

## **Body Condition Assessment Method for Neonatal and Juvenile Asian Elephants (*Elephas maximus*) 2016**

**Charlotte Irene Simpson**

### **ABSTRACT**

The Body Condition Assessment Method for Neonatal and Juvenile Asian Elephants (*BCANJE 2015*) presented here uses visual assessment to assign numerical scores to six different regions of the body, which, when totaled provide a score that reflects general body mass condition. This system for elephant calves relates to and can be used in tandem with Krishnamurthy's 2006 method used with adult Asiatic elephants, including captive elephants in India, Nepal and Myanmar and free-ranging populations in India [Ramesh et al. 2011].

*The 2016 BCANJE* utilizes the same indices and scoring criteria with modification for anatomical reference points and skeletal-muscular ratios that are age related. By using indices that parallel those used historically, comparison across studies can be objectively utilized.

While the Krishnamurthy and Ramesh studies applied body condition assessments primarily at fixed points in time, the *2016 BCANJE* system presented here is designed for regularly monitoring condition of the same animals over extended periods of time. It may be applied to the monitoring of both captive and free-ranging elephants, and has utility to hand-rearing programs as a non-invasive means of tracking condition pre and post- release. Specifically, data collected for several calves over periods of months and years could provide useful insight on rehabilitation processes such as nutrition, weaning, relocation and release, and the ability of individuals to cope with social, nutritional and ecological changes. Further, this information could be utilized in the comparison of calf development in varying circumstances such as calves hand-reared by humans, calves born to dams in captivity, and calves born to free-ranging dams.

**Keywords:** Morphometrics, Neonates, Condition, Juvenile, Emaciation, Orphan

L.V.T, R.V.T, C.W.R

International Wildlife Rehabilitation Council (IWRC)