



Koala care
KOALA
ERGONOMICS

Tools of our trade
CAPTURE BAGS AND
CARRY BASKETS

Major projects update
VISION AND
PURPOSE

JAN'S STORY



Little Jan coming into home care (image courtesy of Susanne Scheuter)



Bilateral conjunctivitis affected Jan's eyes when he was a young joey (image courtesy of Susanne Scheuter)

In early 2019 a little 1.3 kg ball of fur was found curled up in the middle of Maria River Road on the north shore of Port Macquarie. Whilst the road is not the busiest in our area, it is a regular access road for local residents and poses dangers for wildlife. Thankfully a kind motorist realised he had found a small joey, bundled him up and brought him in to the Koala Hospital.

Maria River Road Jan (pronounced Yarn) was very underweight, anaemic, dehydrated and very hungry with both eyes completely crusted shut from the disease, Chlamydia (resulting in conjunctivitis). Jan's prognosis was very poor, so he went into 24-hour around-the-clock home care.

Jan's diseased eyes responded very well to treatment, but he remained weak and quiet. He did not gain weight as staff would have liked. He began to develop a distended abdomen along with associated 'gut issues', including poor faecal output.

Maria River Road Jan became known as the little koala with the big belly!

Over the next 12 months, Jan fluctuated between gaining weight and then losing it. His gut would improve and then it would become an issue again. The conjunctivitis flared up from time to time resulting in re-treatment. As is often the case with small, abandoned joeys who are admitted for care, we don't have the answers about why Jan originally 'failed to thrive'. When and how did all his setbacks originate? Did his mother abandon him as a result? We will never know.

Thankfully, over time, his weight gains began to outweigh (excuse the pun) his weight losses. So far, he has not had a return of eye infection and remains chlamydia negative on health screening. We are delighted to report that Jan has made it to adulthood. Currently he

Cover image: Although he had a difficult start in life, Maria River Road Jan is now in good health.



Jan soaks up some winter sun.

is in good health, good body condition and appears fit and well.

A decision was made to hold Maria River Road Jan permanently as his clinical history suggests he would be unsuitable for release. We are also able to monitor Jan long term at the Hospital for any return of health problems. Although Jan is part of our exhibit team of koalas, his previous poor health means that he will not become part of the breeding program.

Maria River Road Jan now spends his days chilling in the sun, tucking into the fresh leaf provided by the carers and generally enjoying the five-star service at the Koala Hospital. Staff and volunteers hope to be looking after Jan for a long time to come.



Now a young adult, Jan looks out from the shelter of his gunyah at the Koala Hospital.

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REPORT BY CLINICAL DIRECTOR, CHEYNE FLANAGAN

The last three months at the hospital have been rather unusual. Whilst I was off on a few months long service leave exploring the deserts in the Northern Territory, a lovely young locum vet called Orr Cohen, was doing my job for me. Orr arrived with little experience with wild koalas but stepped up to the challenge of the role. Unfortunately wild koalas being who they are, a number succumbed to various illnesses which Orr had to manage and she did an amazing job. Orr has a great future not only as a veterinarian but as a wildlife veterinarian if she chooses to go down that path.

Admission numbers to the hospital have been low which can commonly occur at this time of

year. It is likely to be a year or two before we will see a lot of evidence resulting from the devastating bushfires. Vegetation has returned really well in the majority of fire grounds, but in some places it's still a barren wasteland. It is great to see that government agencies are really putting a lot of work into doing cool winter burns of forested areas that have a high fuel load on the ground. All of this is happening now in preparation for the potential of another big bushfire event this coming summer.

Like everyone worldwide we have had to make a lot of adjustments as a result of COVID. Our annual two-day Koala Rehabilitation Workshop, which the Port

Macquarie Koala Hospital presents on behalf of WIRES NSW, was to be held face-to-face at the end of August. This will now go virtual and be presented as a series of webinars. It will be very different to face to face but at least licenced koala groups across the state can attend these very important information sessions and do it from the comfort of their homes.

