

PUBLIC SUBMISSIONS RECEIVED ON DRAFT KYOGLE FLYING-FOX CAMP MANAGEMENT PLAN

Sixteen (16) public submissions were received on the Draft Kyogle Flying-fox CMP and these comments are compiled below.

1. Terry Moody, CEO, Upper Clarence Combined Landcare Inc (22/10378 E: [REDACTED])

Thank you for this opportunity to have input into this Draft Plan

This is at a time when we as a species are becoming increasingly aware of our dependency upon ecological processes and environmental service delivery. We are therefore surprised and disappointed at the high level anthropocentricity of the document, especially given the acknowledgement in the Plan of the crucial ecological roles / services delivered by flying foxes.

The overall approach appears to start from the premise that something needs to be done to or for flying foxes; whilst ensuring minimal disruption to Council and residents.

We believe the Plan and decision making process would benefit from a review of historical information that would indicate the past presence locations and size of flying fox communities across the LGA. It is considered such information (including anecdotal evidence eg from newspapers, historical records, elderly residents) would provide an increased understanding of the current state of the population and also highlight opportunities for additional habitat improvement / creation.

We have been reliably informed that some 60yrs ago there were vast numbers of flying foxes that nightly flew from west of Haystack over Old Bonalbo dispersing into the Richmond Range forests to feed. Such activity has not occurred for at least the last 32yrs. We are advised by members of the Jubullam community that the flying fox colony identified at Tabulam has had no visitation / residents for a number of years. (junction of Little Ck and Clarence R near the non-operational Caravan Park)

The Plan clearly notes the mobility of flying fox communities (figure 7). It however adopts a Kyogle centric approach that lacks adequate acknowledgement and commitment to the role of Kyogle Council in a regional conservation approach such as that currently occurring for Koala conservation.

It is considered that a recognition of the role of Kyogle in conservation would result in consideration of the Kyogle site in the context of the state of play in other nearby sites and particularly the synergies and interactions with other close sites such as the Moore Park flying Fox camp and the Casino riverbank camp.

This has particular relevance given the impacts of recent climate events eg the devastation of vegetation in the flying fox camp site at Casino.

The Plan lacks consideration of case studies from other areas where flying fox plans / strategies have been trialled / implemented – many over a long timeframe eg Maclean. Consideration of successes and failures may be beneficial.

The Plan states that the major area selected for revegetation / habit creation was in the past used as a roost. It would be valuable to understand what factors led to this area being abandoned – what changed? This knowledge would inform any proposed actions that may be proposed to re-establish visitation to the site

The Plan notes that approximately 113 residential lots are within 300 m of the camp. Unfortunately the Plan does not note the flooding status of these residential lots. The option to buy back any of these residential lots has not been considered. Such considerations require assessment, especially where properties are in recognised flood prone areas. Buybacks could provide for improved safety / emergency management / long term cost reduction / reduction in trauma; as well as for improvement of riparian functionality; creation of additional habitat; and additional opportunities for passive and active recreation / sports.

“Declared Weeds” is terminology that is no longer in use since the introduction of the Biosecurity Act which introduced the concept of general biosecurity duty.

Whilst the document notes that Cocos Palms are a major weed impacting on flying foxes (through impalement), there are many weeds that are a high level threat to biosecurity in that they are widely dispersed by flying foxes, including:

- Cocos Palms from urban areas and residences
- Alexandra palms from urban areas and residences. These palms readily cross breed with Bangalow Palms, a major botanical component of Kyogle's World Heritage assets.
- Cadaghi from urban areas, residences, parks and gardens, roadside and driveway plantings. Cadaghi readily cross breeds and downgrades the timber values of our commercial Spotted Gum forests; and kills native bees. (NB roadside plantings on the Summerland Way North of Kyogle).
- Giant Devils Fig – rapidly encroaching on all land tenures.

Removal of Camphor Laurels to contribute to reducing human / bat interaction is supported – it is also supported as they are a major weed out of control across the LGA: on private land and rapidly expanding into the World Heritage assets of the Council area (as are many other tree weeds including Chinese Celtis, Tipuana tipu).

These trees are easily seen when seasonally changing colour. Thus as assessment of coverage on Council managed land, private land and NPWS and Forestry Corp estates is easily achieved through use of satellite imagery and/or aerial photography and is strongly suggested.

The Plan does not consider the time lag following any restoration / site replanting. Plants will require time to reach a level of maturity / height / stability to provide value as flying fox habitat. It is unclear what is expected with regard to the health and functionality of the camp in the growth interval?

Clarification of the term “consistent vegetation “ with regard to planting of sites is required - consistent with what? Consistent with best practice riparian restoration / habitat restoration; or best practice landscaping? An example may be - endemic native vegetation consistent with knowledge of the original vegetation type / structure of the site. (vines, overstorey, mid storey and ground cover)

The introduction of additional cabins into the Caravan Park is considered incompatible with the objective to reduce interaction and contrary to the rationale for removing Camphor Laurels.

Further, the introduction of additional accommodation into a well-known flood area is considered inconsistent with increasing resilience and climate change adaptability and best practice urban planning.

2. Kevin Markey, 947 Lynches Creek Road, Lynchs Creek (22/11564 E: [REDACTED])

The township of Kyogle is not the only place impacted by a colony of flying foxes. We have a flying fox colony at Lynchs Creek near the old school impacting several nearby residents as well as the old school camp ground which is also used by very many locals particularly in summer when they want to use the adjacent swimming holes in Lynchs Creek. Nobody wants to be here with the impact of the colony. The colony is not as large as the town colony but the residents who are impacted by this colony have the same concerns as listed in your summary document. Currently the colony is only 200 m from our house and it is very unpleasant as well as being a serious disease risk.

I noted this colony in my response asking for it to be included in the project. I also spoke to the mayor at the time Cr Mulholland, who represents our ward. Cr Mulholland said she would ensure this colony is included in the project.

It would seem that the issues faced by rural rate payers are not as important as town residents as the Lynchs Creek colony has not been included in this project. I am very disappointed with this outcome and ask that it be reconsidered before the plan is finalised. I would appreciate being told why the Lynchs Creek flying fox colony has not been included to date.

Response provided to Mr Markey:

To do this Plan we received a limited amount of funding from Department of Planning and Environment. The funding was to be used for the Kyogle camp/s because of the fact that they are primarily situated on Council managed lands. Having a Plan will assist Council in how the camp is managed, how to maintain a separation between the flying-foxes and humans, etc. That is not to say that there is not scope to look at other camps within the LGA over time. Moore Park Camp is another camp which is classed as a nationally significant camp (the only camp that has this classification in our LGA), and it is currently managed by NPWS. Council would like to talk to you further about the Lynches Creek Camp.

3. Cr Sue Abbott, Upper Hunter Shire Council (22/11574 – E: [REDACTED])

Thank you for the opportunity to contribute to the Draft Kyogle Flying Fox Management Plan.

Biodiversity loss is as big a disaster as global warming, and Australia has the ignominious record of the highest mammalian extinction rate in the world. Furthermore, with respect to flying foxes, and bats in general, they are pollinators and without them we and the world do not have food.

Therefore, it is essential that in any camp management plan the bats are protected and their well-being taken to be of the highest importance.

Accordingly, my suggestions for your camp management plan are simple and are as follows:

- Plant more food trees for the flying foxes not none
- Make these beautiful bats a tourist attraction - understandably people are fascinated by these glorious creatures.
- Move people not bats

How marvellous for Kyogle that these bats are camping in your shire.

4. Kim Robertson, Secretary, Kyogle Golf Club (22/12256 E: [REDACTED])

The Board of the Club looked at this draft plan at its meeting in March and has no comments to make concerning the FFCM Plan itself. The only discussion concerned the walking track on the map and where it ended around the 15th hole on our course and any possible repercussions for golfers/walkers re safety concerns.

