Snooping on neighbours gives animals the upper paw

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(Phys.org) —Animals that have developed the ability to eavesdrop on their neighbours may have the edge when it comes to finding food and expanding their habitat, a new study by researchers at The University of Western Australia has found.

Dr Amanda Ridley, a Future Fellow with UWA's Centre for Evolutionary Biology and School of Animal Biology, said her research, published in *Functional Ecology*, was based on studies of wild, free-living animals in the Kalahari Desert in southern Africa.

"Vocal communication has come to light over the last decade as an important way for information to be transferred among individuals

within species, but relatively little attention has been given to unintentional transfer of information between species, known as eavesdropping," Dr Ridley said.

"This is surprising because eavesdropping is likely to have considerable benefits - especially if individuals can reduce their own efforts in keeping an eye out for predators by simply eavesdropping on the alarm calls of others.

"Our research shows that a solitary bird species gains considerable benefits by following a social bird species that has a well-organised sentinel system (where individuals take turns to stand on guard and warn the rest of the group of approaching predators).

"When eavesdropping, these solitary birds can spend more of their time foraging, less time being vigilant and expand into habitat not normally available to them. Therefore the benefits of eavesdropping are large and can completely change an animal's behaviour."

Dr Ridley said the research was important for several reasons - it revealed that eavesdropping could have an important influence on animal behaviour and community structure (because eavesdroppers follow those that give reliable alarm calls) and it also revealed that eavesdropping had considerable ecological benefits, allowing habitat expansion and greater foraging efficiency.

In the long-term, these benefits could influence the survival and reproductive success of eavesdropping individuals, she said.

Provided by University of Western Australia

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