There is an enormous amount of work preparing the Wild Koala Breeding Program, everything from animal ethics, to licensing, to consultation with key partners in the project and design of the facility. Exciting times ahead for all of us.

In the meantime, stay safe everyone.



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REPORT BY PRESIDENT, SUE ASHTON

In this issue of Gum Tips we unveil the eagerly awaited designs for the new Port Macquarie Koala Hospital and the wild koala breeding facility.

The Koala Hospital redevelopment has been funded by a New South Wales (NSW) State Government grant of five million dollars. Under the grant conditions, the hospital needs to make a co-contribution of 20% which brings the total budget for the redevelopment to just over six million dollars.

Anyone who has visited the current hospital would know that it is a rustic, wildlife sanctuary, with a number of buildings and enclosures. The buildings have been added to over time which has caused issues with infrastructure including plumbing, electrical supplies, termites, heating and cooling, storage and other areas.

In the stories about these major projects, you can see the results of many months of workshops and planning to arrive at designs which we feel will provide first class care to sick and injured koalas, and allow the successful breeding of wild koalas. Our focus has also been on meeting the needs of our visitors, to

enable them to see koalas up close, learn more about them and how they can be supported.

The breeding facility will be funded from the huge number of donations the hospital received during the 2019/2020 bush fires. Under the crowd funding we had two goals, the first being to build and distribute wildlife water drinking stations. This project was completed in mid 2020 with the distribution of 140 drinking stations. The second goal is to arrest the decline of wild koalas in NSW by developing the world's first wild koala breeding program. Many people donated to this cause; some as little as five dollars, while others donated larger sums. In many ways the volunteers and staff at the Port Macquarie Koala Hospital feel responsible for honouring the trust people have put in us by ensuring a scientific, robust and successful breeding program is developed.

I hope you enjoy the updates and after reading them, you feel confident everyone at the Port Macquarie Koala Hospital is doing their very best to take care of koalas and ensure we keep these wonderful, iconic animals.

VISION AND PURPOSE: UPDATES ON OUR MAJOR PROJECTS

Work continues apace with:

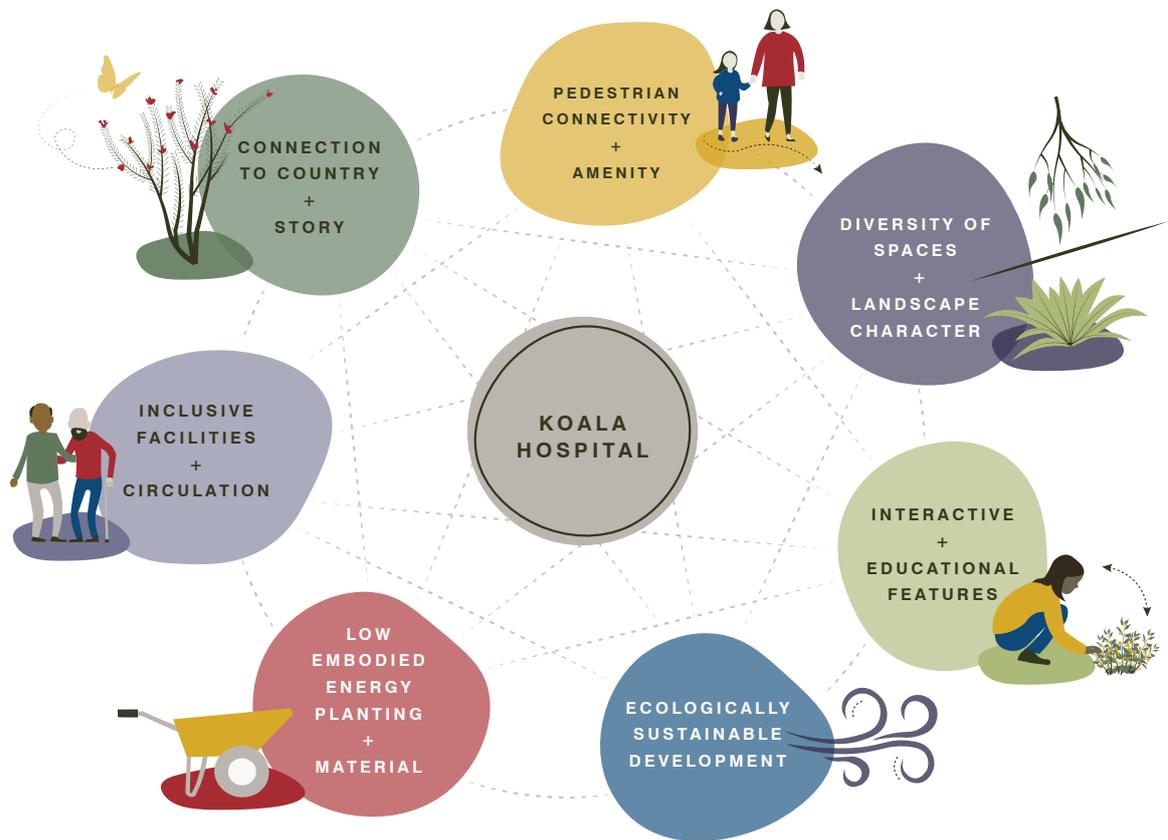
- The new Port Macquarie Koala Hospital
 - Koala hub at Guulabaa, the new tourism precinct at Cowarra
 - The Wild Koala Breeding Program
-

