

# **MEDIA FACT SHEET: River Murray International Dark Sky Reserve**

## **What is a Dark Sky Reserve?**

Dark Sky accreditation is a bit like World Heritage Listing for the night sky, which is assessed and awarded by the International Dark-Sky Association. An International Dark Sky Reserve consists of a dark “core” zone surrounded by a populated buffer zone where policy controls are enacted to protect the darkness of the core from light pollution.

Night sky darkness is measured at a level of between 0–22, with 22 being total the highest reading we have yet for darkness. Places closest to that are the best for viewing the night sky. Recent measurements in River Murray International Dark Sky Reserve came in at 21.97 – darker than any of the many accredited regions around the world!

The River Murray International Dark Sky Reserve will protect and preserve this rural, non-polluted and natural dark region from light pollution for current and future generations.

## **Why is the River Murray International Dark Sky Reserve one of the darkest places in the world?**

The region consistently measures an exceptional level of darkness, commonly about 21.8 and in some areas achieving the extremely high measure of 21.99. This is mostly due to the unpolluted skies, high quality of seeing, low population, extensive farmland, number of local conservation parks and lack of major development.

Professor Stuart Wyithe, Immediate Past President of the Astronomical Society of Australia (ASA) has stated *‘the Reserve has among the darkest skies in the world’*.

Much of the area is protected from the urban environment lighting thanks to the Mount Lofty Ranges Eastern Hills Face Zone that separates the Dark Sky Reserve from greater Adelaide. Policies regarding artificial light and future development are in place thanks to the Mid Murray Council, which ensures this Reserve is protected.

## **Where is the River Murray International Dark Sky Reserve?**

The River Murray International Dark Sky Reserve covers more than 3200 square kilometres in the Mid Murray district of South Australia. The ‘Core Site’ for the River Murray International Dark Sky Reserve is located within the Swan Reach Conservation Park – an area of 2000 hectares of untouched Mallee bushland.

The Reserve will host an education/research centre at the Meldanda Camp Site near the small town of Cambrai. This is approximately a 1.5-hour drive from Adelaide, 25 minutes from Mannum, or 40 minutes from Murray Bridge. Meldanda will present educational events, with a focus on astronomy and the impact of light pollution on Australian native animals.

A demonstration site in the main street of nearby township Cambrai showcases new types of outdoor lighting, and practical ways to reduce light pollution.

Also within the Reserve are other State Government owned Conservation Parks, including Ngaut Ngaut, Brookfield, Ridley and Marne Valley: <https://www.parks.sa.gov.au/find-a-park#/list>.



1	Bear Fence Lookout	2	Blanchetown Oval
3	Towitta Reserve	4	Sedan Oval
5	Big Bend Lookout	6	Meldanda
7	Cambrai Oval	8	Black Hill Cemetery
9	Shell Hill Reserve	10	Kroehns Lookout
11	Maynards Lookout	12	Walker Flat Lookout
13	Palmer Lookout	14	Younghusband Lookout (East front Road)
15	Purnong Lookout		

### **Is it the first in Australia?**

Yes, the River Murray International Dark Sky Reserve is the first of its kind in Australia. There are other Dark Sky Places in Australia – notably one of the newest in the Warrumbungle National Park in NSW – but no Reserves of this size, with this level of darkness nationally.

There are 15 Dark Sky Reserves in the world, with the only three in the Southern Hemisphere located here, and in New Zealand and Namibia. Read more here: <https://www.darksky.org/our-work/conservation/idsp/>

### **Is the Reserve backed by global astronomy leaders?**

Yes. The River Murray International Dark Sky Reserve is now formally accredited by the world's leading dark sky organisation, the International Dark-Sky Association. The *River Murray International Dark Sky Reserve Committee* includes the following experts: Astronomical Society of Australia's Andrew Cool, Astronomical Society of SA's past Vice President David Bennett, UniSA Adelaide Planetarium Astronomy Educator Martin Lewicki, and **Professor Don Bursill** AM, former Chief Scientist of South Australia.

### **Who owns the River Murray International Dark Sky Reserve?**

- The Mid Murray Landcare SA group has led the accreditation bid since 2016 and manages the educational and administrative duties of the Dark Sky Reserve through the recently established *River Murray International Dark Sky Reserve Committee*.
- This Reserve in South Australia's Mid Murray district covers more than 3200 square kilometres, and its boundaries include more than 20,000 hectares of public conservation parks, privately owned wildlife reserves and significant wetlands.
- The South Australia Government owns and manages the various conservation parks, while the Mid Murray Council owns and manages much of the other public land.
- The Reserve is also supported by State Government agencies, the Mid Murray Council and the Astronomical Society of South Australia (ASSA).
- Various private landholders are also included in the Reserve.

