



Sustainability - Collective Impact Kit





Table of Contents

Introduction	2
Quality Education	3
Life On Land	7
Life Below Water	10
Clean Water & Sanitation	12
Affordable & Clean Energy	13
Sustainable Cities & Communities	14
Responsible Consumption & Production	15
Partnership For The Goals	16
Sustainability Stories	17
- Australian Coastal Safaris	
- Echidna Walkabout Nature Tours	22
- Exceptional Kangaroo Island	27
- Exmouth Dive & Whalesharks Ningaloo	31
- FNQ Nature Tours	
- Indian Ocean Experiences	37
- Lords Kakadu & Arnhemland Safaris	40
- Murray River Trails	43
- Naturaliste Charters	47
 Pacific Whale Foundation Eco-Adventures Australia 	52
Pacific Whale Foundation Eco-Adventures AustraliaPremier Travel Tasmania	

Introduction

Australian Wildlife Journeys has aligned its sustainability vision with the United Nation's Sustainable Development Goals (SDGs). Adopted in 2015, there are a total of 17 Sustainable Development Goals (SDGs), that call for urgent action by countries, both developed and developing, in a global partnership to improve health and education, reduce inequality and spur economic growth, whilst tackling climate change and working to preserve our oceans and forests.

We believe that individual citizens, governments and all businesses need to work together to achieve these goals and that the tourism sector has a lead role in raising awareness and expediting implementation of initiatives that address these challenges.

The following document outlines key programs implemented by Australian Wildlife Journeys' members that directly address eight SDGs for the tourism sector in Australia. The nature of these goals are often integrated, with initiatives covering multiple goals. For the purposes of this kit, we have chosen the most relevant SDG for key sustainability programs or policies across our membership base.

Rather than a static document, we are committed to building the number of initiatives under each SDG and updating this publication over time, making it easier for our guests and partners to assess how our members are tackling issues, in particular the loss of biodiversity, whilst providing activities and actions to achieve a more sustainable future for people and planet.





































For further information:

John Daw | Executive Officer Australian Wildlife Journeys john@australianwildlifejourneys.com

1. CODE OF CONDUCT FOR WILDLIFE INTERACTIONS

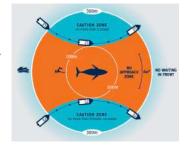
Australian Wildlife Journeys was founded upon a desire to increase the awareness and preference for travellers from across the globe to connect with our unique wildlife in the wild. As wild encounters are central to the collective's experiences, the long-term survival and health of the wildlife we seek to observe is critical. We pursue responsible tourism principals where 'shared space' is at the forefront of the experience, adapting our behaviour and that of our guests, so disturbance of wildlife is minimised when we visit them in their habitat.

We strongly advocate that visitors do not feed, touch or handle wild animals, but follow an ethos of observation from responsible distances. This approach is based on scientific research into maintaining the wellbeing of our wild animal populations, and provides a richer experience for guests as our guides interpret natural behaviours and social group interactions.

Beyond certifications from various bodies including Ecotourism Australia, Responsible Travel, The International Ecotourism Society and the Global Sustainable Tourism Council, several members have developed their own code of conduct or guidelines in relation to observing particular species in their area. Our goal is to go beyond just educating guests on our tours, but publishing and promoting these policies to the wider travel and global community.

Be Whale Aware and Be Dolphin Wise

Pacific Whale Foundation Eco-Adventures Australia has developed a series of best practice factsheets for ocean users and boaters who wish to view whales and dolphins. The "Be Whale Aware" and "Be Dolphin Wise" guidelines are designed to educate seagoers that their presence can affect marine wildlife and habitat. Marine mammals often engage in important social and behavioural activities that may not be apparent to a casual viewer. These factsheets reinforce that approaching marine animals too closely or too quickly in a vessel often disrupts these behaviours and causes unnecessary stress.





Sustainable Koala Watching Code

Echidna Walkabout Nature Tours has been at the forefront of policy development for responsible Koala viewing based on over 27 years of research. In 2006, the organisation launched the <u>Sustainable Koala Watching Code</u>, implementing a welfare policy for guides, researchers and staff members in order to reduce human behaviours that cause Koalas to respond negatively as much as possible. This includes policies such as maintaining a distance of 10 metres (horizontally) from any wild Koala, never surrounding a Koala's tree and avoiding excessive movement or noise around wild Koalas.

Interestingly, a recent scientific study has found that even captive Koalas subjected to people at close proximity (5 metres) do experience higher levels of stress than when people are further away, highlighting the importance of this requirement. Given that the organisation often visits and studies the same Koalas on a regular basis, this code has enabled a positive, or at least benign relationship to form with these wild Koalas.







Protecting Subspecies and Iconics of Kangaroo Island

Kangaroo Island separated from mainland Australia around 10,000 years ago, due to rising sea level after the last glacial period. Due to this long isolation, the island is renowned for the number of subspecies and as a critical breeding, resting or feeding ground for rare species. To reinforce responsible behaviours around these iconic species unique to the island, Exceptional Kangaroo Island has developed a Wildlife Code of Conduct and Guest Briefing Card referencing responsible behaviours for iconic species including the Glossy-Black Cockatoo, Hooded Plover, Australian Sea-lion, Kangaroo Island Kangaroo and Short-beaked Echidna.

This involves sharing a factsheet educating people about sensitive sites and times such as courtship or breeding season that require increased awareness of possible disturbances, such as avoiding known nest hollows of Glossy Black-Cockatoos, beach nesting sites of Hooded Plovers and breeding times for Australian Sea-lions where increased stresses in the colony can bring increased risk to observers. This also reinforces the importance of appropriate behaviour around more elusive animals on the mainland such as the Short-beaked Echidna, who can suffer from "capture myopathy", which is death or shock due to handling stress.







Red-filtered Flashlights for our Nocturnal Beauties

Many of Australia's marsupials are more active at night, with several members such as Murray River Trails, Premier Travel Tasmania and FNQ Nature Tours integrating nocturnal walks as an integral part of their regional experiences. Although spotlighting is a fantastic means of revealing some of Australia's most endearing creatures, white torches or spotlights can significantly disturb our marsupials, due to the greater sensitivity of their pupils to light compared with humans. High-powered spotlights effect the ability for pupils to function properly for extended periods of time, leaving them blinded temporarily.

For this reason, we share with guests the importance of using red-filtered spotlights along with prohibiting flash photography. FNQ Nature Tours has developed a Nocturnal Viewing Booklet, that states guidelines for behaving responsibly during evening walks to minimise the disturbance and vulnerability of many rare species of the Wet Tropics.







2. CONTRIBUTIONS TO ACADEMIC RESEARCH:

As pressures increase from factors such as climate change, extreme weather events, urban or industrial development, plastics pollution and debris, it has never been more important for the tourism sector to unite with academic researchers to measure the impact of these pressures and health of our ecosystems. Several members are directly involved in publishing their own research projects or are supporting collaborations with academic researchers.

Revealing the Mysteries of Bremer Canyon & Beyond

Orcas were first 'discovered' off Bremer Bay in the early 2000s by Dave Riggs, when he was on an annual tuna research expedition from Esperance to Albany. In 2013 he produced a film called The Search for the Ocean's Super Predator, and not too long after that, Naturaliste Charters led by owner Paul Cross, worked alongside Dave to run the first dedicated expedition to see Orcas in Australian waters.

Naturaliste Charters is a national leader in supporting projects, collaborations and facilitating research onboard, regularly hosting active researchers and partnering with institutions and organisations to publish papers. A comprehensive <u>list of articles</u> has been made possible due to these contributions, ranging from the effect of El Niño Southern Oscillations on apex predators, tracking rare pelagic bird species for the BirdLife Australia Rarities Committee, to documenting the <u>incredible Orca predation events</u> witnessed off Bremer Bay, including Blue Whales.

Species of Focus	Research Groups & Academics Supported
Killer Whales	West Australian research group Project O.R.C.A. and Murdoch University
Cetaceans including Humpback, Blue, Southern Right, and Minke Whale	Southwest Whale Ecology Study (SouWEST) integrating the research expertise of Western Whale Research (Dr. Chris Burton), Oceans Blueprint (Dr. Chandra Salgado-Kent) and The Centre for Marine Science and Technology at Curtin University and Geographe Marine Research
Baleen Whales	Geographe Marine Research (GMR)
False Killer Whales	International scientist Jochen Zaeschmar
Sunfish	International scientist Marianne Nyegaard
Pelagic Seabirds	Birdlife Australia Rarities Committee (BARC) and eBird including surveys with Daniel Mantle and Plaxy Barratt







Tracking the Eastern Osprey of the Eyre Peninsula

Australian Coastal Safaris guide and award-winning photographer, Fran Solly, has been watching birds across the Eyre Peninsula for over 35 years. In recognition of her contribution to the birding community through citizen science observations and development of the regional field guide for birds, Fran had an Osprey chick named after her (Solly) in 2020. In November of that year, Solly was the first Eastern Osprey to be fitted with a solar powered tracker as part of the Osprey Recovery Project in South Australia, being the first time this had been undertaken in Australia.

Fran has worked alongside lead researcher, Ian Falkenberg, in developing the tracking capability, which provides data several times a day on the bird's location before falling off cleanly at about four years of age, when the bird is ready to find a nest and a mate. The team expected the bird to range about 20-40 kilometres after leaving its nest, but were stunned when the Solly flew 400 kilometres within the first week. This project is a critical component in providing important information on how Osprey are using coastal habitats in the region, especially with the estimated population decline of up to 26 per cent over the last ten years.

Unfortunately, Solly the Osprey was killed in November 2021, when she was electrocuted by a power pole in Streaky Bay, prompting a call to work with electricity companies to reduce the risks to these endangered raptors.





Discovering the Nose Patterns of Koalas

In 1998 Echidna Walkabout's co-founder Janine Duffy discovered a revolutionary method of identifying individual Koalas through their distinctive natural black and white marking patterns inside their nostrils. That discovery launched a non-intrusive wild Koala Research Project that continues to this day.

The study documenting nose markings over 22 years and across more than 100 individual Koalas in four locations in southern Victoria, showed that the nose pattern stays essentially the same throughout life, with no two Koala patterns being identical. This method provides a cost-effective and reliable non-intrusive process of monitoring wild Koala populations and has since been embraced by Koala research groups across Australia. Koalas are identified by observation at a distance, through binoculars, without the need for tagging, handling or causing stress to individual animals.

Every wild Koala sighted in the You Yangs or Brisbane Ranges National Parks has been photographed, named & identified, their sex established, location taken and tree species and height in tree noted. The Wild Koala Research Project is Echidna Walkabout's own initiative, and fully funded by their social enterprise structure, with Koala researchers employed to input data, conduct research analysis and reconnaissance. This ensures a high degree of success with Koala sightings and adds valuable monitoring data to each day's sightings.







Creating the Largest Humpback Database in Australia

Pacific Whale Foundation's <u>research</u> in Australia began in Hervey Bay in 1984 when founder, Greg Kaufman, visited South East Queensland as part of a documentary film project. Greg and his team quickly determined the area was a critical resting place for Humpback Whale mothers and calves heading back to their feeding grounds in the Antarctic and set about a long-term study focussing on these majestic mammals.

Every whale has its own unique features, including the overall shape of the flukes (or tail), trailing edges, acquired scars, and natural pigmentation. These characteristics can be identified in photos and compared with other sightings to match and track individual whales. Pacific Whale Foundation scientists have established the longest-running Humpback Whale photo-identification project in the South Pacific. The Southern Hemisphere Humpback Whale Catalogue is also the largest curated database of photo-identified Humpback Whales in East Australia and researchers have collected detailed life histories of over 6,900 whales that visit Hervey Bay between July to October, greatly adding to scientific understanding of the population's ecology and behaviours.

Hervey Bay is unique because it is a mid-migratory resting ground for Humpback Whales; it is neither a breeding nor feeding ground. Mother and calf pairs are of particular interest to researchers, given their use of this resting area to provide maternal care, with research focussing on long-term monitoring and quantifying potential human and non-human threats whales face.

The focus of research has always been Hervey Bay, but the research team has also studied Humpback Whale movement and connectivity among various areas of eastern Australia, including Eden (New South Wales) and the Whitsundays/Cairns/Port Douglas region (Queensland). In addition, Humpback Whales moving between the Pacific Ocean and the Indian Ocean (Western Australia) have been studied; the first and only example of interocean Humpback Whale movement between these two populations, which are otherwise thought to be separate. The organisation has an extensive-library of peer reviewed journal articles, technical reports, conference presentations and supported/sponsored research.





3. EDUCATIONAL PROGRAMS & SCHOOLS

Since launching in 2017, the Australian Wildlife Journeys collective has provided a conduit with the academic and wildlife specialist fraternity, incorporating in-house and third-party experts to provide an amplified focus on conservation and scientific research within itineraries. Several members have a long history catering to alumni associations, professional groups, conservation bodies, zoological societies and museums. In addition to experiences for special interest groups, several members have developed educational programs for schools and universities, to foster the next generation of environmental custodians.

Special Departures with Researchers and Conservationists

The Australian Wildlife Journeys collective affords guests the opportunity to connect with the some of the country's leading wildlife researchers. Although all experiences across the portfolio have important educational elements for our guests, a total of 17 experiences have been specifically curated, including several supporting the Australian Geographic Society.

Member	Featured Experiences
Australian Coastal Safaris	Southern Eyre Peninsula Birdwatching with Fran Solly
Echidna Walkabout Nature Tours	Koala Recovery Experience, East Gippsland Wildlife Journey & Mungo Outback Journey with Janine Duffy & Koala Clancy Foundation research team
Exmouth Dive & Whalesharks Ningaloo	Behind the Scenes with Manta Rays with Amelia Armstrong from Project Manta
Exceptional Kangaroo Island	Conservation Connection with Dr Peggy Rismiller from Pelican Lagoon Research Centre, Dr David Paton from BioR and Heidi Groffen from KI Land for Wildlife
FNQ Nature Tours	4 Day Nature, Wildlife & Conservation Safari with Alberto Vale from Australian Quoll Conservancy, Dr Karen Coombes from Tree Roo Rescue
Indian Ocean Experiences	Citizen Science Week with Brendan Tiernan from Christmas Island National Park, Bird & Nature Week with Mark Holdsworth
Naturaliste Charters	Bremer Canyon Killer Whale Expedition, Augusta & Dunsborough Whale Watching with Pia Markovic
Pacific Whale Foundation Eco-Adventures Australia	Ultimate Hervey Bay Whale Watching, Private Charter with Dr Barry McGovern and research team
Premier Travel Tasmania	Tasmania Wildlife & Conservation with Wilderness









Dedicated School & Education Programs:

Pacific Whale Foundation Eco-Adventures Australia use profits from cruises to provide marine education for children, and support ocean conservation programs in Australia and around the world. In addition to supporting school visits or onboard excursions, the organisation has started Hervey Bay Virtual Whalewatch; a simulated whale watching experience complete with sights and sounds, expert narration, and interactive educational activities. With a duration of one hour, this program and can be utilised for whole-class instruction or individual student participation.

The marine biologists at Naturaliste Charters also conduct regular presentations for children from kindergarten through to the final year of schooling, as well as being involved in University and TAFE case-studies. Each year during the Bremer Bay Killer Whale expedition season, the organisation welcomes marine interns onboard, that have started out studying Marine Biology or a science degree. These students support onboard Marine Biologists with skills such as data collection and collation, photo-identification, public speaking, scientific writing and reporting.

Australian Coastal Safaris have developed experiences for mature aged students who have returned to study after leaving high-school early, to broaden their understanding of geology, environmental sustainability, regional produce and the flora and fauna of the Eyre Peninsula. Echidna Walkabout Nature Tours are also involved in hands-on action and environmental learning for students, with organised tree planting and noxious weed removal as part of the Koala Clancy Foundation projects.











1. CITIZEN SCIENCE ON LAND

Tracking Vulnerable Species with iNaturalist

The majority of Australian Wildlife Journeys' members contribute to observations of flora & fauna via citizen science applications including iNaturalist, the world's leading global social biodiversity network. These platforms allow guides to compile research-quality citizen science data that enables a more detailed picture of our national biodiversity, and assists bodies such as the CSIRO, ecologists and other decision makers to deliver better outcomes for the environment and our species.

Guides record observations with iNaturalist Australia by using the iNaturalist app on mobile phones or desktop computers. An observation records an encounter with an individual organism at a particular time and location across each of the regions. Photos are required to be attached to observations for them to become research grade and added to the Atlas of Living Australia.

Although each member makes broader observations they believe to be valuable to the local scientific community, there is a designated list of species that each member has committed to track longitudinally whilst guests are exploring by vehicle, e-biking, walking or by vessel. Through education at the commencement of the tours and customised laminated cards showcasing the species of interest, guests on tour can assist guides in capturing images out in the field and uploading to designated project folders.



Region	Species of Focus
Christmas Island	Christmas Island Hawk Owl, Blue-tailed Skink, Lister's Gecko
East Gippsland, VIC	Platypus, Short-beaked Echidna, Grey-headed Flying-fox, Powerful Owl, Southern Emu-wren, Superb Lyrebird, Glossy Black-Cockatoo, Gang-gang Cockatoo, Sooty Oystercatcher
Eyre Peninsula, SA	Koalas, Short-beaked Echidna, Southern Hairy-nosed Wombat, Southern Right Whale, Yellow-tailed Black Cockatoo, White-bellied Sea-Eagle, Osprey, Bush Stone-curlew, Australian Bustard, Hooded Plover, Malleefowl, Rosenberg's Goanna
Far North Queensland, QLD	Northern Quoll, Lumholtz's Tree-Kangaroo, Black-throated Finch, Grey Goshawk (White morph), Lessor-sooty Owl
Kangaroo Island, SA	Short-beaked Echidna, Glossy Black-Cockatoo, Rosenberg's Goanna, Hooded Plover, White-bellied Sea- Eagle, Bush Stone-curlew, Osprey, Southern Emu-wren, Feral Cat
Kakadu & Arnhemland, NT	Wilkins Rock Wallaby, Antilopine Wallaroo, Frilled-neck Lizard, Dingo, Freshwater Crocodile, Mertens' Water Monitor, Feral Cat
Mungo, NSW	Eastern-grey Kangaroo, Crested Bellbird, Spotted Harrier, Pink Cockatoo, Chestnut-crowned Babbler, Mallee Emu-wren, Painted Dragon, Central Bearded Dragon, Inland Carpet Python
Riverland, SA	Brush-tailed Possum, Short-beaked Echidna, Regent Parrot, Red-capped Robin, Bush Stone Curlew, Rakali
Tasmania, TAS	Eastern Quoll, Spotted-tailed Quoll, Tasmanian Devil, Common Wombat (Mange effected), Forty-spotted Pardalote, Swift Parrot, Hooded Plover, Tasmanian Wedge-tailed Eagle





CONTACT INFORMATION: Info@exceptiona Rangarooisland.com

www.exceptionalks +61 8 B553 9119 Naturalist

Rescuing the Wildlife of Far North Queensland

FNQ Nature Tours' guides are active and passionate volunteers for Far North Queensland Wildlife Rescue Association; a not for profit, incorporated volunteer organisation operating under permit from the Queensland Department of Environment and Heritage Protection. During designated times when they are 'on call', the team has performed numerous rescues of injured, orphaned or trapped wildlife including Bush Stone-curlews, monitors and pythons.

