



NINGALO ECLIPSE

WESTERN AUSTRALIA
20 APRIL 2023



www.ningalooeclipse.com

FOREWORD FROM THE MINISTER

The 2023 Solar Eclipse is an extraordinary and rare astronomical occurrence that represents a unique opportunity for Western Australia.

Tens of thousands of visitors are anticipated in the Gascoyne and Pilbara region to be a part of this once-in-a-lifetime event.

Exmouth is the most accessible land destination in the world to experience the phenomenon that will take place alongside the wonders of the UNESCO World-Heritage listed Ningaloo Marine Park.

Other communities in the region, including Carnarvon, Coral Bay and Onslow will experience a near Total Solar Eclipse with Perth experiencing a partial eclipse.

This event will attract people from around the globe to the region injecting millions of dollars into tourism and boosting local jobs.

It also presents an opportunity to promote the State's stargazing, astronomy and astrophotography offerings to the world.

This event will also help the Department of Jobs, Tourism, Science and Innovation activities to inspire young people's interest and uptake of Science, Technology, Engineering and Maths studies and careers.

The WA Government has been investing significant funding and liaising closely with stakeholders to collaboratively manage the planning and logistics for the 2023 Solar Eclipse, so visitors to Western Australia and the community can enjoy a safe, sustainable and successful event.



**Hon. Roger Hugh Cook MLA BA;
GradDipBus (PR); MBA**

Deputy Premier; Minister for State
Development, Jobs and Trade; Hydrogen
Industry; Tourism; Science





NINGALOO ECLIPSE

WESTERN AUSTRALIA

Welcome to the 2023 Solar Eclipse!
An extraordinary and rare astronomical event that represents a unique opportunity for Western Australia!

TOTALITY IN EXMOUTH

On April 20, the shadow of the moon will graze the tip of the state in a 40-kilometre-wide track, as it travels over one of the most beautiful parts of the world – the World Heritage-listed Ningaloo region near Exmouth.

Exmouth is the only town within the line of totality making it one of the only places on earth to experience a Total Solar Eclipse, one of nature's most phenomenal occurrences.

With WA hosting four of the next 13 Total Solar Eclipses it is the ultimate astro-tourism destination for the next two decades.

AROUND WA

While Exmouth is in complete darkness for just over a minute, the rest of Western Australia will experience a partial solar eclipse, with some locations experiencing more 'darkness' than others.

The town of Onslow will experience a deep partial solar eclipse with over 99% of the sun being covered by the moon. Those south of Exmouth in Carnarvon will witness 95%, whilst in Perth will be approx. 70% coverage.



**KEEP
YOUR
COOL**

It's going to be busy! To make this a memorable, enjoyable and safe event for all please remember to be patient, courteous and considerate.



EXPERIENCE WESTERN AUSTRALIA

The 2023 Solar Eclipse is an incredible reason to plan an adventure in Western Australia – but it won't be your only highlight!

WA is an incredible holiday destination, brimming with natural riches and world class experiences. The phenomenon may be the centrepiece but there's lots happening in the region

Disconnect from the everyday and the well-trodden, and reconnect with something unspoilt and a little wild. The country's largest State with its longest coastline and sunniest capital city of Perth, Western Australia is a place to recharge your spirit.



EXPLORE MORE OF WA

Get ready to tick off your adventure bucket list as you journey through bubble gum pink lakes, horizontal waterfalls, tall timber forests and the world's oldest and largest outdoor art galleries.

WA's picturesque and rugged beauty was made to be explored by car. A road trip in WA will uncover some of the world's most pristine and clean coastlines, into the heart of premium wine country, and through spectacular gorges and outback. Witness carpets of colourful windflowers in bloom, see a staircase to the moon or hike pristine wilderness to natural wonders shaped by billions of years.

There really is an adventure waiting for everyone in Western Australia.

<https://www.westernaustralia.com/us/plan-my-trip/itineraries>



DARK SKY FESTIVAL



2023

The Solar Eclipse takes place on 20 April 2023, leaving plenty of time to participate in the Dark Sky Festival! The Dark Sky Festival is a curated program of music, culinary, art and cultural events for all to enjoy!

EXMOUTH • WEDNESDAY 19 - FRIDAY 21 APRIL

FREE CONCERTS • DARK SKY DINING • FAMILY ACTIVITIES • STARGAZING



SOLFEST

WHEN Wednesday the 19th, 4:30pm – 10pm
Thursday the 20th, 4:30pm – 10:30pm
Friday the 21st, 4:30pm – 10pm

WHERE Talanjee Oval, Murat Road, Exmouth, Western Australia, 6707

PRICE Free

A FREE three-day festival of music and food for all the family. Enjoy live performances (change nightly), food trucks, entertainment, plus an Astrotent with all kinds of fun activities for kids (5 pm to 7 pm). Walk over to our Telescope Field in Koobooroo Oval for FREE stargazing with Astrotourism WA!

