

The conservation conundrum: How to choose which species to protect?

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Not all species are created equal. Some are more important than others. So how do we choose what to protect?

Biodiversity is vital for a healthy environment and a healthy planet.



Every plant and animal has a role to play to keep its ecosystem healthy.

It might be a <u>food source</u>, a pollinator, an ecosystem engineer or a seed disperser, to name a few. <u>But all have a job to do.</u>

The keystone to it all

Every ecosystem has keystone <u>species</u>. These plants and animals play a critical role in maintaining the structure of the ecosystem community. Without keystone species, the ecosystem would change dramatically—and could even collapse completely.

While Australians would be sad if koalas became extinct, the environment would likely recover well enough if they disappeared. But woylies, which many people have never even heard of, are a keystone species. They are ecosystem engineers that play a major role in maintaining the health of forests in <u>WA's South West</u>.

These small, cryptic marsupials munch on underground fungi. While digging for delicious mushrooms, they aerate the soil. This allows more water to seep deeper into the ground and helps move nutrients around. They also spread <u>fungal spores</u> to <u>native plants</u> that rely on the fungi to help them to grow.

While these truffle snufflers are pretty cute, they're really rare to see in the wild. Koalas are bigger, fluffier and much easier to spot hanging out on the East Coast. So how do we get people to care about woylies as much as they care about koalas?

Cute and cuddly gets the likes

It turns out that conservation is a popularity contest. It's similar to a political election—people support who they like the best.



It's easy to get people to care about <u>giant pandas</u>, elephants and fluffy koalas. It's harder to get them to care about weird underground plants, a marsupial they've never seen or poo-eating beetles.

Luckily for the less loveable species, conservation scientists have worked out how to use the adorable animals to the entire ecosystem's advantage.

Let's take <u>koalas</u>. To protect the koala, we need to protect their habitat—eucalyptus trees. By protecting the forest, we also protect other keystone species that live there. In this way, we can highlight a <u>single</u> <u>species</u> for conservation but actually protect an entire ecosystem.

We need biodiversity to have healthy, sustainable <u>ecosystems</u> for plants and animals, the planet and ourselves. Keystone species are crucial for that.

So while the cute and cuddly may hold the key to our hearts, keystone species hold the key to the planet.

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