As part of the <u>4 Day Nature</u>, <u>Wildlife & Conservation Safari</u> experience, FNQ Nature Tours connects guests with several important rescue and rehabilitation organisations including Wildlife & Raptor Care Queensland (rehabilitating mammals, marsupials, owls and Australian raptors), Tree Roo Rescue (rehabilitating orphaned, injured, or displaced tree-kangaroos for release back into the wild) and the Tolga Bat Hospital.









2. TREE PLANTING & NOXIOUS WEED REMOVAL

wildlife departures contribute to this effort, with a portion of the tour cost going towards the Bonorong medical facility and education of guests with

Make a Home for Koala Clancy with Weed Removal

a behind the scenes night tour of their facility.

Echidna Walkabout's decade long Koala research that commenced in 2006, showed that wild Koalas rarely use eucalypts surrounded by thick infestations of Boneseed – an introduced weed native to South Africa. Consequently, in 2011 the Make a Home for Koala Clancy weed removal project began, which includes the opportunity for all guests on tours across the You Yangs and Great Ocean Road, to remove a weed to help a Koala. It is estimated that 50,000 weeds have been removed every year on these tours.

In 2014, Koala Conservation Days for locals were added to the project to educate and involve local people as volunteers in activities such as weed removal, tree planting and maintenance, with the costs of these days heavily subsidised by Echidna Walkabout Nature Tours and Koala Clancy Foundation donors. It is estimated that 400,000 – 650,000 boneseed weeds are removed each year on Koala Conservation Days for Locals with an estimated total of 1,500,000 weeds removed between locals and tourists.







Planting 300,000 Koala Trees by 2030 with Echidna Walkabout Nature Tours

Research conducted by Echidna Walkabout Nature Tours and the Koala Clancy Foundation, estimate that there are around 100 Koalas still living in the You Yangs, down from an estimated 200-250 in 2007. Of concern is that a 46% decline over 10 years has been reported for the overall population.

With the increasing effects of climate change, the stony country of the You Yangs is drying out, with the tree canopy thinning out, leaving Koalas dehydrated and thirsty with the reduction in usable home ranges. Without action, this will result in Koalas dying and the population reducing significantly.

This has prompted the Koala Clancy Foundation to embark on a mission to plant 300,000 Koala trees by 2030 and save the Koalas of the You Yangs. Trees planted away from water, are struggling to survive with the drying climate, so the Koala Clancy Foundation approached farmers on the Western Plains to provide access to precious land, where trees can be planted along rivers, creeks, drainage lines and around dams, to increase the chances of obtaining high tree survival rates.

It is estimated that each Koala needs around 3,000 trees along more fertile regions, allowing the support of an additional 100 Koalas. In 2021, a total of 22,000 trees were planted with the aim to reach 30-35,000 in 2022. Travellers are able to book the Koala Recovery Experience as a two or three day package to assist in planting trees and recovery activities for this iconic species.







Revegetating Four Mile Headland on Maria Island

The team at The Maria Island Walk has partnered with Tasmania Parks and Wildlife Service to replant over 800 colonial-era heritage trees on Maria Island. The tree planting work began in in 2014 at Four Mile Headland, which is located about seven kilometres from Darlington and where The Maria Island Walk guests arrive on day two of the four-day walk.

With the volume of grazing marsupials on the island including Forester Kangaroos, Bennett's Wallabies and Tasmanian Pademelons, it can be challenging to establish endemic plants, especially after several dry years. This loss of green vegetation not only reduces the wildlife's food source, but it can also lead to soil loss and erosion.

The Coast Wattle and Sheoak have been selected for planting at the location in order to replicate the natural ecosystem. The trees help to hold the soil together and prevent environmental degradation and provide habitat for many of the native and Tasmanian endemic birds.

Assisting Christmas Island Mine-site to Forest Rehabilitation

In partnership with the Christmas Island National Park team, Indian Ocean Experiences offers guests the opportunity to participate in Christmas Island Citizen Science week, which includes tree planting and other rainforest rehabilitation activities. These actions form an important component of the broader Christmas Island Mine-site to Forest Rehabilitation (CIMFR) program, that aims to rehabilitate old phosphate minefields adjacent to original rainforest.

One of the priority species is the Abbott's Booby, with areas of restoration set around key nesting sites. To increase biodiversity around these sites, activities include propagating tree species native to the island, noxious plant control and plant fertilisation.





3. MAINTENANCE OF EQUIPMENT

Providing Protection for the Endangered Kangaroo Island Dunnart

Shortly after the 2019/20 Kangaroo Island bushfires, the team at Exceptional Kangaroo Island assisted local conservation group, Kangaroo Island Land for Wildlife (KILFW) to build shelter tunnels out of chicken wire and shade cloth, providing protection for small mammals and birds, with a specific focus on the Kangaroo Island Dunnart. This grey, mouse-sized carnivorous marsupial was one of the animal species devastatingly affected in the fires, with an estimated 90 percent of their habitat burnt.

In partnership with several international travel partners, significant financial donations were channelled through Exceptional Kangaroo Island to assist the KILFW team to continue research on threat reduction, long-term monitoring, and supporting private land holders and volunteers to take care of the bushland and the threatened species taking refuge within these recovering critical habitats.

As part of the <u>Conservation Connection</u> and <u>Flinders Chase Focus</u> experiences, guests are taken into bushland survey sites and shown the shelter tunnels and the wildlife cameras, with the opportunity to view the imagery captured to see some of the threatened species KI Land for Wildlife are working hard to protect, and assist by checking the integrity of 30m survey fence lines which are made out of flywire.

The 30m-long tunnels have been positioned between small unburnt vegetation patches to provide a corridor for wildlife to safely move through while the burnt areas are regenerating. The cameras inside the tunnels are successfully capturing Kangaroo Island Dunnarts, Southern Brown Bandicoots and other vulnerable bird species.







1. CITIZEN SCIENCE & DATA COLLECTION BELOW THE SURFACE

Whale & Dolphin Tracker Program

Photo identification programs have been the backbone of marine mammal studies for decades, allowing researchers to identify individuals by comparing photos in existing catalogues. Photo-identification serves as a non-invasive way to gather information on the life histories of whales, including approximate age and migratory movements. One of the key questions Pacific Whale Foundation is trying to answer is how long whales live for, as researchers do not have a definitive answer on this yet. The team is still tracking some of the whales that were photographed in the 1980s.

Guests and the general public can contribute to research as a citizenscientist by donating Humpback Whale fluke photos. These can be uploaded while on board or after the tour, via the following website link or via their Whale & Dolphin Tracker app. These observations are also integrated with into the global catalogue Happy Whale citizen science program.







Onboard Research with Naturaliste Charters

As a globally-recognised innovator in the industry, Naturaliste Charters supports numerous projects, collaborations and also facilitates independent research onboard throughout the year. The team has been collaborating with Geographe Marine Research (GMR) for over a decade and among other projects, submit images daily, especially of endangered Blue Whales and Southern Right Whales. The team also supports guests to get involved with Citizen Science via eBird Australia, iNaturalist and the HappyWhale platform.

With a variety of seasons comes different data collection opportunities. Dunsborough and Augusta have longer term data that is very specific, versus the relatively new Bremer Bay Killer Whale Expedition (that Naturaliste Charters founded) where scientists are only just beginning the research journey to understand this incredible ecosystem.



Whale Shark and Manta Ray Observations across the Ningaloo Marine Park

The team at Exmouth Dive & Whalesharks Ningaloo contribute to several ongoing data collection studies of marine life at Ningaloo Reef and the Muiron Islands including Whale Sharks, Manta Rays and Humpback Whales; delivering valuable information towards environmental studies and research, and marine management.

The Wildbook for Whale Sharks photo identification platform was introduced in 1994, and the team has assisted in identifying several individual Whale Sharks that have visited Ningaloo Reef on an annual basis. The team encourages guests to get involved with this citizen science program as well, by taking photos behind the Whale Shark's left dorsal fin and also behind the gill slits.

Photos delivered by the crew or guests are compared to the photos of over 1,600 individual Whale Sharks that have been sighted in the area. Guests who are interested in ongoing support can sign up to 'Adopt a Whale Shark', which includes a monthly donation to the cause, with donors receiving an email with details about the shark's current size and its most recent location.

Another animal of interest in the region is the Manta Ray, with Exmouth Dive & Whalesharks Ningaloo guide, Amelia Armstrong helping to lead the Project Manta Ningaloo chapter. Almost all of the information that researchers have about Reef Manta Rays globally has been accumulated within the last 10 years, with the project designed to study and expand knowledge on the population ecology and biology of Manta Rays within Australian waters. Project Manta was founded in 2009 by the University of Queensland, and in 2015 the multidisciplinary organisation joined forces with researchers at Murdoch University in Perth. The team at Exmouth Dive & Whalesharks Ningaloo offer a private charter connecting with the Project Manta team, studying the movement, biology and feeding habits, along with making citizen science observations with guests.





2. MARINE DEBRIS TRACKING AND REMOVAL

Tracking Marine Debris across Hervey Bay

Marine debris is defined as any human-created waste that has entered the marine environment. Concerningly, most of the debris from land-based sources is composed of plastics and other materials that resist natural degradation.

A recent study of marine life found that flexible plastics are responsible for the largest proportion of marine life deaths. In the case of whales, once ingested, the plastics can accumulate in the stomach, with the mass eventually becoming so big that it obstructs the bowels and the whale starves to death. Sometimes, whales become entangled in fishing nets and rope and die that way.

Pacific Whale Foundation Eco-Adventures Australia, has been running coastal marine clean-ups for many years in Hervey Bay, but since 2019 the aim has been to also record the types and quantity of debris found on the Australian Marine Debris Initiative (AMDI) database run by <u>Tangaroa Blue</u>. This database was created to enable volunteers and organisations who were running beach clean-up events to also collect data on what they were finding with a consistent methodology so it could be collated into a standardised national database. This is used to better inform legislators about future changes needed in managing this worldwide problem.

Since 2004, more than 7 million pieces of marine debris have been recorded into the AMDI database, creating a comprehensive overview of what amounts and types of marine debris are impacting beaches around the country, along with suggestions on how to reduce it. Many Pacific Whale Foundation guests are inspired to further their efforts through their own beach and coastal clean-ups, and are encouraged to log any debris collected into the AMDI database through Tangaroa Blue.







Cleaning Up and Making Art from Christmas Island Debris

Due to surrounding currents and winds, the beaches of Christmas Island are often awash with masses of marine debris. Unfortunately, across locations such as Greta Beach, it is not uncommon to see turtle nesting habitat covered in marine debris. As part of Indian Ocean Experiences' Dolly Beach Tour, guests are encouraged to grab a bag and search for unusual treasures that the tide has bought in including flotsam carried by ocean currents from regions far away. Once educated on the type of marine debris deposited and harmful effect on marine species, almost 100% of guests are eager and keen to pick up bags of rubbish.

Indian Ocean Experiences' staff often volunteer during community organised beach clean-ups, with the organisation providing equipment such as bags, gloves and vehicles to ferry volunteers. The team works closely with Tangaroa Blue when on island for Christmas Island Marine Debris Week, promoting the event alongside the Christmas Island Tourism Association. It is estimated that Indian Ocean Experiences removes over one tonne of marine debris every year.

Guests are actively encouraged to purchase local art made by organisations such as Eco-Crab Industries, which turns plastic and debris into things such as building blocks, bowls, coasters, and other artisan items.





Removing Ghost Net from East Gippsland

On Echidna Walkabout Nature Tours' East Gippsland Wildlife Journeys, guests are offered the opportunity to remove Ghost Net – discarded fishing net – that has washed up on the beach from Bass Strait or the Southern Ocean. The project commenced in 2013 when copious amounts of the orange netting could be found across the rocky headland of Cape Conran.

Without removal, the net poses an ongoing hazard to wildlife, as it can wash back and forth, putting species such as albatrosses, fur-seals or dolphins at risk. Over time, it also degrades into smaller pieces that fill the bellies of seabirds, causing them to starve.

With equipment provided such as bags, gardening gloves and heavy duty scissors, almost all guests have eagerly contributed to the clean-up project. Initially, the piles of Ghost Net were so large & heavy that it was impossible to move in one go and it was necessary to cut the net up into manageable pieces. Over recent years, given the large volume of garbage bags of netting removed, it has now become a challenge to find Ghost Net on Cape Conran, with alternative locations now being scouted.





Clean Water & Sanitation

Across a continent as dry as Australia, efficient water management practices are an essential component of sustainable operations, especially as many of our members are positioned in areas of relatively low rainfall with remote access.

The process of reducing fresh water wastage ranges from rainwater harvesting, desalination systems on vessels, composting toilets for wilderness camps, treating waste water safely, through to efficient cleaning and washing policies for vehicles, linens and crockery. Another key component of this goal is restoring water-related ecosystems across our forests, wetlands, rivers, aquifers and lakes.

Championing Environmental Flows for the Murray River

Up until the 1920s, the rivers flowing in the Murray-Darling Basin, made up of Australia's most famous two rivers, were unregulated. Ninety percent of the water flowed out to sea covering floodplains and filling wetlands and creeks along the 2,500km plus journey. The river system naturally flooded and dried almost every year, but today we have reversed the way the system works, by keeping floodplains dry most of the time and allowing only 10 percent of the water to flow out to the sea.

Unfortunately, the lack of overbank flow (small floods that feed forests and fill shallow lakes) due to this reversal, has decreased the regeneration of phytoplankton and zooplankton, which in turn initiates the breeding cycle in insects, frogs, fish and water birds and recharges groundwater systems.

Murray River Trails founder and owner, Tony Sharley, is a leading advocate for the Murray River, and speaks regularly at forums about environmental flows and establishing new conservation-focused industries, such as eco-tourism, that do not extract water from Australia's precious rivers. The organisation has recently established the Murray River Trails Fund, to raise money for organisations at the forefront of improving the region's biodiversity, river floodplain health and status of threatened species in the region.







Creating Feeding Habitat for the Glossy Black Cockatoo

Exceptional Kangaroo Island's tour base in Cygnet River includes an aerobic waste water management unit that captures and recycles water from the office, commercial kitchen, bathrooms and wash bays. Locally-sourced plants have been established outside of the tour base, including the Drooping Sheoak (Allocasuarina verticillata), which is a vital food source for the endangered Glossy Black-Cockatoo. Since planting this species, the cockatoos feed regularly in front of the office.

The planting of sheoaks by the Exceptional Kangaroo Island team, community volunteers and conservation partners such as KI Land for Wildlife and BioR has been critical given that 54% of sheoak feeding habitat was lost in the 2019/2020 summer bushfires. Much of this habitat will grow back from seed over 15-20 years, however, the continued commitment is required to ensure this beautiful cockatoo continues to increase in numbers.









Water Quality Monitoring at Big Swamp

Australian Coastal Safaris guide, Peter Clutterbuck, is actively involved with local environment groups including the Big Swamp Community Centre, to monitor the water quality of Big Swamp on the Lower Eyre Peninsula. As part of this role, ongoing water samples are collected to provide vital information about the ecology and other environmental factors impacting these wetlands.

In addition to this, environmentally-friendly options are being studied to determine the most effective mechanism to suffocate couch grass, to allow revegetation of native flora. Peter has written articles and conducted interviews to educate the wider community about the plight of the last remaining freshwater swamp on the Lower Eyre Peninsula. On private departures, guests are able to learn more about the environmental activities performed by Peter and assist in citizen science recording of species in the area.



Using Desalination where the Outback meets the Reef

All of the vessels operated by Exmouth Dive & Whalesharks Ningaloo utilise desalination systems that convert seawater into freshwater. This is required for numerous functions, from drinking water and food preparation, to deck and exterior washdowns. It is estimated that around 300 litres of fresh water is saved per day utilising this technology, adding up to 60,000 litres per year.

Minimising Water Usage on Maria Island

The Maria Island Walk's safari-style wilderness camps are located in off-grid remote locations, designed to have a small environmental footprint with low-water bush showers, clean composting toilets and utilising rainwater harvesting systems. Through these processes, guests utilise an average of eight litres of water per night, with all water treated on site.









Affordable & Clean Energy

Members of Australian Wildlife Journeys acknowledge that a climate emergency exists and that global net carbon dioxide emissions must drop by 45% between 2010 and 2030, and reach net zero around 2050. Sadly, guides are reporting on a daily basis that global warming is causing long-lasting changes to the majority of ecosystems across Australia, with irreversible consequences sure to occur if we do not act collaboratively.

Over half of Australian Wildlife Journeys' members are 100% dependent on solar energy to power administration offices, with The Maria Island Walk and Lords Kakadu & Arnhemland Safaris operating permanent camps almost entirely energy neutral, with solar panels powering lighting, fridges and fans.

Several vessels across the collective are also taking advantage of solar technology, including Murray River Trails, who launched the new 'High River' vessel in 2022. Measuring 24 metres long, 8.5 metres wide, the vessel is fixed with 52 solar panels generating an impressive 20 kilowatts, with no need for diesel motors as found on standard commercial houseboats.

Exmouth Dive & Whalesharks Ningaloo use solar panels on the roof of vessels to help charge batteries. Inverters are used to run the desalination facilities off the main engine whilst the vessels are under way, to save using generator set. FNQ Nature Tours have a preferred arrangement

with Solar Whisper for their Daintree River Cruises, which uses solar panels on the boat's roof to provide the overwhelming majority of energy used, and an experience with no exhaust, fume or wake.

Exceptional Kangaroo Island and Australian Coastal Safaris now offer guided electric bike wildlife experiences, as an alternative to the traditional 4WD touring options. In addition to offering a more sustainable way of getting around, these experiences offer increased opportunities for guests to immerse themselves in nature, fresh air and movement.

Australian Wildlife Journeys is in the process of setting science-based targets, implementing mechanisms to enable the calculation of carbon emissions across all organisation types and decreasing emissions through technological advancements in hybrid and hydrogen technologies.