Admission is free. Please note this is an alcohol-free event.

FREMANTLE BIENNALE'S FIRST LIGHT DRONE SHOW

WHEN 5pm – 8:15pm on Thursday the 20th of April

WHERE Town Beach, Exmouth, Western Australia, 6707

PRICE Free

First Lights: Nynggulu is a spectacle of light and sound that illuminates the night sky to share ancient stories of place. Guided by Baiyungu custodian Hazel Walgar of the Nynggulu coast and Yingarrda-Wadjjarri artist Sonya Edney, the spectacular Dreaming story of the great eclipse will resound across the night sky. This is the story born from silence, of Jirndarl and Willarda, the sun, the moon and their first encounter. Produced by the Fremantle Biennale, this is an epic-scale aerial choreography consisting of a fleet of 160 light drones. The evening starts with an Indigenous cultural event featuring a selection of music and dance.

Courtesy bus shuttles to Town Beach are available.





TOTALITY BRUNCH

WHEN Thursday the 20th of April, 10am – 1:30pm

WHERE Exmouth Yacht Club, Friedman Way, Exmouth, Western Australia, 6707

PRICE \$200 adults / \$40 kids

The Totality Brunch is your front-row seat to the eclipse, complemented by all-inclusive food and drink showcasing the freshest flavours of WA, including Brolos Western Rock Lobster and Cullen wines. Held at Exmouth Yacht Club, there'll be seating, shaded areas, beachside live BBQ stations, entertainment and the ultimate menu for the whole family to enjoy.

(G) ASTRONOMY DINNER

WHEN Thursday the 20th of April at Exmouth Yacht Club from 5:30pm – 9:30pm

WHERE Exmouth Yacht Club, Friedman Way, Exmouth, Western Australia, 6707

PRICE \$200

An elegant, beautiful dinner under the twinkling stars to celebrate the day's solar eclipse. Enjoy a phenomenal menu featuring the region's best produce while enjoying Cullen's biodynamic Wines, and a talk from public figure and author, Broome astronomer Greg 'Space Gandalf' Quicke.



FEDERATION PARK

WHEN Wednesday the 19th until Friday the 21st of April, 7am – 9:30pm daily

WHERE Federation Park, Maidstone Cres, Exmouth, Western Australia, 6707

PRICE Free

Your day and night picnic zone for the whole family to enjoy during the Dark Sky Festival! In the morning enjoy free yoga in the park, 'String Symphony' - a large-scale, twinkling, interactive hand-woven puppet brought to life by audience members, and public astronomy talks from 10am-12pm.

From 4:30pm there's live music, food trucks, markets stalls and a kids' Astrotent.

Yoga is on from 7am - 9:30am and bookings are required

String Symphony shows are on daily 9-10am, 12-1pm* [except 20/4], 6-7pm, 8-9pm and is supported by Lotterywest.

Admission is free. Please note this is an alcohol-free event.



SCITECH

WHEN Wednesday the 19th until Friday the 21st of April,
9am – 4pm + daily shows

WHERE Mandu Mandu Centre, 2 Truscott Cres, Exmouth,
Western Australia, 6707

PRICE Free

Scitech inspires kids to love science in their mind-bending STEM-based shows and activities. Big and small kids can drop in from 9am – 4pm, plus there are daily shows that really get the brain thinking! These include 'Under Pressure' (10am and 2pm daily) and 'Hot vs Cold' (11am* and 3pm daily).

*Please note there will be no 11am show on eclipse day

STARGAZING SESSIONS – WITH ASTROTOURISM WA ASTRONOMY GUIDES

WHEN Wednesday the 19th until Friday the 21st of April, 6.45
pm to 9.15pm

WHERE Koobooroo Oval, Maidstone Cres, Exmouth, Western
Australia, 6707

PRICE Free

Explore the night sky with Astrotourism WA Astronomy Guides and volunteers. A green laser pointer tours the southern hemisphere night sky constellations. View incredible stellar objects, including Venus, the Southern Cross, Magellanic Clouds, star clusters, nebulae and much more. Sessions run from 6.45 pm to 9.15pm with the Green Laser Pointer Tours repeated at 7 pm, 7.45 pm and 8.30 pm nightly.



