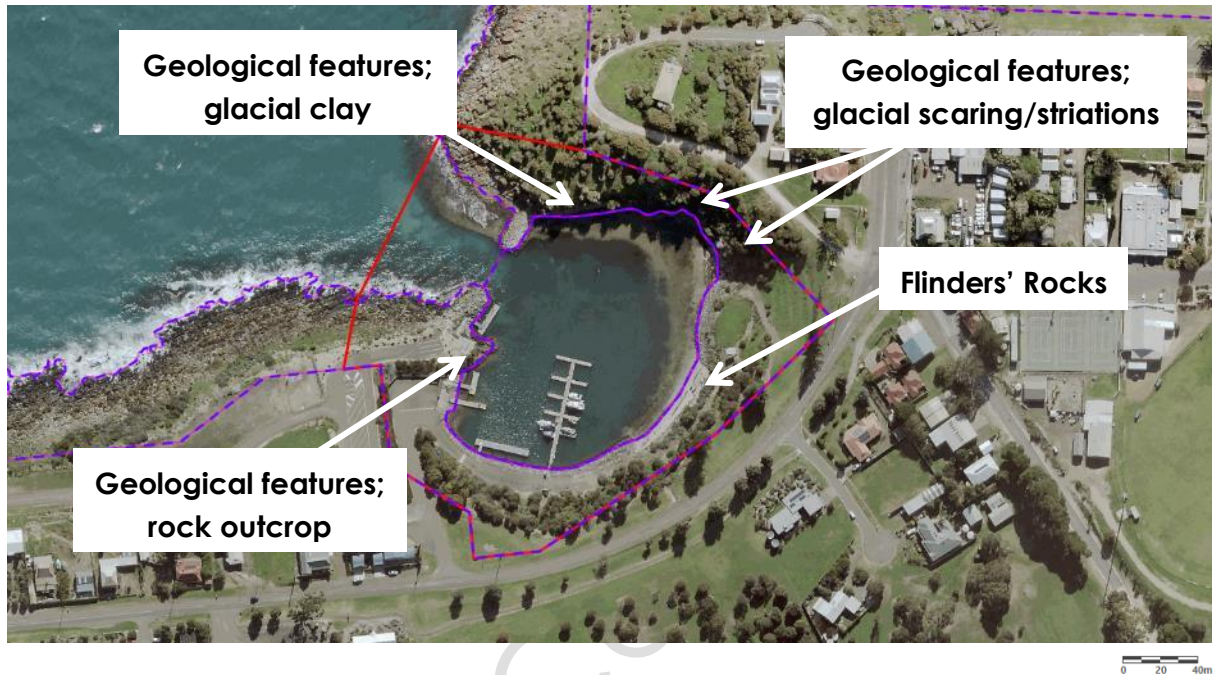
*Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre.

SITE PLAN - DETAIL

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw 5222



Christmas Cove (CR 5228/52 T110201 A91, CT 5981/854 D72454 A100 Hundred of Dudley)

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LEGEND

 Parcel boundaries (Indicates extent of Listing)

