

Wildlife Corridors: a biodiversity perspective

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What is a corridor?

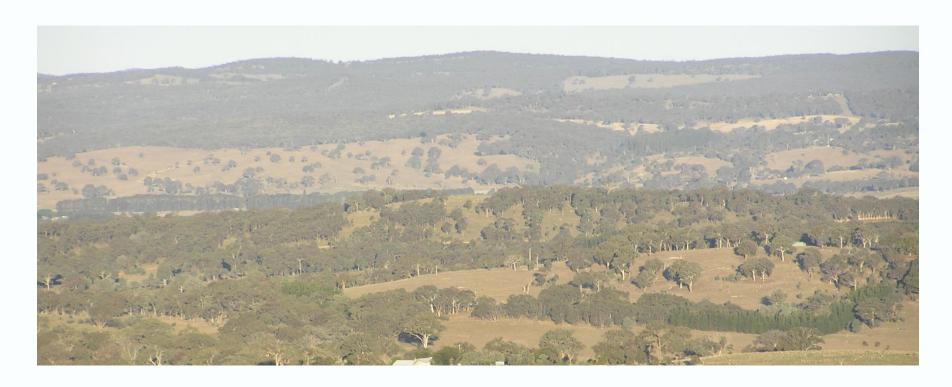
Large swath of land where most (if not all) of the natural processes required to support species and ecosystems in the long term can still happen, despite an intermingling of natural areas with other land uses.





What processes?

- Dispersal & Migration
- Pollination
- Hydrological flows & dynamics





Why this is such a different approach

Usually focus on presence of species (or diversity of species) in patches

But continued species declines







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But continued species declines

Presence of species doesn't necessarily mean it will be there in the future

Shifting conservation goals from species to processes, from patches to landscapes of interacting patches



Why are corridors important?

May be the only way many species and native ecosystems can persist into the future

Why is it important to have native species and ecosystems?

- Duty of care, inherent value
- National identity, aesthetics
- Ecosystem services to humans (pollination, pest control)







What is connectivity and why is it important?

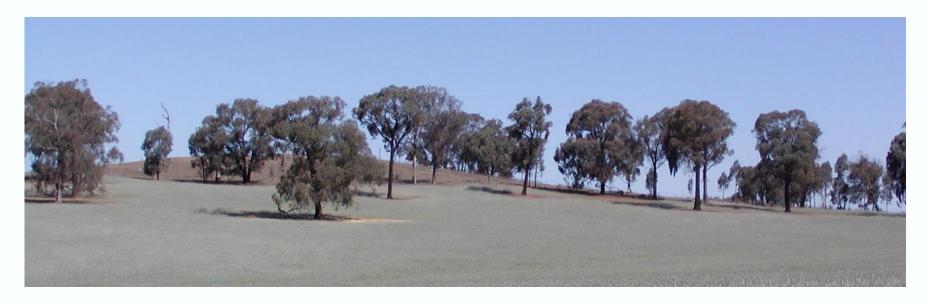
Connectivity is the mechanism through which processes can still occur - the small stuff on the ground between areas of more intact native ecosystems that allows species, water, nutrients, etc. to move between those areas



What is connectivity and why is it important?

Examples:

- scattered trees across a grazing paddock
- a vegetated river corridor
- mature perennial tussocks along a fenceline
- (not necessarily where lots of species live)



Connectivity within corridors



One small part of a corridor

Connectivity

Connectivity

Not connectivity



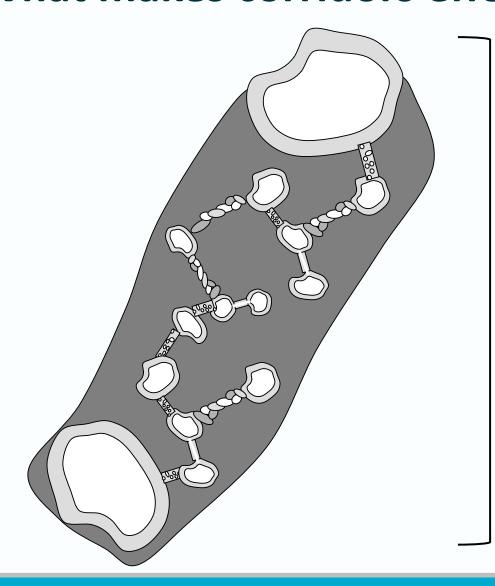
Where are corridors needed?

Wherever native ecosystems are no longer intact but have become fragmented with land uses that may impede key natural processes





What makes corridors effective?



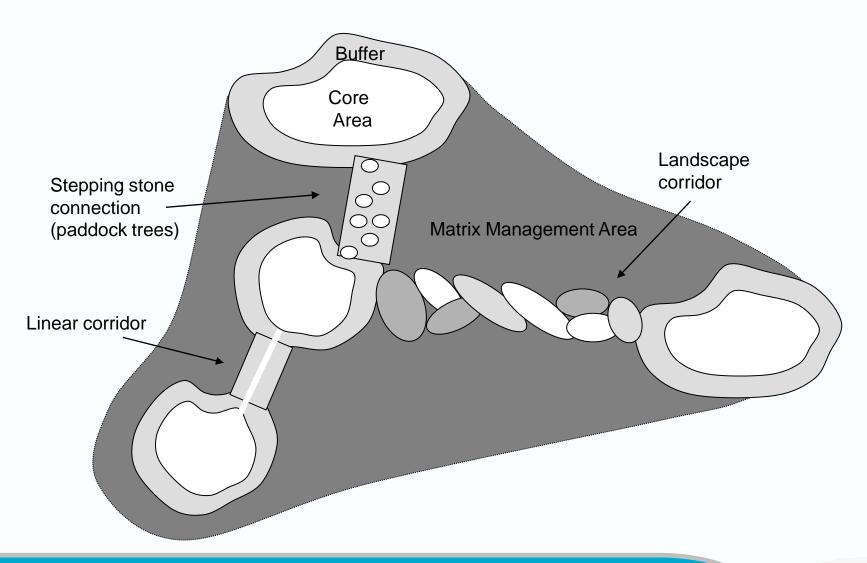
100s of kilometres

Functions:

- resident species dispersing between patches
- nomadic species moving between patches to find food
- migratory species moving between winter/summer areas
- species shifting distributions as necessary



What makes corridors effective?





What makes corridors effective?

More maintenance, less restoration

Work where you already have these conditions and then manage to maintain them (like manage the paddock trees that connect more intact areas so they regenerate)

- Not just about any little bit anywhere helps, but real spatial planning of land uses
- Lots of patches and little links over a large area

Means large group of land managers with a shared vision and/or sufficient incentives to participate





Thank you

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