Little Liverpool Range Initiative

From Little Things, Big Things Grow
What is the Little Liverpool Range Initiative?

• A community based initiative that endeavours to connect and protect, habitat, species and people so that they all may survive and thrive
Where is the Little Liverpool Range?

- Extending from Hatton Vale in the north to Main Range National Park in the south, the Little Liverpool Range is 51 kilometres long and covers approx. 46,000 hectares.
Formation of the Little Liverpool Range?

- Tertiary period (22 – 25 million years ago)
- Numerous nearly horizontal lava flows, mainly of basalt, which erupted to gradually build a complex and elongated volcano.
- Basalt lava flows have a low viscosity and tend to flow large distances forming gently sloping shield volcanoes (as opposed to classical steep sided peaks like Mt Fuji)
- The Main Range & Little Liverpool Range shields formed part of a wider area of volcanic activity spreading northwards past Toowoomba and Kingaroy.
- Other volcanoes of similar age include Mt Barney and the much larger Tweed Volcano whose remains form the Lamington Plateau and Border Ranges.
- The Main Range volcano is believed to have spread as far east as the Kalbar - Boonah and northeast to Rosewood
## Tertiary Period

Due to its long-term isolation (~40 million years) as an island continent, the vast majority of Australia’s native marsupial (93%), rodent (91%) and microbat (73%) species are found nowhere else.

Within the last 200 years at least 25 species of Australian mammals (almost 10%) have become extinct and many more (20% of remaining species) are now threatened.

This rate of mammal extinction is the highest in the world and represents a significant loss of unique biodiversity.

<table>
<thead>
<tr>
<th>Epoch</th>
<th>Key Events</th>
<th>Extinctions/Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Paleocene Epoch 65 to 54 million years ago</td>
<td>Australia is joined to Antarctica</td>
<td>The condylarths—ancestors of modern hoofed herbivores Rodents The first Primates</td>
</tr>
<tr>
<td>The Eocene Epoch 54 to 38 million years ago</td>
<td>Europe and North America separate</td>
<td>Bats Elephant ancestors Whales Eohippus—the first horse</td>
</tr>
<tr>
<td>The Oligocene Epoch 38 to 24 million years ago</td>
<td>Australia separates from Antarctica</td>
<td>Dogs, cats, and pigs toothed whales</td>
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<tr>
<td>(Continued)</td>
<td>Antarctica is covered by glaciers</td>
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<tr>
<td></td>
<td>Sea levels are low</td>
<td></td>
</tr>
<tr>
<td>The Miocene Epoch 24 to 5 million years ago</td>
<td>Africa is pushing into Europe—forms the Alps</td>
<td>Horses, camels, and rhinos Beaver-like animals many apes and other primates</td>
</tr>
<tr>
<td></td>
<td>Arctic becomes covered with ice</td>
<td></td>
</tr>
<tr>
<td>The Pliocene Epoch 5 to 1.8 million years ago</td>
<td>Africa closes off the Mediterranean Sea North and South America join at Panama</td>
<td>First hominids—human ancestors</td>
</tr>
</tbody>
</table>
Challenges

- Habitat loss
- Managing invasive species
- Over grazing
- Unsustainable practices
- Population growth
- Climate change
- Altered fire regimes
- Altered hydrology

Will connectivity exacerbate the spread of weeds, pest species, diseases or catastrophic events (such as fire or floods)?
Great Eastern Ranges
A good start for scale

The Turner Family Foundation
4,638 Ha – Old Hidden Vale
682 Ha – Thornton Views

Qld Trust for Nature
1,970 Ha - Aroona

ICC (Mt Beau Brummel
Conservation Park)
155 Ha

7,445 Ha
### Hidden Vale – A brief history

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1829</td>
<td>Alan Cunningham first Europeans</td>
</tr>
<tr>
<td>1841</td>
<td>First European Settler, James Phelps Robinson</td>
</tr>
<tr>
<td>1849</td>
<td>Property was 155,000 hectares in size and stretched over the NSW border</td>
</tr>
<tr>
<td>1871</td>
<td>Property reduced to 4,000 hectares after being resumed by the newly formed Queensland State Government</td>
</tr>
<tr>
<td>1999</td>
<td>Acquired by the Turner family</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1841</td>
<td>Property Called Franklyn Vale</td>
</tr>
<tr>
<td>1849</td>
<td>155,000 Ha’s, 13,000 Sheep</td>
</tr>
<tr>
<td>1871</td>
<td>Property renamed ‘Jost Vale’</td>
</tr>
<tr>
<td></td>
<td>Property reduced to 4,000 Ha’s after resumption by the newly formed Qld State Government</td>
</tr>
<tr>
<td>1900</td>
<td>Property named Hidden Vale</td>
</tr>
<tr>
<td>1929</td>
<td>Property renamed ‘Sutton Royal’</td>
</tr>
<tr>
<td>1929</td>
<td>Property renamed ‘Old Hidden Vale’</td>
</tr>
<tr>
<td></td>
<td>Mackenzie died 1957; sisters sold part of the property in 1964. Margaret Crombie held the balance which included Old Hidden Vale.</td>
</tr>
<tr>
<td>1992</td>
<td>Acquired Old Hidden Vale in 1992 and acquired additional parcels of land over time taking the property back to about the same size as when it was Jost Vale</td>
</tr>
<tr>
<td>1999</td>
<td>Acquired Old Hidden Vale from the Cole family towards the end of 1999</td>
</tr>
</tbody>
</table>
Hidden Vale today