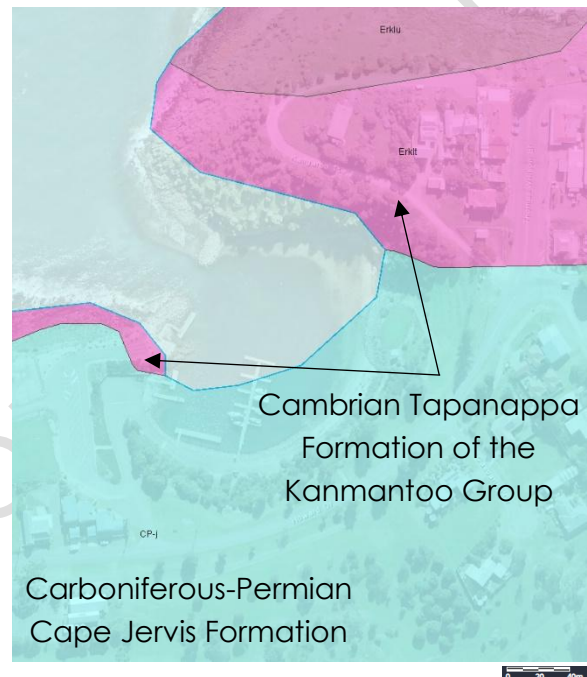
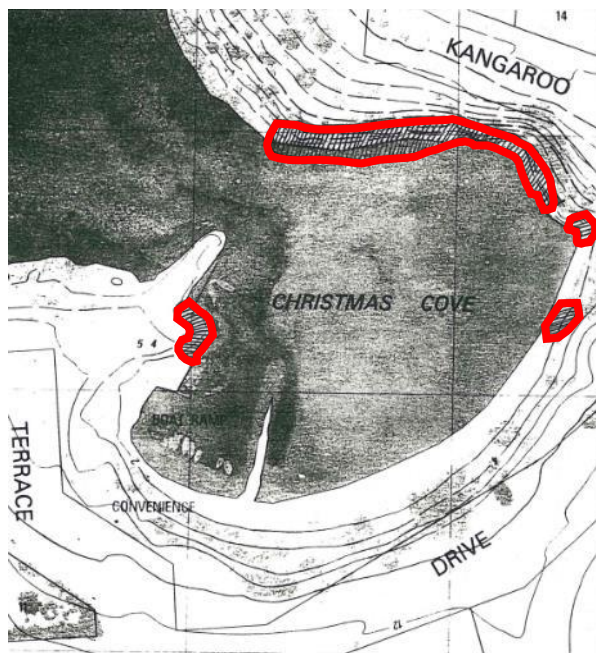
 Outline of Elements of Significance for State Heritage Place

*Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre.

PHYSICAL DESCRIPTION

Christmas Cove is a small, roughly oval-shaped cove on the western side of the township of Penneshaw. The State Heritage Place extends over an area of approximately 0.4km² and includes several significant geological features.

The natural form of the cove has been adapted into a small boat harbor (Penneshaw Marina) with rock revetments and breakwaters, a concrete boat ramp, numerous floating pontoon jetties and other structures (none are significant fabric).



Left: Locations of geological features (c.1997), Right: Indicative geology, note overlay is imperfectly aligned

Source: Left: DEW Files, Right: SARIG Map (N.D.)

At Christmas Cove, glacial Permian clay unconformably overlies Cambrian Tapanappa Formation bedrock metasediments (metamorphosed sedimentary rocks) and polymict conglomerate (rocks comprising fragments of several different rock types). The unconformity demonstrates a break in sedimentation. Cambrian sediments are well exposed at the eastern entrance and at the northern end of the Cove. These sediments have a polished appearance due to ancient glaciation.¹ Cambrian rocks are also exposed on the northeastern side and at the western point near the entrance to the cove. These rocks display deep cuts and striations trending east-west, formed by glacial movement as the glacier scraped across the hard rock surface. Similar cuts can be seen at Hallett Cove Conservation Park & Sandison Reserve (SHP 14033).

Cambrian sediments in turn unconformably (demonstrating a break in the geological record) overlie Kanmantoo Group bedrock. An area of the bedrock in the northern rock wall is reportedly faulted, with pebbles demonstrating a stretched morphology.²

The Permian glacial sediments, deposited through glacial movement, are found sparsely within the State Heritage Place but are occasionally exposed at low tide. Most occur along the northern revetment.³ A notable 2m thick sequence of Permian glacial sediment, the thickest example of such sediment at the site, is found in the northeastern corner of the cove. This sequence contains sand, silt, clay and very clean, medium-fine sand. These few centimetres of sand contain both angular and rounded grains that resemble sediments from other Permian glaciers. Clay bands are also present interbedded with the sand. These sediments slumped right after deposition. Other pebbles, from the local Kanmantoo Group (including the Tapanappa Formation) are also present in this sediment. The fine, layered material of the glacial sediment demonstrates that at deposition, the glacier was likely in its final stages with no evidence of surrounding ice.⁴

