

BARRABA COMMUNITY NEWS

COMMUNITY OWNED AND EDITED

Wednesday 21st February 2024

OUR THANKS TO THE RURAL MEDICAL CLINIC, MANILLA

Over the last 6 months Barraba has had a patchwork of GP services. Dr Boyd from Newcastle and Dr Wearne from Bingara have supplied some part-time service in the interim after MedCIRC left town. But throughout the time the Rural Medical Clinic in Manilla has been a constant service, particularly visiting the residents at Garvin House and taking new patients at the surgery, throughout this time of uncertainty. Face to face services to Garvin House residents are essential to support their health and wellbeing.

BCN talked to Dr Bronwyn Thompson from the Manilla surgery last week. "I am delighted to read in the recent Barraba Community News that Dr Strydom will be able to recommence practice in Barraba. I know the community will be so relieved and happy to have Dr Strydom back," said Dr Thompson. "All of us at the Rural Medical Clinic wish the staff of the Barraba Medical Centre all the best in the future, and we offer our best wishes and 'welcome back' to Dr Strydom as he returns to the community that so loves and appreciates him."

Dr Emma Moffatt, along with the whole Manilla practice, has offered medical care to a very large number of patients from Barraba, only having to close their books when they were completely overwhelmed with patients. The reception staff, in particular, worked themselves to the bone fielding phone calls, uploading patient files and getting new patients set up in the Manilla surgery system.

The NSW Farmers Barraba Branch AGM

Monday 11th March 2024 at 7pm at the Commercial Hotel.

All are welcome to attend. RSVP to Liam Johnston on 0419 993 742 by Friday 8 March.



Community College Northern Inland will be holding RSA and RCG training at the Barraba campus in April.

If you're going to work at a licensed premises (that is, a place that sells alcohol), you must complete competency training in the Responsible Service of Alcohol (RSA). If you don't have valid evidence that you've completed the RSA training required for working in a licensed premises, you could be fined.

If you're going to work in a registered club or hotel and your duties involve gaming machines, you must complete competency training in the Responsible Conduct of Gambling (RCG). If you don't have valid evidence that you've completed the RCG training required for working with gaming machines, you could be fined.

SITHFAB021 Provide Responsible Service of Alcohol – Thursday 11 April

To sell, serve or supply alcohol in NSW you must complete an RSA training course provided by an approved training provider.

SITHGAM022 Provide Responsible Gambling Services – Friday 12 April

NSW Gaming Laws mandate Responsible Conduct of Gambling training for all people working in the gaming industry.

For RSA and RCG Joblink Plus Limited, trading as Australian Training Plus (ATPlus) - RTO ID No. 91434, will be delivering, assessing and issuing Statements of Attainment to students assessed as competent in the units per course requirements.



For more information please phone the Community college on 6782 1662 or enrol on line through our website www.ccni.nsw.edu.au



BARRABA RSL & RECREATIONAL CLUB LTD

Phone 67821379

For the information of members and guests.

THIS WEEK

THURSDAY 22nd February

Bingo from 6pm

FRIDAY 23rd February

MEAT RAFFLES

1st Draw 6.45pm

2nd Draw 7.30pm

MEMBERSHIP DRAW \$1000

Sunday 25th February

Angler Club raffles from 1pm Membership Draw \$1700

HAPPENING SOON

SUNDAY 10th MARCH CLUB AGM STARTING 11AM

BISTRO HOURS

Phone 0427330808

DINE IN OR TAKEAWAY

DAILY BLACKBOARD SPECIALS AVAILABLE

ALSO PIZZAS MADE TO ORDER

MONDAY: CLOSED

TUESDAY: CLOSED

WEDNESDAY: 12PM-2.00PM

THURS/FRI/SAT: LUNCH 12-2PM

DINNER FROM 6PM

SUNDAY: 12-2PM



Notice of Annual General Meeting
Of the Barraba RSL & Recreational Club Ltd
To be held Sunday 10th March 2024 @ 11am
@ the clubhouse