Sustainable Cities & Communities

Being aligned with the responsible travel movement, Australian Wildlife Journeys believes that it is essential that tourism should benefit local communities economically, socially and environmentally. Regional tourism has an extremely important role in creating meaningful employment and arresting regional population declines and subsequent pressure on Australia's metropolitan centres. All members of Australian Wildlife Journeys are based in what is considered regional or rural Australia, with the large majority family-owned businesses.

Embracing the Halo Effect in Regional Australia

Across the Australian Wildlife Journeys collective, there are over 300 regional businesses that are supported via the tour operations of our members. Local communities and personalities are the foundation of our incredible experiences, with our diverse itineraries linking guests from around the world with local food and beverage providers, accommodations, transfer operators, artists and craftspeople, boutique suppliers, small-scale wildlife experiences, and environmental organisations.

Showcasing local vendors wherever possible supports regional Australia and provides our guests with a sense of place and community during the trip. More directly, our guides are almost entirely regionally based, resulting in support for their families and increasing economic resilience across regional areas.

However, the core mission for the collective is to reverse Australia's biodiversity loss through advocating the critical role that responsible tourism experiences play in protecting wildlife habitats. With a greater number of tourists venturing out to see wildlife in the wild, a greater recognition of the economic value of our ecosystems ensues. This increases the chance of future protection and decreases the appeal of pressures from industries such as mining, forestry and urban development.









Supporting the Communities of Arnhem Land

Lords Kakadu & Arnhemland Safaris has spent decades working closely with local Aboriginal clans and share a mutual respect with the local indigenous people and their relationship with the land. Owner, Sab Lord, was raised on a station that is now part of World Heritage-listed Kakadu National Park, with his father employing Aboriginal families who taught him their indigenous language and involved him in traditional ceremonies. His ongoing relationships and understanding of their culture has earned him the rare permission to share culturally significant sites and stories.

On itineraries featuring Arnhem Land, guests visit Injalak Hill, to experience the traditional culture of the Kunwinjku people hosted by an Aboriginal guide employed by the organisation. This area is documented as having some of the best rock art examples in Australia. Upon arrival at Gunbalanya, guests visit the Injalak Arts and Crafts Centre to see artists producing their works, whether that be fabric, weaving or painting. Injalak Arts is a nonprofit Aboriginal-owned social enterprise whose members are the artists and community. Injalak artists produce traditional art inspired by ancient Dreamtime stories. Nearby rock art galleries demonstrate an unbroken link between the present generation of Kunwinjku people and their ancestors.











Responsible Consumption & Production

Australian Wildlife Journeys supports the need to urgently reduce every individual's ecological footprint by changing the production and consumption of goods and resources by abiding by the mantra of Reduce, Recycle, Reuse. Across the collective, single plastics have either been phased out or are close to being phased out completely, with the following best practices in place:

- Usage of cutlery, crockery and food containers made up of enamel, metal or hard recyclable plastic, with all these items washed and re-used. When hard plastic items wear out, the majority of members are now replacing with plant-based biodegradable alternatives, metal, sustainable timber, recycled paper or cardboard, fabric or wicker.
- Packing of food items into re-usable, washable canvas bags, stay-fresh green bags or cardboard boxes with
 preference to suppliers committed to reduced plastic packaging and sharing the same values to using minimal
 single use packaging.
- Requesting guests to bring re-usable drink bottles and re-fill from filtered water sources or taps.
- Collection of recyclable materials such as paper, cardboard, aluminium and glass delivered to local depots.
- A commitment to minimising food waste and constant refinement of the quantity and type of food served to
 guests to reduce food mileage. Several members compost food scraps into local gardens or areas to enhance
 the fertility of soils to support native plants including Echidna Walkabout Nature Tours, Murray River Trails,
 Exceptional Kangaroo Island, Australian Coastal Safaris and Indian Ocean Experiences.

Rubbish Minimisation on Maria Island

The team behind The Maria Island Walk pride themselves on generating less than one bag of rubbish throughout the four-day experience, which accommodates up to 12 people. Their on-site robust waste management system includes cleaning and sorting recyclable materials, and ensuring all organic waste is composted. Keep Cups and reusable water bottles are given to guests to avoid single-use items.

Eradicating Single Use Plastics with Containers for Change

On board the Alison-Maree vessel, guests will not find any single use plastics. In 2018, Naturaliste Charters committed to being plastic free, replacing disposable coffee cups and lids with bio-cups which are compostable and manufactured sustainably, and replacing plastic bottles with a hydration system to serve fresh, filtered and chilled water. Any cans that the organisation sells or other recyclable items are dropped to Containers for Change, who cash in 10 cents per item, which is donated directly to local environmental organisations and charities.

Reuse, Refuse and Rethink Campaign

Pacific Whale Foundation's RETHINK campaign champions alternatives to everyday single-use plastics in an effort to save marine life. Plastic never truly biodegrades, breaking up into smaller pieces that remain in our environment. As plastic breaks into tiny pieces, it's ingested by marine organisms and permeates the food chain. Plastic polymers include noxious chemical additives and contaminants, with evidence that toxins disrupt endocrine systems, even at low concentrations for marine life.

It has been estimated that up to 1 billion marine animals die each year from plastic pollution. Pacific Whale Foundation run a Plastic Pollution Solutions program for schools, beach cleanups, marine debris and prevention research and have produced a series of factsheets and tips for download, to Reduce and Rethink single plastics usage.





CHALLENGE

Plastic never truly biodegrades; instead it photodegrades, or breaks up into smaller pleces, never leaving our environment.

Pacific Whale Foundation research shows 70-90% OF ALL DEBRIS found on and around Maul IS PLASTIC.

8 MILLION TONS of plastic waste ends up in the ocean every year; that's like dumping ONE GARBAGE TRUCK FULL OF PLASTIC into the ocean every minute.

MICROPLASTICS were discovered inside amphipods (the deepest dwelling marine organisms known to humans), indicating that there is NO ECOSYSTEM left on Earth UNTOUCHED BY PLASTIC POLLUTION.



IMPACTS

Marine animals ingest or become entangled in plastic debris.

Plastic has been found in 100% of sea turtle species, MORE THAN 60% of all seabirds and 56% of cetaceans (whales, dolphins and porpoises).

Due to their feeding techniques, humpback whales ingest microplastic which release TOXIC SUBSTANCES.

Plastic pollution negatively impacts OVER 800 MARINE SPECES and is responsible for the loss of an estimated 1 BILLION MARINE ANIMALS EACH YEAR.



YOU CAN HELP!

Single-use plastics are the biggest contributor to this challenge, as they are thrown away after only one use.

Switch to ALTERNATIVES like BAMBOO toothbrushes, REUSABLE water bottle or PAPER sandwich bags.

SUPPORT LEGISLATION. Follow proposed measures regarding plastic waste in your state or county and SUBHIT TESTIMONY.

SPREAD THE WORD! Tell friends and business owners about what you've learned

#REUSEREFUSERETHINK









Partnerships for the Goals

Partnerships between both public and private enterprises are integral to achieving sustainability goals before 2030. In addition to the partnership between Australian Wildlife Journeys' members, there are over 50 environmental and community organisations that members have ongoing relationships with.

There are several members that are regular speakers at tourism or environment-related conferences, including Echidna Walkabout Nature Tours (Janine Duffy & Roger Smith), Exceptional Kangaroo Island (Craig Wickham), Murray River Trails (Tony Sharley), Naturaliste Charters (Pia Markovic), Pacific Whale Foundation Eco-Adventures Australia (Andrew Ellis & research team) and The Maria Island Walk (Charlie Carlow).

Member	Partners Supporting Sustainability Goals
Australian Coastal Safaris	Friends of Southern Eyre Peninsula Parks, Eyre Peninsula Landscapes Board, Birds of Eyre Peninsula
Echidna Walkabout Nature Tours	Koala Clancy Foundation*, Responsible Travel, Future of Tourism, Tourism Declares a Climate Emergency, Parks Victoria, Wathaurong Aboriginal Co-operative, Conservation Travel Australia
Exmouth Dive & Whalesharks Ningaloo	Mission Deep Blue, Longitude 181 Nature, Project Manta*, Wildbook for Whale Sharks*, Centre for Whale Research Western Australia*, Australian Parks & Wildlife Marine Research, Department of Biodiversity, Conservation & Attractions
Exceptional Kangaroo Island	Ecotourism Australia – Advanced Certification, Global Sustainable Tourism Council, BioR*, Pelican Lagoon Research Station, KI Land for Wildlife*, National Parks & Wildlife South Australia, Birdlife Australia
FNQ Nature Tours	FNQ Wildlife & Rescue, Bush Heritage, Forever Wild*, Australian Quoll Conservancy*, Tolga Bat Hospital*, Tree Roo Rescue*, Wildlife & Raptor Care Queensland*
Indian Ocean Experiences	Christmas Island National Park, Tangaroa Blue, Clean Up Australia
Lords Kakadu & Arnhemland Safaris	Ecotourism Australia, Global Sustainable Tourism Council, Parks Australia, Injalak Arts Centre*, Sea Shepherd
Murray River Trails	Murray River Trails Fund**, Ecotourism Australia – Advanced Certification, Great Walks of Australia, Rotary Club Australia, Murray-Darling Basin Authority, Australian Landscape Trust/Austland Management, Landscape South Australia - Murraylands and Riverland
Naturaliste Charters	Project O.R.C.A.*, Murdoch University, Geographe Marine Research*, Western Whale Research*, Centre for Marine Science and Technology Curtin University, Ecotourism Australia, Department of Biodiversity, Conservation & Attractions, Birdlife Australia.
Pacific Whale Foundation Eco-Adventures Australia	Pacific Whale Foundation**, Ecotourism Australia – Advanced Certification, Global Sustainable Tourism Council, Tangaroa Blue
Premier Travel Tasmania	Tasmania Parks & Wildlife Service, Friends of Bonorong*, Wombat Rescue Tasmania, Devils & Cradle*, Orangebellied Parrot Recovery Program*
The Maria Island Walk	Tasmania Parks & Wildlife Service, Birdlife Australia, Ecotourism Australia – Advanced, Tasmanian Land Conservancy, Great Walks of Australia, Great Walks of Tasmania

^{**} Denotes environmental charity formed by Australian Wildlife Journeys' member, with opportunity for guests and travel industry to donate directly.

* Denotes environmental charity or not-for-profit supported financially via special touring experiences provided by Australian Wildlife Journeys' members, with

donations possible via linkage with third-party.







Acknowledgement of Country

We acknowledge the Traditional Aboriginal and Torres Strait Islander Owners of the land, sea and waters of the Australian continent, and recognise their custodianship of culture and Country for over 60,000 years.



Sustainability Stories





BY: TATYANA LEONOV









When Australian Coastal Safaris' guests are out on the road, they are usually seeing an abundance of wildlife, so founder David Doudle approached the Eyre Peninsula Landscape Board in 2019 and suggested that both guests and guides could help out with the cataloguing.

"It's not physically possible for the Landscape Board to be out all the time to view and count animal numbers, so this is a fantastic way to grow community involvement," David explains. The local Citizen Science initiative has seen a number of programs come to fruition, that have involved Rosenberg's Goannas, echidnas, Koalas and several rare bird species.

"The Koala tracking has been the biggest project so far, and through tracing and monitoring we have found Koalas 60 kilometres away from their original location," David says. "Originally there were just two pairs of Koalas introduced to a private property in 1969, and now the area we explore on this property is full of Koalas."

David encourages guests to photograph native animals while out and about. "The project scope includes identifying certain species, taking a picture, and then recording the sighting onto an online website and map. "We can certainly assist with that," he says. "And our guides are a wealth of knowledge, so they talk about the animals and their habitat."

Kids, too, are often very interested in participating, although David jokes that half the time they're keeping their eyes out for animal scat as much as they are the animals. "Kids seem to enjoy finding and identifying droppings," he laughs. "So we talk about that, too.

"The project scope includes identifying certain species, taking a picture, and then recording the sighting onto an online website and map."

"Wombats, kangaroos, koalas, emus... they all have different scat. Wombat scat is often shaped like a cube; kangaroo scat is large and pellet-like; koalas produce elongated scat... and emus, well theirs is just a long mess."

Photographing Birds of the Eyre Peninsula with Fran Solly

Port Lincoln & Coffin Bay Photography Workshop
3 DAYS / 2 NIGHTS (SHARED/PRIVATE)

Southern Eyre Peninsula Birdwatching 3 DAYS / 2 NIGHTS (SHARED/PRIVATE)



CONSERVATION IN ACTION

 Contribute to the iconic birds of Eyre Peninsula citizen science programs run by the Eyre Peninsula Landscapes Board including Osprey, Bush Stone-curlew and Australian Bustard









A group of keen birdwatchers recently named a bird after Fran Solly. The award-winning photographer – who escorts Australian Coastal Safaris' guests on photography tours – explains that the Western Osprey chick was tagged in November 2020 as part of the South Australian Government's Osprey and White-bellied Sea-Eagle Recovery Program. The Port Lincoln Osprey team decided to name the bird Solly because of Fran's longstanding interest in local birds.

"This was the first time in Australia we have been involved in putting a satellite tracker on an Osprey chick," Fran says. "The data we have since collected has been astounding. We expected the bird to fly 20 to 40 kilometres after leaving its nest. It flew 400 kilometres within its first week."

Fran has been watching birds for over 35 years and shares the many observations

in April and leave again in October, as well as the resident Eyre Peninsula birds like the Hooded Plover and many more of the 270 species recorded in the area.

Photographing the birds adds another element that Fran is passionate about. "I started keeping lists of birds I saw about 35 years ago, and the more I saw, the more I trained my eye," she says. "Then, about 12 years ago, I began photographing birds, basically teaching myself as I went along. It's great to be able to share my knowledge with other bird enthusiasts."

Fran encourages guests to become involved in bird spotting, noting their behaviours, and of course photographing the birds. "If we see a bird that is of particular interest, I report that through to the local national parks team and I encourage guests to help me with the reporting," she says. "I talk about

"If we see a bird that is of particular interest, I report that through to the local national parks team and I encourage guests to help me with the reporting."

and interesting facts she has gained in that time with participants of any Australian Coastal Safaris photography tour she leads. She educates guests about local birds, such as the migratory Red-necked Stints, Ruddy Turnstones and others that arrive in the area

photographing birds, and of course I enjoy getting hands-on with guests who bring their own cameras along."









When looking for a rural holding more than 30 years ago, Peter Clutterbuck, a long-standing guide with Australian Coastal Safaris, stumbled upon a property on the eastern tributary of the Big Swamp. "I wanted to get out of town and buy a few acres to pursue a more rounded lifestyle," he says. "And for the kids to know what it's like to look after horses, sheep, chooks and ducks."

Peter and his family immediately fell in love with their new home, and Peter quickly realised that it was his duty to take care of the area. "We have three main ponds that flow into each other and then into Uley Basin, which is where Port Lincoln gets its water from," he explains.

"The Big Swamp wetlands area is important because of the birdlife it attracts and the various plants that grow here, and together with our community I am able to access grants that can help with upkeep. One of the first things we did in 1998 with our initial grant was to obtain an environmental audit, and we are using our most recent grant to monitor the water quality."

Peter is keen to educate Australian Coastal Safaris' guests about what is involved in the conservation process. He does this through talking about the work he does, and demonstrating where possible. "We want guests to walk away with a deeper understanding of the intricacies of the wetland system," Peter explains.

A tour of the wetlands also entails wildlife spotting, and Peter says that guests rarely ever want to leave the private bird hide he takes them to. "We built a little island and a huge number of birds nest and rest here.

We see ducks, swans, stints, waders, plovers, geese, wrens, falcons, eagles and harriers... to name just some of the species," Peter says.

"We want guests to walk away with a deeper understanding of the intricacies of the wetland system."

"We've had bird experts from all over the world visit."

To top the experience off, Peter invites guests to his own boutique vineyard for a tasting, which sits on the eastern tributary of the wetland. "I have about four acres of vines and produce about 4.5 tonnes of grapes per year," Peter says. "My winery is called Coomunga Wines, which is an Indigenous name meaning wetland. This area was previously inhabited by the Barngarla people, and if guests are interested, we can explore that cultural link, too."



Exploring the Lower Eyre Peninsula on e-mountain bikes with David Doudle

RELATED EXPERIENCE:

Guided Coast & Nature E-Bike Adventure FULL DAY (SHARED / PRIVATE)







Bicycle tourism is fast gaining popularity, as being in the saddle is a great way to see the sights. For David Doudle, founder of Australian Coastal Safaris, launching electric mountain bicycle tours in December 2020 was a logical next step for the business.

"It's an affordable option for adventurous travellers," David says.

"And it is a great way to explore the sights, whether that be at your own pace or with one of our knowledgeable guides."

Guests can book a variety of options to suit their needs, spanning everything from self-hiring the e-mountain bikes for personal use, to booking one of the Lincoln National Park tours or heading further up the west coast to explore various private properties. "It's a great add-on to the already available portfolio of activities we have here," David explains.

"There are people who may not want to go boating, shark cage diving or swimming with sea lions, and one of our e-mountain bike tours could suit their needs. Or perhaps they've already toured extensively and just want to rent a bike and explore on their own."

Being a passionate biker himself, David ensured that the bikes being made available to the public were of a high quality. "Our bikes are German-manufactured Cube Reaction Hybrid Pro 500 Electric Mountain Bikes, and they're multi-use and designed to work well both on paved roads and on rough terrain," David explains. "The idea

is that guests can rent them to get around when visiting the various wineries and eateries we have here, or they can use them for serious off-road exploring on our tours."

The e-mountain bike tours Australian Coastal Safaris offer are varied, with highlights including cycling along the stunning coastline and beaches, soaking up the diverse landscape, and spotting wildlife at almost every turn. "We see kangaroos, emus, goannas, and many species of birds including the rare White-bellied Sea-Eagle and Bush Stone-curlew," David says.

"Biking is not only a sustainable way of getting around, it also offers ample opportunity to immerse oneself in nature, fresh air and movement."

He goes on to explain that biking is not only a sustainable way of getting around, it also offers ample opportunity to immerse oneself in nature, fresh air and movement. "My favourite part of the day is seeing the satisfaction on people's faces after having a ride on these bikes for the first time," David says.





BY: TATYANA LEONOV

Koala Recovery Experience with Janine Duffy

RELATED EXPERIENCE:

Koala Recovery Experience



CONSERVATION IN ACTION

- Participate in planting targeted Koala trees in places where Koalas need them most
- Includes financial contribution to Koala Clancy Foundation









This year, the Echidna Walkabout Nature Tours team, together with hundreds of volunteers, is aiming to plant 50,000 trees across the Melbourne and East Gippsland region... and 2022 is set to be even bigger.

"Our tree total is going up every year and managing the work is a huge job," Janine Duffy, founder of Echidna Walkabout Nature Tours along with Roger Smith, explains. "We need to plant at least 30,000 trees every year to reach our target of 300,000 by 2030. We need that many trees to support the population of Koalas."