Project teams are working solidly, holding workshops and feedback sessions to reach agreement on themes and features for inspirational designs. The focus continues to be on striving for the highest standards in planning, execution and the overall impact of these important and exciting facilities. Our goal is to create a new Koala Hospital which will deliver the best care possible for koalas, and develop

the first Wild Koala Breeding Program to increase populations in the wild. In collaboration with our partners at Cowarra, we are also developing the 'koala hub'. This will be at Guulabaa, an indigenous word meaning 'place of koala', a major tourist attraction with goals to educate visitors about how we think about the environment, native forests and wildlife and our interaction with them.



Artist's impression of the entrance to the redeveloped Port Macquarie Koala Hospital (courtesy of Allen Jack + Cottier Architects).



The design for the new Hospital incorporates many principles illustrated here (courtesy of OCULUS Landscape Architecture).

NEW PORT MACQUARIE KOALA HOSPITAL

Famous, historic Hospital to be rebuilt within original bushland setting

Scheduled for completion in 2023, this multi-million dollar project is a re-design and complete re-build of the famous, historic Hospital, opened in 1973. Funded by the New South Wales Government’s Restart NSW program and Koala Conservation Australia Limited (KCA), the redevelopment will retain our unique natural environment and magnificent

old-growth trees in the Macquarie Nature Reserve, a couple of kilometres from Port Macquarie’s CBD. Extra funding has recently been approved by KCA to ensure that additional, innovative features can be included in the final design.

Koalas will benefit from expanded and upgraded clinical facilities. They will be housed in larger enclosures, taking full advantage of our beautiful bushland setting. The design of innovative walkways through the trees will ensure that visitors enjoy getting closer to these iconic animals, as well as more opportunities to see the work of the clinic. Visitors will also be able to observe more of the day-to-day

work of the volunteers as they care for the koalas.

The Birpai Local Area Land Council (LALC) are working closely with the Koala Hospital to make aboriginal artwork and storytelling integral to the new Hospital. We will see the connections between animals, humans and the environment, which are such vital characteristics of indigenous culture. Educational information, audio-visual displays and the sharing of knowledge throughout the new Hospital will be key to demonstrating why koalas are in danger, and how we, as individuals, can make a difference by how we respond to wildlife and the environment.

GUULABAA: PLACE OF KOALA

Development of this major tourist attraction in Cowarra State Forest, just one kilometre from the Pacific Highway between Port Macquarie and Wauchope, is led by the Forestry Corporation of NSW with multiple partners including the Port Macquarie Koala Hospital. The Koala Hospital facility will include exhibit koalas in a natural, forest environment, as well as the koalas that are a part of the breeding program.