It is typical for glacial sediments to contain erratic rocks transported by glacial movement.⁵ Glacial erratics (rocks transported by glacial movement) are notably present in the surrounding beach rock sediment on the eastern side at the head of the cove.⁶ This includes three large granite erratics known as the Flinders Rocks. A plaque attached to one of the erratics reads: 'Capt. Matthew Flinders named Kangaroo Head and landed near this spot March-April 1802'.⁷

Additional Permian glacial sediments, predominantly comprising clays with dropped erratics, may also be found exposed along the shoreline at low tide and in the cliffs on the southern side.⁸ The erratics are composed of granite, arkose, gneiss, tuff, rhyolite and arenite, among other stones.⁹

A glaciated rock knob (a *roche moutonnée* or *moutonnée*) is located south of the cove entrance,¹⁰ near the beginning of the southern breakwater. A *roche moutonnée* is a bump of bedrock that has been scraped on one side (the stoss) and quarried (natural process) and broken off on the other (the lee) and demonstrates the direction of glacial flow.¹¹

Elements of Significance:

Elements of heritage significance include:

- Glacial rock surfaces and glacial sediment at the base of the cliffs on the northern side of the cove,
- Glaciated rock outcrops on the western side of the entrance channel to the cove,
- Striated rocks on the eastern cliffs,
- Solid glacial rocks, boulders and erratics,

- Glacial sediments,
- Three large erratic boulders known as Flinders Rocks,
- Cambrian polymict conglomerates and evidence of elongated pebbles in Kanmantoo Group bedrocks,

Elements not considered to contribute to significance of place include:

- Human-made objects, trails and roads, vegetation, fencing and signage excluding the plaque affixed to Flinders Rocks,
- Rock revetments and breakwaters, concrete boat ramp and floating pontoon jetties.

HISTORY OF THE PLACE

Geological History

The Palaeozoic Era encompasses the period of time from the beginning of the Cambrian (~538.8 Ma) to the end of the Permian (~251.9 Ma). Several glaciations occurred during this time and the geological evidence preserved at Christmas Cove, dating from approximately 280 Ma,¹² and is excellent evidence of the Palaeozoic glaciation.¹³

Cambrian sediment of the Tapanappa Formation, part of the Kanmantoo Group, is believed to have been deposited into an ocean basin approximately 520 Ma. Over time, the fine-grained sediments were metamorphosed and altered. The resulting sediments are mostly fine-grained greywacke sandstones that have been metamorphosed into poorly sorted 'metagreywackes', interbedded with polymict conglomerate beds. The conglomerate beds contain flattened rocks including marble, phyllite, andalusite schist, granite and dolomitic siltstones and cobble and pebble-sized grains of granite and quartzite.¹⁴

Eventually, around 500 Ma, the Delamerian Orogeny, a massive mountain-building event that altered the geology of much of the State, pushed large areas of the Kanmantoo Group upwards, forming the Mount Lofty Ranges. Pebbles and rocks within the Tapanappa Formation were likely flattened and altered during this time.

Sediment eroded until the Permian (298-251 Ma), when an ice age dominated much of Australia, then forming part of the large landmass known as Gondwana. Hallett Cove Conservation Park & Sandison Reserve (SHP 14033) and Glacier Rock Inman Valley (SHP 14581) also display glacial movement, as well as Boxing Bay and Smith Bay on Kangaroo Island.

