Field Report to the International Elephant Foundation – May 28 2013 Satellite Tracking of Bornean 'Pygmy' Elephants

Dr. Shermin de Silva, Director of the Uda Walawe Elephant Research Project (UWERP)

The Kinabatangan River Sanctuary is a narrow reserve that runs along both sides of the Kinabatangan River in the North Eastern tip of Borneo. It is a very moist seasonal environment. It harbors primates such as orangutans and proboscis monkeys, several bird species such as hornbills, as well as a small population of Bornean elephants. This elephant population numbers less than 150 individuals and is threatened primarily by habitat loss due to oil palm cultivation. The World Wildlife Fund estimates that there are fewer than 1500 Bornean elephants in the wild. Earlier this year 14 individuals in another population were killed through poisoning, possibly connected to their movement onto oil palm plantations.



Collars are being placed on adult female Bornean elephants to determine the ranging behavior of these elephants are:

- a) That they are moving through the landscape in a single large group; or
- b) That sub-units fragment into different groups and use different portions of the available habitat.

The two alternatives carry different implications in terms of monitoring and protecting these elephants. If they move as a single unit, the presence of any collared or tracked individual would be sufficient to indicate the location of all individuals. All individuals are likely to be exposed to the same environments and potential threats (e.g. electric fences, poison etc). If they do not move as a unit, and if there are differences among sub-units, they may be exposed to different hazards and types of human activity. Overall, it is important to understand what areas they are using and the extent to which they encounter human activity in those areas.





Above: Mark Ramp, manager of the Danau Girang Field Center, and Nurzhafarina Othman, experimenting the collars' programming software.









Clockwise from left: The trial metal clasp for the collar; The collar is fitted on a subadult female by staff from the Wildlife Rescue Unit of the Sabah Wildlife Department.