An important focus in the development of this eco-tourism facility is offering visitors opportunities to experience and understand the natural forest environment by walking through undulating forest trails and canopy walkways, different vegetation types and along the creek. Visitors will use sight, sound, smell and touch to gain deeper knowledge of our native forests and their importance in sustaining life for us all.

We will learn how indigenous people have lived in harmony with natural forests for thousands of years.

Another partner at Guulabaa, the Bunyah Local Area Land Council (LALC), is working to provide indigenous experiences and share knowledge about how people have lived in harmony with native forests for many



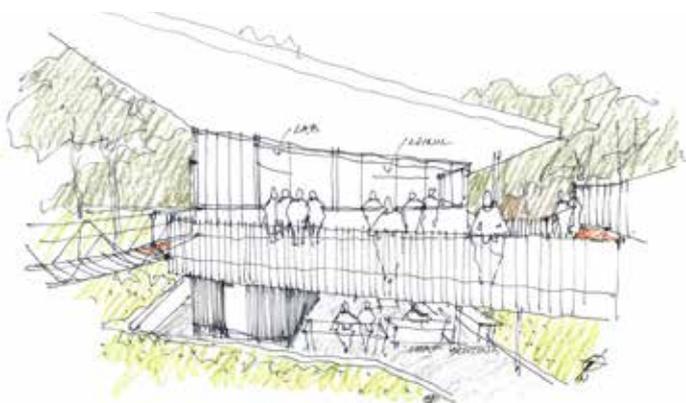
The entrance to the koala breeding facility, where visitors will be able to view koalas.

thousands of years. Cultural burning practices, indigenous storytelling and artwork will demonstrate culture, history and ancient knowledge. In addition, a café run by the Bunyah LALC, will provide welcome refreshments at a meeting place in the forest.

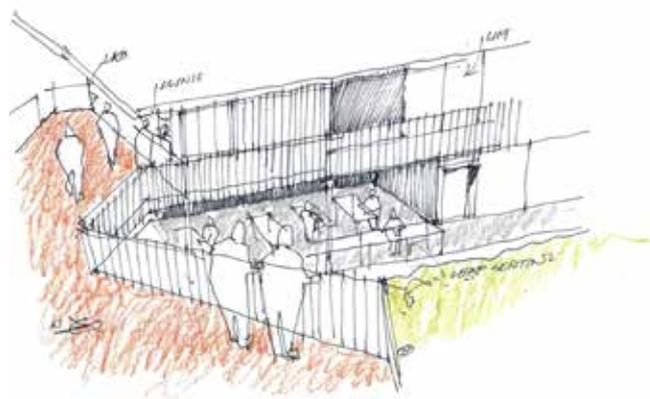
Interactive displays and education areas will enable Forestry Corporation to showcase their sustainable management of native forests, information about the diversity of species, and timbers produced in the local region.

WildNets Australia is adding another dimension of adventure to the tourism precinct. With a bird's eye view of the tree tops, visitors of almost any age will be able to explore the network of interconnected spaces, bouncy netted rooms, tree houses and suspension bridges.

Guulabaa is scheduled to open in 2022. It is anticipated that WildNets adventure park may open earlier in late 2021.



Visitors watching koalas being treated and cared for at the breeding facility's clinic and laboratory.



Visitors watching volunteers sorting and preparing leaf for koalas.

All artist's impressions on page 8 courtesy of Allen Jack + Cottier Architects.

