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## **THE AMBATOVY LEMUR POPULATION SPATIAL MONITORING PROGRAM: SUMMARY OF PRELIMINARY RESULTS**

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The Ambatovy Project includes an open pit mine located in Madagascar's east coast rain forest, an area recognized for its high regional biodiversity exemplified by the presence of 13 confirmed and a potential 16 lemur species present. Due to the mine's location, a comprehensive Biodiversity Management Plan has been prepared. The lemur viability assessment program aims to confirm that the mine's activities do not lead to a long term reduction in the pre-construction viability levels of priority lemur species' populations present in the mine area forests. The primary work to be conducted through the spatial monitoring program is to assess the ability of lemur species' to move away from areas being clearing for mining and to monitor radio-collared lemurs and their movements in nearby refuge forests. Preliminary results based on the spatial monitoring of 44 groups of lemurs representing eight species suggest that although average group size is within the normal range for each monitored species, home ranges tend to be larger than established norms. Analysis of movement trends out of cleared areas suggests that groups and individuals are able to move away unaided and that the slow directional cutting technique is effective in pushing species towards an established conservation zone. Data collected during lemur monitoring work will be integrated into a lemur species population impact monitoring matrix and lemur assemblage integrity index in order to quantify the impacts of mine activities on the lemur population found within the Ambatovy forests and as needed feed back to Ambatovy Project mitigation actions.

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