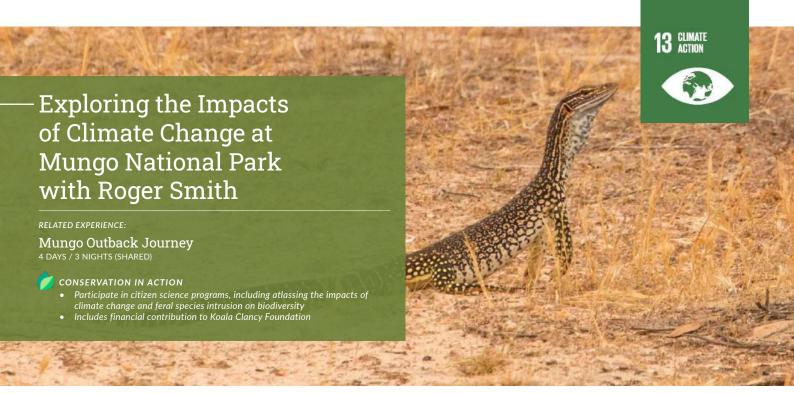
"The most important factor affecting Koalas is their loss of habitat due to climate change," she explains. "They need it back along the riverbanks and estuary lines, because the moisture content of the leaves they eat is really important for them."

Janine explains that climate change is making conditions too hot and dry for Koalas. "The increased carbon dioxide in the atmosphere is reducing the nutritional content of eucalyptus leaves," she says. The Koala Recovery Experience is designed for those who want to contribute with tree planting, which only takes place during a short period of the year because of soil moisture levels.

"July is the optimum time for tree planting around the Melbourne region, while May and September are the best times for the East Gippsland region," Janine says. "People can join tours in both locations, and we're especially keen for the extra assistance on week days."

"We need to plant at least 30,000 trees every year to reach our target of 300,000 by 2030."

Although Red River Gums are favoured by koalas for consumption, they eat a variety of eucalyptus leaves, including Yellow Gum and Grey Box varieties. "It's a myth they only eat one type of tree leaf," Janine explains. "We plant a variety of tree species, which is vital for long-term ecosystem health – and the health of our Koalas."









When you ask Roger Smith, co-founder of Echidna Walkabout Nature Tours along with Janine Duffy, about climate change at Mungo National Park, he cites an example. "To help people understand the impacts of climate change in a certain area, I usually profile a creature," he says. "I've been visiting Mungo for over five decades and have noticed the number of emus over the last few years has declined."

Mungo National Park was recognised and included in the Willandra Lakes World Heritage Region in 1981 for its record of Aboriginal settlement (experts hypothesise that the park is home to the oldest culture on earth after the discovery of Mungo Lady and Mungo Man), its strong representation of Australian megafauna, and its important geological attributes.

The park – which spans 111,000 hectares – is also famous for its diverse bird life. "Many serious birdwatchers come here to see the 150 or so species of birds we have here," Roger says. "The Pink Cockatoo, Chestnutcrowned Babbler and a staggering diversity of parrots are all highlights."

Emus, are one of the more popular birds to spot, however, in April 2021 Roger saw only

eight emus over three days. "A few years ago, at the same time of the year, I'd usually see hundreds," he says. "One of the most important things we do when we assess the impacts of climate change is to monitor the health of the environment, and one of the best ways to do this is to track and record the number of creatures we see."

Although the majority of the emus seemed to have moved on to 'greener pastures' for now, Roger is confident that they will return (probably in reduced numbers), explaining that animals naturally move between areas to survive different booms and busts. "Australian wildlife is capable of dealing with dramatic changes in the environment," he explains.

In the meantime, spotting an emu feels just that little bit more special when in Mungo, and Roger says that by coming along on the Mungo Outback Journey, guests are already partaking in important conservational work.

"By walking around, looking for seeds, looking for wildlife, and logging the species that we see, guests are already doing a great deal," he says. "However, for Mungo to lose so many of its emus is extraordinary, and a warning that even Australia's toughest bird is having problems with climate change."

"We assess the impacts of climate change to monitor the health of the environment, and one of the best ways to do this is to track and record the number of creatures we see."



Janine Duffy, founder of Echidna Walkabout Nature Tours along with Roger Smith, knows a thing or two about Southern Emu-wrens... but then she knows a thing of two about hundreds of wildlife species. "If it's native and it's wildlife, I love it," she says. "I joke that my favourite animal is the one right in front of me."

Southern Emu-wrens, however, do hold a special place in Janine's heart because she – alongside a team of 40 others – found 18 of them in Mallacoota when it was previously

The notion of seeing a threatened species and recording the sightings sounds relatively straightforward, yet the repercussions can be profound. "Often scientists don't have enough time to visit each region regularly, so when ordinary people take a photograph and record the data it's a huge help all round," Janine explains. "There are a number of fantastic online platforms where people can submit sightings too."

On any given tour, the Echidna Walkabout Nature Tours team log relevant wildlife







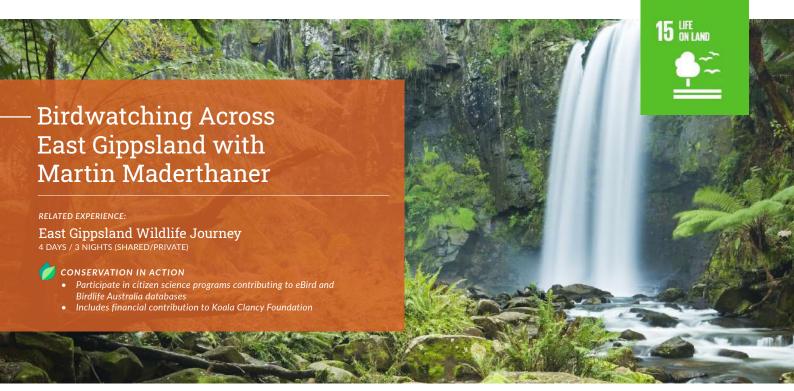
"The findings and recordings can influence policy and strategy when it comes to conservation work."

thought that the bushfires of 2019/2020 eradicated them all.

"So much of the habitat was burnt during the fires, and because Southern Emu-wrens are really small birds and can't fly very far, it was assumed that they were completely gone from the entire region," Janine says.

"While we were there with the Mallacoota Birders Big Weekend in March 2021, we found and recorded sightings of 18 Southern Emu-wrens. Scientists now predict that there is enough of a population in the region to enable the species to bounce back."

sightings, and guests keen to participate are encouraged to join in. "We focus on logging bird species data, in particular, when in East Gippsland on our Wildlife Journey, because the tour goes to an area that is right on the edge of a burn zone," Janine explains. "We log sightings on every tour and can share those details with guests who are interested, of course. The findings and recordings can influence policy and strategy when it comes to conservation work."









The spring and summer months are the favourite time of year for birdwatching in East Gippsland for Echidna Walkabout Nature Tours guide, Martin Maderthaner. "It's an active time for birds, and it's a very exciting time to be in the forest. The birds are all singing, and competing with each other for territory, for breeding purposes – so you get a lot of activity," he says.

"They are also nesting at this time and quite often we find nests and, with time and patience, we might see birds sitting on the eggs or even bringing food to the nestlings." For guests exploring the region, the diversity of bird species is another highlight, with close to 340 species recorded in the area.

"East Gippsland is considered to be one of the more biodiverse regions of Australia, because you get a little bit of the east coast summer rainfall as well as the west's winter rainfall. It's the meeting of two systems," Martin explains. "There are dry eucalyptus forests, wet eucalyptus forests, temperate rainforests, coastal heathlands and riverine forests. That results in a big diversity of both bird, and plant life."

Although any bird sighting excites Martin (he's a keen eBird contributor and spends much of his free time birdwatching), he always gets a thrill when he comes face-to-face with a Black-faced Monarch. "It's a beautiful bird with a black face, grey-silver back, bright rufous belly and a lovely high-pitched whistle," he says.

"We also often see Gang-gang Cockatoos and guests like them because they're unassuming, with their soft voice and subtle colouring. We often hear their 'creaking door' calls before we see them. Sometimes, too, we see the Glossy-black Cockatoo and that's really special as they are listed as threatened in Victoria."

"The birds are all singing, and competing with each other for territory, for breeding purposes – so you get a lot of activity."

Wherever Echidna Walkabout Nature Tours guests go, the guides leading the adventures are taking notes and posting lists of the birds seen on eBird and Birdlife Australia. Martin explains that this simple action is a huge help in governing responses from conservational bodies.

"By knowing where certain birds – particularly vulnerable species – are doing well, or where they are absent, Birdlife Australia and other conservation groups can target their recovery programs and pressure the government to protect certain areas," he says.





When you ask long-standing Echidna
Walkabout Nature Tours guide, Martin
Maderthaner, to describe the hoot a Powerful
Owl makes, he doesn't hesitate. "It's a very
loud and deep hoot, a double hoot, really," he
explains. "It's a commanding sound and you
immediately know it's coming from a large
bird, a bird with a big presence."

Powerful Owls are very big birds, with an average adult owl measuring 50-60cm, weighing 1.5-2kg and having a wing span of up to 140cm. "It's Australia's largest owl, and it takes on all sorts of prey," Martin explains. "In East Gippsland we've seen Powerful Owls with captured young Koalas, Sugar Gliders, Ringtail Possums, Brushtail Possums, and as well as various diurnal (day active) birds, including Galahs and Magpies, caught while roosting."

Although Powerful Owls are mostly found in wet eucalyptus forests and rainforests in eastern parts of Australia, they are also regularly seen in bushland located close to cities, and even sometimes within city suburbs where possums are abundant and enough tree cover remains.

"At Echidna Walkabout Nature Tours, we offer a number of private day tours that we personalise to our guests' interests. We often see Powerful Owls in the eastern suburbs of Melbourne, as well as in the Dandenong Ranges, which are only a short drive away from the centre of the city," Martin explains. "On these day tours we also keep our eyes out for other wet forest birds, such as Lyrebirds, King Parrots, Rose Robins, Golden Whistlers and Whipbirds."

East Gippsland is another location where Powerful Owls are seen frequently, although due to the bushfires of 2019/2020, some of the forest areas Echidna Walkabout Nature Tours used to visit are not accessible at present.

Still, there are opportunities to see the birds in other areas of East Gippsland, and Martin is confident that, when forests affected by the fires regenerate and possum numbers increase, the Powerful Owls will return.

"On the four-day Wildlife Journey we stay in a homestead overlooking the Snowy River Valley at Orbost, and one of the highlights here is hearing the owls' deep hoots from the accommodation, or finding them in one of their daytime roosts," he says. "They just stare at you unflinchingly with their piercing golden eyes, and you realise you're in the presence of a formidable predator."





"They just stare at you unflinchingly with their piercing golden eyes, and you realise you're in the presence of a formidable predator."

SUSTAINABILITY STORIES WITH





Take a Bushwalk with World Expert Echidna Researcher Dr. Peggy Rismiller

RELATED EXPERIENCE:

Conservation Connection

3 DAYS/2 NIGHTS (PRIVATE)

CONSERVATION IN ACTION

- Participate in echidna research and citizen science programs
- Includes financial contribution to Pelican Lagoon Research Station









When you join world expert echidna researcher Dr Peggy Rismiller (OAM) for a bushwalk, it's no ordinary stroll. "I've been working with short-beaked echidnas since 1988, so I know a thing or two about them," she laughs. "But there is still so much I'd like to find out."

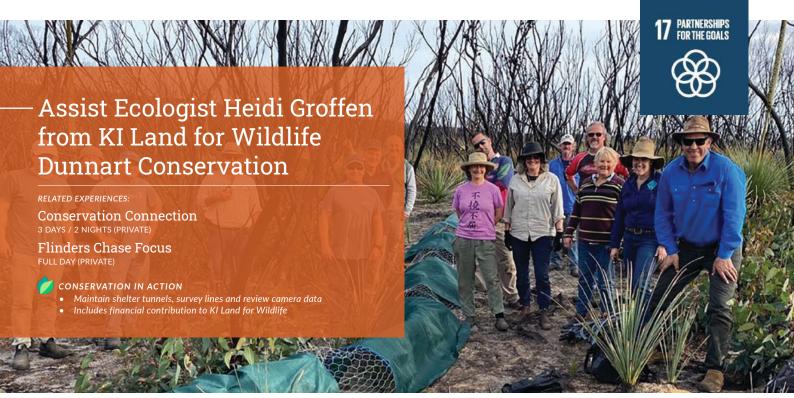
The egg-laying echidna represents the world's longest surviving mammals (their ancestors roamed the planet with the dinosaurs), yet there is still a lot to learn. "Back in 1834 Sir Richard Owen, founder of the British Museum, posted seven basic questions about their biology, and when I started my research work in 1988 only one of those seven questions had been answered," Peggy says, adding that although she has found answers to his other six questions, she has also come up with many more. "Echidnas are very solitary and elusive creatures," she says. "And it has taken years to unravel key facts about these mysterious animals."

When Exceptional Kangaroo Island guests tag along with Peggy, she chats about living and working in the wild with echidnas and shares many fascinating facts she has learnt over the years, spanning everything from their mating and breeding habits to their love of travelling great distances and their unexpectedly diverse diet.

"They are often on the move and are consequently very challenging to track," Peggy says. "The peninsula area at Pelican Lagoon Research Station where we work in is 15 km², and it took us 10 years to work out there are 40 to 45 resident individuals. You need patience when working with wild echidnas."

"I've been working with short-beaked echidnas since 1988, so I know a thing or two about them," she laughs. "But there is still so much I'd like to find out."

Peggy stresses, too, that a bushwalk with her doesn't necessarily equate to always seeing an echidna. "I take Exceptional Kangaroo Island guests to the habitat where you would normally find them," she says. "We often discover echidna digs – and these are distinctly different from goanna and kangaroo digs. We might find an echidna scat. And there are times we have one-on-one prime time with the elusive echidna."







The 2019/2020 bushfires had a devastating effect on Kangaroo Island and its wildlife, with just over 40% of the island burnt. As a result, a large number of animal and plant species were identified as priority species for recovery efforts, and programs were quickly implemented to support the recovery.

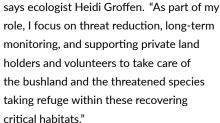
The Kangaroo Island dunnart - a grey mousesized, carnivorous marsupial - was one of the animal species devastatingly affected, with an estimated 90 percent of their habitat burnt. "They were already listed as Endangered

before the fires, so now more than ever they need support. We do this by reducing threats to their habitat and populations,"

cloth. "These were crucial in providing protection for small mammals and birds. There are 18 tunnels set across burnt landscapes to provide extra shelter for the Kangaroo Island dunnart and other priority species post fire," she says. "The 25m-long tunnels have been positioned between small unburnt vegetation patches to provide a corridor for wildlife to safely move through while the burnt areas are regenerating."

The cameras inside the tunnels capture real-time footage, and Heidi is happy to report that the dunnarts are using the shelter tunnels on a semi-regular basis to shelter and forage safely. "Exceptional Kangaroo Island

"Guests are taken into bushland survey sites, where we can show them the shelter tunnels and the wildlife cameras and they can view the footage captured to see some of the threatened species we are working hard to protect."



with dedicated volunteers from Exceptional Kangaroo Island, helped to build shelter tunnels out of chicken wire and shade

guests are taken into bushland survey sites, where we can show them the shelter tunnels and the wildlife cameras and they can view the footage captured to see some of the threatened species we are working hard to protect," she says. "Guests can also help the Kangaroo Island Land for Wildlife team check the 30m survey fence lines - which are made out of flywire - and download the camera data."

critical habitats." After the fires, Heidi and her team, along









It's hard to pinpoint the best part of the day of the Exceptional Kangaroo Island e-biking adventure, although the cycle along the meandering Cygnet River, with massive sugar and red gums shading the bike path, is one of Exceptional Kangaroo Island Managing Director Craig Wickham's highlights. "The riverside cycle is a great part of the day, but the open pasture rides are very pleasant too, as are the rides through the bushland terrain. We pass through habitat for kangaroos, Tammar Wallabies, a few species of possums, as well as Glossy Black-Cockatoos," he says.

"Nature is complex – it is dense, messy, colourful and diverse. By using solid science and planning based on soil type and topography, they have given nature a restorative boost."

The newly launched e-bike tour is something different for the island, with rides taking place on a piece of property within Cygnet Park accessible only to guests of Exceptional Kangaroo Island (and those involved in habitat restoration work).

The former pristine farmland dates back to 1819, and is special because there is nowhere else on the island that reflects what the

country looked like back then. "Kangaroo Island has huge swathes of conservation land, but the tall forest we explore here only ever covered about one percent of the island and none of this is included in the reserve system. It really is a special treat to explore," Craig says.

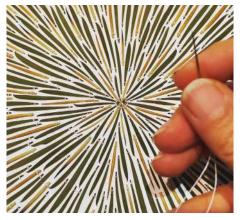
A group of passionate individuals wanted to leave a positive legacy by conserving this special habitat, and began a complex revegetation across the property in 2007. "They used 135 species of plants – including a variety of herbs, ground cover plants and mid-storey vegetation – to showcase that it was possible to do more than simply plant trees," Craig explains. "Nature is complex – it is dense, messy, colourful and diverse. By using solid science and planning based on soil type and topography, they have given nature a restorative boost."

The e-bikes used for the journey are top-of-the-range belt-drive style, with enough grunt to help with hills and challenging terrain, as well as sufficient resistance for guests to still be able to work up a sweat, if they so wish.

En route, there are plenty of stops to chat about bush conservation, spot wildlife, and enjoy the fine food and wine that Kangaroo Island is renowned for. An elaborate al fresco lunch is served under a canopy in the forest, and wine and gin tastings towards the end of the tour seal the deal.









Janine Mackintosh spent a great deal of time on Kangaroo Island throughout the years before finally deciding to call the paradise home in 2012. "My partner Richard and I purchased a large heritage bush property in 2000 and we both wanted to learn all we could about it," she says. "Richard is an entomologist, so he was busy studying the insects, while I added to the list of birds we observed and made a reference collection of the plants. My assemblage art evolved from that."

The move into assemblage art was a somewhat logical step, given Janine's background in design work and her personal interests. "My partner and I are both passionate about conservation," she says. "He pursues it through science, and I through art."

Janine's artworks are made from a breadth of materials, ranging from gum leaves patterned by insect bites to seashells and pumice. "I'm not just making pretty decorations," Janine explains. "Prior to moving to Kangaroo Island, I worked with clients as a designer. Now I consider the bush to be my client. I am speaking for the bush."

The message Janine wants to articulate to Exceptional Kangaroo Island guests is how incredibly complex the bush is. No object Janine gathers is simply a piece of material. "Every item I collect is a fragment of a story about something bigger," Janine says. "For

example, I might pick leaves that have been chewed by beetles to show how everything is interconnected."