5. Kathy Watkins, [REDACTED] Collins Creek Road, Collins Creek (22/12229 E: [REDACTED])

Thank you for the opportunity to make comment on your Flying Fox Plan.

I think overall it seems to be well considered and takes in the value and importance that Flying Foxes have within our environment and even as pollinators, an economic value to the LGA, even tho the camp is close to town.

It is reassuring that the expertise of those with knowledge, training, education and experience are being consulted in an advisory capacity...and hope that they continue to be consulted.

The remediating methods mentioned, such as education and exclusion of feed trees close to housing are all a good solution to the problems some residents have experienced.

My main comment is that I trust there will be sufficient time and some patience before any Level 3 solutions were ever to be considered or to be brought to practice.

In fact I think that they are quite inhumane and barbaric and I prefer and hope those do not need to be exercised...and that the other solutions examined in the plan are successful in resolving tensions.

I appreciate the chance to have a say.

6. Kyogle Environment Group (Sue Page, Secretary) (22/12421 E: [REDACTED])

Overview

Kyogle Council are to be congratulated on developing a management plan that is designed to protect what is a keystone species. Flying Foxes are protected by law and have suffered dramatic decline due to loss of feeding habitat and roosting sites as a direct result of land clearing. As a result, flying foxes are now listed as vulnerable and face the threat of extinction. It is important to note that flying foxes don't perceive a difference between urban areas and the forest. As the loss of native forest continues and the impacts of a changing climate increase in severity, urban areas will become even more important to flying- fox colonies.

These changing circumstances challenge us to become better educated and more tolerant of flying-foxes in our backyards, and to be mindful of the problems the animals face as well as the important roles they play in maintaining healthy forests. To this end it is imperative that a larger focus on improving the knowledge and appreciation of the flying foxes and their important role in the survival of our forests is actioned in this plan.

Specifics

Action ID	Comments
G01	One of the key actions is to review and update signage. There is currently one sign that was erected in 2019 and the information is current.
G02	The management actions seem both implausible and impractical. It is unlikely that flying fox will become "accustomed to machinery".
G04	If flying fox populations move closer to residential areas, residents need to be provided with the resources to adapt.
G08	Include the Australasian Bat society
R01	Removal of invasive vines on the northern side of Fawcett's Creek to promote potential roosting sites. Consultation needed with private landholders.
R03	The Fawcett Creek walking track needs to be rerouted.
R04	Information sheet for Kyogle Gardens Caravan Park explaining the significance of the population. See attachment.
R05	Consider removal of pecan trees rather than trimming. Saves money in the long run and stops all those annoying seedlings appearing in the native gardens planted below the caravan park.
R06	Strongly object. This is the prime roosting site and MUST not be interfered with. The solution is to reroute the walking track.
R07	As well as the Camphor Laurels also remove the Chinese Rain Trees – COELREUTERIA elegans

7. **Maree Treadwell Kerr, President, Bats and Trees Society of Cairns** (22/12564

E: [REDACTED]; [REDACTED])

I am writing to you regarding your plan of management as a private citizen who has been involved with conservation of flying-foxes, including community education, habitat restoration, bat tourism and bat care, since the 1980s. I was a member of the Cairns Flying-fox Advisory Board as both a community representative and a Flying-fox Expert Adviser for its lifespan (2015 – 2021) and am currently president of Bats and Trees Society of Cairns and act as coordinator of the Spectacled Flying-fox Recovery Team. I am a convenor with Jess Bracks (EcoSure) and others of the Australasian Bat Society's Flying-fox Expert Group.

As you have not provided a format or guidelines for comments on your plan, I am just going through it page by page and commenting as I go including providing information on how I would have responded to the community feedback and issues you have received. This may include some things you have not thought of when developing your management plan. I will of course give most consideration to your actions and activities of the management plan and will summarise my comments at the end.

Area covered in the management plan

From what you write I understand there are six camps in the Kyogle area, but this is only one of two permanent camps, the other of which is a nationally important camp. What is the relationship between Bundgeam Moore Park Nationally Important Camp and Kyogle focus camp? Whose responsibility is the Bundgeam Moore Park camp and does it have a management plan? Is there a regional plan that all individual management camps are coordinated with?

My summary of the area and potential roosting area and comments

Area of primary Kyogle camp- 2.95 ha – occupied area (roost footprint) – Kyogle recreation reserve

Secondary camp- occupied area 0.4ha, 30m west downstream of primary camp, in showground area - intermittent occupation

Secondary camp – occupied area, 550 m upstream of primary camp – 0.39ha

My opinion is that ecologically the secondary camps are part of whole Kyogle camp, used when the core area is full.

Total riparian area potential ff roosting area is 14.03 ha (equivalent in area to the Kur-ring-gai FF reserve, Gordon Sydney, of which a proportion is used from year to year, the section and extent used differing from year to year – core of camp on creek is used consistently. There is over 30 years roosting data mapped). Many FF camps appear to be tiny remnants of what would be considered one camp by the flying-foxes if there were not any other land uses separating them. Flying-foxes ideally need the full 14.03 potential habitat conserved to allow them to move around the whole site which allows vegetation to recover.

These camps are all along the one river and flying-foxes would readily move along the riparian zone. There would be virtually no chance of dispersing this colony as the vegetation type is ideal for flying-foxes.

Population – 500 – 10,000

FF present for over 50 years.

GHFF, BFF freq, LRFF occasionally

Recent population -- mostly 2500- 9,999. In 2013, over 10,000 Regional significance

This is just off the criteria for a nationally important camp – a camp that has had over 10,000 ghff in more than one year or occupied by more than 2,500 ghff permanently or seasonally each year for the last 10 years.

The surrounding region has a high FF population and is an important foraging resource.

It looks like for better or worse the FF are here to stay. It is possible to live with GHFF camps. Community engagement and education should work well. Community understanding of little reds may be needed to not derail the process of becoming a flying-fox tolerant community.

Impacts and some thoughts in engaging with community concerns

Kyogle caravan park residents – 8 sites, 50 visitor sites – tourism potential

Users Kyogle recreation reserve and (Apex Park, Anzac Park & Amphitheatre Park & Golf course)– tourism potential- guardians of the colony- local pride- try not to disturb bats with paths but allow views of FF- interpretive bat trail – cover playground- Apex Park- also gives sun cover

Users of showground- management of horses inc vaccination

Near-by businesses- low conflict- community engagement, tourism potential

113 residents within 300 m- education, subsidies, tourism potential, sprinklers if needed, local pride

Rural property neighbours including livestock watering points- cover water, manage access if flowering or fruiting, vaccination of horses

Faeces – private property- good fertiliser, can be slippery if wet, high-pressure cleaning equipment loans or subsidies- regular cleaning of public paths, cover public paths

Odour- - education- communication esp breeding- males mark territory, not everyone hates it- - subsidy for air-conditioning and/ or double-glazing during mating season (late summer/autumn) – also helps noise impacts

Disease- education- droppings- use filters on water tanks- can't get anything from droppings that you can't get from any other animal, droppings won't hurt stock- not going to hurt swimming holes- if you don't touch a flying-fox, you can't get ABL. Vaccinate and manage grazing of horses – for Hendra. Can't get Hendra directly from FF. Hendra spillover associated with BFF. All spp have antibodies.

Human health (see above re disease) and well being – subsidies double-glazing, proven to reduce noise (also works on those other annoying noises like railway and road noise!)

If all above is controlled, there is no reduced amenity. FF are a natural part of the environment and important in retaining natural vegetation amenity.