WILD KOALA BREEDING PROGRAM



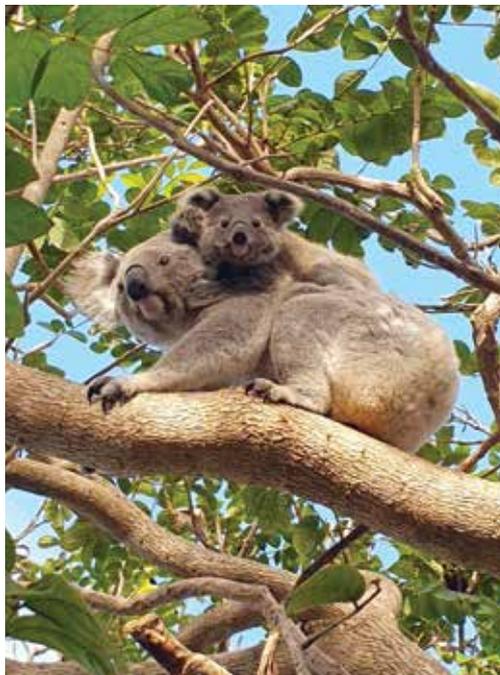
The establishment of this breeding program is even more important following the fires which decimated koala populations in NSW, but also in Queensland, Victoria and South Australia.

A dizzying array of applications, licences and biosecurity plans, all to be reviewed and approved by an ethics committee, are being completed, and we hope to be able to reveal more soon about the breeding facility which will be situated at Guulabaa. Included in the plans is an area dedicated to remembering the bushfire tragedy of 2019/2020; set in native forest, it will be a poignant reminder and a memorial to the wildlife we lost.

We look forward to providing further updates to readers of Gum Tips magazine soon about all these exciting projects.

Donations by people all over the world have fast-tracked this vital program.

Amazingly this project, so important for the future of the species, is funded by public donations. During the terrible bushfires of 2019/2020, the Port Macquarie Koala Hospital was overwhelmed by the generosity of people from around the world. So much so that, not only were we able to build and deploy over 140 wildlife drinking stations, but we are now able to fast-track a vital and complex initiative for which the Hospital has for some years been working to fund - the world's first wild koala breeding facility, which when established will help recover and bolster wild koala populations across the NSW Mid North Coast. Major partners include Taronga Conservation Society, The University of Sydney and the Australian Museum.



Wild mother and joey spotted recently near Port Macquarie.

Images courtesy of Orr Cohen.

KOALA ERGONOMICS



Scott (left) and Kel (right) enjoy the challenge of koala ergonomics!

Scott Castle and Kel Tremayne are passionate about designing and building koala enclosures because for a wild animal in permanent or temporary care, their environment is vital to their wellbeing.

Scott Castle is Conservation Manager at the Port Macquarie Koala Hospital, and has been involved in this work since he joined us five years ago. Scott was delighted when Kel Tremayne joined the ranks of Hospital volunteers a year ago. Kel brings many skills to the table. A qualified surveyor, he is also a DIY enthusiast and creative mechanic. Scott also has practical experience in small-build projects, plus his BSc in Zoology, Ecology

and Conservation gives him the understanding to assess an animal's behaviour, capabilities and needs. Together Scott and Kel make a great team.

'Observation is key, watching koalas use the space, branches and 'furniture' in their enclosures. It informs our decisions, and enables us to personalise the koala's environment.'

Scott Castle

Koala Hospital enclosures are called 'gunyahs', an indigenous word meaning 'shelter'. When designing new enclosures or improving existing ones, Scott and Kel check health charts for each koala, and its ability to climb and move around within its current space. Koala care teams also observe and monitor each koala's behaviour day-to-day and update records. All this helps to inform gunyah design. In addition, we adhere to the guidelines of the Department of Primary Industries, when we apply for exhibit enclosure licences.

Releasing koalas back to the wild is always our aim, so whenever this is the potential outcome, we must include in the treatment, plan time for the koala's condition to return. Just like people following injury or illness, koalas in care can lose muscle tone and strength. For a koala in the wild, the ability to climb quickly, even to jump between branches is vital to escape predators, compete for food, and during breeding season. Koalas who were originally admitted as young joeys and have been in care for some time, require extra checks. Before release these juveniles may spend months in large enclosures with big trees; here their strength and agility is monitored so that we know when they are ready for life in the wild.