At The Playhouse Hotel

Open Saturday and Sunday 8am to 2pm

Breakfast, morning tea, brunch and lunch

To book or enquire please phone Shelley on 0488192256

2024 Barraba Show Program

THURSDAY 29 FEBRUARY

4pm - Encouragement Draft

FRIDAY 1 MARCH

Daylight Start - Campdraft

9am - Dressage

9:30am - Wool Judging

11am - Wool Judges comments

Face painting and balloon Twisting

12noon - Showjumping

3:30pm - Junior Beef Cattle judging

4.30pm - Junior Young Woman judging

5pm - Pavilion Opens

6pm - Grand Opening

6.30pm - Motorbike Barrel Race

8pm - Music

11.45pm - Bar Closes

SATURDAY 2 MARCH

Daylight Start - Campdraft

7:30am - Yard Dog Trails

8am - Sports Shear/Wool Handling

8:30am - Cattle Judging - Young Paraders

Show Jumping

9am - Pavilion Open

9:30am - Poultry Judging

10am - Fat Lamb Judging

Light Harness

12pm - Registration for Sporting Events

2pm - Sporting Events

6pm - Extreme Broncs

8pm - Music

11:45pm - Bar Closes

SUNDAY 3 MARCH

Daylight Start - Campdraft

7.30am - Sports Shear/Wool Handling

8:00am - Horse events - Ring 1, Ring 2, Ring 3

Yard Dog Trials

8:30am - Australian Stock Horse Judging

9am - Pavilions Open

1:30pm - Pet and Dog Show

<u>Entering in the Show – ENTRY DETAILS</u> <u>PAVILION SECTIONS</u>

<u>ALL ENTRIES:</u> Delivered to the Secretary's Office at the Showground between 10am - 4pm on Weekdays, from Monday 26th February to Thursday 29th OR to the Showground Pavilion on Friday 1st March, 8am – 10am.

EXCEPT:

CUT FLOWERS Luncheon Pavilion from 2pm – 4pm, on Friday 1st March.

GARDEN PRODUCE Luncheon Pavilion from 2pm-4pm, on Friday 1st March.

AND PLEASE NOTE THIS TIME:

PHOTOGRAPHY Entries close 3:30 pm on Tuesday 27th February.

OTHER SECTIONS

STUD CATTLE Entries close Friday 23rd February All entries to cattle

secretary: mctswalker@bigpond.com Tammy Walker PH: 0429 310 479

or 02 6782 7378 Entry form on website:

<u>www.barrabashow.com.au/forms</u> Please send in completed waiver form, with entries.

POULTRY Entries close Friday 23rd February. All entries to the Secretary

WOOL Fleeces can be left at the show office during the show week or at

the wool pavilion by 2:30pm on Thursday 29th Feb. HORSES Entries are taken on the day under the marque in the horse section.

2024 Junior (U18) Dog and Small Pet Show



Our very popular pet show is on again at the 2024 Barraba Show. Bring along your small pet; entries are open to all young people up to senior high school. It is not just dogs; there are classes for birds, cats, and other small animals. There is even a class for the most unusual pet!

All animals must be on a lead, or in a cage or pen. All entries for the dog classes (and all dogs that come onto the Showground) must be fully vaccinated and have a current vaccination certificate. The local Vets will be on hand prior to the start of events to check certificates. Entries (\$1 per class) open about 12.30 pm behind the Grandstand.

Judging will be about 1.30 pm on Sunday 3rd March behind the Grandstand. Come along – there are heaps of ribbons, certificates, and prizes to be won – it is always great fun.

Any enquiries: Terry Threlfall: 0400 216 365

NEW AT THE 2024 SHOW – THE MOTORBIKE BARREL RACE!

This year, Friday night's entertainment in the Rodeo Ring won't feature horses or bulls, but motorbikes! For the first time in many years, the spectacular Barrel Racing on bikes returns to Barraba Show. Competitors are timed racing around fixed barrels in the arena; the fastest to complete the circuit wins.



Chief Steward Phil Denyer told us: "This is an event for the whole family. There are entry classes for children as young as seven, riding their PeeWees, right through to seriously competitive adults on their powerful machines. It will be fun and great entertainment". Safety rules and regulations concerning clothing and bike capacity will be strictly enforced.