Damage to vegetation – this is lessened if FF have enough room to move around a camp- they will naturally move around a larger camp (eg 15 ha) allowing vegetation to recover. They also provide nutrition in the form of droppings to help vegetation flourish. They actually bring in very few weeds, and would not bring in any weeds if we hadn't put the weeds there in the first place. There were no weeds in a FF camp prior to 1788. The natural fertiliser in the droppings also provides good conditions for any weeds to grow which is why many camps are weedy. Weeds grow faster than native vegetation. This can be managed by weed programs in the whole shire (to reduce the source) and bush regeneration to restore the habitat of the camps and the rest of the riparian corridor. Good

opportunity to have a council-led (or specialised bush regeneration contractor led such as Kyogle LandCare) habitat restoration program augmented by a community (residents) bush regeneration team. It is safe to work near flying-foxes.

Pollution of water- education- FF have been here for millennia- they don't pollute water.

Impacts on business- education. Also potential for tourism.

Property devaluation – depends on how you look at things- The Gordon flying-fox (Ku-ring-gai FF Reserve) colony is on the upper north shore with homes worth over 2 or greater million. FF have been there since the 1970s and habitat restoration has been carried out since the 1990s and the reserve looks beautiful and is full of wildlife (even if the FF have recently gone missing- people are concerned).

FF eating fruit from gardens- wildlife-friendly backyard netting (or share with wildlife)

Management plan proposed activities

Management responses to date

Vegetation buffers involving removal of native vegetation should be minimised (I.e. look first for other ways of creating buffers- e.g. canopy mounted sprinkler systems) and offset by replanting other areas for FF in connected low conflict areas. Riparian vegetation is natural FF habitat. Removal of overhanging branches and weed removal is good maintenance.

Regenerating vegetation and financially supporting others to regenerate vegetation is excellent. Providing ways for community involvement in regenerating and habitat restoration programs assist community engagement especially if done in conjunction with FF monitoring programs (and other bat/wildlife monitoring projects)

Community education addressing fears of disease is needed.

Elements Bat Project and festival held in 2002 precedes the introduction of the Australasian Bat Society's [Australasian Bat night program](#). It would be great if you were to consider holding some bat night events even this year. I am the coordinator of the program if you need any assistance.

Informing visitors to Kyogle Gardens Caravan Park about the nearby flying-fox camp when enquiring or booking into the park, should not just talk about potential impacts of droppings or noise, although these should be mentioned, but also mention the potential viewing attraction especially the flyout. All information should be positively framed even when mentioning potential impacts of droppings, smell and noise. Within one health framework addressing disease, risk-avoiding behaviours are better obeyed when bats (or other animals) are positively framed- ie messages not to touch bats to avoid transmission of ABL in the low case an infected bat is camping nearby.

Stakeholder involvement - it is important to work with all stakeholders including orchards (are they eligible for netting subsidies), wildlife carers (have they been consulted about the management of FF habitat and potential heat stress plans?), there may be cultural values of FF to the Indigenous peoples, FF tourism is an added tourism potential to businesses involved in tourism, even those involved with horses and tourism as long as horses are managed against Hendra (which the showground would certainly be doing). I spoke about other stakeholders- those potentially impacted earlier. There is also an opportunity for citizen science to help flying-fox research.

Community Feedback- Management Options

Management must be consistent with latest science and evidence, with state and Commonwealth legislation particularly as the main species is listed as vulnerable under NSW and Commonwealth law,

with management in neighbouring LGAs, and must try actions with the least impact on flying-foxes before considering level two management activities.

Dispersal (level 3) will certainly fail if carried out.

Management Actions (Table 5)

G01 Information and awareness – on the whole supportive.

But, while supporting removal of weeds and possibly undesirable species (what is the definition of an undesirable species?) from private land, would not allow removal of flying-fox food trees that are native. Removal of coconuts is very much encouraged and any non-indigenous palms. Foraging resources for the vulnerable GHFF are limited and have been impacted by recent fires, drought and maybe now floods, and native vegetation should be retained on private land.

Add to this, develop community programs and projects on bats including citizen science (involve schools), participation in the Australasian Bat Night, even consider holding a second Bat Festival- recreate 2002!

And don't forget about developing the bat tourism potential. I happen to be creating an Australian Bat Tourism trail and am happy to help with bat tourism.

Also, you can create interpretive bat trails- look at the one near Yarra Bend, Melbourne. Adelaide ran a bat trail in 2019 focused on their GHFF camp in the Botanic Gardens. They put up lots of bat-shaped signs with fun bat facts and you could pick up your trail map at any cafe. I can also help with advice on bat interpretive signage.

G02 Supportive of developing protocols to minimise impacts to FF when carrying out maintenance.

G03- Very much support developing an FF incident management protocol particularly in the event of a heat stress event in collaboration with wildlife carers

G04- New camp management procedure- a risk matrix is a very good guide for actions that may be carried out. Even for new camps, dispersal should be an action of last resort as it delivers the wrong message and may result in calls for dispersal from existing established camps. Any dispersals, even tiny ones, need good messaging or human-human conflict can be created.

G05- Appropriate land use planning is vital. Do not site residential development or school/hospital infrastructure near known camps. Excellent to assist residents who find themselves next to camps when there was no planning.

G06 FF mapping and improved knowledge – involve state, researchers and citizen scientists in mapping. Drone technology could assist. Mapping floristics and phenology can assist in predicting incursions of flying-foxes.

G07 Subsidising existing residents near current camps for modifications to mitigate noise, smell and droppings is excellent. Research has shown that this combined with community education and engagement results in good outcomes toward a society co-existing with FF. Remember, flying-fox droppings are excellent fertiliser.

G08 FF monitoring – excellent. Also could involve community in organised monitoring as is done in Melbourne under Dr Rodney van der Ree.

G09 – excellent, particularly involving community.

All R0 actions 1 – 4 are great regarding habitat enhancement and creation. Remember under R04 when informing caravanners about FF roosting near sites, that it is a great spectacle to watch a fly out and to frame things positively.

R05 and 6 – buffers through vegetation removal – as long as this is about trimming and pruning overhanging limbs and not removing trees this is great. If there is loss of potential roosting habitat, this should be offset by creation of new habitat. Is there a need to trim overhanging branches at the entry to the landcare nursery? Could the access and walkway be covered instead?

Could the estimated 60m² be reduced somewhat to ensure no impact on the lowland rainforest TEC? I don't quite see how this estimated figure is obtained when R05 and 6 only talk about tree trimming. Could implementation of canopy mounted sprinklers be considered to maintain a buffer without the need to remove trees if you are talking about tree removal? Pruning of trees should be minimised to a maximum of 20% of the canopy of any individual tree.

I note that you are not doing any formal offsets (which don't work well) and agree these are not warranted but as a rule, any loss of habitat should be replaced by creating twice as much new habitat.

Proper assessment should be carried out to determine the impact on other threatened species using the habitat and no work carried out if nesting or other breeding activity observed.

R07 – Buffers through vegetation removal/weed removal. Support removing the six camphor laurels and replacing with non-FF food trees in the caravan park. In general, would encourage the removal of all camphor laurels in the region and replacement with native trees including both food and non-food species depending on the situation.

A01 – support maintaining existing buffers

A02- support shade sail over playground

S01 – support management of existing buffers at the showground

S02- support covering of horse water and feed areas – common sense

S03- support FF risk management protocol for horses at the showground

Stop Work Triggers

Care must be taken to ensure that stop work triggers that recognise stress do not use stress response for heat stress because this means it is far too late. The unacceptable levels of stress in table 6 are heat stress responses.

Flying-foxes respond to stress in more ways than just flying out from a tree. For instance, if a crane is working overhead, flying-foxes will respond as they do to an aerial predator and remain motionless in the tree or drop. This may not be to within 2m of the ground but may involve a drop of more than 0.5m. This was the situation in Cairns when new hotels were built within 50m of a nationally important camp. Females returning to the camp were disturbed by the cranes and lost lactation and pups died. The only stop work trigger was if 30% flew out from a tree.

Monitoring and reporting

Full monitoring of any activities should be carried out and recorded and management should be adaptable should any unforeseen consequences occur.