THE WALLAL EXPERIMENT AND EINSTEINIAN PHYSICS

WHEN Wednesday the 19th until Friday the 21st of April, 9am – 4pm

WHERE Mandu Mandu Room, Ningaloo Centre, 2 Truscott Crescent, Exmouth WA, Australia, 6707

PRICE Free

Emeritus Professor David Blair, Australian physicist and professor at the University of Western Australia and Director of the Australian International Gravitational Research Centre, hosts an exciting talk about the Wallal Experiment and Einsteinian Physics. The Wallal Experiment proved Einstein's theory of relativity – right here in WA! Einsteinian Physics is an exhibition and a series of STEM activities for children and families. See first-hand the Einstein First Team do live eclipse simulations and show you earth-moon orbital dynamics on the spacetime simulator! No need to book – just come along

DARK SKY FESTIVAL

2023



Image credit © Roger Groom

2022 ASTROFEST ASTROPHOTOGRAPHY EXHIBITION

WHEN Weekdays 8:30am - 4:30pm Weekends 9am - 4:30pm, 01
Apr 23 - 30 Apr 23

WHERE Tantabiddi Gallery, The Ningaloo Centre, 2 Truscott
Cres, Exmouth, Western Australia, 6707

PRICE Free

Visitors are invited to see an exhibition of Western Australian astrophotography curated by Roger Groom, produced here in WA. There are also free talks by Roger Groom:

Sunday the 16th of April at 11am

Tuesday the 18th of April at 2pm

Friday 9 am-12:00 pm - join Roger for the BYO "Best of your eclipse photography" chat, designed to help enthusiasts get more from their own eclipse photography

PUBLIC TALK AND BOOK SIGNING BY GREG 'SPACE GANDALF' QUICKE

WHEN 11am - 12pm on Friday the 21st of April

WHERE Ningaloo Centre, Cnr Murat Road & Truscott Cres,
Exmouth, Western Australia, 6707

PRICE Free

Beloved public figure and author, Broome astronomer Greg Quicke will present a public talk and book signing that pays particular attention to the power of the Total Solar Eclipse. Greg will discuss our home planet's position in space and explore the very real relationships within our planetary, stellar and galactic neighbourhoods.



DARK SKY FESTIVAL SEAFOOD BBQ (sold out)

WHEN 5:30pm - 7:15pm and 7:45 - 9:30pm on Wednesday
the 19th of April

WHERE Exmouth Yacht Club, Friedman Way, Exmouth,
Western Australia, 6707

PRICE \$65

Enjoy a seaside dinner at dusk in the beautiful Exmouth Yacht Club with a seafood BBQ buffet. On the evening before the eclipse, WA's magnificent fruits of the ocean will be showcased at this beautiful dinner. Setting the scene, there will be live acoustic music playing against the backdrop of the twinkling Exmouth Gulf.

For all information on the Dark Sky Festival
19 - 21 April, book tickets or view programme
ningalooeclipse.com or scan the QR code





NINGALOO ECLIPSE

WESTERN AUSTRALIA






LEGEND

- Event Venue - Exmouth
- Food/Supermarket
- Fuel Station
- Hospital
- Pharmacy
- Police Station
- Visitor Centre
- Shuttle Bus Stop
- Overflow Parking
- Airport
- Dump Point

EXMOUTH ESSENTIAL SERVICES & ECLIPSE VENUES



EXMOUTH ESSENTIAL SERVICES & ECLIPSE VENUES

	TOWN/LEG	NAME	ADDRESS	HOURS
	Exmouth	Exmouth Ningaloo Fuels	23 Ingram St, Exmouth WA 6707	24 hours
	Exmouth	Ningaloo Reef Fuels	6 Pelias St, Exmouth WA 6707	24 hours
	Exmouth	Ampol	77 Maidstone Cr, Exmouth	24 hours
	Exmouth	Exmouth Fuel Suppliers	26 Nimitz St, Exmouth	0500-1800
	Exmouth	Exmouth Hospital	Lot 1448, Lyon Street, Exmouth, WA, 6707	0800-1630
	Exmouth	Exmouth Police Station	32 Maidstone Crescent, Exmouth	
	Exmouth	Ningaloo Visitors Centre	2 Truscott Crescent, Exmouth	
	Exmouth	Welch Street Overflow campsite	Welch Street, Exmouth	
	Exmouth	Talanjee Oval	77 Maidstone Cr, Exmouth	
	Exmouth	Exmouth Yacht Club	Friedman Way, Exmouth	
	Exmouth	Bullara Station	Burkett Road, Exmouth Gulf	
	Exmouth	Ningaloo Visitors Centre	2 Truscott Crescent, Exmouth	
	Exmouth	Federation Park	Maidstone Crescent, Exmouth	
	Exmouth	Kooboороo Oval	Murat Road, Exmouth	
	Exmouth	Exmouth Shire Hall	22 Maidstone Crescent, Exmouth	
	Exmouth	Tantabiddi Gallery	2 Truscott Crescent, Exmouth	
	Exmouth	Exmouth Library	Ningaloo Centre, Cnr Murat Road & Truscott Crescent, Exmouth WA 6707	
	Exmouth	Mandu Mandu Centre	2 Truscott Crescent, Exmouth	
	Exmouth	Town Beach	56L Truscott Cres, Exmouth WA 6707, Australia	
	Exmouth	Ningaloo IGA	4 Ross St, Exmouth WA 6707	0630-1900
	Exmouth	Ningaloo Harvest IGA	Cnr Ross St & Mainstone Cr	0630-1900
	Learmonth	Official Viewing site	cnr Manilya- Exmouth Road and Kailis Road, Learmonth	