ALL COMPETITORS –

- Provide their own two-wheel motor bike
- Must have a minimum of two years riding experience
- Must wear a helmet, long pants, long sleeve shirt and boots
- Must be seven years or older.

ENTRY CLASSES -

- 1. Mini-racers (7 12 years) CC maximum of 125cc
- 2. **Tweens 1** (13 15 years) CC maximum of 125cc
- 2a. Tweens 2 (16 17 years) CC maximum of 450cc
- 3. Seniors (18 years up) CC maximum of 750cc
- 4. Clapped out Ag Bike
- 5. Best Decorated Bike
- 6. Fancy Dress

Now is the time to work out who in your family will enter and what classes. Full information and the all the entry forms are in the Barraba Show Schedule which is available on line at www.barrabashow.com.au or you can get already printed copies by dropping into *Phil Denyer Mechanical Repairs*, corner Alice and Queen St, Barraba during business hours. Entry forms with entry fees (\$10 under 18yrs, \$20 adults) must be lodged at Phil Denyer Mechanical Repairs before

5pm on Thursday 29 February 2024, **or** at The Secretary's Office at the Showground **before 3pm Friday** 1 March. **NO entries will be taken at the Rodeo Ring** before the event.

OTHER IMPORTANT INFORMATION

Getting you and your bike to the start: On Friday afternoon, when you drive/ride through the Showground gate, keep left at the first intersection, go right past the campdraft area and then follow the track west through the horse rings towards the Secretary's Office. You will come to the unloading ramp and the marshalling area for the bikes.

"It is a serious competition with good prizes," Phil Denyer told us. "So expect to see some really skilful riding. However, it also a fun event for the whole family – get dressed up, decorate your bike, see if you can also win Class 5 and 6. And I'm really looking forward to seeing those clapped out Ag bike racing!"

Remember the riding and clothing requirements will be strictly enforced.

EVENT STARTS: 6 pm Friday 1 March 2024

FURTHER INFORMATION: Phil Denyer at *Phil Denyer Mechanical Repairs* 6782 1107.









Senior Citizens Notes

Hello everyone,

How is everything at your place? I do hope that the heat is not knocking you about too much. There was a great roll up at Housie last week.

People please keep the morning free to come along and listen to Julie Tremayne, an advocate for senior rights service. If you have any questions about services you are receiving, or about to apply for something, this is an ideal opportunity to seek more information. An information session will be held at the Senior Citz – 50 Fitzroy Street at 10am 15th March. We will even bring morning tea. If you are able to attend, please do so, even if we think we know about what goes on around us, it will be very interesting to hear what Julie has to say.

About our trip away – I have spoken to our friendly bus driver, but we will get our heads together next week and see what we can come up with.

Once more – dog owners – please be responsible and clean up after your dog. It is neither funny or amusing in the least, to walk away and pretend that it was not your dog.

Members, just a reminder, it is meeting day again on Friday. Come along and share your ideas.

This is all for now – except to wish all those folk on the sick list a speedy recovery.

Till next time

Cheers Judy B

PS – The information morning, is open for everyone, not just Senior Citz. Everyone welcome.





From Adam Marshall's Newsletter -

Pensioner concessions for council rates should be doubled

I have called on the State Government to act swiftly and increase the pensioner concessions for local council rates which have been fixed at a maximum of \$250 for the past three decades. I placed a motion on the notice paper in State Parliament last week, advocating for the region's seniors and pensioners who are doing it tough, particularly during the cost-of-living crisis. There are enormous pressures on vulnerable members of our communities at the moment. Current pensioner concessions for local council rates have been fixed at a maximum of \$250 for general rates and \$87.50 for water and sewer charges for 31 years, since the Local Government Act 1993 was created. In the last three decades, council ratesnd charges have increased markedly, reducing the relative value of this concession, and placing further cost pressures on those who are vulnerable. The reality is \$250 dollars in 2024 is hardly comparable to \$250 in 1993 and the government needs to keep pace with the real value of money. I have also pushed for current pensioner concessions to be indexed annually, in line with annual rate increases, to ensure that as rates rise, the concession increases at the same rate.



