Charismatic endangered species 'can help save other wildlife'

May 6 2015

Charismatic or 'celebrity' endangered wildlife can help save less well-known or 'forgotten' animals – if the conservation funds are used wisely, environmental scientists say.

Dr Joseph Bennett and Professor Hugh Possingham argue that the world has developed a very inefficient way of choosing which animals facing extinction to save, often favouring popular wildlife such as rhinos, koalas and bilbies over the less well-known species, including Australia's blobfish, giant Gippsland worm, or the Pacific lamprey.

Their study, supported by the ARC Centre of Excellence for Environmental Decisions (CEED) and the National Environmental Research Program (NERP), reveals that using conservation funds to maximise shared benefits between charismatic and other threatened species will give the world a better chance to save biodiversity.

"Whether it's a plant or an animal, species that are charismatic or interesting often get more attention in conservation," says Prof. Possingham. "For example, around 80 mammal species including lions, tigers and pandas are used by international non-governmental organisations (NGOs) to raise funds for conservation, but almost no invertebrates are used this way.

"However, if these 80 charismatic species absorb the majority of money available from sponsors, what is left for the other 1,000 threatened mammal species and the 19,000 threatened plants, birds, reptiles, frogs,

insects and more obscure species?"

Dr Bennett adds that the whole process of raising money around charismatic animals creates 'have' and 'have-not' species: 'Charismatic species' often get most of the money and splashy ad campaigns, which further increases their exposure and appeal.

"So if you're an obscure animal or plant in a remote place, you have less hope of getting conservation resources, even if you may be more genetically distinct – and contribute more to an ecosystem – than a charismatic species."

To give all species a better chance of survival, the scientists looked for more efficient ways of using funds donated for flagship animals. They studied New Zealand's private sponsorship programs that help pay for the conservation of 10 iconic bird species.

They found that twice as many species can be saved with the funds donated for charismatic wildlife if they are used on activities that also benefit other species. This includes protecting habitats shared by several species, trapping invasive mammalian predators, and prioritising quarantine and inspection for invaders that can harm a wide range of native species.

"If private money is used on the flagship species without caring about other species, one or two extra species are still saved from extinction, thanks to overlaps in the conservation activities," says Dr Bennett.

"However, if we are more careful in how we invest our money, and focus on activities that protect several species simultaneously, we can achieve much better results for the same outlay. Private donors also get the satisfaction of saving both charismatic and non-charismatic species."

The researchers found that the best approach is to combine baseline conservation funds – from government – with private donations for flagship species. Dr Bennett explains that baseline funds should be used to protect as many species as possible.

"We can then use the private funds donated for flagship species to maximise the shared benefits with other species. Conservation organisations can also encourage donations to a broader suite of flagship species, by enlarging their 'flagship species fleet' to appeal to a wider pool of donors."

Prof. Possingham adds that society needs to ask more questions about where its tax dollars go and support public debate, such as how to find enough money to stop the extinction crisis.

"We can also encourage groups that are interested in a particular animal to pay attention to a similar species as well – for instance, people who follow Australia's Richmond birdwing butterfly may develop an interest in other endangered, but less well-known, butterflies.

"The sad truth is we can't save everything with current funding levels, but we should demand that the available money achieves the greatest outcome possible."

Dr Bennett hopes to continue his studies on threatened species as part of the Threatened Species Recovery Hub, funded through the Australian Government's National Environmental Science Program.

More information: "Biodiversity gains from efficient use of private sponsorship for flagship species conservation." *Proc Biol Sci.* 2015 Apr 22;282(1805). pii: 20142693. DOI: 10.1098/rspb.2014.2693