watercorporation.com.au/eclipse



www.exmouth.wa.gov.au/eclipse



www.ningalooeclipse.com

Health and Safety is a top priority at this event and is everyone's responsibility.

To ensure your wellbeing and the wellbeing of others please follow the advice.

MAINROADS

Main Roads' travel map provides road users with the latest information on roadworks, road closures, detours and incidents across the State Road Network.

Use the Travel Map to plan your road trip before you set off and, you can also pinpoint rest areas and other amenities along your way.

Click here <https://travelmap.mainroads.wa.gov.au/Home/Map> to get started!



LOOK AFTER YOURSELF

Drink plenty of water, limit time outdoors, and understand the signs of heat stress. Be SunSmart – wear light protective clothing, a hat, sunscreen and sunglasses, and seek shade. Take note of first aid areas and where to access healthcare. Please rely on authorities for the latest health and safety updates and visit ningalooeclipse.com for more information.

Solar Eclipse Eye Safety

The Department of Health does not recommend viewing an eclipse directly, including using eclipse glasses and equipment with specific solar filters. If you choose to use eclipse glasses understand the risks.

Visit [Healthy WA](http://HealthyWA) for more.



SOLAR ECLIPSE EYE SAFETY










It is never safe to look directly at the sun, and doing so may cause eye damage. The only way to guarantee that you do not get eye damage is by viewing the eclipse indirectly. Indirect methods include projecting an image of the sun onto a surface, such as using a pinhole viewer, or watching a live stream on the TV or online.

The Department of Health and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) do not recommend direct viewing of the eclipse.

Viewing a full or partial solar eclipse directly, including with the use of visual protection, can cause eye damage or permanent loss of vision.

IF YOU CHOOSE TO USE SOLAR ECLIPSE GLASSES, UNDERSTAND THE RISKS PLEASE REFER BELOW

  <p>Dark sunglasses, exposed xray film and welding shield will not provide suitable protection</p>	  <p>Wearing solar eclipse glasses to look through a camera, binoculars or a telescope will not protect your eyes.</p>	 <p>The Department of Health does not recommend viewing an eclipse directly, including using eclipse glasses and equipment with specific solar filters because:</p> <ul style="list-style-type: none">• their quality cannot be guaranteed• they may not block sufficient light• they may have scratches, cracks or pin hole defects• they frequently do not fit the face well and the gaps enable light to reach the eyes.	 <p>IF YOU CHOOSE TO USE SOLAR ECLIPSE GLASSES, UNDERSTAND THE RISKS</p> <ul style="list-style-type: none">• Check that your glasses are marked with and meet ISO-12312-2020 certification• Check your eclipse glasses for damage before use• Place certified eclipse glasses on before looking at the eclipse and remove them after you have turned away from the eclipse. Do not remove your eclipse glasses while looking at the sun.	 <p>If using equipment only use specially designed filters for lenses.</p>
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Parents should supervise children during the eclipse to ensure they do not look directly at the sun, and if their children are using eclipse glasses, to ensure they fit the child's face properly and cover both eyes completely. If they don't, do not use them.

BE WATER WISE

Water has always been a precious resource in this part of the world and demand will be very high over the event period. We need to work together to save water. Here are some tips to be water wise.



PROTECT THE REGION

The natural marine and land environment throughout the region is exceptionally diverse, beautiful and precious. A range of measures are in place but we all have a duty to protect, care and conserve this pristine environment.

Please dispose of your rubbish wisely or store it responsibly to take it away with you.