History Notes

This week we hosted two small busloads of seniors from Tamworth for morning tea. Our group set up a group of tables and umbrellas and produced lots of delicious treats which our visitors thoroughly enjoyed. Thank you to all those who assisted with the event.

We still have not heard any results from last week's query re Troth/Groth families although I have found that someone on the coast is trying to help this family as well! We are also hoping to hear some more about the Central Hotel and Adele Croaker who married Mr. Wackett possibly in 1953.

A number of Barraba residents are aware of the centenary of the Town Clock this year. Somewhere there is a cutting taken from a Barraba newspaper dated in 1924 - this article will show just who constructed the clock and when it was finished. There is a story that it was ready for Anzac Day 1924 but the postcard that turned up points to the fact that it was Remembrance Day in November 1924. This matter needs to be cleared up before April.

I have been asked about the history of Barraba's Banks. The Commonwealth Bank began in Barraba early in the 20th century and it was housed in a shop in the main street just south of the Central Hotel- I think it was the one used as a doctor's surgery for many years. I have childhood memories of visiting the bank with my 'pass book' and money box to empty the contents into my account.

Eventually the bank built a bank building on the vacant block that had been the Royal Hotel and conducted its business there for a number of years. Pass books became cheques and later with communication progress the bank decided to leave Barraba - perhaps someone can remember the bunch of flowers placed on the doorstep by one of our citizens!

The building remained empty for a time before Australia Post decided to leave their relatively new building diagonally across the road and set up in the empty Commonwealth Bank building. This was a major operation as the private mail boxes had to be moved as well as some of the fittings.

The Bank of NSW arrived in Barraba circa 1902 and set up in a house near the Pre School - possibly now part of the Pre-School. This turned out to be a temporary site as the bank built a new two-storey bank building on the corner of Queen and Maude Streets. The ground floor was the banking chamber while the second floor was the manager's

residence -this plan worked well so long as the family were fit arid able to climb the stairs!!

Once again progress caused changes and then it was said that the brick building was cracking!! The building was demolished and a new "functional box" was built together with a manager's home in Maude Street. Tim Shellshear, who conducted a study of Barraba's main street buildings in the 1990's was disgusted with both the new bank buildings.

The oldest bank to do business in Barraba and the last to leave has a long history so I shall leave that until after the show.

Cultural Plan 2024-2029

Have your say about our region's cultural life



Tamworth Regional Council is committed to supporting and developing arts and culture throughout our region. The Tamworth Regional Cultural Plan 2024-2029 will outline the region's arts and culture priorities for the next five years. We want to raise the region's profile as an emerging and progressive destination to live, do business and visit.

Have your say on the region's cultural life and help shape the 2024-2029 Cultural Plan. Complete an on-line survey available through the Tamworth Regional Council website. The first phase of consultation closes Friday 15 March 2024.

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Published by Community College Northern Inland Inc.

Cnr. Alice and Fitzroy St Barraba Contacts: Bronwyn 0447 165 008

Office: 02 67821662

Email news@barrabacommunitynews.org.au
Printed on site at the Community College. Free publication by email or collection from local Barraba main street businesses

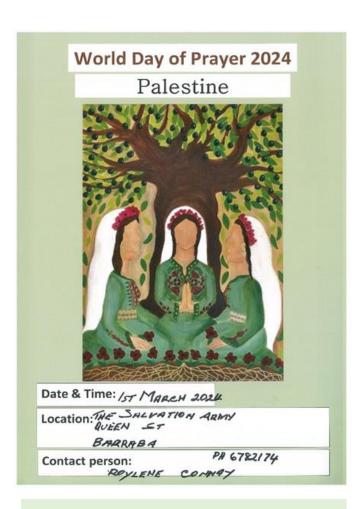
Council meeting update

Here is an overview of outcomes from Tuesday 13 February, 2024 Ordinary Meeting of Tamworth Regional Council:

- ➤ In a series of Mayoral Minutes, Mayor Russell Webb secured the support of his fellow councillors on three actions which aim to build the region's resilience:
- Councillors supported the dissolution of the Namoi Joint Organisation, also known as Namoi Unlimited, due to decreasing participation and the governance costs associated with running the organisation in its current form. At the meeting of Namoi Unlimited (Namoi Joint Organisation) held on 23 November 2023, the Board resolved to discontinue its activities as a Joint Organisation effective from 31 December 2023. Tamworth Regional Council tonight agreed to begin the process of writing to the Minister for Local Government to begin the process to put this resolution into effect by 30 June 2024. Participating councils in Tamworth, Gunnedah, Walcha and Liverpool Plains intend to pursue a less formal alliance into the future.
- Councillors agreed to write to the NSW Premier, the NSW Treasurer and the NSW Minister for Local Government seeking action on the increasing financial gap for councils around the state. They made the decision after considering the findings of the "Cost Shifting onto Local Government" report for the 2021/2023 financial year. The report, commissioned by the NSW Office of Local Government, outlines a need to address cost shifting through a combination of regulatory reform, budgetary provision and appropriate funding.
- Councillors accepted an invitation from Business NSW to become a member of the Regional Leaders Program which connects leaders and decision makers in Regional NSW to strengthen the collective voice of business. The Mayoral Minuet said program participants are highly engaged in driving the economic vision of Regional NSW and advocate on issues that impact economic growth and prosperity. The program provides a unique platform and opportunity for Council to engage directly with business and industry in a collaborative environment where the focus is on developing joint solutions to some of our most challenging issues such as housing, temporary worker accommodation, renewable energy, and worker and skill shortages.
- ➤ In line with Council's Blueprint 100 Strategy to support establishment of a high technology agribusiness cluster and develop or host agri-tech events, Councillors endorsed sponsorship of the Start-Up Lane segment at AgSmart Connect 2024. The two-day event will be held at Tamworth

- Regional Entertainment and Conference Centre in early March 2024. It is expected to attract more than 5,000 attendees in-person and online, helping promote Tamworth as an agriculture hub and an innovative destination among the agri-industry and its investors. Councillors agreed to one-off \$10,000 sponsorship to be funded from the Event Reserve. The economic benefit of the event to the region is projected to be just over \$1 million.
- Councillors tonight agreed to change the fee structure for green waste disposal at rural waste facilities across the region, resulting in a decrease of up to half the cost. In addition to the reduction of green waste disposal fees for the 2023/24 Financial Year, the fee structure will be streamlined from six classifications of green waste to three and a new minimum charge of \$5 for green waste disposal will be established. The lowest had been \$10. The new structure removes an inequity between fees for green waste disposal at Tamworth's Forest Road Waste Facility and at the Rural Waste Facilities at Manilla, Barraba, Bendemeer, Dungowan, Duri, Kootingal, Manilla, Niangala, Nundle and Somerton. The rural sites do not have weighbridges and quantities of green waste for disposal are measured by vehicle size and type. At Tamworth's facility, loads of green waste are charged by weight and are minimal in comparison to the fixed charges at Rural Waste Facilities. The Council report said the change in fees was expected to reduce monthly income by about \$4,500 (excluding GST), however the lower fees were expected to result in an increased presentation of green waste. The new fees will come into effect from 1 March, 2024.
- As part of Council's ongoing commitment to the region's youth, Councillors at tonight's meeting formally adopted the Tamworth Regional Youth Strategy and Action Plan. The document will help guide how Tamworth Regional Council, local services providers, schools, clubs and government departments can build a region that supports young people. The strategy has been designed around five key focus areas including life ready, wellbeing, access and connectivity, community and identity. Each focus area has its own set of priorities and actions which will guide the delivery of prioritised youth related initiatives. The Strategy and Action Plan has been created through extensive consultation with local youth, key stakeholders and the wider community. More than 500 individual submissions were received during the engagement process and in response to surveys, including during the Stand Tall Event.
- Making sure Tamworth has enough water to meet the needs of its growing community is at the top of Tamworth Regional Council's priorities and tonight Councillors took another step

towards investigating options to ensure water security. They agreed to send fund a study trip for a Council staff member to attend the WateReuse Symposium – the pre-eminent world conference about water recycling – in Denver, Colorado in the United States. The symposium strip will also include site visits to places exploring or operating purified recycled water facilities in America. Tamworth Regional Council is one of six organisations the Water Services of Association invited to be represented on the study tour including Sydney Water, Melbourne Water, South Australia Water and Auckland Water, recognising Council at the forefront of innovation.