Glacial movement and associated erosion deposited Permian-aged fine-grained sediments such as clay, silt, sand and diamicton.¹⁵ The bedding of these clay sediments is also inclined, having been deposited on the angled bedrock of the Tapanappa Formation.¹⁶

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The Tapanappa Formation was also glaciated, meaning it was covered by ice sheets. Striations within the greywackes at the western entrance to Christmas Cove and further inside on the northeastern side demonstrate the direction of movement of the glacier during the Permian.¹⁷ The glacier is also thought to have gouged out the basin that forms Christmas Cove.¹⁸ In 1999, researchers demonstrated that the base of the glacier was plastic, meaning it conformed to the shape of underlying Cambrian bedrocks under certain conditions,¹⁹ while still scouring the underlying rock. It is hypothesised that the western trending direction²⁰ of the striations at Christmas Cove demonstrate that the Backstairs Passage, the strait between the Australian Mainland and Kangaroo Island, had a glacial origin.²¹

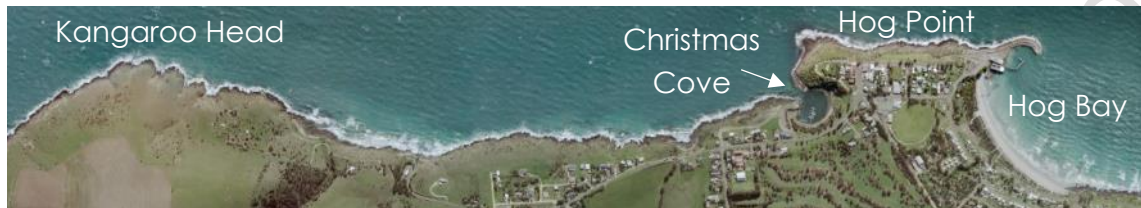
Erratics, or rocks plucked off other sediments such as the Tapanappa Formation, were also deposited within the Permian sediments. As the glacier broke up, these erratics were dropped into the fine and unconsolidated silts and clays of fluvioglacial (from flowing, glacial meltwater), glaciolacustrine (from glacial lakes)²² or ocean bed deposits below.²³ Glacial erratics are found plentifully around the cove at low tide, including three large granite boulders known as Flinders Rocks, which do not occur naturally near Christmas Cove. It has been hypothesised that the movement of the glacier may have transported these large boulders from the vicinity of Cape Willoughby, over 30 km to the southeast.²⁴

In some cases, the Tapanappa Formation also provided a protective barrier to underlying Permian (~299-252 Ma) sediments. As time passed and where the Tapanappa Formation has been breached, the Permian sediments have eroded, contributing to the formation of the rounded cove.²⁵ A rise in sea-level between 17,000 and 6,000 years ago created Backstairs Passage, in turn filling Christmas Cove with water.²⁶

Human History

Aboriginal People have a long association with Kangaroo Island, living there before rising sea levels about 11,000 years ago separated it from the mainland. Evidence of habitation by Aboriginal people includes stone hammers and middens. Thereafter, Aboriginal People travelled to Kangaroo Island intermittently until about 400 years ago.²⁷ Mainland Aboriginal People know Kangaroo Island as Karta Pintingga, meaning 'island of the dead.' Ngarrindjeri, Ramindjeri, Kaurna and Narungga People all assert traditional interests over the island.

Captain Matthew Flinders renamed Karta Pintingga Kangaroo Island.²⁸ Flinders reputedly landed at or near Christmas Cove on 21 March 1802 and obtained fresh meat from kangaroos killed at a place which he named 'Kanguroo Head',²⁹ most likely the headland at the northwestern end of Christmas Cove, which is today known as Hog Point.³⁰ Nicholas Baudin also landed at Christmas Cove in January 1803, reportedly leaving behind pigs which were later discovered by sealers, leading to the naming of nearby Hog Point and Hog Bay.