Reports should be publicly available to interested people on council's website.

There should be no need to carry out any level three management options on a threatened species so I am not sure of the interpretation I should read into figure 11. The impacts discussed in your plan do not at any stage warrant further actions than in your management plan. Any level three management actions risk creating wildlife-human conflict that is currently not present and escalating it to human-human conflict and negating any community engagement outcomes. I know this- I've seen what has happened in Cairns. The community is divided. Myths abound. People are afraid of bats, unnecessarily and won't or cannot listen as communication from Council has involved mixed messages. Other people are angry with council for moving the bats and not caring that they are now in a worse place and will not try to engage in working with council towards a solution. There is no resolution in sight. Look at Maclean if you need another example- Or Charters Tower. Don't go near level three and make it plain that any level three actions will only be carried out as a last resort under exceptional circumstances.

And define those exceptional circumstances.

Other

It is important that community engagement includes a comprehensive education program including consideration of bat tourism school and community education and public events such as participation in the Australasian Bat Night program and/or Australian Bat Tourism Trail and consideration of citizen science projects to enable the community to participate in all things batty.

You have allowed \$3500 for community information kits. If you run regular community events in partnership with LandCare there may be grants to put on bat nights. Bat tourism can start small with regular/occasional flyout events at the showground, perhaps a cocktail party with proceeds to the showground maintenance. As it grows, more people can benefit, maybe even council, and some proceeds can go toward more education.

Get the school involved in bat monitoring and citizen science. Also, grants may be available.

Conclusion

I was asked to give input by a community member who is afraid that your plan involves

- dispersal of the bats from near the Caravan Park and the Golf Course, assisted by Landcare
- that landcare volunteers will plant non-flying-fox food trees and that
- under 4.2.2 of Management Plan Council will cut down trees. I assume this refers to the loss of 60m² of habitat through removal of overhanging limbs. Have I missed anything about removal of whole trees?

I should like to be able to reassure her that no bats will be dispersed (I did not see anything to that effect), that although LandCare will plant non-food trees this is just to maintain existing buffers, and that you are only trimming overhanging branches and not removing roost trees.

She is very concerned and it might be worth increasing the reach of your community consultation as it seems mixed messages are out there.

In general, the plan looks good to me although I am confused about the relevance of figure 11 and where you get the estimate of 60m² habitat loss through tree trimming.

8. Alison Martin, Director, Greenloaning Biostudies Pty Ltd (22/12566

E: alison.martin@greenloaning.com.au)

Below are some brief comments on the draft Kyogle Flying-fox Camp Management Plan. Unfortunately the impact of the recent Lismore floods, in combination with the timing of the Plan exhibition period, has prevented me providing a more detailed review.

1. Overall, the Plan appears to present logical management actions which have the potential to enhance flying-fox habitat in the area over a period of time, whilst reducing conflict with the community. Habitat regeneration and revegetation in the northern part of the Recreation Reserve seems particularly appropriate, as does establishing/maintaining buffers between the flying-fox camp and public use/residential/proposed residential areas;
2. From a professional perspective, I consider all figures in the Plan need to be improved to facilitate understanding of the Plan background and management areas. The labelling on all of the draft figures is very difficult to read, both digitally and in a printed version;
3. Although there is frequent reference to monitoring throughout the Plan this is primarily within the Management Action Tables. I would suggest there needs to be a greater emphasis on the importance of regular monitoring within the body of the report to ensure the implementation of the Plan actions and the Plan outcomes are effective or need amendment.
4. In case this hasn't been picked up, there is a typo on p 8 of the Plan (paragraph 3) , where the site inspection has been stated as having occurred in June 2022, rather than in 2021.

9. Daniel Peterson JP, [REDACTED] Dyraaba Road (22/12567 E: [REDACTED])

I've looked at the Kyogle Flying-fox Camp Management Plan and would like Council to register my support for the Level 1 option, which I read as Council to manage the issues with MINIMAL disturbance of the Flying-foxes and the existing ecology of Fawcetts Creek.

These species provide a critical remnant link in Kyogle's ecological asset base and must be protected, preserved and promoted.

10. Robyn Lucienne, Kyogle (22/12568 E: [REDACTED])

Flying Fox Colonies are under threat because of deliberate camp dispersal by Councils.

The common complaint from people who are too close to a roost, or downwind, is that they smell. Flying foxes are clean animals, grooming frequently they produce a rich rainforest smell from glands on the neck, especially males in breeding season, this a natural pheromone odour and not from fouling, or waste. To avoid carrying heavy food in their stomachs, they separate pith from juice against the ridges on the top of their mouths, then spit out the pith and hang by their thumbs to invert when toileting.

During food shortages, flying Foxes alter roosting and feeding behaviours in predictable ways that allow them to 'get by on less'. They increase their use of garden plantings; establish new camps in areas beyond their usual range boundary while searching for food; and they break into small roosting groups, close to feeding sites.

In the past, the temporary camps flying foxes formed during food shortages were abandoned once conditions improved. However, in recent years a portion of these 'temporary' camps have persisted—leading to an increase in the number of camps in urban areas and a more persistent presence in inland areas, particularly in rural cities and towns. Many of these new camps have become sites of conflict (Dr Peggy Eby).

Grey-headed and Spectacled Flying-foxes are nationally protected species, camps 'provide resting habitat, sites of social interactions and refuge for animals during phases of their annual cycle, such as birth, lactation and conception.

Determining accurate counts of current flying fox populations, and population trends, is essential for the monitoring of the Grey-headed and Spectacled Flying-foxes' national distribution and conservation status. Flying fox population counts are currently undertaken by the National Flying fox Monitoring Programme (NFFMP).

Scientists are researching bats for their long telomeres, protective structures found at the ends of chromosomes. In most animals, telomeres tend to get shorter with age, a process that may be associated with age-related cell breakdown and death. Bat's telomeres don't shrink with age.

Further to this, wild bats carrying viruses do not pose a threat to humans if left undisturbed, conservationists and scientists agree that research into their unique immune systems would provide an understanding of how people can live with viruses and not get sick.

Another common complaint, is noise from bats, Flying Foxes have far more sensitive hearing than humans and can have energy reserves depleted by disruption of human noise, to which bats react, due to echolocation and sonar hearing. bats can zero in on objects as small as 0.007 inch, a hair. Bats click rapidly to zoom in, being the fastest vertical flight of any animal.

Bats eat half their weight in insects, nightly, that are no longer present in large numbers to destroying crops, gardens, or in the case of mosquitoes spreading viruses.

People should be educated about bats supersensitive ears to develop an appreciation of their sound and hearing specialisation.

Humans put bat survival under threat. Proactive steps need to be immediately taken to prevent their further decline, and to assist community efforts toward the recovery of the species, according to the Department of the Environment and Heritage, 'EPBC Act Administrative Guidelines on Significance—Supplement for the Grey-headed Flying-fox',

<https://www.environment.gov.au/system/files/resources/50453032-5d0c-4352-a1a2-485faa77554f/files/grey-headed-flying-fox.pdf>

In New South Wales (NSW), the NSW Scientific Committee assesses nominations under the Threatened Species Conservation Act 1995 (NSW) based on IUCN criteria and the Grey-headed Flying-fox was listed as Vulnerable in 2001. The Scientific Committee identified 'habitat loss as the primary reason for the decline – particularly the important feeding habitat on the coastal plains of NSW and southern Queensland'. (NSW Government, Office of Environment and Heritage, 'Cumberland Plain Recovery Plan'; <http://www.environment.nsw.gov.au/threatenedspecies/Grey-headedFlying-foxVulnerable.html>

Subsequently, requesting public comment stems from the Department of Environment and Conservation, NSW Flying-Fox Consultative Committee, following the listing in 2001, designed to provide a means for balanced public input and to develop strategies to conserve and manage flying-foxes in the state. The timeframes and closing date for public comments needs to be genuine to accommodate demands made upon the public, such as school holidays and open borders from COVID relaxation of lockdowns. See the NSW Government, Office of Environment and Heritage, 'The NSW Flying-Fox Consultative Committee';

<http://www.environment.nsw.gov.au/threatenedspecies/TheNSWFlying-FoxConsultativeCommittee.htm>

In particular, local governments are responsible for managing flying-foxes and they have had a significant effect on their decline, through dispersal strategies, prioritising economic values over the survival requirements of the species.

