



A tale of two critters: Commercial sector solutions for threatened species management

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During a recent survey, a majority of practitioners agreed that a good environmental outcome was one that resulted in a diminished risk to a matter of social, ecological or general environmental importance at a national, regional or local scale.

In this paper, I am proposing that the ongoing protection of threatened species will only be achieved with commercial sector involvement. This is primarily because Government is unable to provide commercial outcomes that serve an environmental benefit and therefore, cannot suitably manage threatened species. The regulations that assess impacts to threatened species are directly linked to a range of mechanisms for avoidance and mitigation strategies, habitat conservation / improvement and funding support. For practitioners, this can mean offsetting – a last resort means of abating an impact through the provision of a counterbalance. The counterbalance must be scientifically based and should link to the known threatening processes affecting the species, community or its relevant habitat. Any project with a potential for impact must invest significant funds to understand and offset impacts, thereby addressing the fundamental core for threatened species management. This could be succinctly condensed to mean **More Development = Better Outcomes for Threatened Species**.

In Queensland, relevant projects with a potential to impact threatened species may be triggered to find offsets at a State or Commonwealth level. To avoid double-dipping, the State and Commonwealth have agreed that their relevant matters can be addressed by one or other of the processes. In practice, this means that a proponent must:

- Make all reasonable efforts to avoid, reduce or mitigate impacts to threatened species
- If this is not possible, offsets may be a last resort and the level of impact should be calculated in terms of an impact area
- A proponent may then supply a proposal to offset. This may involve identifying land or habitat that is suitable for the threatened species that requires management to bring it up to a suitable state
- A proponent must legally secure the offset so that it is bound to the land / title. This can be achieved in a number of ways, including the provision of a financial contribution

From our experience, poorly-understood species stand to benefit from commercial sector involvement. This can occur where a species is newly-listed and has not received adequate scientific support from the State or Commonwealth to produce a recovery plan or conservation advice. As the State and Commonwealth legislation is regularly amended to include or remove species, this can mean that the approvals pathway for a proponent can

trigger a particular species if the impacts from their project are deemed to be likely to result in a significant impact. Similarly, other proponents can slip through the process by not triggering impacts for species that are listed at a date after the approvals process has proceeded, even though the impact on the ground will still occur.

For this paper, examples of species that stand to gain from commercial sector involvement are:

- Palm Cockatoo *Probosciger aterrimus*; and
- Water Mouse *Xeromys myoides*.

Both species are listed at the State and Commonwealth levels and both species are known to be directly impacted by threatening processes associated with development.

For Palm Cockatoo, bauxite mining is stated to be a key threatening process due to the potential for the mining activity to damage breeding habitat for the species. However, there is little evidence that the published records of breeding requirements for the species are immediately transferrable across the vast area inhabited by the species. The species does not have a recovery plan and there is limited conservation advice available to guide assessments. For a proponent wishing to develop a bauxite mine in habitat that could present potential habitat for Palm Cockatoo, they are likely to be required to identify and protect offsets areas, even if there is no evidence that the areas afford any conservation benefit for the species. Despite the lack of evidence, the species' listing will result in the protection of thousands of hectares of habitat, as environmental offsets, funded by the commercial sector.

The Water Mouse is a cryptic species that inhabits intertidal wetland and mangrove communities in Northern and Eastern Australia. Regular surveys show that populations disappear and reappear from sites for no apparent reason. The species is known to respond negatively to development adjacent its habitat, yet there is little understanding of the scale of impact required to negatively affect population dynamics that result in its demise. Without commercial sector involvement, the species is likely to remain cryptic with no further understanding of the parameters that are limiting to populations or the actions required to manage threatening processes. Again, the majority of work that has contributed to our understanding of the species has been funded by commercial entities conditioned to offset impacts associated with their projects.

Commercial sector involvement plays an important role for achieving good environmental outcomes. For the species discussed here, the involvement of commercial entities has contributed directly to achieving:

- Offsets that protect the habitat, both potential and known, for threatened species
- Greater scientific understanding of species
- Beneficial outcomes unable to be met by Government

The challenge for the commercial sector is that it is expected to contribute to the scientific understanding of threatened species, for no apparent benefit. This is further complicated because most commercial entities wanting to develop projects are seeking financial milestones, not necessarily environmental outcomes.

This presents an opportunity for EIANZ to lead a response with Governments and on behalf of the commercial sector to identify mutually beneficial outcomes that can protect environmental values and enable developments to proceed.



A tale of two critters:

Commercial sector involvement in threatened species management

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Overview

- ▶ Positive environmental outcome
- ▶ Avoid, reduce, mitigate.....offset
- ▶ Palm Cockatoo & Water Mouse
- ▶ Commercial sector involvement
- ▶ What works & why?
- ▶ Role of EIANZ



Positive Environmental Outcome

- ▶ Diminished risk to matter of social, ecological or environmental importance at National, Regional or Local scale
- ▶ Threatened species - processes that risk the future viability of species, its habitat or population
- ▶ Roles
 - ▶ Government - Policy & legislative context protect threatened species
 - ▶ Commercial sector - Result in impacts, provide funding to manage threats



Avoid, Reduce, Mitigate.....Offset

- ▶ Commonwealth & State legislation
- ▶ If a project has potential to result in impacts to threatened species - must offset
- ▶ Vast majority of commercial projects will have an impact & need to offset
- ▶ Offset - legally secure protection, reduce risk, mitigate impact

**More Development = Positive
Environmental Outcomes for Threatened
Species**



Palm Cockatoo - Iron Range National Park





- ▶ Bauxite mining that impacts rainforest
- ▶ Competition for nest sites
- ▶ Lack of suitable nest hollows



Regular Fires - Weipa



- ▶ Commercial sector established extensive offset
- ▶ Managing fire frequency
- ▶ Improving habitat condition

Rehabilitation of Open Woodland

Water Mouse in Mangrove - Gladstone



- ▶ Inhabits intertidal area - mangrove, saltmarsh & ecotones
- ▶ Cryptic
- ▶ Sensitive to changes in habitat condition

Coomera Area, Gold Coast - Once Prime Habitat



- ▶ Loss of habitat due to coastal development
- ▶ Increased stormwater discharge
- ▶ Modified tidal regimes



Dense Mangrove Forest - Mackay

- ▶ Commercial sector established research programs & \$
- ▶ Landuse planning
- ▶ Government updated policy, ineffective

What Works & Why?

- ▶ Commercial sector
 - ▶ Define / quantify impacts to threatened species
 - ▶ Identify solutions in accordance with policy
 - ▶ Secure offsets; fund research & monitor
- ▶ Government
 - ▶ Legislation & compliance
 - ▶ Little on-ground benefit
- ▶ Outcomes
 - ▶ Commercial sector operational management of threatened species
 - ▶ Millions \$ contributed to research, offsets, monitoring
 - ▶ Government reassess status & modify policy position



Role of EIANZ

- ▶ Misalignment between Government policy & commercial sector
- ▶ EIANZ advocate for practitioner involvement - CEnvP lead reviews & guidance
- ▶ Challenge for EIANZ to generate mutually beneficial outcomes
 - ▶ Influence policy
 - ▶ Representative organisation
 - ▶ Improved management of threatening processes





Questions?

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