• Working cattle property of over 400 head
• 36 Room luxury retreat
• Series of mountain bike trails – over 150 kms
• Bush walking ecotourism operation
• Hidden Vale Wildlife Centre
• Commitment to ecological restoration
Wildlife at the Centre

- Northern brown bandicoots
- Mahogany gliders
- Blue tongue lizards
- Fat tailed dunnarts
Wildlife at The Centre
Eastern bristlebirds...

- Aviaries prepared
- Birds due in August
- Existing captive breeding program with Currumbin Sanctuary
- As a model for other endangered species at HV
Some of our wildlife

- Koalas
- Glossy Black Cockatoos
- Pale Headed Rosellas
- Rainbow Lorikeets
- Powerful Owls
- Red-necked wallaby
- Brush tailed rock wallaby
- Common brushtail possum
- Brush tailed phascogale

- Greater glider
- Sugar glider
- Long nosed bandicoot
- Yellow-footed antechinus
- Tusked Frog
- Red bellied black snake
- Yellow faced whip snake
- Lesueur’s tree frog
Some of our possible wildlife

- Eastern bristlebird
- Spotted quoll
Fire Map 2002-2015
Low fire incidences over past decades – need to review fire management with broader community.
Hidden Vale Project

• To deliver resilient ecosystems with representative, self-sustaining populations of fauna and flora endemic to the Scenic Rim
The Hidden Vale Koala Project

An intensive koala project to develop:

- A thriving and sustainable kola population at Hidden Vale… a “koala haven”…
- Healthy koalas for bolstering their populations through the Little Liverpool Range… a “koala fountain”…

Aim to find out:

- The size of the HV koala population;
- Health status and movements;
- Current threats – predation, disease, habitat change;
- Strategies for increasing koalas at HV;
The Koala Project

**How** – Catch, examine and collar every koala in a prescribed area
- Monitor health and movements of all koalas for 12 months
- Treat and release any diseased koalas
The Results (so far)

Three capture sessions so far, each of three days. 15 adult koalas have been captured, examined, fitted with a radio-tracking collar and released at their point of capture, with 4 joeys:

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
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<tbody>
<tr>
<td>Ahern</td>
<td>M</td>
</tr>
<tr>
<td>Amelia</td>
<td>F</td>
</tr>
<tr>
<td>Dalene</td>
<td>F (joey)</td>
</tr>
<tr>
<td>Dave</td>
<td>M</td>
</tr>
<tr>
<td>Deej</td>
<td>F (joey)</td>
</tr>
<tr>
<td>Flanners</td>
<td>M</td>
</tr>
<tr>
<td>Jo</td>
<td>F</td>
</tr>
<tr>
<td>Jude</td>
<td>F</td>
</tr>
<tr>
<td>Karen</td>
<td>F (joey)</td>
</tr>
<tr>
<td>Mara</td>
<td>F (joey)</td>
</tr>
<tr>
<td>Matt</td>
<td>M</td>
</tr>
<tr>
<td>O’Hara</td>
<td>M</td>
</tr>
<tr>
<td>Robyn</td>
<td>F</td>
</tr>
<tr>
<td>Skroo</td>
<td>M</td>
</tr>
<tr>
<td>Vicki</td>
<td>F</td>
</tr>
</tbody>
</table>
The Koala Project

The Results:
The Results: we have an unusual and valuable population:

- Most appear healthy with low level of chlamydia
- Most are young adults – few older koalas
- The population is breeding well.
- The LX tracking collars allow them to be tracked twice per day
The Next Steps –
1. Continue project in the Nature Refuge;
2. Monitor their use of the koala plantations;
3. Look for potential interactions with cattle;
4. Continue to monitor movements and health of all koalas;
5. Chlamydia vaccine field trial
6. Look at possible eco tourism opportunities - develop “koala safaris”...
Questions?