Flying foxes return to established camp sites, and will roost in neighbouring gardens, if trees are removed. Dispersal doesn't work, which is why under the legislation, it is a last resort. What other strategies has Council attempted first? Making a roosting site undesirable is unlawful, under State and Commonwealth legislation. Dispersal should only be considered when actual risk or significant impacts

cannot be managed using other methods and only if flying foxes were to attempt to establish a new camp in an undesirable or sensitive location, such as a school, or hospital.

Seventeen Council flying-fox dispersal attempts failed, between 1999 and 2013. Roberts and Eby (2013) estimated costs of up to \$6.2 million in the long-term, despite the cost, there was a high degree of uncertainty regarding long-term outcomes, or success of dispersals, for e.g', Batemans Bay, Ku-ring-gai Council, Eurobodalla Shire Council, Noosa Shire Council. Northern Beaches Council, Sutherland Shire Council, Local Government NSW, and The Royal Botanic Gardens, which destroyed 35 heritage trees and numerous shrubs to move bats to the Yarra Bend.

<https://www.environment.nsw.gov.au/resources/animals/flying-fox-2014-subs/flyingfoxsub-jenny-beatson-part2.pdf>

The Draft Management Plan should involve revegetation/regeneration and a weed control program, throughout a large hectare management area, along Fawcett's Creek, minimum 26 hectares, and construct artificial roost structures, (based on research of the existing roost site of branch size, and distance of branches from each other) at sites indicated on the Draft Management Plan.

In accordance with approved engineering specifications to ensure minimal impacts on roosting flying-foxes during construction and maintenance. Reputable companies should be selected to ensure that legislative standards are met, and that the flying-foxes are not disturbed.

With regards to employing an expert observer and Gullibul representative, it is suggested to contact Uncle Wayne Walker, during any removal, or dispersal to identify any sites or artefacts of cultural significance.

Community group volunteer efforts, at roost sites, should involve a monthly evening fly-out counts, successful in Australian states and other countries has been involvement of animal welfare groups on heat-event days. Key stakeholders of other Flying fox management plans have generally agreed that attempting to engage the community in vegetation management at Flying Fox campsites is no longer appropriate, and that works should continue to be carried out by contractors.

Residents should be assisted in a variety of ways:

- be provided with advice about reducing garden attractiveness through watering options and landscaping.
- be advised that overhead sprinkler systems created a microclimate which appeared to be preferred by flying foxes.
- be advised that drip systems could reduce the chances of visitation by the flying foxes.
- Landholders be provided with wildlife authorisations and a protocol for moving animals away from their gardens using noise.

Golfers should be informed of the significance of flying-foxes in a number of ways:

- Informative signage installed at points throughout the course
- Score cards with ecological and compliance information about flying-foxes developed
- Flying-fox trophies presented each year to positively promote the flying-foxes co- existence with golfers.

In Victoria, permanent signage resulted in a significant decrease in incidents with golfers. The presence of the colony does not seem to be interfering with, or negatively impacting on the golfers. Club members have advised that the trophies are highly sought after and valued. It is proposed that the donation of trophies should continue as a means of promoting the flying-foxes, their needs and co-existence at the golf course (Victoria State Government Department of Environment, Land, Water and Planning, 'Flying-foxes', <[http://www.depi.vic.gov.au/environment-and-wildlife/wildlife/flying foxes](http://www.depi.vic.gov.au/environment-and-wildlife/wildlife/flying%20foxes)>).

11. Tara Price (22/12569 E: [REDACTED])

Bats play a vital role in maintaining the health of our ecosystems. They pollinate and disperse seeds from a wide variety of plants both native and introduced and in forest or plantation situations. More than 450 economically important plant species depend on bats for their survival and production. **All Australian species of bats are protected.**

North Coast Flying Fox Colonies are in rapid decline due to habitat loss. More and more species are moving from rural environments to urban landscapes. This also brings these animals into conflict with humans and hazardous situations e.g. power lines, barbed wire, backyard netting and more recently, deliberate camp dispersal.

My question is:: If “ the Plan aims to reduce current and future conflicts between humans and the Flying-fox Camp “, what are those conflicts??

Lyssavirus from bats have killed 2 people in the last 20 years. Is that your reason to kill trees and the bats by “relocation”. Cars killed 1194 Australians in 2019. That is still no reason to rid our town of these noisy smelly death traps!!

During the day, the flying foxes roost in the canopy of a stand of trees near Fawcett’s Creek. Their camps are near water because they eat insects and mosquitoes benefiting agricultural crops, gardens, parks, and nurseries.

Eating half their weight in insects, bats control insects, preventing them from destroying crops. They also eat mosquitoes that spread viruses. Scientists estimated that insect-eating bats may save U.S. farmers about \$23 billion per year by reducing crop damage and limiting the need for pesticides. [The Night Life: Why We Need Bats All the Time--Not Just on Halloween | NSF - National Science Foundation](#)

Flying Foxes have complex habitat requirements and require ‘multiple populations of food trees dispersed over a large area’. Consequently, the species is vulnerable to habitat degradation, as their preferred food sources are unlikely to exist solely within conservation reserves, such as national parks (Department of the Environment and Energy, ‘Draft Recovery Plan for the Grey-headed Flying-fox (*Pteropus poliocephalus*)’, January 2017, p. 15)

It is important to recognise the preservation of the Flying-fox Campsite in Kyogle because they play a significant role as seed dispersers and pollinators for a wide range of native trees across Australia. In particular, the Grey-headed Flying-fox is considered a ‘keystone species’, with the South East Region Conservation Alliance describing the species as ‘highly significant to the health and maintenance of many ecosystems in eastern Australia’ (South East Region Conservation Alliance)

A single Grey-headed Flying-fox can disperse up to 60 000 seeds in one night, travelling hundreds of kilometres. Flying Foxes have been recorded travelling more than 400 kilometres in two days between camps. [Bats and their vital ecosystem services: a global review - RAMÍREZ-FRÁNCEL - 2022 - Integrative Zoology - Wiley Online Library](#)

These ecological services ultimately protect the long-term health and biodiversity of Australia’s bushland and wetlands. In turn, native forests act as lucrative carbon sinks, provide habitat for other fauna and flora, stabilise river systems and catchments, add value to production of hardwood timber, honey and fruit, and provide recreational and tourism opportunities worth millions of dollars each year. (Tamworth Regional Council).

Camps generally remain in a similar location, with some camps noted as having been used for more than 100 years. Once relocated, where will the bats go??

The Grey-headed Flying-fox were listed as Vulnerable, under the EPBC Act, in 2002, 'due to the high levels of death associated with human interactions'. There has been a decline of up to 50%, over the past 10 years, three generations were 'observed, estimated, inferred or as suspected reduction'. The Fawcett's Creek Flying Fox Camp is only a small camp, of a number of known small camps in the LGA.

Humans get a lot of benefits from bats, while Flying Foxes get no benefits from humans, which has put their survival under threat. Proactive steps need to be immediately taken to prevent their further decline, and to assist community efforts to protect this species.

