Study challenges popular image of dingo

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(PhysOrg.com) -- A recent study of dingoes in the Blue Mountains challenges the postcard image of dingoes as only being white pawed and sandy coloured.

Brad Purcell, a PhD candidate in the University of Western Sydney's School of Natural Sciences, closely followed dingoes using GPS tracking and infra red cameras in the remote Southern Greater Blue Mountains World Heritage Area, approximately 80 kilometres from the centre of Sydney.

Mr Purcell believes dingoes can be better defined by their function in the ecosystem rather than only through DNA analysis or comparing physical attributes like skull shape or coat colour.

He studied the dingoes' genetics, diet, breeding and movements to confirm their role in the World Heritage Area.

"The diet and activity of the Blue Mountains dingoes and their prey appeared to be synchronised with changes in the dingoes' behaviour during biological seasons such as times when pups are whelped and reared," says Mr Purcell.

Six infra-red motion activated cameras captured candid moments of dingo activity. While analysis of dingo scats, or faeces, showed that the dingoes preferred swamp wallaby, brush tail possum and eastern grey kangaroo.

Data from GPS tracking collars fitted to 12 dingoes for up to 14 months indicated that these dingoes maintained home territories bound by natural markers and obstacles such as ridge lines, rivers and cliffs.

"The average home range was about 34 square kilometres but they spent 50 per cent of their time within a core area that was on average 5.9 square kilometres," says Mr Purcell.

"Individual dingoes from different packs only briefly crossed paths and, importantly, there was only minimal or no visits to farmland by the GPS tracked dingoes. The dingo packs kept mostly in their own territories - inside the scheduled dingo conservation habitat.

"The preliminary results of the study throw serious doubt on theories that dingoes breed in the protected areas and move into pastoral lands to prey on livestock," he says.

Mr Purcell believes the motivation for rare trips outside the home territory is not to find prey but a mate. The tight dingo pack structure seems to be supported in the DNA evidence.

"From testing the genetics of these dingoes, we could show that they remained in family groups. We also found that adjacent packs had different colour variations which support the evidence that these dingoes maintained a close pack structure," Mr Purcell says.

The study will be made available to government agencies managing ecosystems in the Blue Mountains and could be used to shape future studies of dingoes in other areas.

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