### **Visiting the River Murray International Dark Sky Reserve**

#### **Where are the best/darkest locations to view it?**

- **Big Bend cliffs:** This is easily accessible along the road between Walker Flat and Swan Reach. There are lookouts near Nildottie and another at Kroehns Landing.
- **Cambrai, Meldanda:** A structured educational campsite just near the township of Cambrai. Meldanda is open to the public seven days a week. Entry is free. There is a \$5 per person fee for overnight campers. Perfect for groups. Bookings essential.
- **Swan Reach:** You can access the Swan Reach Conservation Park (4WD access only, no facilities) off Stott Highway, or you can visit Big Bend By Night nearby for a tour and viewing.
- **Sedan:** Towitta Reserve near Sedan is ideal for an uninterrupted view of the night sky.
- **Black Hill:** The Black Hill Cemetery is a unique place for viewing.
- **Houseboat / boat (on River):** See the sky from the magnificent Murray River anywhere along the Reserve between Younghusband and Blanchetown.
- **Walker Flat:** There are a number of riverside reserves in and around Walker Flat where you can stop and look up. Our favourite spot here is the Marne River mouth.
- **Shell Hill Reserve (near Wongulla):** A small reserve and remote location to stop and look up.
- **Other:** The Reserve also includes the towns of Palmer, Blanchetown, Bowhill, Keyneton and Tungkillo – so there are plenty of small towns to visit and explore the skies. Ovals at Cambrai, Blanchetown and Sedan are ideal, along with lookouts at Palmer, Purnong, Younghusband and Maynards Lookout between Walker Flat and Wongulla.

### **What should I know before coming to visit?**

- Ensure you check the weather, especially cloud cover.
- Ensure you know how to use your equipment and have mobile lighting to set it up in the remote/unpowered areas of the Reserve.
- Be prepared. Bring torches and warm clothes, wear covered shoes. Tell someone where you're going.
- Understand how to visit/travel in areas with no/limited facilities (this includes in some cases, no access to toilets, power, signage, shelter).
- Ensure you know how to get where you're going. There are many unsealed roads throughout the Reserve, many of which are not marked on Google Maps (which you can't access anyway if you don't have service).

### **Is it safe to drive there?**

Most towns within the reserve area are linked by sealed roads, however, many roads to access some of the best viewing sites are unsealed, and while a 4WD isn't necessary in terms of access, there is a lot of rubble, dust and wildlife to consider when travelling by car.

*Access to the core site within the Swan Reach Conservation Park is by 4WD only.*

There are many native animals in the Reserve – many of which are most active at night – including wombats, emus and kangaroos. Be prepared to see them and understand how to safely deal with this, especially if you are driving at night when many of them will be on the roads.

### **What should I bring with me when I visit the core site or Conservation Parks in the Reserve?**

If you're heading to the core site, then you will need ALL provisions for travel and refreshments. There are NO facilities in the Conservation Parks within the Reserve.

**Key items to bring include:** *telescopes, binoculars, maps, camera equipment, all camping equipment (there is no power and limited or no other facilities in the park), food, water, telephone, torch, warm clothing.*

### **What accommodation options are available within the Reserve?**

The Reserve is easily accessible from Adelaide (with international airport). There are plenty of accommodation options available throughout the Reserve including camping facilities, local hotels and pubs, holiday homes, houseboats and B&Bs. Make the most of your night sky viewing and stay the night in the region.

With a population around 2,000, Mannum is the largest and one of the most popular holiday destinations in the area and is a 'gateway' to the Reserve, offering many accommodation choices and easy access to other key tourist attractions and facilities.

Discover your options at the [Mannum Visitor Information Centre](#), [Murray River, Lakes and Coorong Tourism](#) and the [Mid Murray Council](#).

### **Is there phone, and internet coverage within the Reserve?**

In many areas there is good mobile and 4G coverage. There are, however, a number of patches with no signal.

### **Are there any guided tours or special events?**

New guided tours have been developed by local tourism operators including [Juggle House Experiences](#) and [Big Bend by Night](#). The Mid Murray Landcare SA group plans to host events soon at Meldanda and the PS Marion has plans for a Dark Sky Cruise in early 2020.



**What else can I do when I visit the Reserve?**

The region is home to many exceptional attractions including the Murray River, Big Bend cliffs and Mannum Waterfalls. Also nearby are the Monarto Safari Park and The Bend Motorsport Park. Find out more on the regional tourism website here: [www.themurrayriver.com](http://www.themurrayriver.com).

**Is there a connection with the local Aboriginal people and the Reserve?**

Yes. The Ngangurkau, Ngaiawang and Ngarkat people were the first inhabitants of the Mid Murray district, and Ngaut Ngaut Conservation Park sits at the junction of these communities. Ngaut Ngaut is a special place and the stars are integral to their traditions and stories of this area. Carvings in the cliffs at Ngaut Ngaut represent phases of the moon and other ancient astronomical observations. Stories about the sun (female) and the moon (male) and familiar constellations like Orion and the Pleiades are carved into the cliffs. There are also constellations unique to Australia's indigenous people. Visit: [https://www.parks.sa.gov.au/find-a-park/Browse\\_by\\_region/Murray\\_River/ngaut-ngaut-conservation-park](https://www.parks.sa.gov.au/find-a-park/Browse_by_region/Murray_River/ngaut-ngaut-conservation-park)

**Fruit Fly restrictions**

A substantial part of the Reserve falls within the [Riverland Fruit Fly Exclusion Zone](#). Visitors should check whether their destination is affected and dispose of any fruit or vegetables before entering the zone, or risk on the spot fines.