<https://www.environment.gov.au/system/files/resources/50453032-5d0c-4352-a1a2-485faa77554f/files/grey-headed-flying-fox.pdf>

Local governments are responsible for managing flying-foxes and they have had a significant effect on their decline, through dispersal strategies, prioritising economic values over the survival requirements of the species. A case study of 17 flying-fox dispersal attempts, costs ranged from tens of thousands to millions of dollars, in the case of active dispersals. Roberts and Eby (2013) summarised 17 known flying-fox dispersals between 1990 and 2013, where a number of councils, estimated costs of up to \$6.2 million in the long-term, despite the cost, there was a high degree of uncertainty regarding long-term outcomes, or success of dispersals, for e.g', Batemans Bay, Kuring-gai Council, Eurobodalla Shire Council, Noosa Shire Council. Northern Beaches Council, Sutherland Shire Council, Local Government NSW, and The Royal Botanic Gardens, which destroyed 35 heritage trees and numerous shrubs to move bats to the Yarra Bend.

How successful was bat relocation In Casino? How much did it cost?

Landcare planted the current bat roost site 30 years ago, so I am guessing any hope of revegetating another site would also take another 30 years!!

What is the indigenous perspective on the Bat colony?

The Council should also conduct a review of the current scientific research to ensure the most reliable population results, both static counts (at least twice per month) and evening fly-out counts (once per month). Research should include documentation of tree species that the flying-foxes were choosing to roost in and reproductive output of the flying-foxes, male and female sex ratios, heat related mortality and assessment of roost and camp conditions, humidity data, weather conditions, rain levels, temperature range.

The key goal of management at the site must be to continue to provide suitable roosting areas for the flying foxes into the future, and allow the regrowth of trees in existing roost and increasing the range of the colony away from urban areas. Works in other Council Flying Fox Management Plans included extensive planting of food trees and weed control, carried out by contractors.

Councils should use specialist contractors to carry out revegetation works. Pruning damages the trees and has not been effective in other areas. Given that the regular trimming of some native species can have significant impacts on the health and rigour of those species, limits of impacts are prescribed in Flying fox Camp Management Policy 2015 (2015 Policy) should also form part of the requirements for camp management actions and in buffer zones:

- Pruning or removing of flying-fox roosting habitat should occur at night or at other times when the flying-fox camp is vacant; and
- Any tree lopping, trimming or removal or trees is undertaken under the supervision of a suitably qualified arborist,

While carrying out camp management actions, disturbance actions must be limited to a maximum of 2.5 hours in any 12-hour period, preferably at or before sunrise, or at sunset”.

Community education and engagement activities should occur four (4) weeks prior to any camp management actions being undertaken and before high impact camp management actions. Notification requirements to residents within 300m of a camp (section 16 (2)) to include notification on a public register. The Council is subject to obligations for appropriate environmental assessment and, where necessary, approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The Caravan Park should have detailed interpretative signs about flying-foxes have been provided for visitors in key areas of the park. The Council website should have a page dedicated to the information on flying-foxes and the Flying Fox Campsite. Local park brochures should have some information about the flying-foxes, the park website should be reviewed and updated, and that a brochure specifically about the flying-foxes be available and distributed every year.

Fawcett’s Recreation Reserve should have orientation and interpretation signs installed and a viewing platform, along the track to the roost campsite. Media releases relating to the viewing platform, and the important role in biodiversity conservation and threatened species recovery in providing education and a unique wildlife viewing opportunity. Along with the implementation of a Campsite Management Plan and compliance issues. Talks should be scheduled during school holidays and appropriate times for Flying Foxes. Educational visits should be targeted curriculum material being developed by WIRES (see attached Annual Report 20-21).

A Comment box, with web address, should be installed at the viewing platform to monitor the benefits and provide information, so that people view the site as a destination to come and observe the flying-foxes, without disturbing them. Rangers should regularly patrol the site at weekends and provide reports to the Head Ranger for interval Council updates. Monitoring use of path and viewing platform, so people can be diverted away from under the main flying-fox roost areas, minimising disturbance to the colony. The path along the entry road and river that enables foot traffic, should be maintained, cleaned to reduce the potential for accidents involving pedestrians and some sections of track need maintenance after heavy rain, and timber edging, Installation of handrails could be considered for some areas, and bins, near signage.

A Campsite Management Plan and Protocols for Management of Grey-headed flying-foxes should include WIRES and ensure on severe heat days any dead flying-foxes are collected quickly, and during severe adverse weather events. The Campsite Management Plan should involve substantial improvements in vegetation cover and Council should establish a Habitat Zone for food plant diversity in the roosting site and across most of the Fawcett’s Creek site.

The Management Plan should be focussed on:

- the maintenance of existing habitat and infrastructure
- enhancing the visitor experience
- consolidation of the revegetation efforts
- the continuous monitoring of flying-fox population
- a long-term plan for ensuring ongoing availability of suitable roosting habitat (such as mature Silver Wattle patches) a list of appropriate food trees should be prepared.

The main source of food for flying-foxes is the nectar and pollen of flowering native trees, including a number of species of eucalyptus, turpentines, paperbarks and banksias and the Grey-headed Flying-fox has a preference for the spotted gum, which only flowers once every four years, also a preferred Koala food tree. The symbiosis between Koalas and other native fauna and their habitat cannot be understated.

A reasonable person would agree that the vegetation at the Flying Fox Campsite is of high amenity value for users of the land and surrounding residents, contributing to people's attraction to live in the local area. Council agrees most of the vegetation at the camp is of high biodiversity value.

Council plans to plant native shade trees that are not flying-fox foraging resources and to engage in costly tree removal: \$24,000; subject to securing external funding. Tree planting: existing Council resources. No one would dispute the long-standing need to remove the six Camphor Laurel trees from the Kyogle Gardens Caravan Park grounds and indeed all the Camphor Laurel Trees on Crown Reserve, along Fawcett's creek, done by stem injection. However, to replace them with native trees that do not provide flying foxes food resources is cruel and short sighted and lacks an understanding of the role Flying Foxes play in the health and sustainability of ecosystems.

Having objectives of removing the source of weeds is not disputed but reducing disturbances to park users from flying-foxes foraging within the caravan park grounds, is not a defence to harming any listed threatened species, or ecological communities. It shows a lack of foresight and knowledge that Council didn't have a "Habitat Buffer Zone", specifically for the area to create a distance from human settlement that can be considered to constitute the buffer, and "habitat modification". Due to the lack of habitat zone, to ensure that appropriate limits were placed on human activities, the proper and least costly long-term solution is to move the Caravan Park, not to reduce the opportunity for flying foxes to roost in the caravan park during spill over events.

Tree removal may be undertaken in accordance with the Action G02 and the NSW Flying-fox Camp Management Code of Practice 2018 (Section 4.2.2 of the Draft Flying Fox Management Plan), but the Objectives for the Code include references for the need to **ensure the conservation of flying foxes**.

Flying foxes have a very high level of fidelity to established camp sites, and attempts to re-establish the camp will continue, often for many years. **How successful was Richmond Valleys relocation? What did it cost? Was it effective? How has it impacted area??**

As such, dispersal is rarely successful in the long-term without significant vegetation removal to make the site undesirable for roosting flying-foxes. Flying foxes will almost always select another site in the local area, generally within 600 mtr, and often splinter into several locations nearby (including potentially remaining at the original site).

Dispersal should only be considered when actual risk or significant impacts cannot be managed using other methods. Dispersal is not currently being considered for the Park, but only if flying-foxes were to attempt to establish a new camp in an undesirable or sensitive location. Roberts and Eby (2013) summarised 17 known flying-fox dispersals between 1990 and 2013. <https://www.environment.nsw.gov.au/resources/animals/flying-fox-2014-subs/flyingfoxsub-jenny-beatson-part2.pdf>

The Code refers to a 'Flying Fox Campsite Manager' who must be required to follow the advice provided by the flying-fox expert and must be made publicly available at least three business days before carrying out camp management activities.