The northeastern coast of Kangaroo Island

Following Flinders' and Baudin's visits the existence of Kangaroo Island became known to Europeans, initially who visited Kangaroo Island regularly to hunt seals, kangaroos and to extract salt from dry lagoons for curing skins. From c.1806, Kangaroo Island also attracted escaped convicts and ship deserters.³¹

Many of the sealers based on Kangaroo Island were involved in the forcible abduction of Aboriginal women. The women and in some cases girls and boys were primarily taken from Tasmania and the Lower Murray area of South Australia. Historically, the women and girls have been referred to as the men's 'Aboriginal wives'. The Aboriginal women, taken to Kangaroo Island, were responsible for tending gardens, hunting small animals and fishing and undertaking a range of household duties. A number of children were born to the Aboriginal women and sealers. Different period accounts variously describe the women as being treated cruelly; while others state that they were treated well.³²

Kangaroo Island was formally settled by the South Australian Company at Reeves Point in 1836. After the Company's venture on the island failed, Kangaroo Island attracted limited European settlement through the nineteenth century. Christmas Cove was believed to have been named after an early settler who resided on Kangaroo Island prior to 1836.³³ A farming settlement existed at Hog Bay, now known as Penneshaw by the 1860s and during the nineteenth century, Christmas Cove, sometimes referred to as 'The Basin', served as the main port of entry to the settlement.³⁴

On 10 August 1885, the hawking ketch *Daring* sank approximately 30m inside the entrance of Christmas Cove,³⁵ after breaking its mooring during a gale and striking an anchor which came up through the bottom of the ship. The wreck is presumed to

remain in situ¹.³⁶ In 1902, when a jetty was built at the nearby Hog Bay, Christmas Cove was retired as a commercial port.³⁷

In 1936 a plaque was installed on one of the erratic boulders at Christmas Cove and unveiled by then-Governor Sir Winston Dugan on 11 November, as a part of the state's Centenary Celebrations.³⁸

In 1984, Christmas Cove was recognised as a Geological Monument by the SA Division of the Geological Society of Australia in 'Geological Monuments in South Australia'.

Christmas Cove was dredged and modified several times during the late 1990s and early 2000s, resulting in the creation of the Penneshaw Marina. During these developments, rocks and erratics found during excavation were cleaned and placed on display around the nearby parking area. In 2003, a landslip on the northeastern side of Christmas Cove resulted in reconstruction of a stepped slope using material dredged from the Cove, with areas for benches and sheltered picnic areas.³⁹

Aboriginal Cultural Considerations

The *Heritage Places Act 1993* makes provision for the identification, recording and conservation of places and objects of non-Aboriginal heritage significance. The protection and preservation of Aboriginal heritage is provided for under the *Aboriginal Heritage Act 1988*. Contact the Aboriginal Heritage Unit for listings.

¹ The location is incorrectly recorded at 'Hog Bay' (Rather than the actual bay ~600 metres to the east) or the 'Hog Bay Basin' by the Maritime Register.

CHRONOLOGY

Year	Event
538-485 Ma	Cambrian Period. Bedrocks present at the State Heritage Place are deposited.
500 Ma	500 Ma, Delamerian Orogeny. The Mount Lofty Ranges form.
298-251 Ma	Permian Period. Glaciation throughout much of Gondwana, including what is now Southern Australia.
17000-6000 years ago	Sea levels rise, filling Backstairs Passage and Christmas Cove.
1802	21 March - Matthew Flinders lands at Christmas Cove with crew members and 'scientific gentlemen' from HMS <i>Investigator</i> . 23 March – Matthew Flinders names Kangaroo Head.
c.1806	Whalers, sealers and others begin to settle on Kangaroo Island, with abducted Aboriginal women from Tasmania and South Australia, who are held captive as slaves.
1836	Kangaroo Island formally colonised.
1841	First Australian census, 90 people, including 13 Aboriginal women and children reside on Kangaroo Island.
1885	Ketch <i>Daring</i> sinks inside the entrance to Christmas Cove.
1902	A jetty is built at the nearby Hog Bay, marking the end of Christmas Cove as a commercial port.
1936	A plaque is attached to the erratics on the Christmas Cove shoreline to celebrate Flinders' landing and the centenary of South Australia and formal settlement on Kangaroo Island.
1984	Part of the State Heritage Place is recognised as a Geological Monument by the SA Division of the Geological Society of Australia in 'Geological Monuments in South Australia'.
1995	17 May – Identified to the Heritage Branch.
1996	8 February – Provisionally entered in the State Heritage Register and designated as a place of Geological significance. 13 June – Confirmed in the State Heritage Register.
c. 1998	Dredging of the channel at Christmas Cove and extension of wharf ⁴⁰

- c. Dredging and redevelopment of marina.
2003 Landslip on northern side of Christmas Cove.