BARRABA UNITING CHURCH NOTICES

Sunday 25th February 2024 No Service in Barraba this Sunday Combined Service at Manilla Uniting Church at 10am

Followed by shared light lunch.

All Welcome
Sunday 3rd March Barraba all services return to

10:45am

ANGLICAN CHURCH TIMES St Laurence's Barraba

Sunday service at 10.00am Woodsreef 2nd Sunday of the month at 11.30am

Snippets from St Laurence's

The year is slipping away and it is time to celebrate the World Day of Prayer again. This is now held on the first Friday in March each year, and this year is being hosted by the Salvation Army, at 10am on 1st March. When I first came to Barraba is was held at 3pm, then later it was at 7pm for some years, but now we meet at 10am and enjoy a cuppa and yarn afterwards.

This years' service has been prepared by Christian women of Palestine. It is based on Paul's letter to the Ephesians: "Bear with one another in love." That is a message that is certainly relevant today.

Meanwhile, Matt has completed his year of training and is now a fully fledged vicar. Bible study groups and youth group have started up again and Men@Glen will be held at the Glen Innes showground on 1st and 2nd March.

In Paul's letter to the Ephesians, chapter 4 and verses 1 to 3 we find this advice: "As a prisoner of the calling you have received. Be completely humble and gentle; be patient, bearing with one another in love. Make every effort to keep the unity of the spirit through the bond of peace."

CATHOLIC CHURCH TIMES

Barraba 1st Saturday evening Mass 6pm 2nd 3rd 4th and 5th Sunday 9am Upper Horton 11am on the 3rd Sunday Weekday Mass Wednesday 10am

Thank you to Roylene Conway

I just thought it would be nice to send a general note, to the Barraba Community News, to thank Roylene for her dedication to her role and for the wonderful service she has given to the town and residents over the years.

Many people, over the years, have enjoyed the very generous Christmas lunches organised by her. It should also be noted, a special thanks the all the volunteers and the local shops that donated food for the day.

Name and address supplied





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... and that is WHY the chicken crossed the road.

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Now you can get the local news updated more frequently by going to

www.barrabacommunitynews.org.au

From The Conversation

A tug of war between survival and fitness: how chameleons become even brighter without predators around

Martin Whiting, Professor of Animal Behaviour, Macquarie
University

Invasive species offer a rare research opportunity, as they often colonise new environments very different to their native habitat. One such species is the Jackson's three-horned chameleon (Triocerus j. xantholophus), which was accidentally introduced to the Hawaiian Islands in the 1970s.

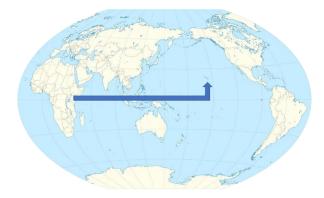
Our study, published today in Science Advances, shows Hawaiian chameleons display much brighter social signals than individuals from their native habitat range in East Africa – and could represent an example of rapid evolution.



A male
Jackson's
three-horned
chameleon
(above)
courting a
female
(below) in
Kenya.
Martin
Whiting.

A long way from home

In 1972, about 36 Jackson's chameleons made their way from their native Kenya to the Hawaiian island of Oahu, destined for the pet trade. The chameleons were a little worse for wear by the time they arrived in Hawaii, following a long and taxing journey that would have begun days before they were loaded onto the plane in Nairobi.



