

## **ABBREVIATED TRANSCRIPT OF PRESENTATION BY DR STEVE PHILLIPS - POTTSVILLE COMMUNITY HALL, 7 MARCH 2015**

In 2010 the Tweed Coast Koala Habitat Study undertook a systematic survey of koalas from Tweed Heads to Wooyung. It was found that koalas were extinct between the Tweed River to the Queensland border, and Tweed Coast koalas were in decline all the way to Brunswick Heads due to habitat reduction.

There were 3 population cells: Bogangar/Kings Forest (30-40 koalas); Forest Hill/Tanglewood/Koala Beach/Round Mountain (60 koalas) and Pottsville Wetlands/Black Rocks (35 koalas).

In 2012 there was a major fire which wiped out habitat, and combined with mortalities due to road strike, disease and attacks by domestic dogs in Tanglewood, in just 5 years there was a significant number lost, leaving approximately 100-110 koalas. At that rate we can predict koalas will be extinct on the Tweed Coast by 2025-2030.

In a healthy population of 100 koalas, 50 will be females, 10 seniors, 10 pre-adult. Of 30 remaining females only half will breed in any one given year. Of those 15 joeys produced half will survive to reproducing age (ie 7.5 koalas). That is 7.5 koalas per year for the entire 3 cells on the coast. We already know that the rate of attrition exceeds the number of those breeding and surviving.

In October 2014 the NSW Scientific Committee made a Preliminary Determination to support a proposal for the threatened status of the Tweed Coast koalas to be upgraded to 'endangered' under *The Threatened Species Conservation Act 1995*. While the new 'endangered' status will require Council to write a new report on the status of the koala, this may take some years and therefore, in the meantime, the fate of the koalas really is in our hands.

It raises the question: Is it too little too late? Is it too late full stop? The Tweed Coast Comprehensive Koala Plan of Management is very big on rhetoric (I have read it several times) but it is very small in the scale and scope of its actions. I picked up a Tweed Link today. The heading says: *Council adopts koala-saving blueprint for Tweed Coast*. It is not a koala-saving blueprint, it is a koala plan of management. Whether or not it saves koalas is yet to be determined, and it is only going to happen as a result of a long-term monitoring programme. It is an unproven tool until the koalas are monitored over a few generations and the key performance indicators are found to have been met.

So don't be deluded by what you read. Don't be deluded by the media hype. This Koala Plan of Management has a lot in common with other koala plans of management, and it is certainly nowhere near as assertive as what it needs to be if it is going to effect recovery action. There is a bit of arrogance there on the part of the media hype. Please consider it, scrutinise it, be sceptical. What we have in fact is a 'safe' plan. I know there has been a lot of liaison with the Department of Environment and Planning, and I think the intent is to get a fairly safe plan through the Department because they have still got to finally approve the Koala Plan of Management that Council has adopted. So it is not over yet. We are possibly going to get a fairly safe plan, but we really need something that is pretty assertive if we are going to turn this decline around.

Few breeding female koalas remain which makes it very difficult for them to recover to a viable population size. As the population gets smaller and smaller, the recovery tasks and actions at the bottom of it get harder and harder and harder. And the cost of recovery gets more and more and more. It is a well established phenomenon throughout the world and it is an economic reality. Many of us who have long histories in koala conservation know that we should have acted a decade ago with some of these populations, and the Tweed Coast is one of these.

What are we dealing with? We are dealing with issues of fire, issues of unsustainable mortalities due to motor vehicle strikes and domestic dog attacks. Don't be deceived again by what you read in the media. The science is very strong on this. Signs don't work. We can't even get people to slow down at school crossings for our kids let alone slow down at signs which say *Please slow down for koalas*. These signs are very bright, very flashy, but they do not work. I remember reading in probably the Echonet Daily or Tweed Daily News on New Year's Day about the first animal which was killed on Clothiers Creek Road. There are probably others there we don't even know about. As far as I am concerned, there are about 50% of road kills which are never reported.

So what we are seeing and what we are being able to document is a little surface reflection of what is really going on. Road kill is ongoing and it is unsustainable, and it is happening as we sit here in this room. And the signs certainly won't stop it. There is some good technology out there now which is making us think outside the ball park about how we can better engage in terms of trying to minimise the impacts of road strike on koalas, but we have nothing at this point in time that we can put forward to the community to say that we are actively engaged in that process.