"Prior to moving to Kangaroo Island, I worked with clients as a designer. Now I consider the bush to be my client. I am speaking for the bush."

Sometimes guests are keen to get hands-on with Janine, and in such cases, Janine will sit down and demonstrate how she might position patterns. At other times visitors may want to see and learn about her works. "I enjoy showing visitors my studio. To get here they pass through our precious swathe of bushland, which to me is ecological antiquity, where thousands of species have co-evolved for millennia," Janine says. "I like to explain the ideas, techniques and motivation behind my art practice and I hope that guests leave with a sense of awe and reverence for Kangaroo Island's wilderness, where so often the beauty is in its intricate details."





BY: TATYANA LEONOV

Writing the Wildbook for Whale Sharks with Heather Kay

RELATED EXPERIENCE:

Deluxe Whaleshark Swim

FULL DAY (SHARED / PRIVATE)



- Participate in Wildbook for Whale Sharks citizen science program to identify individual Whale Sharks
- Tour includes financial contribution to the Parks & Wildlife Service



Ningaloo Reef is one of the best places in the world to swim with Whale Sharks, with hundreds congregating in the world-renowned marine park from March to early August. "I'm very fortunate to work in an area that has one of the highest interaction rates with Whale Sharks in the world," says Exmouth Dive & Whalesharks Ningaloo spotter and snorkelling guide, Heather Kay. "We find them, we swim with them, and we photograph them for identification purposes."

Although some guests are happy to simply swim with the world's largest fish, others are keen to contribute to research efforts. "Our videographers are required to get a shot of each Whale Shark we swim with, and we also encourage all of our guests to participate. Everyone can submit their photos to Wildbook for Whale Sharks and learn about the exact shark they swam with," Heather explains. "The more data we gather, the more we learn about these gentle giants."

The Wildbook for Whale Sharks photo identification platform was introduced in 1994, and Heather explains that there are individual Whale Sharks who have visited Ningaloo Reef every year since. "Some even come back at the same time every year," she says. "Information like this

helps us to track the total number of Whale Sharks and grow our understanding of their behavioural patterns."

Whale Sharks, which can grow up to 12 metres long, are considered to be slow swimmers, so keeping up with them is relatively easy. Taking a photo of an individual, however, can be challenging.

"For identification purposes, we need photos taken behind the shark's left dorsal fin and also behind the gill slits, which is like the shark's fingerprint region," Heather explains. "Then those photos are compared to the photos of 1600 individual Whale Sharks that have been sighted in the area since 1994. Sometimes we get lucky and are able to recognise an individual shark in the water, especially if it has specific scarring or marks."

Guests who are interested in ongoing support can sign up to 'Adopt a Whale Shark', which includes a monthly donation to the cause. Heather explains: "The really cool thing about this is that every time the adopted shark is seen, an email with details about the shark's current size and its most recent location is sent to the sponsor."







Tracking Manta Rays with Amelia Armstrong

RELATED EXPERIENCE:

Behind the Scenes with Researchers: Manta Rays Private Charter

FULL DAY (PRIVATE)



- Participate in citizen science Project Manta program to identify individual Manta Rays
- Tour includes financial contribution to the Parks & Wildlife Service and in-kind contributions to Project Manta









Manta Rays have been around for millions of years, and their reliable aggregations are an important part of Western Australia's marine ecotourism offering. Yet, it was only discovered as recently as 2009 that there are two species of Manta Rays.

"To think that an entire species with a five-metre wingspan had gone unnoticed for so long goes to show just how much we have left to learn about our oceans," explains Project Manta researcher Amelia Armstrong. "Almost all of the information we have about reef Manta Rays globally has therefore been from the last 10 years. Our goal at Project Manta is to study and expand our knowledge on the population ecology and biology of Manta Rays within Australian waters."

Project Manta was founded in 2009 at Brisbane's University of Queensland, and in 2015 the multidisciplinary organisation joined forces with researchers at Murdoch University in Perth, which in turn facilitated an opportunity to expand Manta Ray studies from the east coast to the west of Australia.

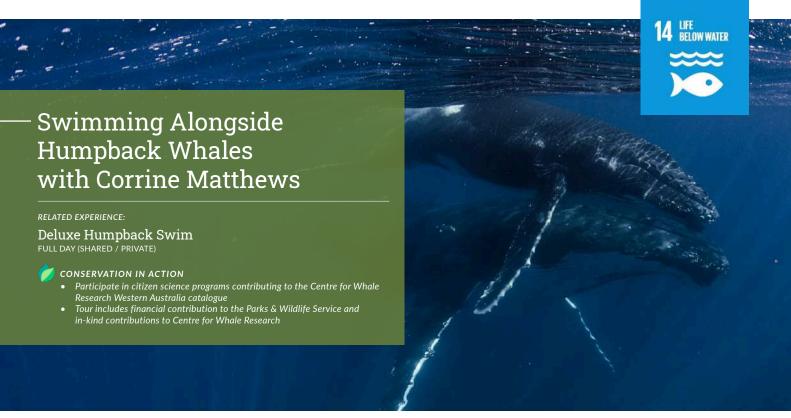
"I was born and grew up in Queensland, but when the opportunity came up to study Manta Rays in Exmouth, I jumped," Amelia says. "The work we are doing here on Ningaloo is very exciting and progressing really well. We study their movement, biology, what they eat and where they go. In Exmouth, Exmouth Dive &

Whalesharks Ningaloo have been paramount in supporting the studies and in sharing findings with their guests."

When opportunities arise, Amelia loves getting on board a charter boat with Exmouth Dive & Whalesharks Ningaloo to chat all things Manta Rays. "I could talk all day long about them," she laughs. "And I certainly do if guests are interested in hearing about these charismatic creatures."

"Our goal at Project Manta is to study and expand our knowledge on the population ecology and biology of Manta Rays within Australian waters."

She explains that the two hot spots in Western Australia for monitoring Manta Ray activity are in Exmouth and Coral Bay and that, thanks to the unique spot patterns on the belly of reef Manta Rays, combined with ongoing photo ID submissions from the public, Project Manta has been able to identify more than 1200 individuals that call Ningaloo home.





Marine scientists say that the Humpback Whale call is one of the most complex animal sounds there is. "It's a very beautiful and melancholy song and sounds a little like a door creaking or a violinist warming up," spotter and snorkelling guide, Corrine Matthews, says. "Some days when we snorkel on the outer reef of Ningaloo, we ask our guests to dive down and just listen. Sound travels underwater four times faster than above water."

Hearing a Humpback Whale call is a tantalising teaser to swimming alongside one. "The two experiences are vastly different, but they both offer an opportunity to get to know this special whale species a little better," Corrine says. "What I love about Humpback Whales is their focus on connection. They are rarely alone, and when we swim with them, I believe that you can also feel this connection."

Exmouth Dive & Whalesharks Ningaloo was one of the first operators in Western Australia to offer Humpback Whale swims, and with every Humpback Whale swim tour sold, a donation is made to the Centre for

Whale Research Western Australia and the Parks & Wildlife Service, with the option for guests to donate additional amounts.

The tours support ongoing Humpback Whale research and safety is paramount. "We have pilots in the air who have eyes on us; the guides swim with radios in their hands; the skipper has a radio; and the whole team is in continuous communication to ensure that everyone is happy and safe," Corrine explains.

Swimming with one Humpback is the goal, but since the whales often travel in twos, guests are sometimes able to swim with a mother and her calf, and even a male escort if they're very lucky. "The first time I swam with a Humpback Whale took my breath away and it felt like there was nothing else in the world except this giant of the ocean and me," Corrine recalls.

"I hear similar statements from guests after they experience their first swim, too. The adrenalin is high, but the minute you see a Humpback your body and mind just freeze in the moment."





"What I love about Humpback Whales is their focus on connection. They are rarely alone, and when we swim with them, I believe that you can also feel this connection."





BY: TATYANA LEONOV

Explore the Privately Owned Shared Earth Reserve with James Boettcher

RELATED EXPERIENCES:

Tablelands & Crater Lakes Exclusive FULL DAY (PRIVATE)

Nature, Wildlife and Conservation Safari 4 DAYS / 3 NIGHTS (SHARED/PRIVATE)



CONSERVATION IN ACTION

- Participate in citizen science programs to document vegetation and wildlife in the reserve
- the reserveIncludes financial contribution to Forever Wild









When the FNQ Nature Tours vehicle pulls up to the Forever Wild Shared Earth Reserve it's quickly evident that something special is about to occur. "We open this big locked gate and drive into this huge expanse of land with a wealth of ecosystems," FNQ Nature Tours owner and guide, James Boettcher, says. "It's an exclusive experience for our guests and often we don't see another soul while we are out exploring."

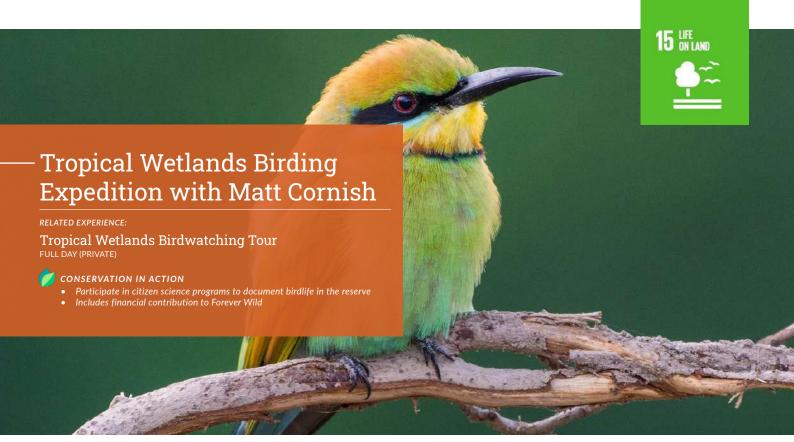
The Shared Earth Reserve is effectively an ecologically intact landscape that is used for multiple purposes, and tourism is a crucial constituent. "If you come to our reserve you will have the opportunity to learn about the ecology of the place, as well as the cultural heritage of the Muluridgi people, the traditional custodians of the land," CEO of Forever Wild – an organisation managing and protecting a number of wilderness reserves – Fiachra Kearney explains.

"And if you're there as a tourist the revenue you bring in is contributing to the management of the landscape. We're effectively a social and environmental enterprise." Sometimes guests might bump into Fiachra while out exploring, but a day here is all about nature and wildlife.

"We usually spend four to five hours exploring the Shared Earth Reserve and pass through eucalyptus forest, savanna and woodland," James says. "It's this habitat diversity that results in us seeing a huge variety of wildlife. The reserve is home to over 220 species of birds and a healthy population of Northern Quolls."

"We help the Forever Wild team with wildlife identification by documenting what we see, as it's a good way for all of us to monitor the health and wealth of these incredible ecosystems."

Guests are welcome to sit back and relax as they enjoy wildlife sightings, or if they want to become more involved, they can assist James with identifying individuals within a certain species. "We help the Forever Wild team with wildlife identification by documenting what we see, as it's a good way for all of us to monitor the health and wealth of these incredible ecosystems," James says.









The smallest of the 10 species of Bowerbirds in Australia – the Golden Bowerbird – builds the largest structures of all the Bowerbirds to attract their female counterparts. "We call the structures bowers," FNQ Nature Tours guide Matt Cornish explains. "The Golden Bowerbird formations are intricate assortments of sticks and plants and can rise over 1.6 metres in height."

Golden Bowerbirds are endemic to the Wet Tropics, so guests keen to see the bright yellow-gold treasures may be in luck. "We know where they reside, so we can take guests into the most suitable habitat in search for them," Matt explains. "But sightings depend on a number of factors, including the weather, season and whether or not it's breeding time."

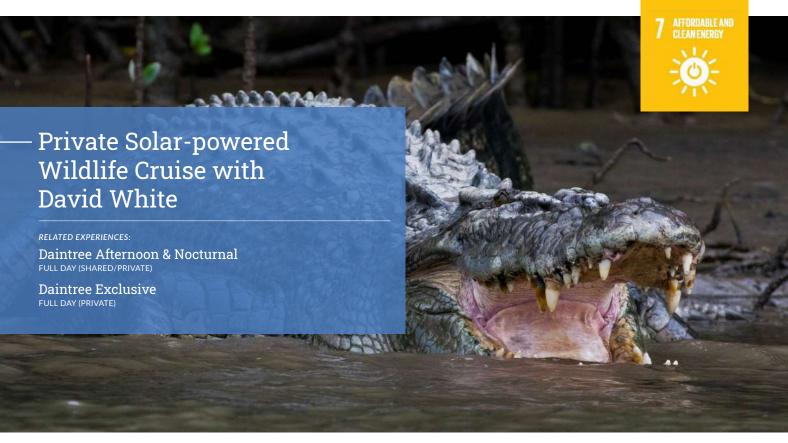
A huge array of birds can be found in the Tropical Wetlands throughout the whole year, with over 250 species recorded throughout. "We often see three species of Bowerbirds – the Toothbilled Bowerbird, Great Bowerbird and Golden Bowerbird; up to seven of the 10 Kingfisher species that exist in Australia; and all sorts of other birds including Red-kneed Dotterels, White-browed Crakes, Black Bitterns, Black-necked Storks, Brolgas, Sarus Cranes, and even

great birds of prey, such as White-bellied Sea Eagles," Matt explains. "It's incredible."

The full-day tour spans two key locations, with the first half of the day spent exploring the Forever Wild Shared Earth Reserve and the second half of the day focused on the high-altitude rainforest (that can be either the Atherton Tablelands or the Julatten area).

"A huge array of birds can be found in the Tropical Wetlands throughout the whole year, with over 250 species recorded throughout."

"The Shared Earth Reserve is a highlight on tour as the location is exclusive to FNQ Nature Tours guests, and also because of the huge diversity of microhabitats there," Matt says. "We visit dry savanna, wetlands, swamps, creeks, grass beds – and all these different habitats have their own bird species to appreciate and admire."









There's something magical about cruising along the Daintree River listening only to the sounds of only nature. "In 2002, after working on larger petrol driving boats, I started a business that allows people to get close to nature without the sounds of an engine and the smell of fumes," explains David White.

"I feel that a boat with no exhaust or fumes - and one that produces no wake or erosion - is something that people now appreciate... not to mention the inhabitants of the river. I now operate two boats - a 10-seater and a 24-seater – and both vessels are very efficient and mostly run on solar power," he savs.

Although David does charge the boats up using power each evening, he explains that plus. "When FNQ Nature Tours guests come on board it's only them, and we can cruise any time they want - sunrise, sunset, or even in the late evening," David says. "It's their expedition and tailored to their personal interests, although of course we have highlights I like to point out."

Crocodile spotting is one such highlight, and although the crocs are harder to find in summer, David says that they are always there... and his silent method of transportation does make it easier to spot them.

He stresses, too, that there's a whole spectrum of wildlife to be seen. "We look for crocodiles, sure, but we also keep our eyes open for tree snakes, pythons, birds

"A highlight is watching the fruit bats. On a hot day, they come and skim the water before heading out. Seeing thousands of flying mammals all around us is an amazing sight."

there's no impact on the river. The solar panels on the boat roofs provide a big chunk of the energy he uses, and he considers his business to be almost zero emission while on the river.

For FNQ Nature Tours guests cruising with David, the silence and serenity is not the only and flying foxes," he says. "A highlight is watching the fruit bats. On a hot day, they come and skim the water before heading out. Seeing thousands of flying mammals all around us is an amazing sight."





Researching Christmas Island's Endemic Birds with Mark Holdsworth

RELATED EXPERIENCE:

Bird & Nature Week Christmas Island 8 DAYS / 7 NIGHTS (SHARED)

Christmas Island Birdwatching



CONSERVATION IN ACTION

 Work alongside scientists banding birds, collecting data on various endemic species and participating in nightly presentations about restoring the ecology of the island.









According to Mark Holdsworth, Indian Ocean Experiences' bird expert, one of the best times to experience Christmas Island's birds is during Bird 'n' Nature Week. "May to November is our dry period here, and this year Bird 'n' Nature week falls between 30 August and 6 September," Mark says.

"The birds are about, and the time is optimal as it coincides when researchers, including me, visit the island. Guests can assist us with capturing, measuring and placing bands on the birds before we release them. It's a great opportunity for close encounters with some of the island's special birds."

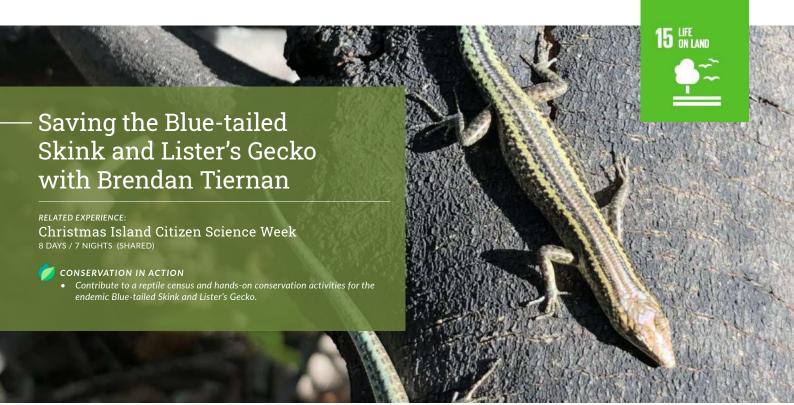
Although the island is home to only a handful of endemic birds, Mark explains that the bird-watching experience is unforgettable. "Christmas Island sits atop of an ancient volcanic seamount surrounded by a vast ocean. And, because there is no easy way to land on the island, the wildlife has either flown or washed up here over millennia," Mark explains. "We don't have many bird species on the island because of its location, but what we do have is unique."

Mark likens the Christmas Island nature experience to Galapagos, with ample opportunities for guests to get close to the birds. "There was no human occupation on the island until Europeans created

a settlement in 1888 to exploit phosphate, so the wildlife had not evolved to fear people. The birds are approachable, especially the critically endangered Christmas Island Goshawk, which I have spent many years studying," he says. "We are able to get within a metre of these birds, and this provides great opportunities for both research and bird-watching."

To seal the deal, Mark and the team ensure that guests are split into small groups during Bird 'n' Nature Week, with each group assigned their own researcher for the day. "The beauty of doing it this way is that we are able to work around the island and show guests all of the island's birds, including Goshawks, Abbott's, Brown and Redfooted Boobies, and White-tailed (including the unique golden form) and Red-tailed Tropicbirds." Mark says. "Each group has their own dynamics, and I can't think of any other bird-watching experience that offers such a personal and direct connection."

"Each group has their own dynamics, and I can't think of any other birdwatching experience that offers such a personal and direct connection."