'I am learning to understand koala behaviour and I enjoy that challenge. Sometimes I need to think like a koala!'

Kel Tremayne

Forestry Corporation NSW provide eucalyptus hard woods for building the gunyahs. They help us by regularly delivering supplies of trimmed branches to the Hospital.

Main design criteria

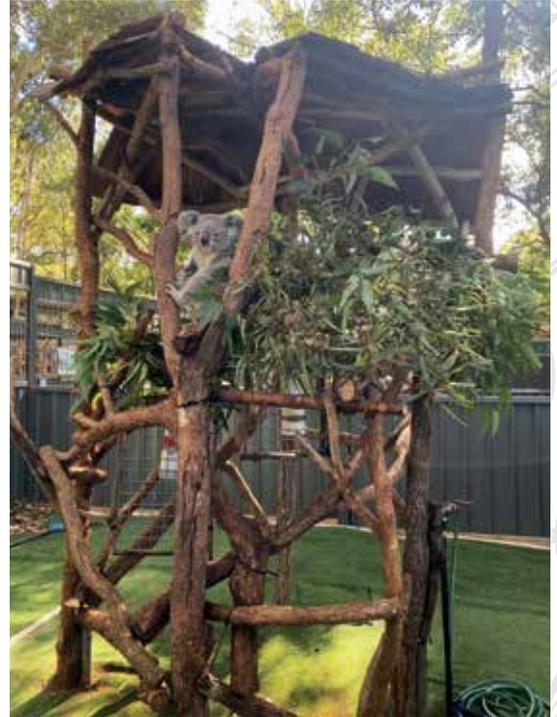
Branches, at appropriate heights with uprights and sloping poles for access. A minimum distance is required between branches and enclosure fencing, as koalas can leap up to 2 metres!

Resting places and forks in trees, vital when animals sleep up to 18 hours a day. Size, shape and width of forks is tailored to each koala. Whilst humans cannot imagine being comfortable in the fork of a tree, koalas are perfectly adapted, with a layer of thick padding on their rumps, providing as Kel says, 'a natural cushion for their tush'!

Leaf containers, positioned so that the koala can access food comfortably. Koala carers also need to be able to access containers readily for cleaning and restocking with fresh leaf.

Privacy, allowing the koala to hide amongst leaf if they wish.

Sun protection and shady spots, where koalas can also catch the breeze on a warm day. Some koalas also use these covered areas during rain, but many are happy to get wet (koala fur gives the best insulation of any native Australian animal's).



Maria River Road Jan making the most of his gunyah.



Kel working on a new design for an indoor ICU unit.

Recently Scott and Kel have been working on simplifying processes. For biosecurity reasons we deep clean enclosures and change branches between every occupying koala. During busy periods, there can be a fast turn-around in the rehabilitation area! Scott and Kel are now creating gunyahs which can be broken down and rebuilt quickly and easily with fresh new branches. Their innovative designs will be used at the new Hospital in town and the new koala hub at Cowarra.

CAPTURE BAGS AND CARRY BASKETS: 'TOOLS OF OUR TRADE'

Rescues, releases, health assessments, diagnostic procedures, medical treatments and surgery all require staff and volunteers at the Port Macquarie Koala Hospital to be able to safely handle koalas with minimal stress. Unfortunately, you don't get a good result if you search for 'koala carry basket' or 'koala capture bag' on the internet! So, with experience and some research, over time we have created our own solutions. These materials not only protect the koalas themselves but also provide a safer working environment for our volunteers.

Safe and stress-free koala handling is a priority.

Our trained rescuers respond at all times of the day or night to koalas in all kinds of trouble. They have a good understanding of koala behaviour but also need the best equipment to achieve a safe and successful rescue, and bring a koala in for assessment

and treatment. Our goal is always to rehabilitate and release wild koalas, so we ensure that koalas in rehabilitation do not become accustomed to human touch and company. Our koala bags and baskets help us achieve this while they are at the Hospital. They also enable releases to be calm and gentle events, where a koala is offered freedom from the security of a bag or basket.