Invasive chameleons have made it to the Hawaiian islands – the world's most isolated island archipelago. Wikimedia

Commons

The story goes that an Oahu pet shop owner, Robin Ventura, opened the crate in his garden to give them fresh air and an opportunity to recover. Presumably, he underestimated the speed with which chameleons can move (and recover) – and they quickly dispersed into the surrounding area.

This founding population represented an accidental invasion, and subsequently became an unplanned experiment in evolution. What happens when an animal with colourful social displays – from a population with lots of bird and snake predators – is introduced to an island virtually free of predators?

Evolution in action?

We predicted Hawaiian chameleons, as a result of being relatively free from predation, would have more elaborate or brighter displays than their Kenyan counterparts. We also predicted they would be more conspicuous when viewed by their East African predators, such as birds and snakes.

In the animal kingdom, bright or colourful displays can attract the attention of sharp-eyed predators. This reduces an individual animal's likelihood of survival and, by extension, its reproductive fitness (or the number of genes it passes on to future generations).

When survival is threatened, natural selection acts as a brake and halts the further elaboration of colour, or shifts bright colours to areas of the body less visible to predators.

For instance, many lizard species have bright colours concealed on their undersides or throats. In South Africa, male Augrabies flat lizards will signal to rival males by raising their underside and exposing the throat, which is puffed out.



Many lizard species, such as this Augrabies flat lizard, have bright colours on body parts that are less visible to predators such as birds. Martin Whiting

On the other hand, conspicuous displays may also increase fitness. For example, brighter or more colourful males may gain greater access to females, either by winning contests with rival males, or simply appearing more attractive to females. This tug of war between survival and fitness is well documented in species with fixed or seasonally dependent colouration. For instance, guppies become less colourful when dangerous predators share their streams. However, it's less understood in animals with dynamic colour change such as chameleons.

Although we have a good understanding of how chameleons change colour, we don't know if they modulate their displays when there are more predators in their environment. It may also be that natural selection prevents them from producing colour signals that are colourful or bright beyond a certain threshold. To test our predictions, we travelled to Kenya and Hawaii to study colour change in wild chameleons.

Vibrant test subjects

Chameleons are great study subjects because they have a very strong stimulus response. You can pop them on a branch away from their usual haunts and present them with a fake predator or another chameleon, and they will devote all their attention to the stimulus while completely ignoring you! We presented each male chameleon with a rival male, a female, a model bird predator and a model snake predator - each in a one-on-one interaction. During the presentations we measured their colour using an optic spectrometer.



Chameleons were exposed to a model snake (pictured: African boomslang) and bird (pictured: African cuckoohawk) predators. Martin Whiting

This instrument allows us to quantify two metrics of colour: chromatic contrast (essentially how colourful they are) and luminance contrast (how bright they are). We could then estimate how detectable a displaying chameleon would be to an observer – be it another chameleon, or a bird or snake predator.

We also measured the leafy vegetation that forms the backdrop against which a chameleon signals. This way we could estimate how detectable a displaying chameleon would be against a particular background.



A male Jackson's three-horned chameleon from Hawaii, showing subordinate colours. Martin Whiting

An exciting example of rapid change

The results were particularly exciting and exceeded our expectations. We found Hawaiian chameleons had much brighter displays than Kenyan chameleons during male contests and when courting females. They were also more conspicuous against their Hawaiian background than a Kenyan background. This is consistent with what scientists term "local adaptation". This is the idea that signals will be fine-tuned to be more detectable in the environment in which they are used.

For Hawaiian chameleons, one unintended consequence of being brighter was they were also more detectable to their native predators. Interestingly, this effect was more pronounced when facing birds compared to snakes — probably because snakes have poorer colour discrimination than birds. Finally, Hawaiian chameleons also had a greater capacity to change colour than Kenyan chameleons - they could do so over a greater range.

We can't be completely sure brighter signals in Hawaiian chameleons represents rapid evolution. It's also possible this degree of colour change is due to plasticity, which is when an animal changes to a different state due to prevailing environmental conditions. Nevertheless, plasticity itself can evolve — and colour change in chameleons may be a combination of both evolutionary change and plasticity.



A male Jackson's three-horned chameleon from Kenya in full display colour. Martin Whiting



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