I guess this is where we will focus and this directly affects the community heart. In 2010 we had about 35 koalas in the Pottsville Wetlands-Black Rocks population cell. In December 2014 on Christmas Day we had a very significant fire event which damaged more than 200ha of primary and secondary koala habitat. It impacted that population cell and, as a couple of speakers have already confirmed, the likely cause of that fire was arson.

It is very easy for us to sit here and think, 'Yes, we have had a fire.' But the cost of that fire and the cost of high fire frequencies and intense fires, particularly on the eastern seaboard of Australia, and the impacts on biodiversity are increasingly being recognised as unsustainable and huge. For koalas it is particularly catastrophic. They don't just jump out of their trees and run along the ground and try and find refuge. They usually sit in their trees or jump out of their trees and get burnt alive, or they get injured to such an extent that they ultimately die. And those of you in this room who are involved in koala caring are familiar with the things that need to be dealt with from time to time that most of us never see.

So when the animals are killed directly as a result of fire, that occurs on the day. What follows after that are other mortalities that are indirectly attributable to the fire. Those are animals that get burn injuries and can't climb, they are found at the base of trees, they have respiratory trauma as a result of inhaling smoke, burnt respiratory tracks, they lose their food resource. They get an incredible amount of stress, and they tend to manifest stress-related disease symptoms like Chlamydiosis. For those that are lucky enough to survive the fire event, as they disperse into adjoining habitat they are often picked off by domestic dogs and they can be run over by cars, and they can have another serious event in their lives.

So we are not talking about anything that is necessarily a minor task here, particularly in the landscape such as the Tweed Coast where the population is so small, the landscape is so fragmented. We don't have the numbers to play those games. These next photos are not particularly attractive, but you need to know what happens, you need to see some of this stuff. You know people deal with this, they repair the damage, they try to get these animals back in the bush and on their feet. And there are some really good medicinal approaches on these, but invariably these are very chronic trauma events.

So if we take the original population at Black Rocks now, and we say on the basis of what we know about the impacts of wild fire, we reckon we are looking at a loss of somewhere between 30 and 60% of that breeding population in that one event. This is almost half. Some of them may have survived around the edges, that's great. But we probably lost half of that population cell in that one event. If we have another event within the next 10 years that would be half of what survived that one.

So what happens when you have a chronic fire event imposed upon the landscape? Out of the ashes – what happens? Black Rocks sports field has become a really interesting issue here locally. As a playing field within the landscape everything is wrong with that sports field area. It is a gap in an otherwise vegetated landscape. It has a long winding road to this sports field which is not effectively integrated into the developed landscape. So according to ecological first principle planning processes it is actually in the wrong position, but I don't necessarily want to go there.

It is about 4ha in size, with a 320m length road leading into it, and it has got an edge. When you go up the right hand side of the road, go around the playing field, and go back up the left hand side of the road, it has got an edge of 1.5km. It is an internal gap in the forest ecosystem, and its edge can be worked by dogs. It can be accessed by any number of other variables that impact on the sustainability of the koala population, and as you saw in the many photos that Dave and Lyn have put up, those animals are very close to the edge of that playing field. Anyone who is familiar with ecological principles will be aware of things like the edge to area ratio, and be very mindful that we have 1500m of exposed habitat which is available to traumatic events for koalas.

Given the fire event we know that it stopped just north of Kellehers Road. The Black Rocks sports field and surrounding areas of habitat are now the last stronghold for the Pottsville Wetlands-Black Rocks koala population cell. We think we have probably lost at least half of them, we therefore have not got very many to play with. Remember when I talked about 7 ½ koalas and we had to share them around. It is likely that in any one year 2 (may be a bit more) joeys will come out of that cell if we are lucky. So it is that cell where recolonisation of the existing habitat areas (once they regenerate) is going to occur.

This cell is the key to the southern corridor and is therefore particularly important to the survival of the Tweed Coast koala as a whole, especially as the corridors are effectively cut off to the north.