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<<https://published.collections.slsa.sa.gov.au/placenamesofsouthaustralia/C.pdf>>
[accessed 18 February 2026].

Photographs

SARIG (2008), 'Thin veneer of Permian glacial clays exposed at low tide, Christmas Cove, Penneshaw, Kangaroo Island', Photo no. 418372.

State Library South Australia (c.1884), Church at Penneshaw SRG 4/108/2/24

State Library South Australia (c.1936), Tablet, Christmas Cove B 9512

State Library South Australia (c.1913), Christmas Cove, Kangaroo Island PRG 280/1/15/1097

Other

Department of Environment and Water, (N.D.), Maritime Register.

SITE DETAILS

Christmas Cove

PLACE NO.: 14751

Off Howard Drive, Penneshaw SA 5222

DESCRIPTION OF PLACE:	Small cove containing Cambrian and Permian sediment demonstrating glacial events.		
HISTORIC THEME/S	1. Natural Environment 1.1. Tracing climatic and topographical change 2. Peopling Places and Landscapes 2.2. Exploring, mapping and surveying South Australia (including government and private survey schemes)		
AGE OF FORMATION:	Cambrian (538-485 Ma) Permian (298.9-251.9 Ma)		
REGISTER STATUS:	Provisionally Entered 8 February 1996 Designated 8 February 1996 Confirmed 13 June 1996		
CURRENT USE:	Recreation; boat harbour		
LOCAL GOVERNMENT AREA:	Kangaroo Island Council		
LOCATION:	Street No.:	NA	
	Street Name:	Howard Drive	
	Town/Suburb:	Penneshaw	
	Post Code:	5222	
LAND DESCRIPTION:	Title	CR 5228/52 T110201 A91, CT 5981/854	
	Reference:	D72454 A100	
	Hundred:	Hundred of Dudley	

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Rock outcrops on the western side of the cove, c.1998.

Source: DEW Files

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Western side of Christmas Cove, Kangaroo Island, c.1913.

Source: State library South Australia PRG 280/1/15/1097

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Plaque attached to Flinders Rocks, c. 1998.

Source: DEW Files

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Northern glacial cliffs, c.1998.

Source: DEW Files

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Glacial striations in the eastern rock outcrops, c.1998

Source: DEW Files

PHOTOS

Christmas Cove

PLACE NO.: 14751

Howard Drive, Penneshaw SA 5222



Thin veneer of Permian glacial clays exposed at low tide, Christmas Cove, Penneshaw, Kangaroo Island, 2008

Source: SARIG Photo no. 418372

REVISIONS

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Date	Changes
13 February 2026	SAHC modified template to include an image at the beginning of the document.

¹ McBriar EM and Giles, CW (1984), 'Geological Monuments in South Australia Part 5', On behalf of the *Geological Monuments Subcommittee of the SA Division of the Geological Society of Australia Incorporated*, pp. 114-116.

² DEW Files.

³ DEW Files.

⁴ DEW Files.

⁵ Bourman, RP and Alley, NF (2010), 'Permian glaciated bedrock surfaces and associated sediments on Kangaroo Island, South Australia: Implications for local Gondwanan ice-mass dynamics'.

⁶ DEW Files.

⁷ Kangaroo Island Pioneers Association Signs (N.D.), 'Matthew Flinders Christmas Cove'. From: <<https://sites.google.com/site/kipasigns/commemorations/matthew-flinders-christmas-cove>>; State Library South Australia (~1936), Tablet, Christmas Cove [B 9512], Photograph.

⁸ McBriar EM and Giles, CW (1984), 'Geological Monuments in South Australia Part 5'.

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