LOOKING AFTER OUR KOALAS

BACKGROUND:
WHY ARE OUR KOALAS SO IMPORTANT?

- HVP Plantations policy aims to protect biodiversity values within our native forest (custodial) estate and while conducting plantation operations.
- The Koala is an important part of this biodiversity and an iconic Australian species.
- Koalas in the Strzeleckis may be particularly important as they are believed to be a uniquely 'unaltered' population.
- We believe we have a high proportion (up to 50%) of the best remaining habitat for the Strzelecki Koalas on our property.

RELEVANT MANAGEMENT FACTORS

- Koalas prefer certain eucalypt species including Blue Gum, which we have in plantations that will gradually be converted to pine or Shining Gum.
- Koalas may be found anywhere, including (occasionally) in non-preferred species such as Mountain Ash, or even pine plantation.
- Nothing is known about their preference for Shining Gum, however observational evidence is that they do eat it and are using Shining Gum plantations.

RELEVANT MANAGEMENT FACTORS (cont)

- Koalas (especially males) are territorial so minimising stress on animals when they are displaced from their home range depends on having adequate, accessible alternative habitat.
- Population pressures and social mechanisms such as dispersal of young males, depends on having adequate, accessible alternative habitat.
- Koalas suffer stress in times of heat and drought and may need to move into more favourable environments (eg. creek lines) to find adequate shade and moisture.
- Mitigating effects of fires depends on having corridors to allow for dispersal and recolonisation of animals back into burnt areas.

RELEVANT MANAGEMENT FACTORS (cont)

- Koalas may shelter in ‘permeable’ vegetation without eucalypts, including older pine plantation, or move through it to get from one food source to another.
- They may also move for <u>short</u> distances over open ground.
- Blackberry infestations and dense scrub are not suitable corridors for Koalas and many other species.

MANAGEMENT STRATEGIES

1. **Provide for the *long-term* sustainability of the population and minimize *future* plantation harvesting impacts by <u>improving habitats & linkages… in strategic areas…as opportunities arise</u>** ***(a silviculture strategy involving landscape-scale planning within & beyond HVP boundaries).***
2. **Design harvesting schedules to avoid removal of entire habitat units within a short period** ***(a harvest planning strategy involving landscape-scale planning).***
3. ***Minimize* direct impacts on individual Koalas and the local population from eucalypt plantation harvesting or road construction** ***(a coupe planning & harvesting strategy involving coupe-scale controls).***
4. **Gather information to guide future management.**

Strategy 1: Providing for long term sustainability

a) How do we improve habitats & linkages?

- **By establishing 40m native corridors, including prefered food species, along waterways linking priority habitats where there was pine plantation previously (aligns with Sensitive Streams Policy for permanent streams).**
- **By removing blackberries from existing vegetation within priority habitats and linking corridors.**
- **By replanting canopy trees, including preferred food species, where missing from existing vegetation within priority habitats and linking corridors.**

Strategy 1: Providing for long term sustainability

Food preferences in the Strzeleckis (AKF)

Common name	Scientific name	Classification	Strike rate
Mountain Grey-gum	*E. cypellocarpa*	Primary	0.36
Blue Gum (Eurabbie)	*E. globulus ssp. bicostata*^	Primary	0.33
Yellow Stringybark	*E. muelleriana*	Primary	0.33
Manna Gum	*E. viminalis*	Primary	0.26
Messmate	*E. obliqua*	Secondary*	0.17
Mountain Ash	*E. regnans*	Secondary*	0.14
Yertchuk	*E. consideniana*	Secondary	0.14
Apple Box	*E. angophoroides*	Secondary	0.11
Narrow-leaf Peppermint	*E. radiata*	Supplementary	0.10
Swamp Gum	*E. ovata*	Supplementary	0.10
Silvertop Ash	*E. sieberi*	Supplementary	0.05

***** *Only Secondary when mixed with Primary food species, which increases the strike rate for E. obliqua to 0.23 and for E. regnans to 0.34.*

^ *Subspecies endemic to the Strzelecki and South Gippsland study area, identified by AKF as bicostata.*

Strategy 1: Providing for long term sustainability

b) How do we identifying strategic areas?

- By use of the Koala Habitat Management GIS layer.

What information underpins this layer and how should it be used?

Strategy 1: Providing for long term sustainability

c) How can we take advantage as opportunities arise?

- **By conducting works on native habitats and corridors while adjacent plantations are being site prepped following harvest (equipment is on site and sites are accessible)**
- **By not replanting pines within creek buffers in strategic areas.**
- **By long term planning (a corridor may take a rotation to restore, one section at a time).**

Strategy 2: Designing harvesting schedules with Koalas in mind

- **Use the Koala Habitat Management layer to identify where harvesting impacts are likely to be greatest. These are:**
  - **First: Blue gum plantations completely isolated from other habitats (Mmt. priority 1).**
  - **Second: Core habitats (>150ha) comprising >70% blue gum plantation. Potential serious impact if harvested in a short period (Mmt. priority 4).**
  - **Third: Blue gum plantations with poor quality linkage to other habitats (Mmt. Priority 7). '*Permeability' for Koala movement will improve over time as surrounding young pine or euc plantations mature, so timing will be important.***

Strategy 2: Designing harvesting schedules with Koalas in mind

- **Some strategies that may be employed:**
  - **Avoid isolating blue gum stands before they are harvested, by clear felling right around in preceding years. Bare ground and young plantations restrict Koala movement.**
  - **Postpone harvesting of blue gum surrounded by young plantations (especially pine) until plantations mature (>10 yrs.).**
  - **When scheduling large habitat units comprising mostly blue gum plantation (Management Priority 4), stagger harvesting over as many years as possible to allow for gradual migration/adjustment of populations rather than sudden impact.**