Our koala capture bags are made of lightweight canvas, fine enough for the animal to breathe through yet strong enough that their claws can't pierce the materials or injure the handler. Once the bag is closed and the koala is secure, the bag becomes dark helping the koala to relax. Bags are currently cut and sewn by a kind member of our community, Leah Mitchell and made to an agreed pattern. Not too big and not too small, they are just right for a koala. The design includes double French seams to prevent loose threads that could entangle a koala's claws. Leah loves the fact that her sewing skills mean she can help koalas in this special way!





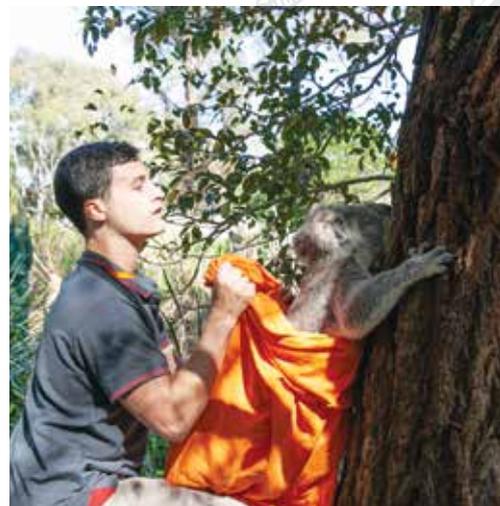
We provide samples and templates to other wildlife organisations to help them develop their own protocols.

Our koala carry baskets are a simple, practical combination of two sturdy laundry baskets, cushioned to provide comfort and minimise slippage. Three of the basket sides are secured with a system of hook and loop tape which also function as hinges. Betty Lambert, who has been a dedicated volunteer with us for many years, sews fabric covers to fit over the baskets. These minimise a koala's ability to see, and be concerned by human activity and unfamiliar surroundings.

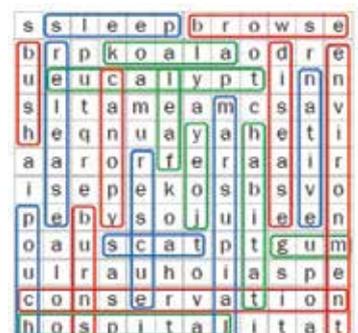
Both bags and baskets are used for rescues and releases. These 'tools of the trade' are also used day-to-day at the Koala Hospital by staff and volunteers with koalas in care. Our customised bags and baskets mean we can bring koalas in and out of the clinic quickly and safely for health checks and treatments, and to move koalas to new enclosures when necessary. They can be used to transport koalas over longer distances if animals need to be brought to us for specialised care. Joeys in home care are regularly transported by their carers to the Hospital clinic in carry baskets for their check-ups.

Koala Emergency Rescue Line: 02 6584 1522

If you sight a koala in distress, call our Rescue Line 24 hours a day/7 days a week.



Koala Kids word search solution



KOALA HOSPITAL PRESIDENT WINS AWARD

A few weeks ago our President, Sue Ashton, had an unexpected surprise when news arrived that she had won the 2021 NSW North Coast Local Tourism Hero Award for the Port Macquarie and Hastings Region!

There was no formal nomination process for the award and to date her nomination remains anonymous. Although we genuinely don't know who put Sue forward, the Koala Hospital heartily endorses the presentation of the award to Sue, by the lead government agency for the north coast of New South Wales (NSW) tourism and major events sectors, Destination North Coast.

The nomination cited many features of Sue's leadership including:

- Sue's dedication to the Koala Hospital, its mission and of course the koalas themselves. Her tireless support of staff and volunteers.
- Her calm and considered leadership, including navigating local, national and international media attention during the horrific bushfires of 2019/2020.
- Sue's role in securing a \$5 million state government grant for the redevelopment of the Port Macquarie Koala Hospital.
- Her role in maximising outcomes for almost \$8 million raised during the bushfires, to make the world's first Wild Koala Breeding Program a reality.



