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## THE DECLINE OF THE WOYLIE (BETTONGIA PENCILLATA) IN WESTERN AUSTRALIA- AN UPDATE ON THE INVESTIGATION

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Wild woylie or brush-tailed bettong (*Bettongia pencillata*) populations are undergoing a catastrophic decline in south-west Western Australia (WA). Since 2006, Department of Environment and Conservation (DEC) has conducted an investigation into the cause of the population declines, assisted by a large group of collaborating institutions including Murdoch University, Perth Zoo and Australian Wildlife Conservancy.

This presentation will provide a summary of the woylie investigation process and its outcomes, with particular focus on developments occurring over the past 18 months. Funding has been secured, via Western Australian mining company, Bauxite Resources Ltd <a href="http://www.bauxiteresources.com.au/">http://www.bauxiteresources.com.au/</a> and their community based fund-raising efforts "Woylie rescue" <a href="http://www.bauxiteresources.com.au/woylierescue/">http://www.bauxiteresources.com.au/woylierescue/</a> This funding has provided employment of a part-time Manager of Disease Investigation, beginning March 2010.

WA state government funding has also supported the construction of a 400 ha predator-proofed enclosure within the Perup Nature Reserve, in SW WA. Within the next four months, 40 woylies will be placed inside the Perup Sanctuary and monitored closely for health and disease, in the absence of introduced predators such as foxes and feral cats.

Perth Zoo is working closely with DEC to establish a captive insurance population of woylies to ensure the species genetic diversity is maintained in the event of continued decline of wild populations.

Detailed investigation of sick and dead woylies, at Perth Zoo and Murdoch University, has revealed several intriguing new findings. Ongoing analysis of diagnostic samples has indicated trends in pathogen presence and prevalence which may shed new light on the species decline.