Strategy 3: Minimizing direct impacts at a coupe level

1. Coupe planning

- **Priority 1 and 7 areas (isolated blue gum with poor or no linkage): have the stand surveyed for Koalas in the planning stage unless sufficient habitat will remain (eg. road-lining, partial harvest). Take steps if present.**
- **Priority 4 (core areas >150ha comprising mostly plantation): consider how much remaining plantation & native habitat is within and near the core. Take steps if insufficient.**
- **Priority 10 areas (isolated blue gum with better linkage): consider how much alternative habitat is accessible. Take steps if insufficient.**

Strategy 3: Minimizing direct impacts at a coupe level

- **Steps that can be taken:**
  - **Retain sufficient eucalypt plantation trees, especially along creeks or in areas that are commercially marginal due to steep slopes, etc.**
  - **Restore sufficient habitat or biolinks prior to harvest (a long term strategy that will be impossible in many cases due to surrounding land tenure, lack of custodial land or other reasons).**
  - **Relocation of animals should not be considered except as an *absolute last resort*.**

Strategy 3: Minimizing direct impacts at a coupe level

2. Coupe inspection & boundary marking

- **Look and listen for Koalas and signs of their presence during coupe preparation.**
- **If Koalas are seen**
  - **mark the tree and those adjacent with coloured tape to alert operators to possible presence.**
  - **record sightings on the coupe map and/or planning checklist to inform contractors.**
- **If calls are heard or scats/scratches found**
  - **search for animals in the immediate area and proceed as above if sighted.**
  - **Possible presence should be recorded on the planning checklist, even if animals are not sighted.**

Strategy 3: Minimizing direct impacts at a coupe level

3. Coupe harvesting & roading supervision

- **Supervisors should promptly and thoroughly investigate any signs (calls, scats, scratches) reported to them in active coupes and mark trees where animals are found, and those immediately adjacent, with coloured tape.**
- **Supervisors have a responsibility to convey the requirements for management of Koalas to contractors, and to keep the contractor informed of all developments within the coupe including sightings of animals and marking of trees.**
- **If injured or orphaned animals are seen or reported, contact the Stewardship Forester or Southern Ash Wildlife Centre at Rawson on 5165 3583.** ***Do not attempt to capture or handle animals.***

Strategy 4: Gathering information for future management

- All Koala sightings in any location should be reported to the Stewardship Forester for recording on the company database. Include your name, date, location (GPS or map) and general observations (eg. sex, state of health, juvenile or mature).
- Koalas will be the subject of ongoing monitoring, as well as research when opportunities arise.

More information…….

All staff involved in management, planning and supervision should read the BMP, especially the Policy and Procedure document.

<u>Appendix 2</u> is a decision tree summarizing management actions at a harvest planning and supervision level, which can be used as a quick reference. It includes emergency contact information.

CONTRACTORS' RESPONSIBILITIES

- **Contractors have the final responsibility for looking after the welfare of Koalas within the coupe by**
  - **making every effort to avoid felling trees with animals in them, or adjacent trees that may injure animals.**
  - **allowing opportunity for animals to move away from the active harvest/roading area as work progresses.**
  - **promptly reporting any injured or orphaned animals.**

CONTRACTORS' RESPONSIBILITIES

- **What steps can be taken?**
- **Expect to find Koalas anywhere, but especially in eucalypt coupes and native forest.**
- **Read the coupe documents and be aware of where Koalas or evidence of their presence has been found.**
- **Get in the habit of looking around the *immediate work area* in eucalypt coupes and roading operations before starting work in the morning and after breaks.**
  - **Look and listen for animals and signs of their presence. It may be impossible to see them from your machine.**

CONTRACTORS' RESPONSIBILITIES

- **If Koalas are found or other evidence seen/heard,**
  - **notify the HVP supervisor immediately.**
  - **mark and avoid felling any tree with an animal in it, and trees adjacent, until the animal leaves.**
  - **try to leave an escape route; avoid harvesting right around for as long as possible or until the animal moves on.**
  - **permanently retain these trees at coupe completion if Koalas remain in them.**

CONTRACTORS' RESPONSIBILITIES

- **Before you harvest marked Koala trees,**
  - **thoroughly inspect the marked trees and those in the immediate surrounding area.**
  - **If you are sure the animals have moved on, the trees may be cut.**
  - **If Koalas are still present, the trees must be retained.**

CONTRACTORS' RESPONSIBILITIES

- **If animals are accidentally injured or orphaned,**
- **Report immediately to the HVP supervisor, or the Southern Ash Wildlife Centre at Rawson on 5165 3583.**
- **Never attempt to handle animals. This can be dangerous to you and excessively stressful for the animals unless done by trained people.**

MORE INFORMATION…..

An Operating Standard outlining contractors' responsibilities is available as part of the company BMP. If not attached to coupe plans it may be requested.

<u>Appendix 1</u> from this document is a decision tree summarizing actions at an operational level, which can be used as a quick reference. It includes emergency contact information. This page should be attached to all eucalypt coupe plans and roading plans involving eucalypt removal.

ONE FINAL THOUGHT……

Black Saturday probably killed a large proportion of our Koalas.

We don't want to add to this impact.

We also want to help mitigate the effects of such disasters in future.

Traralgon Creek contained large areas of primary habitat