Strzelecki Koala

This is a very readable article about the pure Strzelecki Koala, who haven't had their genetics interfered with by man, in the way of translocations of other populations from other areas, and are therefore quite a genetically distinct population of Koala's.

KOALA KONNECTIONS: Richard Appleton, Stewardship Forester, HVP Plantations

I'm wondering if I'm 'koalified' to provide advice on all things related to these iconic creatures, but being employed by HVP Plantations to look after their huge areas of native bush and all its contents (amongst other things) provides a few insights which I'm happy to share.

It's been going on a long time - basically since the Company came into existence - commencing with an ambitious 8 year project to map, identify and record flora species within no less than 15,000 distinctly different patches of vegetation scattered over 37,000 hectares, using a combination of aerial photos and foot-slogging through all terrains. In the early stages, the Australian Koala Foundation (AKF) was very active in our area and enlisted the help of university students to install a network of survey plots to identify eucalypt species our koalas prefer to eat. The results of this were eventually applied to HVP's maps and the Koala Atlas was born.

Without this tool we would be flying blind. It underpins everything we do, from looking after koalas in day-to-day forestry activities to planning long-term strategies for their welfare. We know where the good habitat is, what is in between and most importantly, can start looking at the best ways to link it all together within individual catchments or across the whole region so the population can move around, remain genetically diverse and healthy, bounce back from fires and function the way it used to before we (white folk) arrived on the scene.

It has also contributed to a lot of interest and thinking about koalas, both within and outside HVP. It has long been thought our koalas are unique in Victoria and now a basic genetic study using samples from road kills and vets' clinics has confirmed that they are genetically intact and diverse survivors of the original population, unlike those elsewhere. The 2009 fires also raised awareness because they were a tragic blow to these defenceless animals. We know this because apart from the many dead animals we saw, the Atlas told us about 40% of their primary habitat on HVP land had been burnt. This has added weight to a campaign by some to have them listed as a threatened species and contributed to public and government scrutiny of what HVP is doing and how this is affecting koalas, given that we are a major player (but certainly not the only one) in the koala landscape.

But we haven't been sitting idly by and watching this unfold. We've spent a lot of time working with the likes of Peter Menkhorst (DSE koala expert, now freelance consultant) and Dr. Wendy Wright (Monash University Gippsland Campus) learning pretty much all we can about koalas and using that to chart a clear course ahead through what HVP calls

its Koala Best Management Practices, or Koala BMP. This covers everything from Company policy to what we expect contractors to do to protect koalas during our day-to-day activities. But it's no use writing documents unless they are translated into actions, so we have run a training course on koala management for staff and contractors at all levels. We didn't just leave the Atlas on the shelf as a reference; we have developed it as a planning tool to identify where the priority areas are for linkage and restoration works so we can do what we can in the normal course of business, as well as plan ahead, and it gets used on a daily basis.

The knowledge we have is just a start. We have maps showing where we think the best habitat is and we have learnt some important rules, like koalas can't move through blackberry patches so removing blackberries from corridors is critical. We know which eucalypt species they prefer so we can plant more of them where appropriate. We know that koalas, especially males, are territorial and young adults need to disperse into unoccupied territory. We know they get stressed in summer heat and drought just like we do, and often seek moist, shaded refuges along gullies where their food has a higher moisture content in such times; a clue to linking vegetation on ridge tops with creek lines. We know they will move some distances along open ground, but prefer not to, and open ground can present dangers for them. We know any vegetation is better than none, even a pine plantation, to help provide shelter and dispersal opportunities. Refer MAP and FOOD PREFERENCES attached.

There are still a lot of critical questions we don't know the answers to. How many koalas do we have in our forests? How many are in surrounding areas, and where are they? Where are the boundaries of our 'special' population and how are animals moving within it? Are there any isolated pockets where animals are becoming in-bred? Is the population healthy, growing, stable or in decline? What long-term impact did the 2009 fires really have; are they recovering? What effects are other changes having, such as choice of plantation species (we see them eating Shining Gum and think it will be better than Mountain Ash, but have no hard evidence)? Although the Atlas is based on good research, we haven't validated it by going into all of the habitat classes identified and actually counting the koalas in there, which is the only way to know for sure if it's as realistic as it can be. Answering all of these questions requires dedicated research and extensive monitoring.

HVP's estate is only one piece in the jigsaw puzzle and we all need to be thinking how we fit in and what we can do. There are many areas of public reserves and private bush we really don't know much about in terms of koalas. Everyone can help, even if just by reporting and recording what we see in their own back yards. Plotting anything seen or heard using the Spatial Vision Interactive Mapper will secure this information, and HVP is also interested in records outside HVP land because it is potentially very useful for future planning, monitoring and research activities and for securing future funding!

Some of these activities are already under way and we are hoping to expand them with the help of funds from government or elsewhere. Monash University, with support from HVP, has perfected a way to extract DNA from koala scats. This easy and non-invasive sampling method can potentially answer many of the questions we need to answer, but so

far we haven't been able to secure the necessary cash to do the research on a large scale (we're not giving up yet!). Meanwhile, again in partnership with Monash but using HVP funds, we are attempting to carry out a full koala census to get an idea what shape the population is in overall and hopefully validate the Atlas information by assigning population densities to each habitat class. That would be exciting stuff, and give us some REAL information for the fist time on what shape our koalas are in. But it's not as easy as it sounds. We've looked at methods developed by Parks Victoria and other researchers over many years of trial and error, and tried to adapt it to our much more complex landscape. It calls for a rigorous survey process, experienced crews and lots and lots of foot-slogging, which will probably take many years to complete unless financial support can be secured. On top of that, we have set up permanent monitoring sites in burnt and unburnt habitats to try to get a handle on what's happening there.

There is an obvious need to extend the research and census projects beyond HVP's boundaries to get the whole picture. We don't yet have mechanisms or means for doing this, but partnerships with Landcare and other organizations can lead to really useful synergies. Ultimately a properly funded region-wide linkage strategy that includes detailed planning, ground works, research and monitoring is called for, along with a dedicated project manager to draw people together and make it all happen.

Meanwhile, have a look at HVP's habitat map and the preferred species list (both attached) which may be useful for what you're planning on your own properties, and don't forget to report your sightings! Don't forget to read the attachments that go along with this article.