Brendan Tiernan, the Christmas Island National Park Natural Resources Manager, has been living on Christmas Island for close to 15 years. "I moved here to work on the Yellow Crazy Ant program, and from there I was fortunate to move into the conservation of wild reptiles. Since 2009 we have been trying to prevent the extinction of the Blue-tailed Skink, Lister's Gecko and the Forest Skink," says Brendan. "Unfortunately, our efforts failed to capture enough Forest Skinks to establish a breeding population, but our efforts are ongoing for the Blue-tailed Skink and Lister's Gecko."

Brendan explains that between 2009 and 2010, the National Parks team recovered 66 Blue-tailed Skinks and 43 Lister's Geckos from the wild in a move to increase populations. "The reptiles on Christmas Island evolved without the presence of predators," explains Brendan. "And we suspect that the introduction of the Southeast Asian Wolf snake caused the population decline."

Guests visiting the island have historically been able to participate in research efforts through Citizen Science weeks organised by the National Park, the Christmas Island Tourism Association and Indian Ocean Experiences. Although Covid-19 put a halt to the various programs in place, the Indian Ocean Experiences team are hopeful that guests will soon again be able to contribute to the critically important work.

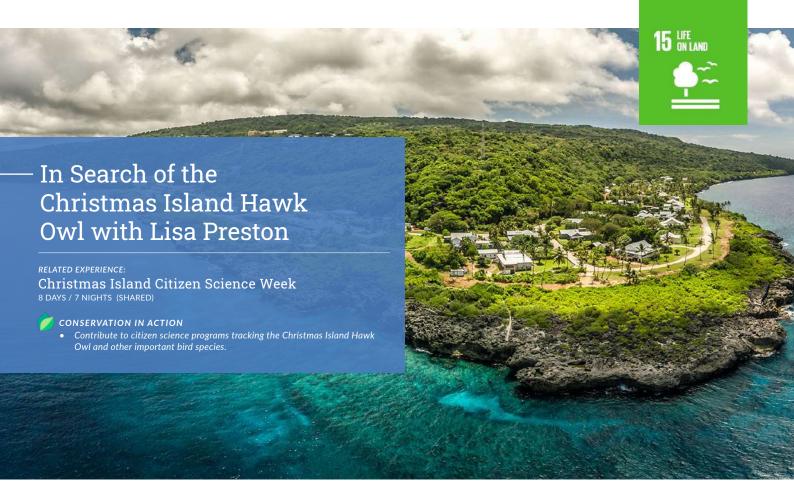
"In the past visitors had the opportunity to participate in our reptile

census in February and August. The hands-on program offered people the chance to interact with the animals while learning about the science," Brendan says. "And of course, we chat about the various programs we have in place, such as the Blue-tailed Skink and Lister's Gecko population revival."

"The hands-on program offered people the chance to interact with the animals while learning about the science."

To date, the Blue-tailed Skink and Lister's Gecko numbers are increasing. In 2016, the population outgrew the National Parks team ability to care for them in captivity, and soft releases into enclosures were introduced with short-term success. In 2019 and 2020, 600 Blue-tailed Skinks were translocated to two islands on the Cocos Keeling archipelago where no predators exist.

Lisa Preston, manager of Indian Ocean Experiences, suggests that those interested in seeing the released skinks book the High Tide Canoe Safari on Cocos Islands. "Guests can view the skinks there and participate in a population count," she says. "It's a really special experience."









Six forest birds and 11 seabird species call Christmas Island home, and although not all of the island birds are endemic, Lisa Preston, manager of Indian Ocean Experiences, explains that all the birds are unique. "Our forest birds are small-bodied birds compared to their counterparts in other parts of the world," she explains. "Scientists think that when there was less food available, the smaller birds survived to propagate."

One of the island's most elusive birds to spot is the Christmas Island Hawk Owl, and Lisa enjoys it when she is leading a group that is up to the challenge of spotting one. "It's rare to see a Christmas Island Hawk Owl during the day, so we plan our sightings for the evenings. We aim to be in the forest searching for the owl from dusk onwards."

The island's hawk-owl is one of Australia's rarest raptors, and Lisa says that there are only about 340 mature birds on the island according to the latest count.

Lisa appreciates that guests on a bird-watching tour are keen on spotting an owl or two, so if there are no sightings one evening, she takes them to another location the next night for no additional cost. "The owls tend to prefer dense rainforest, so we venture into some of the wilder parts of the island," she says. "They are tricky to spot. Not only are we limited to night tours, but they don't always respond to calls. For example, if it has recently rained they won't usually respond to our calls."

"The island's hawk-owl is one of Australia's rarest raptors, and Lisa says that there are only about 340 mature birds on the island."

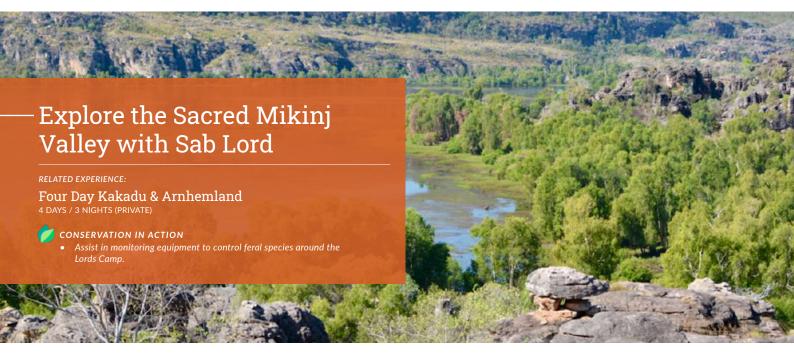
Seeing a Christmas Island Hawk Owl is a highlight on any night, but Lisa says it's especially exciting when guests witness the raptor swooping down to grab dinner. "They eat insects, reptiles and even the occasional small bird, and seeing them chasing their prey is an electrifying experience."

SUSTAINABILITY STORIES WITH





BY: TATYANA LEONOV









There's only one tour company that is permitted to enter and explore the Mikinj Valley, and that is Lords Kakadu & Arnhemland Safaris. "I've spent decades working closely with local Aboriginal clan groups, and we're fortunate that the members of the Nayingguls family are happy for me to show my guests this beautiful expanse of billabongs and escarpments," says Sab Lord, who founded and co-owns Lords Kakadu & Arnhemland Safaris with his wife, Ann-Maree Grant.

"I have known the Nayingguls family since the 1960s, and this strong connection to the land and its rich history is something that we are all able to share with safari guests."

The Mikinj Valley is a seldom visited area on Maniligarr country in Arnhemland, with vistas that feel like they belong in a movie. Some days the clouds drifting high in the sky look like puffy pillows... and if they were, they would provide a perfect vantage point to

take in the rivers and creeks, the boulders and grasslands – a colourful patchwork of bright blues, emerald greens and mellow yellows as far as the eyes can see.

"It's high country here, and the scenery is truly spectacular," Sab says. "The view from the top of the Hamish Dreaming – looking out across the floodplains and the Arnhemland escarpment – is simply breathtaking."

Sab explains that, although there is plenty to see and do in the area, visitor numbers are small and there are only a few individuals who know where the most interesting sights are. "The majority of people who come here want to see a couple of good waterfalls and experience the landscape," Sab explains.

"I know where to take them, and since the area is exclusive to us, it's really only myself and the local Aboriginal people who know where to go. It's our secret sanctuary."

"I have known the Nayingguls family since the 1960s, and this strong connection to the land and its rich history is something that we are all able to share with safari guests."









It's hard for Dean Hoath, longstanding guide at Lords Kakadu & Arnhemland Safaris, to name just one favourite bird. "I love all birds, but one of my favourite birdwatching experiences is when we stay at the Lords Kakadu & Arnhemland Safaris permanent bush camp in Kakadu National Park," he says.

"We have a family of about nine Blue-winged Kookaburras that hang out on the camp grounds; Black Cockatoos often come to visit; bright-blue Azure Kingfishers pop by; and watching the Great Bowerbirds attempt to dance is always a highlight. The Great Bowerbird dance is more like a hop with a broken leg, and the plume of purple he shoots out of its head when he finds a mate is interesting."

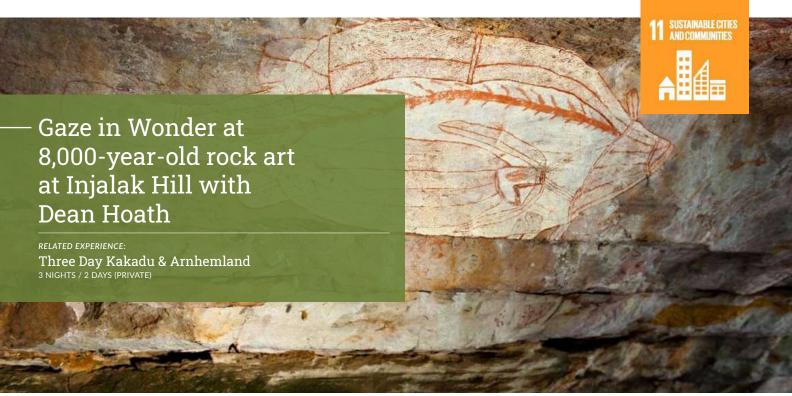
Dean could talk about birds all day... and he does when leading any tour where birds are the focus. "We travel through a big variety of ecosystems, so we are always exposed to different kinds of birds every day," he says. "We have over 280 species of birds in the region."

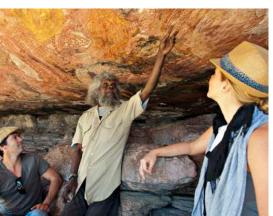
As the landscapes change, so too do the birdwatching experiences. At the camp, the bird encounters are on a smaller scale, whereas at Bamurru Plains witnessing birds en masse can take one's breath away.

"Some guests have never seen so many birds in one place and on such a scale. We're talking thousands and thousands of birds at the one time," Dean explains. "We see thousands of Whistling Ducks taking off and filling the sky like a cloud. Then we turn a corner and see the Magpie Geese, also in their thousands. The enormity and scale of it is awe-inspiring."

"Some guests have never seen so many birds in one place and on such a scale. We're talking thousands and thousands of birds at the one time."

Although Dean is privy to seeing birds on such a scale on a daily basis during the dry season, he is still humbled by the sight. "Fogg Dam is another location where we often see birds en masse, and it's a very interesting setting because it's a dam wall, with lush wetlands on one side and dry wetlands and grasslands on the other," Dean says. "Ducks and ibises abound in huge numbers in the wetlands, while Magpie Geese, spoonbills, brolgas and jabirus are easily spotted on the dry side."









When Dean Hoath, one of the lead guides with Lords Kakadu & Arnhemland Safaris, takes guests to admire rock art at Injalak Hill, he is always accompanied by an Aboriginal guide. "In the township of Gumbalanya, which we visit before we begin our walk, we pop into Injalak Arts to see artists producing their art, whether that be fabric, weaving or painting, after which a guide joins the group to travel to the hill."

The drive to the base of Injalak Hill only take 15 minutes, then the group begins the ascent to the rock art site. "We're away from the main tourist sites here," Dean explains. "Which makes it all the more special. Even the trail we use is barely visible."

When the group reaches the rock art site, Dean usually allocates some time for everyone to grasp the enormity of the art around. "We're looking at drawings that are thousands and thousands of years old, so that's older than any art hanging on the walls of galleries. Then physically the area where the rock art is found is big, too. The rock itself is about one kilometre long, and although we spend three to four hours walking around, we only see a small part of it," he says.

Both Dean and the Aboriginal guide accompanying the group talk about the various depictions they see, their discussions spanning everything from cultural significance and dreamtime stories to the types of ochres used. "Interestingly, there's a good number of food [animals] painted on this site, and a huge number of spiritual story representations," Dean says. "One of the important paintings here is of Eingana, the creation mother. The Galiwin'ku people believe that the first spirit was a woman who came walking out of the ocean, with a whole lot of dilly bags (traditional bags made from reeds or grasses) full of food which she scattered over the landscape. There's a very famous painting here depicting that."

"The rock itself is about one kilometre long, and although we spend three to four hours walking around, we only see a small part of it."

To seal the deal, lunch is served in one of the most incredible settings. "Our lunch stop is my favourite lunch stop ever," Dean says. "I set the picnic up in a rock shelter and we all dine together admiring vistas over the wetlands and rock art above our heads. There's nowhere else like it."





Championing Environmental Flows with Tony Sharley

RELATED EXPERIENCES:

Murray River Safari

Murray River Walk



- Participate in citizen science programs to document vegetation and wildlife in the region
- Provide a financial contribution towards the Murray River Trails Fund, supporting the region's biodiversity and river floodplain health









The Murray-Darling Basin spans an area of one million square kilometres, and for owner and founder of Murray River Trails, Tony Sharley, its protection is crucial. "Having a basin like this is significant," he explains. "It is one-seventh the size of Australia, or four times the size of New Zealand, and if we protect it and ensure we get the flow regimes right, we have a resource that will attract people from all over to see it."

Overbank flows (small floods that feed forests and fill shallow lakes) trigger the regeneration of phytoplankton and zooplankton, which in turn initiates the breeding cycle in insects, frogs, fish and water birds and recharges groundwater systems. "It's a natural and vitally important cycle," Tony explains.

"But since the introduction of water storage systems and the growth of the irrigation industry, the overbank flows have dramatically decreased." Tony and his guides discuss the concept of river health throughout all tours, engaging guests with fascinating stories that capture the importance of preserving the environment.

"Most of the people who book with us love to learn and crave a greater depth of understanding," Tony explains. "The challenge is to help people understand why balanced water sharing is the key to the future of the basin, and why more water must return to its environment."

Up until the 1920s, the rivers flowing in the Murray-Darling Basin were unregulated, so 90 percent of the water flowed out to sea covering floodplains and filling wetlands and creeks along the 2,500km plus journey. "This is an ephemeral river system that naturally flooded and dried almost every year, but today we have reversed the way the system works by keeping floodplains dry most of the time and allowing only 10 percent of the water to flow out to the sea," Tony explains.

"The challenge is to help people understand why balanced water sharing is the key to the future of the basin, and why more water must return to its environment."

"The other 90 percent is held up in dams and released slowly for irrigation and for small environmental purposes, and that's not enough to spill out onto the floodplains. Consequently, we don't get those triggering events as frequently – the flooding of dry ground that produces that smorgasbord of food that results in a natural breeding event."

43









For local native plant enthusiast and Murray River Trails guide, Andrew Walladge, going to work is essentially a fun day out. "Through guiding, I'm able to share my passion for Australian plants with people who are genuinely interested," he says. "It's such a joyful way to spend time."

Andrew could talk plants all day... and he does when guiding, explaining that his previous work with State Flora has shaped him into someone who is passionate about sharing his love of plants with others. "Often our days start at sunrise, and then I'll stay up talking after dinner with interested guests," he says.

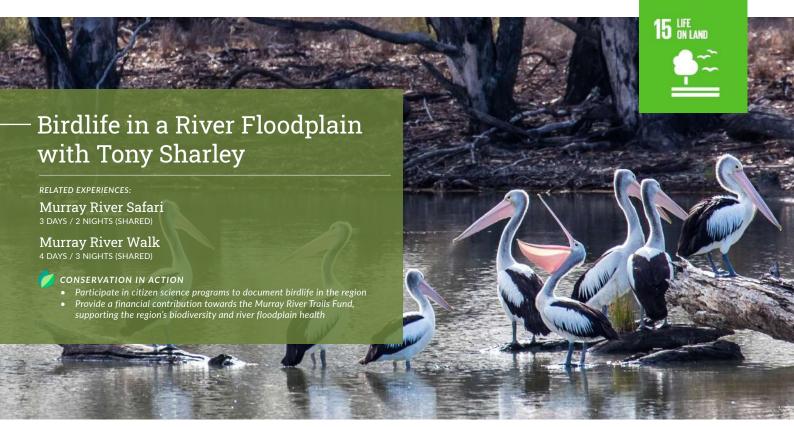
Over the course of the tour, guests will see about 30 species of native Australian plants in the Murray River floodplain, and what Andrew enjoys talking about most is the interconnection between the plants and the surrounding organisms.

"Once we get a high river on dry floodplains, the life cycle wheels are in motion," Andrew explains. "The microflora starts growing first, then the microorganisms that grow on the microflora come along, next it's the invertebrates, then the smaller bird species, then the raptors... it's a snowball that gets bigger and bigger.

The location of different plant species dictates their water needs, too. The River Red Gums are on the low-lying terraces needing regular watering, while the Black Box Woodlands are on higher terraces and are more drought tolerant." Discussing how pivotal each of these organisms are to one another provides guests with a deeper understanding of the region, and at the same time links in to how long it has been there in one form or another.

"Our guests are always taken aback when we encircle a large River Red Gum with outstretched arms to measure the girth."

"Our guests are always taken aback when we encircle a large River Red Gum with outstretched arms to measure the girth," Andrew says. "Approximately one-metre girth at chest height equals about 100 years of growth, and this is often an eye-opener for guests. We stand back after this activity and the unspoken sentiment is: we are nothing."









Owner and founder of Murray River Trails, Tony Sharley, never tires of seeing guests discover a destination through the presence of its birds. "We spend the bulk of our time in the Riverland Ramsar wetlands, which is home to more than 180 species of birds. We can see migratory water birds, local black swans, ducks, honeyeaters, and several species of parrots including the vulnerable Regent Parrot, and raptors including the Wedge-tailed Eagle," Tony says. "Two of our smallest birds, the Red-capped Robin and the Mistletoebird, are celebrated when sighted because of their brilliant red plumage."

Smaller birds are easy to see with good binoculars, but long-distance water birds are often difficult to identify, so Murray River Trails invested in a special Swarovski spotting scope in 2019 to help guests see them up close and clearly. "This single scope can magnify by up to 60 times," Tony says. "When we're out exploring, I set it up and focus it on a bird I've seen in the distance, and then everyone has an opportunity to take a look. Guests often experience a kind of awakening when they can see the bird's finer details."

Although birds can be admired yearround, Tony explains that the Murray River Trails' touring season runs from March to November, with each month offering something unique.

"I really enjoy observing Blue-winged Shovelers and Pink-eared Ducks. They are such beautiful wetland birds that use their filter feeding bills to catch small aquatic plants and animals that live in the ephemeral lakes when they fill," Tony says.

"The Rainbow Bee-eaters are also fascinating and you can set your clock by them. They arrive from northern Australia in the first week of October and stay until the first week in April. They come here to breed and dig out tiny tunnels in the sandy cliffs found on either side of the river valley. They build their nests inside those tunnels."