- Sue's connection and collaboration with tourism operators, the Tourism Association, the local Council, conservation bodies, media and more.
- Her leadership of a comprehensive and collaborative strategic process to provide a clear vision for the Koala Hospital into the future with koala care and conservation at its core.

KOALA REHABILITATION WORKSHOP 2021

For the first time ever, this popular workshop is being presented as a series of online webinars, owing to COVID restrictions.

The Port Macquarie Koala Hospital hosts and provides this comprehensive workshop, usually on an annual basis, on behalf of WIRES NSW (Wildlife Information, Rescue and Education Services). The Koala Rehabilitation Workshop is open to all NSW licensed wildlife organisations, plus licensed wildlife groups in other states in Australia. For carers already working with koalas or intending to do so in the future, this is vital training.

In 2020, COVID unfortunately forced us to cancel both this face-to-face workshop and the third National Koala Conference. This year we had been busy preparing for a 2 day face-to-face training in Port Macquarie in August 2021, when once more COVID intervened.

We were determined not to cancel training this year, and the workshop is going ahead online during September and October. Despite the different circumstances, we are delighted to be conducting this important training again!



The Koala Rehabilitation Workshop includes:

- NSW Koala Code of Practice
- WHS – working with koalas
- Capture, handling and re-release
- Biology and social behaviour
- Leaf identification
- Housing
- Reasons for admission to care eg disease, motor vehicle accidents, dog attacks
- Search and rescue - firegrounds
- Treatment of burns injuries
- Care of joeys

Koala Kids

WORD SEARCH ACTIVITY

s	s	l	e	e	p	b	r	o	w	s	e
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Find a word - search list

browse

burns

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canopy

conservation

disease

environment

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gum

habitat

hospital

joey

koala

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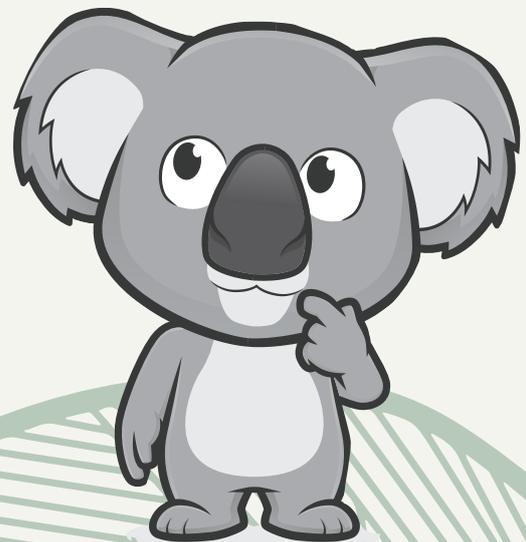
pouch

release

rescue

scat

sleep



Koala Emergency Rescue Line - Phone (02) 6584 1522

If you sight a koala in distress - call our
Rescue Line 24 hours a day / 7 days a week

E: info@koalahospital.org.au    

General Enquiries: 02 6584 1522

www.koalahospital.org.au

'KOALA CAM'



Recently we received these interesting images taken by a wildlife camera on local private land in the Port Macquarie area.

On examination, we think the camera has captured at least two different mothers each with young joeys. Given the location, we are fascinated because it is very likely that the adult mother koalas are two of the five koalas which we released in that area a year ago.

Kooloonbung Tasha, Hockey Luna and Kooloonbung Close Trevor, were originally admitted to the Koala Hospital as orphaned joeys and they went into home care for many months. Following that they

spent further time in our juvenile rehabilitation yard, learning to climb and preparing themselves for life in the wild. Pacific Drive Courtney and Ocean Drive Bray were juveniles on admission and both were in care for several months.

These images also illustrate success for the local landowners who decided to return their land to koala habitat, and collaborated with us on the koala releases. The landowners had not seen or heard koalas prior to the release of the juveniles last year. So far we can't check for koala ear tags (hairy ears mean the tags are often hard to see and read at a distance) but we will keep you posted!