Maintaining existing areas will provide a buffer between the vegetation along Fawcetts Creek (potential flying fox roosting habitat) and the recreation ground. Maintenance works would be in accordance with the Routine Works Protocol (Action G02) should flying foxes move to this section of Fawcetts Creek. During future landscape works, Council would consider appropriate vegetation when planting trees, they should choosing **more** flying fox food trees, not reduce them, a strategy that has proven more likely to encourage movement and spread less weeds like Devils Fig.

Please Leave the Bats alone.

12. Val Walsh (22/12570 E: [REDACTED])

It is very disappointing that you had to stoop to the low tactic of making the deadline for comment on Easter Monday at 4pm when most people haven't arrived home from their Easter Holidays. The first time many people have been able to go interstate and see family on school holidays. Also when many Council staff don't return until the following week AND no one was able to get any questions answered.

That tactic shows your intention is to harm the Flying Fox colony, regardless of what people submit. It's obvious you intend to starve the bats, when they have already been left only the poorest of food sources, invasive weeds you should have removed years ago.

It's obvious the only motive for such illegal conduct is money, the only people who want the Flying Foxes gone are people with a vested interest in money, air BnB, rents, caravan park, the events at the Showgrounds, golf club, landcare, and sports; they're all only interested in money.

Appears It doesn't matter what anyone says to Kyogle Council because it has already decided to waste millions on a dispersal strategy that is supposed to be a last resort. Let's start counting how much it's already cost Council to pretend to do community consultation and put those costs in the draft management plan and continue to add up the costs, so it can be included in studies that show Dispersal doesn't work.

It would be cheaper to provide the alcoholics and substance abusers at the caravan park with low cost affordable housing than to kill the Flying Foxes slowly over years.

It doesn't look like it's worth the effort telling Council that this keystone species is an indication of how healthy the environment is as an ecosystem.

Doubtful your interested in the research that show towns with bats have less mosquito borne diseases and save on health system costs. Farmers in bat areas spend less on pesticides, Councils in areas with bats spend less on planting, and that the seeds bats spread are superior to any purchased saplings because bat seeds come from heritage genetic stock that will survive in this area.

It'd be a waste of time telling you that people who want bats dead don't have the intelligence to understand how an ecosystem is integrated, each species dependent upon other species in a food chain and all dependent on flowering fruiting native trees. If you only plant non flowering non fruiting natives you are destroying the habitat of almost all native fauna and flora, in the area. Kyogle will be the spearhead of extinction in the region.

You could invest in making the bats a visitors destination point of interest, a school education program.

You could uphold the conservation laws, regulations, Government Policies and Codes AND do what you get paid to do - keep safe the habitat of a protected species. It's counter intuitive but to get the bats to move you have to plant more fruiting and flowering trees along the creek, create a buffer zone AND remove the weeds, invasive trees and fine private properties if they refuse to remove weed trees.

13. Klaus Halder (22/12571 E: [REDACTED])

Council should remove the Devils Fig, Castir Oil weeds, Camphor Laurels, and Cocos Palms from the Fawcett's Creek area. Keep the path clean along the recreation reserve and put seats and bins and dog poop collection bags for the public to put their rubbish and dog shit AND they should regularly empty bins.

14. Lib Ruytenberg and Merryn West, Bird Bat Coordinators, WIRES Northern Rivers (22/12904 E: [REDACTED])

We welcome the opportunity to comment on the Kyogle Flying-Fox Camp Management Plan draft.

The following comments indicate aspects of the plan we find particularly important or aspects we believe need strengthening or amending.

We support the inclusion of Level 1 and Level 2 actions and agree that Level 3 management actions should not be adopted. Disturbance and dispersal methods are costly and ineffective (as described in appendix 8) and extremely stressful for the flying-foxes, increasing the likelihood of an increase in disease and in species decline.

General

Providing information: (p.31)

Most flying-fox rescues by WIRES Northern Rivers (5 LGAs) are for entanglement in barbed wire or netting (44.2% or 293 flying-fox rescues with only 11.6% survival, 2019-2021 WIRES NR Annual Report). Accordingly, Wildlife Friendly Fencing and Wildlife Friendly Netting are ongoing campaigns to reduce wildlife casualties from entanglement. On p33, we suggest amending the reference to netting to wildlife friendly netting. There are various resources which provide relevant information.

<https://www.wires.org.au/wildlife-information/wildlife-friendly-fencing>

<https://www.wildlifefriendlyfencing.com/WFF/Home.html>

<https://www.wires.org.au/wildlife-information/wildlife-friendly-netting>

S03 p 39 Risk management at the showground includes possible temporary fencing. It is important that if this is enacted, the fencing should not be barbed wire. We would like KSC to assist us in preventing wildlife mortality by using wildlife friendly fencing and encouraging landholders to do the same.

The Council website should have a tab with information about flying-foxes and all of the Flying Fox Camps in Kyogle LGA.

Flying-fox Incident Management Protocol

G03 (p34) Of all the flying-fox camps in the Northern Rivers, two in particular are most vulnerable to heat stress mass casualties and fatalities; Casino and Kyogle. These are the two camps we monitor closely when temperatures get close to 40 degrees and prepare ourselves for emergency response. Critical Incident Response for all wildlife and particularly for flying-foxes covers not only heat stress events but starvation events from food shortage and adverse weather events. WIRES Northern Rivers has been called to respond to

- Heat stress events
- Mortality from food shortage
- Cold snap in November causing dropping and deaths of newborn ff
- Severe storms causing death and injury to ff in roosts.

Any of these situations could affect the Kyogle camp. Wildlife groups need to be able to contact a KSC officer 24/7 should such a critical incident occur, in order to enact any of the strategies outlined on p

34, if required eg restrict public access. Most previous heat stress events impacting Casino and Kyogle camps have occurred on weekends and wildlife groups were unable to contact councils and other authorities for the necessary support. In critical incident response, prevention, preparedness, response and recovery are the key. All stakeholders need to be involved in the implementation of these plans.

Various stakeholders are coming to terms with the need to formalise emergency response protocols. Northern Rivers Wildlife Network (which includes all relevant wildlife stakeholders) has recently worked on a Draft Emergency Response plan. WIRES Northern Rivers has a Critical Incident Response Plan (2014). In emergency response events WIRES works with NRWC and LLS vets. We welcome the opportunity to work more collaboratively with Kyogle Council in Emergency Response.

G06 p.34 and in many places throughout the draft plan, maintain 300m buffers is emphasised. This is important for the 113 residential lots referred to as well as proposed future housing.

G08 p 35 The quarterly count is vitally important for a great deal of scientific research so it's crucial that NPWS who has taken responsibility for the count of KSC camps routinely submits the quarterly data. Furthermore, the management of this plan requires not only the quarterly count but monitoring of changes to the roost footprint.

G09 We strongly support inclusion of the mention of collaboration with researchers.

Actions for the Reserve

R01 p 36 The key aspect of this draft plan is the objective of vegetation enhancement to the north of the reserve. Liaising with Landcare will be important. Vegetation enhancement benefits all wildlife.

"The vegetation structure in the camp is critical – a good camp will have plenty of dense mid storey for the bats to climb down into and shelter from the heat, as well as ground cover to lock moisture in, and will survive even when the outside temps are high; a more open camp will suffer much earlier. Broadscale removal of weeds is not necessarily improving an area when considered a habitat. In particular, removal of dense lantana or privet thickets, or removal of wandering dew groundcovers can make a camp far more subject to heat stress- as well as removing habitat for small birds and other fauna".

Flying-fox heat event response guidelines (Bishop, Pearson, Lyons 2018)

The vegetation enhancement should be expanded to include wildlife foraging trees beyond the camp footprint. This would benefit all wildlife and minimise the likelihood of bats feeding on fruit in domestic backyards. Landcare would be ideal partners in such work.