For Tony, any bird sighting is exciting and he transmits that passion to anyone who visits. "Water birds are great indicators of river health and they are also incredibly graceful to watch," he says. "The reason we launched Murray River Safari in 2020 was to show visitors the mosaic of wetland and terrestrial habitats that are connected to Australia's largest river system."

"Guests often experience a kind of awakening when they can see the bird's finer details."









Deep in the Murray River channel between Kingston and Moorook in South Australia's Riverland, lies a fish hotel that weighs a whopping 10 tonnes, understood to be the biggest man-made structure found in the basin.

"I assembled it in my front yard," Murray River Trails guide and fishing enthusiast, Kym Manning, explains. "It was picked up by a 100-tonne crane so that it could be placed deep enough in the river to ensure it wouldn't disrupt any boats."

The enormous wood and iron structure is one of nearly 100 fish hotels that Kym has built and helped position in the Murray-Darling Basin including Lake Bonney – a freshwater lake fed by the Murray River – over the years, thanks to various fundraising efforts that have helped the concept catapult. "The hotels are structures made from River Red Gum and they're designed to shelter native fish, such as Murray Cod, Golden Perch and Silver Perch.

We hope that this helps facilitate the growth of their populations," Kym explains. "I also run the SA Carp Frenzy fishing competition targeting the pest species, European Carp, drawing over 800 fishermen to our small town every year. To date, we have removed almost 30,000 carp and raised \$70,000 from the proceeds, with 100 percent of the raised funds donated back to community projects."

Through his guiding work with Murray River Trails, Kym is able to educate guests about the Murray River and the multitude of aspects that all play a role in the river's health. "What I like to do is pull up a root ball from the river, and from there we start a discussion about fish habitat and the destruction of the environment.

"It's about increasing awareness of how important underwater habitat is, and reminding people that it's not just about what you see above the water line."

I tell guests about how the paddle steamers pulled three million root balls out of the basin since they started trading along the river in the 1850s. And, I rationalise that if three million trees were chopped down, it wouldn't go unnoticed," Kym explains. "It's about increasing awareness of how important underwater habitat is, and reminding people that it's not just about what you see above the water line."







RELATED EXPERIENCE:

Bremer Canyon Killer Whale Expedition FULL DAY (SHARED)

CONSERVATION IN ACTION

- Participate in citizen science programs to identify individual Killer Whales on tour
- Includes hosting of Project ORCA and other research personnel on board









As soon as Captain Andrew Johnstone (better known as Captain Dundee), a Naturaliste Charters skipper with a huge smile, starts talking, you realise that you're in for a treat. "We know around 150 of the whales we see each season personally," he says. "After seven years in the Bremer Canyon location I've learnt to drive with them... and they've learnt to swim with me."

Captain Dundee is referring to a phenomenon that has evolved over many years at the helm. Whereas eight years ago he had to search far and wide to find Orcas, these days they come to him most of the time. "For the past few years they've been greeting us. We leave them to their own devices as we observe and watch, and intriguingly they now sometimes include us as they engage in their predatory behaviour and attacks," he says. "They drive their prey – for example Beaked Whales – right to us and pin the animals up against the vessel."

Although finding Orcas has become easier over the years, Captain Dundee still uses a variety of tracking methods to get close to the animals. "It comes down to GPS tracking, incredible eyes, and knowing where they like to hang out," he says. "Our deckies are

great spotters, and every morning we put out the challenge for guests to participate, too. If a guest spots an Orca before a deckie, the pride in their face is amazing."

Captain Dundee stresses that although they do see Orcas regularly and are in tune with their behavioural patterns, each day is an unknown. "Some days we observe the whales relaxing, just chilling and cruising around; other days can be sporadic and we don't see much of them as they spend their time deep diving; then there are days when we now realise the Orcas are actively hunting," he says. "And if we can't see them we look for birds. Whenever we see a swirl of birds looking down, waiting for scraps from a kill, we know there might be Killer Whales.

"After seven years in the Bremer Canyon location I've learnt to drive with them... and they've learnt to swim with me."

Learning About the Photo Identification Programs with Pia Markovic

RELATED EXPERIENCES:

Bremer Canyon Killer Whale Expedition FULL DAY (SHARED)

Dunsborough or Augusta Whale Watching



CONSERVATION IN ACTION

- Participate in citizen science programs to identify individual whales on tour

 land definition of individual whales of individual whales of individual whales on tour

 land definition of individual whales o
- Includes financial contribution or in-kind support to Project ORCA,
 Department of Biodiversity, Conservations and Attractions and Western
 Whale Research







There's an iPhone feature that sorts photos using facial recognition, categorising frequently photographed faces into groups. Interestingly, it can work for Southern Right Whales too, albeit a little more haphazardly.

"Basically, there are different ways of identifying all whales. And because Southern Rights have distinctive callosities (louse-covered callouses) on their faces (rostrum), we essentially use facial recognition to identify them," Naturaliste Charters marine biologist Pia Markovic explains. "This is usually painstakingly categorised by a scientist, but emerging technology is helping advance this. It even works on phones if you have enough photos of the same whale."

Pia explains that Naturaliste Charters research staff use different identification methods for different whale species when recording and photographing their unique marks. "With Humpback Whales we look for scarring on their dorsal fin and other unique markings on their body. With Blue Whales we again look at the dorsal fin as well as look for unique markings on their body. With Orcas we are looking for marks on the dorsal fin, eye patch and saddle patch. And with Sperm Whales we are looking at their tails," Pia explains.

Guests, too, are encouraged to note down any unique markings on whales they might see while on an expedition, helping Pia and the team of marine biologists expand their information database. "Through photo identification, we learn more about population size and composition, migratory distribution, and individual usage of a resting area over its lifetime," Pia explains.

"Through photo identification, we learn more about population size and composition, migratory distribution, and individual usage of a resting area over its lifetime."

"The collecting of whale identification images – which is done in a collaborative effort with Western Whale Research – can provide an insight into an individual whale's life, as well as the species." Defining Geographe Bay as an 'emerging aggregation area' in 2019 was reward enough for the scientists and Pia. "This means one step closer to protecting these whales," she says.



Recording the Behaviour of the Earth's Largest Creature with Pia Markovic

RELATED EXPERIENCE:

Dunsborough or Augusta Whale Watching



CONSERVATION IN ACTION

- Participate in citizen science programs to identify individual Blue Whales on tour
- Includes financial contribution or in-kind support to Western Whale Research



When you ask Naturaliste Charters marine biologist Pia Markovic what she loves most about Blue Whales, there's no wavering when she answers. "Blue Whales are the largest animal on the planet – bigger than dinosaurs," she says. "And learning more and more about them every day is both thrilling and rewarding."

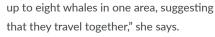
Pia explains that it was originally understood that Blue Whales travelled solo for the most part, but over the last few years local marine scientists have discovered that they prefer to move in pods. Working with Naturaliste Charters has corroborated this. "We've seen

incredibly large," she explains. "For us, it's the group dynamics that are really remarkable. What direction is the pod heading in? How big are the whales? Is there a calf in the pod? Any information collected is donated to Western Whale Research, who have been conducting whale surveys in the area for the past two decades."

The Blue Whales start arriving to Geographe Bay in November and usually stay until the end of the year, providing ample opportunity for multiple sightings. For Pia, seeing guests become involved with the spotting is a big highlight.



"Guests on board the cruise can help us spot the whales. They aren't usually expecting to see a Blue, so when they do it's very memorable."



Naturaliste Charters marine biologists began recording the behaviour of Blue Whales approximately three years ago out of personal interest, focusing predominantly on their behavioural patterns.

"We watch the Blues in the shallow, gentle waters of Geographe Bay, and usually they don't do very much because they're so "Guests on board the cruise can help us spot the whales. They aren't usually expecting to see a Blue, so when they do it's very memorable," she says. "Each year the likelihood is increasing and nowadays we generally see them five days out of seven, so the odds are good."





Bremer Canyon Killer Whale Expedition









Seabird guides Daniel Mantle and Plaxy Barratt say there's something extraordinary about observing birds while at sea. "Watching seabirds mastering the strong oceanic winds is just about the pinnacle of birding for both us," Plaxy explains. "The spray, the wind, the rocking boat... it's magic."

The two pelagic birdwatchers are regular guests and seabird guides on Naturaliste Charters expeditions, keen to share their knowledge with other sea bird enthusiasts. "By helping people recognise and appreciate the seabirds that they're seeing, I hope we can help instil an interest in the birds' conservation and protection," Plaxy says.

Throughout the year local birds such as Flesh-footed and Little Shearwaters, Great-winged Petrels, and White-faced Storm-Petrels – along with visitors from much further afield including Indian Yellow-nosed, Black-browed, and Shy Albatrosses – make regular appearances. The Bremer Canyon location, too, has gained a really strong reputation for attracting rare summer seabirds.

"Great and Cory's Shearwaters, Barau's Petrels, and the rare and stunning Amsterdam and Chatham Albatrosses are some of the species we might see throughout the year," says Plaxy.

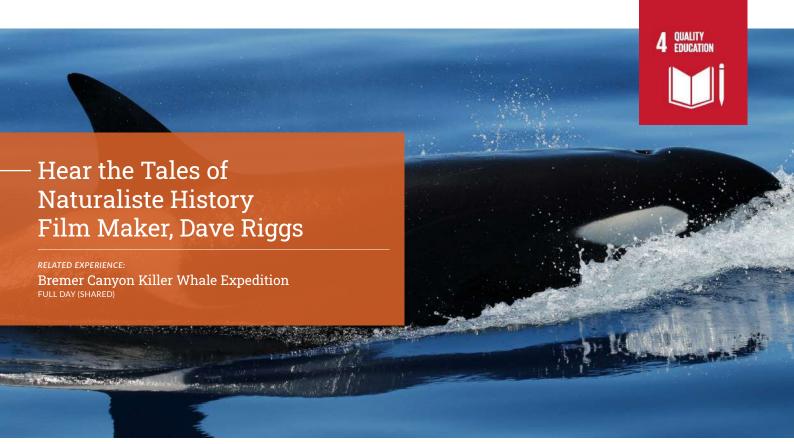
Dan and Plaxy especially enjoy bringing guests' attention to certain species' unique behavioural patterns, such as those of the White-faced Storm-petrel. "We see them jumping from spot to spot across

the ocean surface, pushing off with their webbed feet," Dan says. "Most Storm-petrels patter across the water in similar manners – as if they are 'walking on water' – and are sometimes referred to as Jesus Birds."

"By helping people recognise and appreciate the seabirds that they're seeing, I hope we can help instil an interest in the birds' conservation and protection."

What elevates the Naturaliste Charters expeditions to even further heights is the opportunity to watch seabirds and Orcas interact. "The highlight at Bremer Canyon is watching the birds following the Orcas and scavenging for scraps when the Orcas make a kill," Dan says.

"Larger predation events can attract thousands of seabirds and the excitement of involving the guests in photographing the action and searching through the masses of seabirds for that special rarity is always a great buzz."









What life is hiding on the sea floor? Naturaliste history film maker and Naturaliste Charters tour guide, Dave Riggs, will soon find out. "I'm in the process of sourcing camera systems that will be capable of withstanding water depth to at least 800 metres," Dave says. "And when I do find out what's going on down there, I'll be sharing my findings."

This thirst for knowledge and exploration is what drives Dave. No stranger to adventure, he's filmed apex predators in the Antarctic; dived the Neptune Islands, the White Shark capital of Australia; and filmed Bull Sharks and crocodiles going head-to-head with each other in the Northern Territory.

Dave is probably best known, however, for his video The Search for the Ocean's Super Predator. "In 2003 when filming for Australia's CSIRO we had a Sperm Whale stranding off Bremer Bay and we put a satellite tag on a Great White that was there at the time," he recalls. "Four months later we retrieved the tag. The shark and the tag had been eaten by something with an internal temp of 27°C, indicating that the predator was a warm-blooded animal. That formed the basis of this film."

The research and film work led Dave to the discovery of the largest aggregation of Killer Whales in the Southern Hemisphere. "That's when I hooked up with Naturaliste Charters," Dave says.

"We were all children once and we all still have that sense of mystery. On an expedition we are exploring the unknown. It's genuinely mind blowing."

Dave's appetite for the underwater realm is what drives him to capture his incredible underwater photographs and videos, and those on-board Naturaliste Charters expeditions are privy to a world inaccessible to most land-dwelling mammals. "We were all children once and we all still have that sense of mystery," he says. "On an expedition we are exploring the unknown. It's genuinely mind blowing."





Managing the Largest Humpback Whale Photo Database in Australia with Stephanie Stack

RELATED EXPERIENCE:

Ultimate Hervey Bay Whale Watching



CONSERVATION IN ACTION

- Contribute to long-term citizen-science programs for monitoring whales via Pacific Whale Foundation's free Whale & Dolphin Tracker app
- Profits from our cruises support whale and dolphin research, marine education for children, and ocean conservation programs









Photo identification programs have been the backbone of marine mammal studies for decades, allowing researchers to identify individuals by comparing photos in existing catalogues.

"We track Humpback Whales by photographing the underside of their tail fluke, where they have a unique pigmentation pattern," explains Stephanie Stack, Chief Biologist at Pacific Whale Foundation. "Pacific Whale Foundation Eco-Adventures Australia is a social enterprise owned by Pacific Whale Foundation, and the profits from our marine eco-tours support whale and dolphin research, marine education for children, and ocean conservation programs. We are proud of our database, which is one of the biggest photo catalogues in the world and has over 6,900 individual Humpback Whale files."

Stephanie explains that the identification program is an asset that is used beyond just finding individual whales. "We are using the photo identification program for longevity. We're trying to learn how long the whales live for, since that is one question researchers do not know the answer to yet."

Commercial whaling ceased in Australia in 1978, and identifying whales through photo-taking began in the 1980s. "We photograph whales as calves, and then we keep documenting individuals throughout their life. If we stop seeing an individual whale over a long period of time, it's a fairly good indication it has passed away,

but we are still tracking some of the whales that were photographed in the 1980s," Stephanie says.

Guests can contribute to the project by taking their own photos while on board (photos can be uploaded to www.pacificwhale.org/donatephotos) or after the tour, and by sharing the opportunity with family and friends. "We don't often see the same whales day to day because the population off the east coast of Australia is so large – there are 25,000 or more whales in the area," explains Stephanie.

"That's why we turn to boat operators and other water users to crowd source the photo identification effort. There are many people out on the water – often with cameras and sometimes telephoto lens' – so we can increase our efforts if others participate."

For those who want stay up-to-date with whale sightings, the Pacific Whale Foundation Humpback whale catalogue is a live file accessible via www.happywhale.com/org/494.

"We are proud of our database, which is one of the biggest photo catalogues in the world and has over 6,900 individual Humpback Whale files."









The complexity of a Humpback Whale song astounds scientists every day, and anyone who is privy to hearing a Humpback Whale sing firsthand is almost always left breathless by the beautiful – and what is sometimes described as haunting – melody.

"It's one of the most complex communication signals in the entire animal kingdom," explains Dr Barry McGovern, Australia Research Associate at Pacific Whale Foundation, the parent company of Pacific Whale Foundation Eco-Adventures Australia. "A whale song is usually made up of moans, groans, grumbles and grunts. The sounds are pulled together in a hierarchical structure with multiple units combining to make phrases, and then the phrases are combined to make up a song, which can last up to 30 minutes. This song can then be repeated a number of times to make a singing session."

The discovery of the Humpback Whale song occurred in 1968, when bio-acoustician Dr Roger Payne and his wife Katy Payne boarded navy engineer Frank Watlington's vessel. The group discovered that the sounds Frank had been hearing for years were, in fact, whale songs, and the Paynes later produced a record-selling album using Frank's recordings. "Humpback Whales have a large

repertoire of sounds, including their songs and other non-song communication sounds," says Barry.

"On board the Pacific Whale Foundation Eco-Adventures Australia tours, the crew bring a hydrophone along, which is a microphone that is able to be used underwater. It picks up any sound within a certain distance, depending on species. Dolphins can be picked up within approximately a 500-metre radius, while a singing whale can be picked up kilometres away, depending on the environmental conditions." Guests are able to hear whale songs, and sometimes dolphin calls at the same time, almost always.

Barry says that, although guests are already awestruck at this stage, it gets even better. "For many years it was thought that Humpback Whales only sang around the breeding grounds to attract females or compete with males, but now we know songs have been heard all the way along the migration route, and occasionally even in the feeding grounds in Antarctica," he explains. "When you tell guests that the song changes slightly from year to year, and then once every few years it changes to a completely different song, it leaves a pretty strong impression."

"The sounds are pulled together in a hierarchical structure with multiple units combining to make phrases, and then the phrases are combined to make up a song, which can last up to 30 minutes."









A recent study of marine life found that flexible plastics are responsible for the largest proportion of marine life deaths. In the case of whales, once ingested the plastics can accumulate in the stomach, the mass eventually becoming so big that it obstructs the bowels and the whale starves to death. Sometimes, whales become entangled in fishing nets and rope and die that way.

"Plastics are by far the biggest problem, but all debris is a hazard for marine life," explains Andrew Ellis, Director of Pacific Whale Foundation Eco-Adventures Australia. "We are now trying to understand what exactly ends up in the ocean, and how, so we can tailor better solutions to combat the problem."

Pacific Whale Foundation, a social enterprise and parent company of Pacific Whale Foundation Eco-Adventures Australia, has been running coastal marine clean-ups for many years in Hervey Bay, but since 2019 the aim has been to also record the types of debris found on the Australian Marine Debris Initiative (AMDI) Database run by Tangaroa Blue.

"The idea is to establish a comprehensive database that covers marine debris from right around Australia," Andrew explains. "Coastal and beach clean-ups were about removing rubbish and that is still the objective, but we are now trying to understand where the rubbish is coming from. If we can identify the sources and types, we can make suggestions on how to reduce it."

Education through appreciation is the catch phrase while on board any Pacific Whale Foundation Eco-Adventures Australia whale watching tour, and Andrew explains that there is no better time to inspire guests to further help our marine environment than while they are in awe of the Hervey Bay marine life.

"After seeing these magnificent creatures in their natural environment our guests often want to learn how they can help. If we all make small changes – like reduce our use of single-use plastics and make sure that all of our waste is disposed of effectively – the ocean will be a much better place," Andrew says.

"Coastal and beach clean-ups were about removing rubbish and that is still the objective, but we are now trying to understand where the rubbish is coming from. If we can identify the sources and types, we can make suggestions on how to reduce it."