For more information visit <https://www.kabc.wa.gov.au/>

An advertisement for 'EXPLORE EXMOUTH'. On the left, a hand holds a smartphone displaying a mobile app interface with various photos and icons. The background is a scenic beach with a person surfing and a sea turtle swimming in the water. Text on the right reads: 'CONNECT WITH US ON LAND AND SEA. Join us to experience the amazing things Exmouth has to offer. Your memories will last forever.'

CONNECT WITH US ON LAND AND SEA
Join us to experience the amazing things Exmouth has to offer. Your memories will last forever.

An advertisement for 'WELCOME TO COUNTRY ROADS'. It features a close-up of an Aboriginal man with a grey beard and a blue headband, holding a wooden object. The background is a landscape of rolling hills under a cloudy sky. Text on the left reads: 'WELCOME TO COUNTRY ROADS. PLEASE DRIVE CAREFULLY & MAKE EVERY JOURNEY SAFE.'

WELCOME TO COUNTRY ROADS
PLEASE DRIVE CAREFULLY & MAKE EVERY JOURNEY SAFE

ROAD SAFETY

Welcome to Country Roads and have a safe journey from Perth to Exmouth. Drivers, get at least 7.5 hours sleep the night before you set off and take regular breaks. If you need to overtake a large vehicle, don't underestimate the distance you'll need. Look out for wildlife at dusk and dawn. Enjoy the scenery in this sacred and beautiful country, but watch your speed.

Hear more tips from the Aboriginal Elders welcoming you to the country roads of WA. Campaigns (www.wa.gov.au)



SOLAR ECLIPSE

20 April 2023



It's tropical cyclone and bushfire season in the north of our State.

To make sure you and your family stay safe during the 2023 Solar Eclipse, find out what you need to do to prepare.



Keep Fuel topped up – refuel at each town and keep extra fuel just in case



Travel with an emergency kit. This should include:



Have your own supply of food and water for emergencies – At least three litres of water per person to last at least 3 days.



- Portable, battery operated AM/FM radio
- First aid kit and manual
- List of emergency contact numbers
- Medications, prescriptions and toiletries
- Waterproof torch
- A portable battery charger for devices and spare batteries




Plans might change quickly during an emergency so be ready to act.



Know where to find emergency information.

EMERGENCY INFORMATION

 Call **000** for life threatening emergencies

 [emergency.wa.gov.au](https://www.emergency.wa.gov.au)

 13 DFES (**13 3337**)

 @dfeswa

 @dfes_wa

 Bureau of Meteorology
Weather Warnings **1300 659 210**

 [bom.gov.au/wa/warnings](https://www.bom.gov.au/wa/warnings)

 Main Roads **138 138**

 [travelmap.mainroads.wa.gov.au](https://www.travelmap.mainroads.wa.gov.au)



Your Local **ABC Radio**:



Familiarise yourself with the warnings systems and how to keep up to date:

Cyclones, bushfires and other natural hazards can lead to roads being closed or restricted for safety reasons.

These hazards are extremely dangerous - it's important to understand the risks before you leave, plan what to do if there is an emergency and understand your travel plans may need to change.



Understand the Cyclone Warning System:



BLUE ALERT

Get ready.

Ensure your emergency and relocation kits are complete. Secure loose objects.



YELLOW ALERT

Act now.

Put your cyclone plan into action and move to shelter.



RED ALERT

Shelter now.

Stay indoors and away from windows.



ALL CLEAR

Be careful.

Take care to avoid dangers caused by the cyclone.

Understand the Bushfire Warning System:



EMERGENCY WARNING

There is a threat to lives or homes.

You are in danger and need to take immediate action to survive.



WATCH AND ACT

There is a possible threat to lives or homes.

You need to leave or get ready to defend – do not wait and see.



ADVICE

A fire has started but there is no immediate threat to lives or homes.

Be aware and keep up to date.

For fire or life threatening emergencies: **000**



NINGALOO ECLIPSE

WESTERN AUSTRALIA
20 APRIL 2023



EMERGENCY CONTACTS

There will be a number of events taking place across Exmouth, Carnarvon and Onslow and first aid stations staffed by trained first responders will be on hand.

If you find yourself in an emergency situation and are unable to attend a first aid station, call 000.

There is also two secondary emergency call service numbers, **112** and **106**.

112 is available from most mobile phones. 106 connects to the text-based relay service for people who have a hearing or speech impairment.

Telecommunications capacity has been increased to ensure a safe and enjoyable 2023 Solar Eclipse that the region, wider WA and the world can enjoy now and in the future.

Network connectivity differs across service providers in the regions. Visitors should check with their carriers.

emergency.wa.gov.au



Please rely on authorities for the latest health and safety updates and visit **www.ningalooeclipse.com** for more information.

