

**PROTECTING WILD ORANG-UTANS OUTSIDE OF PROTECTED AREAS**

M. Ancrenaz<sup>1</sup>, L. Ambu<sup>2</sup>, I.Lackman<sup>1,3</sup>

<sup>1</sup> *Kinabatangan Orang-utan Conservation Project, Sukau, Sabah, Malaysia,* <sup>2</sup> *Sabah Wildlife Department, Kota Kinabalu, Sabah, Malaysia,* <sup>3</sup> *Pittsburgh Zoo Research fellow, Pittsburg, USA*

*Presenter's Email: panaupanau@yahoo.com*

Protected forests in Sabah covered 13% of the total land mass of the state, but it is doubtful that protected areas alone will achieve their mission of ensuring the long-term maintenance of species like the orang-utan. Indeed, this network is fragmented in more than 130 forest reserves and many of these forests are small and highly degraded. This fragmented network is prone to natural catastrophes (fires, floods, disease outbreaks, diversity erosion) and human encroachments. In addition, most reserves are established in highlands with high endemism but relatively poor conservation value for orang-utans. Lastly, the functionality of ecosystems found inside the protected areas strongly depends on the type of management implemented in surrounding lands. Simultaneously, our recent surveys showed that more than 60% of the wild orang-utan populations in the state are occurring outside of protected forests, in commercial forests exploited for timber or in agro-industrial lands covered with oil palm plantations and other crops. We now realize that a conservation landscape approach embracing not only protected areas but also non-protected lands is the best possible way to achieve long-lasting conservation results. Strengthening the role and participation of community members, involving key private players and developing mechanisms such as sustainable timber certification, Carbon sequestration or biodiversity bank credits have the potential to become major venues for saving many endangered species in Borneo.

Key words: orang-utans, conservation, multiple-use forests, oil palm plantations