One thing that saddens me and others is I have watched over the last 6 months or a year the issue of the Black Rocks sports fields, access to the sports fields, men's sheds, koala habitat – become a really divisive community issue, and I think that is one of the reasons why we are all here today. Some people know that one of my favourite sayings is that when an issue becomes polarised, it is the focus (of the debate) that invariably suffers. So while we all go about our respective agendas about koala habitats, men's sheds, sports fields, access, we are losing sight of what is actually important – that is, that population really needs our help. So what do you do? What do we do about these sports fields?

I remember reading a letter in the paper last night which suggested we could fence the entire sports field and we could fence the access road. That would probably cost around \$100-\$150,000, depending on what sort of fence you want to put in there. It is not without its problems. It would obviously as a result fragment and disrupt the movement of the corridor along this habitat block. It is a very difficult thing to overcome.

We could do what we are doing now and make it into a political football and kick it around the place amongst our local government and state government politicians at a community level, and really nothing happens – no one really scores any goals. And we end up alienating a lot of people who should be our friend and dividing the community which really needs to be moving in a united fashion.

We could rip it up. We could rehabilitate the whole lot. That would probably be a little bit cheaper (\$65,000-\$75,000). It also has its problems. It is a reclaimed area, consolidated sediments, difficult to get trees to grow in there.

So everything has its problems. I am just alluding to the fact that I recognise and I respect all those issues. Again this is the polarisation of the argument, and certainly from where I am standing, we are losing sight of what is important. What are we going to do? The current management situation, the gate being left open all the time – it is really poorly informed, it is ecologically irresponsible, and it is dangerous.

We did a long-term monitoring programme down in Lismore where we used a combination of wildlife fencing, grids and a whole range of things to stop koalas from getting into the exclusion zone. For 6 years not one animal got into that fenced area.

Think only that you are facing an extinction event in **your** backyard in **your** lifetime. I do not want that, and I do not think generally the Pottsville community or anyone wants that to happen. We need to focus on what is important. As far as I am concerned (and I am sorry if things that are important to me are not the things that are really important to you, but it is certainly important to me), I think we need to work collectively to avoid that.

What I am asking you today is to basically put aside your differences and enforce a moratorium on development and future use of the Black Rocks sports field site until this critical cell ideally recovers to more sustainable levels. That is, give this population some time to recover. And one thing that was said in the Habitat Study, and certainly the early drafts of the Koala Plan of Management, was that this is very much a community issue and needs the community's help. We have to get the community engaged in this process if it is going to work.

Extinction is forever and pulling back decline is not an easy task. It is going to require a lot of work. I am not only advocating and asking, I am pleading to you, to give this cell time to recover. Please lend them a hand. Their survival depends on you and you alone.

Some times I think I am living in a world of revolving circles, and I can talk about this till ground hog day, get up and go to work and push a button on a computer. But I want to go back to the stories which started in the 50's and 60's. Something you may be aware of - the Barrenjoey Peninsula koalas. Someone said, "I have got a problem with these animals in the 60's and 70's, they get run over on the road, get munched by domestic dogs, we have got some habitat issues, I have seen some signs of disease." This population was the first population to be listed as endangered in NSW. There has been a lot of survey work done and basically in 2003 the population was near extinct. Gone. The main reasons: fire, dogs, road strike, but excuse my bluntness, also bureaucratic ineptness and a whole bunch of apathy. Because we think somebody else is going to fix the problem, but they are not.

So the security, the nurturing of these remaining population cells is vital. It is VITAL in capital letters if you are/we are going to collectively recover this population. To do that we have to work even more on this issue of fire and its potential impact on the remaining population. We have to look very seriously at the whole road strike thing – stop flapping around the edges with signs and endless statistics. No, let's do something. Let's think outside the box and take a very assertive and aggressive response. Now we have to give those remaining habitat areas our full support and our protection.

Contrary to what you might think, the future of the Tweed Coast koalas is not in the hands of the federal government, it is not in the hands of the state government, it is not even in the hands of the Tweed Shire Council. It is in your hands and your hands only.

So those of you who are here today, whatever your respective point of view, just think really hard about this. A couple of us here this afternoon have already talked about this – about intergenerational equity. This is something that is instantly made clear about our children's future and our children's children's future. It is about handing on an environment that is at least as good as the one that has preceded us. Our generation in particular has failed to do that. We need to think very seriously about doing this on the Tweed Coast. It is our backyard, our koalas. Ultimately what happens to them will be up to you.