R06 Creating permanently covered areas (carparks, paths, seating) may be a better option than repeatedly trimming branches. Such covers would provide permanent weather protection for the users. The visual barrier may also reduce the disturbance by human activity for the flying-foxes. A "bat hide", similar to a bird hide could be created.

Such a "bat hide" could incorporate public information posters such as those found through national parks.

If a major source of conflict is around the nursery, perhaps some covered carparking could be provided, or consider relocation of the nursery.

R07 p 38 We have concerns about the proposal to remove six camphor laurels before replacing them with native non-forage trees. We understand the various points against and for camphor laurels.

Flying-foxes regularly roost in non-forage species such as casuarinas (Casino, Tabulam, Glenreagh) pine trees (Clunes, Manifold Rd, Lumley Park), camphor laurels (Casino, Kyogle) and mangroves (Ballina). In

extreme heat events, the dense, cooler foliage of camphor laurels is a refuge sought by flying-foxes. Replacing one non-forage species with another non-forage species will take many years and might have no net benefit.

If such a strategy is used, consider a staggered process, with planting the replacement trees to establish them well before removing any of the camphors. (Byron Bay Council's management of the Bangalow Paddy's Creek buffer involved staggered tree removal to create the desired buffer). Then, if the camphors are removed, this should be undertaken progressively, guided by observations of movement of roosts within the footprint.

Apex Park

p39 The planned strategies for Apex Park are important as this is a potential area of conflict with park users.

Showground

p 39 The regular users of the showground need special consideration as much of the use is related to equine activity. As the flying-fox population is mobile, and at any time the flying-foxes could return to roost near the showground, it is important to work with the showground trust to manage risk as detailed in S01.2,3. We appreciate the advice of Dr Phil Kemsley from Local Land Services in this regard.

Stop Work Triggers

p 42 This section is crucial in protecting the welfare of the flying foxes. Reducing stress is essential for maintaining a healthy camp and reproduction of the species. Stressed bats are susceptible to becoming unwell and posing a greater risk to humans. In particular, the maternity season August to March must take high priority for consideration of animal welfare with heavily pregnant, birthing and lactating adult females and dependent young present.

P 43 We note that the draft plan acknowledges as a trigger the final trimester of pregnancy in August, which is when most adult females of reproductive status are heavily pregnant.

P 46 We note that although the flowchart shows Level 3 actions, these are not proposed.

Please do not hesitate to contact WIRES for further support regarding the implementation of this plan.

15. Border Ranges – Richmond Valley Landcare Network (Emma Stone, Landcare Coordinator)

(22/13035 E: landcare.support@brrvln.org.au)

BRRVLN welcomes the opportunity to comment on Kyogle Councils management plan for the flying-fox camp in Kyogle. We acknowledge that flying-foxes can be a controversial and divisive issue in many communities affected by them; the Council's decision to address community concerns in a considered way, through commissioning a study and draft plan, is to be commended.

As a not-for-profit organisation dedicated to sustainable use of our environment, including the preservation of native flora and fauna, BRRVLN supports the overall thrust of the plan in its prioritising the conservation of the local flying-fox population, whilst also acknowledging, and seeking to address, community concerns.

The plan's emphasis on community education (Action G01) is important in dispelling some of the misconceptions about flying-foxes and allaying fears of people living in close proximity to the camp. As well as the proposed activities in the plan, consideration should be given to improved on-the-ground information for casual users of the walking trails, sporting facilities and show grounds akin to the sign opposite the Kyogle Landcare nursery. This could include well designed interpretive boards that explain the importance of flying-foxes as a keystone species, as well as simple precautions to prevent unwanted interactions with them.

The protocols for working around the roost and mitigating for changes in circumstances (G02 – G04) all appear appropriate.

Addressing flying foxes in the planning system, as well as accurately mapping and monitoring occupied habitat to inform this (G05,6,8 & 9), is sensible, although (as the plan acknowledges), camps are dynamic in nature. The plan mentions the creation of buffers between 'sensitive receivers' and the camp. If done sensitively, this is a sensible approach and will allow for minor changes in the areas used by flying-foxes, without negatively impacting residents' amenity.

Modifications to dwellings and other infrastructure to mitigate impacts such as fouling and noise (G07) may go a long way to addressing the concerns of neighbouring residents. Kyogle Landcare considered the effects of having flying-foxes in close proximity when it upgraded the plant nursery. Working areas have been covered and shielded from bat faeces, allowing work to go on without negatively impacting on volunteers, customers, or the flying-foxes themselves.

Actions R01 to R07 contain some potential management actions to reduce the impacts on people involved in recreation, volunteering and other activities. These involve vegetation management around the caravan park, sports facilities and walking trails. If carried out sensitively, these should not have any adverse impacts.

The proposal to enhance habitat for flying-foxes away from sensitive receivers will need comprehensive consideration. For it to work, an acceptable approach that appropriately manages the desirability of habitat close to town will need to be implemented, once new habitat is established further upstream on Fawcett Creek. This transition will need careful planning, patience and, perhaps, further study of similar schemes elsewhere.

16. Biodiversity and Conservation Division, Department of Planning and Environment (Dimitri Young & Paul Houlder) (22/14459 E: [REDACTED])

Our comments on the Kyogle Flying Fox Camp Management Plan are attached. I apologise for the delay in responding.

Overall the Plan is concise and straightforward and we have no significant issues to raise. We appreciate the opportunity to provide feedback into the development of the Plan and look forward to assisting with its implementation and providing ongoing support to the Kyogle Council for the management of Flying Foxes within the Kyogle Shire.

Please do not hesitate to contact me if you require any further assistance.

Comments provided directly into document:

1.2 Objectives p1 – first objective - Remove 'associated' replace with "from the effects of"

Maps - suggest maps be redone with higher resolution output for clarity (noted at Figure 2 but referring to 'maps')

2.3.2 p10 – "The monitoring shows that the camp is occupied most of the time," Continuously?

4.2.2 p26 – Replace "will" with "may" in following sentence: If the Department assesses a biodiversity conservation licence application and determines that a significant impact is unlikely, a biodiversity conservation licence ~~will~~ be granted (the appendix to the Policy lists standard conditions for flying-fox management approvals).

4.2.6 p27 – Check grammar in first sentence. Should this section also include LLS Act 2013 as it pertains to those areas of the FF camp and potential clearing activities on adjacent private Rural zoned land?

“Plans of Management for ‘Community Land’ under the Act, having the same provisions under SEPP Infrastructure for exempt and development permitted without consent as does crown land, when a Plan of Management is in place. Community land under the Local Government Act 1993 can be freehold land or Crown Land.”

4.3.1 p27 - For context, should this section mention SEPP (Biodiversity and Conservation) given potential clearing on Native veg in urban and conservation zones ??

“State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure) aims to facilitate the effective delivery of infrastructure across the State. As the Kyogle Recreation Reserve has an adopted Plan of Management under the Local Government Act 1993; activities undertaken on this land that are consistent with the Plan of Management constitutes exempt development or development permitted without consent under SEPP Infrastructure. Any activities undertaken on this land that are not consistent with the Plan of Management and do not constitute exempt development would need to be reviewed against development without consent provision of SEPP Infrastructure, and if applicable, would require an assessment under Part 5 of the EP&A Act.”

Action G01 p33 – re first sentence “Provide information to the community regarding”

Information on the benefits of flying foxes as pollinators to the ecology and agricultural activities could also be presented.

7.1 p44 – re dot point 2 “removal of six Camphor Laurel trees (exotic weed species) located within the Kyogle Gardens Caravan Park grounds. These trees do not typically provide flying-fox roosting habitat, however spill over usages has been reported on rare occasions” These Camphor trees will be regarded as FF Habitat if they are mapped as per the figures contained within this FFCMP. Note that they are likely to be mapped as Biodiversity Values map (riparian) and may trigger Biodiversity Offset Scheme? need to confirm legislative pathway.