RELATED EXPERIENCE:

Ultimate Hervey Bay Whale Watching 3 HOURS (SHARED

Hervey Bay Private Charter CUSTOM DURATION (PRIVATE)



- Contribute to long-term citizen-science programs for monitoring dolphins via Pacific Whale Foundation's free Whale & Dolphin Tracker app Profits from our cruises support whale and dolphin research, marine education for children, and ocean conservation programs









Although whale watching is a big focus of Pacific Whale Foundation Eco-Adventures Australia tours, all marine life is important to care for - and to teach others about. Dr Barry McGovern says: "I'm the Australia Research Associate at Pacific Whale Foundation, the parent company of Pacific Whale Foundation Eco-Adventures Australia, and my PhD was on the acoustic behaviour of Bottlenose Dolphins, so I'm very interested in continuing to study their behaviour, and to share my knowledge with the public."

Barry explains that one of the highlights of Hervey Bay is that dolphins are found here year-round, so the sighting and researching opportunities are ongoing. "Pacific Whale Foundation built their name and research on Humpback Whales," Barry explains. "But as we worked, we realised that Humpback Whales are only one of many marine species.

In the past we collected data on dolphins opportunistically, but now we are working on expanding the operation and conduct dedicated surveys on the dolphins of Hervey Bay. Very little information has been published on the dolphins here, and we are working on gathering baseline data on the two most common species."

The two most common dolphin species who frequent the warm waters of Hervey Bay are the Indo-Pacific Bottlenose Dolphin and the Australian Humpback Dolphin, and Barry says it's enlightening for guests to learn about the differences between the two.

"We often see mixed groups of dolphins, but the species differ in their behaviour," Barry explains. "Anecdotally, groups of Bottlenose Dolphins tend to be larger and are not usually too affected by boat presence, while the Humpback Dolphins are generally a little more boat-shy. This is something we have also seen in other parts of the world. Humpback Dolphins are generally more elusive, harder to study, and seen in smaller numbers."

While the company's whale watching tours offer guests an opportunity to involve themselves in dolphin research, investigating the behaviour of these creatures continues long after the whale watching season ends.

"We have a research project dedicated to dolphin health and status. We have a strategic plan in place across several field sites (in Australia's Hervey Bay, Hawaii and Ecuador), and we focus our research efforts on where there is a gap, then we fill that gap with baseline data," Barry explains. "Our data will hopefully help government bodies to make informed decisions on how best to protect dolphin species."

"We have a research project dedicated to dolphin health and status. We have a strategic plan in place across several field sites (in Australia's Hervey Bay, Hawaii and Ecuador), and we focus our research efforts on where there is a gap, then we fill that gap with baseline data."



Measuring the Impact of Climate on Whales with Stephanie Stack

RELATED EXPERIENCE

Ultimate Hervey Bay Whale Watching 3 HOURS (SHARED)

Hervey Bay Private Charter



CONSERVATION IN ACTION

 Profits from our cruises support whale and dolphin research, marine education for children, and ocean conservation programs including climate change measurement









Since the 1980s, human activities – such as burning fossil fuels and cutting down forests – have been a big driver of climate change, and dire consequences are already being observed. "The rising temperatures have been causing extreme weather events, and we are also noting the temperature change in the water," explains Stephanie Stack, Chief Biologist at Pacific Whale Foundation, the parent company of Pacific Whale Foundation Eco-Adventures Australia. "One of the main priorities of our climate change research program is to better understand how climate change will affect Humpback Whales and other large migratory whales," she explains.

As increasing carbon dioxide and other greenhouse emissions trap more energy from the sun, the oceans absorb more heat, and consequently this is causing an increase in sea surface temperatures and rising sea levels. "We are seeing fish stocks change already, and we know that the changing water temperature will impact the whales, too, we just don't know exactly how," Stephanie explains.

"The whale population has only recently recovered from commercial whaling, and now there is the looming threat of climate change. We are using modelling to try and calculate how the ocean will warm, and to forecast what habitat will be suitable for the whales as the ocean temperature rises. We predict that there will be a shift towards the Poles. The whales may not travel as far north along the coast as they do right now, or they might even not migrate far at all, and stay in the feeding grounds all the time."

Stephanie stresses that the issues go beyond the effect on the tourism industry, explaining that the whales' changing behaviour will also have a big impact on the ocean eco-system. "Whale migrations are important for moving nutrients throughout the ocean," she says. "And we expect to see this change in the next 50 to 100 years."

Pacific Whale Foundation Eco-Adventures Australia consider themselves a floating classroom, and the marine naturalists on board take every opportunity to educate guests. "A conservation talk is part of the daily program," Stephanie says.

"We are using modelling to try and calculate how the ocean will warm, and to forecast what habitat will be suitable for the whales as the ocean temperature rises."

"We talk about plastics and the importance of minimising our waste. We touch on sustainable fisheries and how to purchase seafood responsibly. We delve into responsible tourism and how to choose a responsible operator. And we talk about climate change. Hopefully we can inspire people to drive community change and lobby together for a greener future."





Exploring Tasmania's Botanic Riches with Geoff Curry

RELATED EXPERIENCES:

5 Day Tasmanian Wildlife and Wilderness
5 DAYS / 4 NIGHTS (SHARED / PRIVATE)

5 Day Icons of Tasmania Small Group
5 DAYS / 4 NIGHTS (SHARED / PRIVATE)



CONSERVATION IN ACTION

- Participate in citizen science programs, including atlassing rare flora and fauna
- Includes financial contribution to Bonorong Wildlife Sanctuary or Devils @ Cradle as part of their adoption program









When Geoff Curry, long-standing guide with Premier Travel Tasmania, talks about plants, he likes to focus on their ever-evolving relationship with their surroundings. "I'm very interested in how everything interacts with each other. The forest isn't just a bunch of trees, it's a living and dynamic place," he explains. "That's the story I like to tell when I'm guiding.

Aside from guiding tours for Premier Travel Tasmania, Geoff is President of Threatened Plants Tasmania (TPT) group and is the Conservation Officer for a national orchid society. It's no surprise, then, that guests exploring with Geoff can learn a great deal about Tasmania's flora. "There are over 1950 species of endemic plants in Tasmania and over 200 species of native orchids, of which 71 species of these are endemic to the state," he says. "I'm especially fascinated by terrestrial ground orchids, as many do not photosynthesise and rely completely on microscopic fungi to survive."

Close to Hobart, is Mount Field National Park where guests can see a diverse range of plant life in a relatively compact space. "Within 30 minutes of drive time we go from a reasonably low altitude up into alpine country and there is a significant change in the habitat and plant life we come across," Geoff explains. "We see how the trees change in size, starting with the massive giant ash trees and then driving further up to the snow gums, which are quite small. I talk

about geology and glaciation, and how the plants and environment interact with each other"

In Cradle Mountain–Lake St Clair National Park, Geoff concentrates on the alpine grasslands and open forest. "I like to point out the pencil pines, as some of them may be over 500 years old. I also like to show guests the deciduous beech (nothofagus gunii) in the alpine forest. It's endemic to Tasmania and it's Australia's only deciduous tree," he says. "There are plenty of easy boardwalks to take guests on and we often encounter the local wildlife, including Tasmanian Pademelons and wombats."

"The forest isn't just a bunch of trees, it's a living and dynamic place," he explains. "That's the story I like to tell when I'm guiding."

Coles Bay on Tasmania's East Coast again offers a completely different perspective on plant life, with coastal dry forests growing in an area dominated by granite. "Here we explore a completely different habitat and suite of plants," Geoff says. "That includes up to 60 species of orchids that can be found flowering during the year."



Tasmania - Wildlife & Conservation with Wilderness Flight Safari 9 DAYS / 8 NIGHTS

Tailor Made Adventure



Includes financial contribution to Orange-bellied Parrot Recovery Program

There's only one place in the world where Orange-bellied Parrots (Neophema chrysogaster) breed in the wild, and that's in Tasmania's Southwest Wilderness World Heritage Area, a vast and ravishingly beautiful region that is renowned for its wild weather and untamed landscape.

"The power and wonder of this magnificent wilderness is hard to describe," guide Mark Holdsworth explains. "It has to be experienced." Guests can walk for seven days, travel by boat for two days, or fly into Melaleuca, the base for exploring the Southwest National Park, and the best location in the world for close encounters with the critically endangered Orange-bellied Parrot.

"The entire breeding population calls Melaleuca home and is the focus of the Orange-bellied Parrot monitoring program, which includes the use of feed tables and nest boxes so volunteer observers and biologists can monitor every individual," Mark explains. "Their hard work provides valuable information to the Orange-bellied Parrot Recovery Team to measure survival and demographic relationships."

Mark first worked on the Orange-bellied Parrot in the early 1980s in the then Tasmanian Parks and Wildlife Service as a Trainee Ranger, and for 17 years managed the entire Tasmanian Orange-bellied Parrot recovery program, up until his retirement in 2014. Mark has since provided specialist nature guiding services across Australia and he now joins the Premier Travel Tasmania team to share his knowledge with guests who book the Australian Geographic tours.

"Melaleuca has been my backyard throughout my career and I love to share the unique insights I have about the biology and conservation of the Orange-bellied Parrot," he says. The small (45 grams) and brightly coloured parrot can be seen in Melaleuca from October to March during their breeding season. By April the entire population migrates northward to coastal Victoria and South Australia, where they feed on a range of plants in windswept salt marshes.

"Interestingly, the adults leave from February through to March, while the juveniles manage to find their own way from late March to early April,' Mark says. "I'm always amazed how natural instincts are able to successfully drive migration behaviour."

If guests visit Melaleuca when the birds are not there, Mark can still chat about the program, and those keen to become more involved in conservation work can join volunteer searches along the coasts of Tasmania, Victoria and South Australia through the Friends of the Orange-bellied Parrot (Wildcare Tasmania) and BirdLife Australia.

"Melaleuca has been my backyard throughout my career and I love to share the unique insights I have about the biology and conservation of the Orange-bellied Parrot."











Karin Beaumont's background makes her an obvious choice for leading the art-focused Premier Travel Tasmania tours. "I'm a tour guide with a PhD in Antarctic Marine Biology, but I'm also a contemporary jeweller and artist, and I really enjoy introducing guests to Tasmania's rich art scene," she says.

Hobart is the first port of call for most people when visiting Tasmania, and Karin recommends people book the one-day Hobart's Art & Fine Wine or Best of Hobart tour for a taste of what Premier Travel Tasmania offers. "Sometimes we visit the famous Salamanca Market, where we take out time to peruse the many stalls as we meander through. The vendors make up a very small community: I know a lot of them personally and can introduce guests to them.

"The controversial museum is partially nestled inside a cliff face and is quite unassuming," she says. "And when guests discover the calibre, diversity and profile of international and local art works, as well as the immense scale of the museum for such a small island state, they are genuinely surprised and blown away by the whole concept," she says. "They don't always love all of the artworks on display, but they do find it interesting."

Beyond Hobart, the whole island of Tasmania offers ample opportunities for further immersion in arts and culture. "In Launceston, you have Design Tasmania, a centre that houses the Tasmanian Wood Design Collection, which has ongoing exhibitions and a retail outlet showcasing



"There really is something for everyone, from traditional landscape painting and practical craft, to exquisite design, local studios and edgy contemporary festivals."



We can explore the waterfront precinct, including the Salamanca Arts Centre, as well as the Old Wharf side with more galleries, including an Aboriginal art gallery showcasing Tasmanian Aboriginal art and craft. And of course, no art tour would be complete without a visit to the Museum of Old and New Art (MONA)," she says.

Karin's favourite part of the day is seeing guests' surprise as they approach MONA.

the best of Tasmanian design across furniture, ceramics, jewellery, textiles," Karin says.

"And wherever you go in Tasmania there is likely to be an artist studio, a collective of makers, or a gallery run by the local artists themselves. There really is something for everyone, from traditional landscape painting and practical craft, to exquisite design, local studios and edgy contemporary festivals."





In Search of Tasmania's Endemic Birds with Danny Pullbrook

RELATED EXPERIENCE:

THE MARIA ISLAND WALK 4 DAYS / 3 NIGHTS (SHARED)

CONSERVATION IN ACTION

 Participate in citizen science programs contributing to eBird and Birdlife Australia databases









When you ask The Maria Island Walk guide, Danny Pullbrook, what he likes to do in his spare time, he doesn't hesitate to answer. "I'm heavily interested in birds," he says. "I watch them whenever I have a chance, often with my wife and kids."

Maria Island is a dream location for Danny, who is able to spend his working days outdoors spotting birds and teaching guests all about them. "We have around 150 species of birds on the island, and on a four-day walk we would easily see between 20 to 30 of those," he says. "And that's just on the main trail. If we have keen birders with us, we might take a little detour deeper into forested areas, where we'd see more."

What is interesting about the species of birds found on Maria Island, is that only eight of the 150 species are introduced. "All the others are native, so as a habitat the island offers a really unique birding opportunity," Danny says. "And of the 12 endemic bird species found across Tasmania, Maria Island is home to 11."

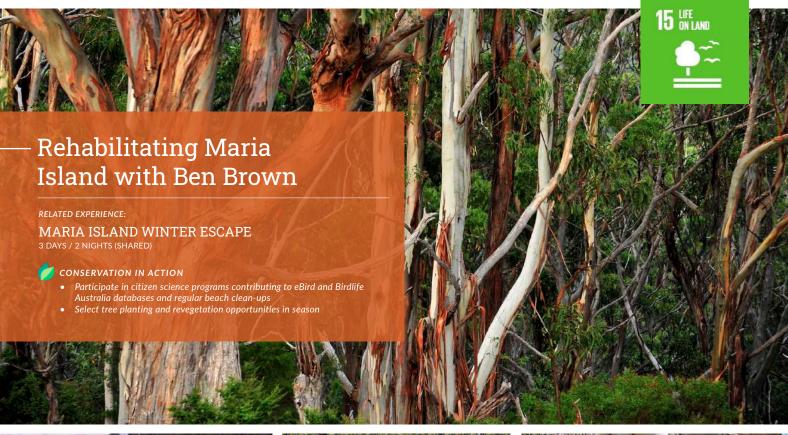
Although any bird sighting delights Danny, there are certain bird species that he gets very excited about seeing and showing to guests. "The Forty-spotted Pardalote, a really tiny bird weighing an average of nine to 13 grams, is an endangered Australian species. It can only

survive with White gum trees as its food source but, since it's so small, bigger birds often take over its territory," he says.

"The Swift Parrot is another species we need to watch out for, as experts estimate there are fewer than 300 remaining in the wild. It's the world's fastest flying parrot and to survive and thrive needs access to mature Blue gums (Swift Parrots live in the large tree hollows of Blue gums).

Although spotting a rare bird is always a thrill, Danny enjoys pointing out all kinds of birds to guests and chatting about their behavioural traits. "One of my favourite birds is the Dusky Robin." Danny explains. "It's Tasmania's biggest robin and one of the island's endemics. The way it presents itself and its beautiful melancholy birdcall makes it a really interesting species to observe."

"The Swift Parrot is another species we need to watch out for, as experts estimate there are fewer than 300 remaining in the wild. It's the world's fastest flying parrot."









The founder of The Maria Island Walk, Ian Johnstone, has always been passionate about both showcasing and taking care of Maria Island, drawing that philosophy into his teachings and subsequently into the guides' work. "So, rehabilitation work on the island is just something that comes naturally to the guides," says operations manager, Ben Brown.

"Over the years we've conducted bird surveys, collected marine debris, gathered and studied Tasmanian Devil scat and planted trees, alongside our guests and volunteer organisations such as Taroona Scouts."

"Over the years we've conducted bird surveys, collected marine debris, gathered and studied Tasmanian Devil scat and planted trees."

The tree planting work that is presently a focus was begun in 2014, and Ben explains that, since its inception, over 200 trees have been planted on Four Mile Headland, which is located about seven kilometres from Darlington and where The Maria Island Walk

guests arrive on day two of the four-day walk.

"The mammals that live on the island, especially the grazing mammals such as wallabies and kangaroos, tend to favour the green vegetation, so if you have a few dry years in a row there are only hardy shrubs left. This loss of green vegetation not only reduces the wildlife's food source, but it can also lead to soil loss and erosion," Ben explains.

"A tree planting program such as the one we have undertaken can be a great help. The trees help to hold the soil together and prevent environmental degradation. The new plants also provide habitat for many of the native birds." Two plant species – Coast Wattle and Sheoak – were selected for planting at Four Mile Headland, chosen specifically because they are the dominant trees in the area and The Maria Island Walk team wanted to replicate the natural ecosystem.

Ben notes that rehabilitation work is always in motion along The Maria Island Walk, and the idea is to involve guests in various environmental programs in the future, such as weed eradication. "We are also looking at potential partnership opportunities with companies working around Maria Island," he says. "It's a beautiful part of Tasmania and we want to look after it."



Nocturnal Spotlighting for Tasmanian Devils and Marsupials with Holly Schorta

RELATED EXPERIENCES:

THE MARIA ISLAND WALK
4 DAYS / 3 NIGHTS (SHARED)

MARIA ISLAND WINTER ESCAPE 3 DAYS / 2 NIGHTS (SHARED)









Maria Island is renowned for its abundance of wildlife, including a variety of both native and introduced species, some of which are more active when the sun goes down. "The island is nicknamed Noah's Ark because in the 1960s a variety of threatened species, such as Cape Barren Geese and Forester Kangaroos, were introduced to the island for their own protection," Maria Island Walk guide, Holly Schorta, explains. "You really have to come here to understand just how much wildlife is around."

"The island is nicknamed Noah's Ark because in the 1960s a variety of threatened species, such as Cape Barren Geese and Forester Kangaroos."

Night walks can be enjoyed each evening, although Holly explains that the chance of seeing more animals increases as the walk progresses. "Towards the start of the walk we spend our nights in forested areas where animals are a bit trickier to spot, however on the last night the nocturnal walk is on open land, so spotting creatures that are active at night is more probable," she says. "Most

nights we are likely to see wallabies, pademelons, Pygmy Possums and wombats. If we're very lucky we might see a Tasmanian Devil."

Although a Tasmanian Devil sighting is not guaranteed, Maria Island is one of the best locations for spotting one of these iconic creatures in the wild. "Fifteen Tasmanian Devils were introduced to the island as an insurance population in 2012 as part of a rehabilitation program," Holly explains.

"Elsewhere in Tasmania, they are near extinct because of Devil Facial Tumour Disease (DFTD) – an aggressive and transmittable parasitic cancer. However, on the island there are no devils with the tumour, so they have been able to breed successfully and the population has steadily grown."

Although Holly can't be sure of exact numbers, she says that local research teams speculate that there are close to 60 Tasmanian Devils on the island. "The last time I saw a Tasmanian Devil was incredible," she remembers. "I was leading a group of walkers and as we turned a corner onto Bloodstone Beach there was a mother and her baby eating a dead seal that had washed up on the beach. We were all speechless."



🖰 www.australianwildlifejourneys.com

- **f** AustralianWildlifeJourneys
- @australianwildlifejourneys
- www.youtube.com/australianwildlifejourneys