

Health Issues of Captive Asian Elephants in Myanmar

Zaw Min Oo

Myanma Timber Enterprise, Insein Township, Yangon, Myanmar

Author's e-mail: zawminoomte@gmail.com

Introduction

According to old literature, the Golden Land or Myanmar possessed many captive and wild elephants. It is said that the Ancient King, Anawratha Min Saw toured his land up to Bengal with a force of 38 white elephants and 800,000 elephants (U Chan Tha Oh, 1993). But, the elephant population has gradually decreased throughout recent history. Currently, most captive elephants in Myanmar belong to the Myanma Timber Enterprise (MTE) with over 2,800 elephants. Some captive elephants are also owned by private owners and the Forest Department (MOCAF). In the past ten years, between 60 and 100 captive elephants died yearly from various causes. Annual deaths have been higher than annual births except in 2011-2012, where the number of births was higher. Elephant deaths are higher in the resting season (mid February to mid June) due to it being very hot, and green fodder and water not being readily available.

In 2011-2012 a total of 23 males and 30 females died. Most female elephants died during early ages or after 50 years. Males died at all ages, with more males dying in youth (Fig. 1). The most common cause of death among the 53 elephants that died in 2011-2012 was old age (Table 1).

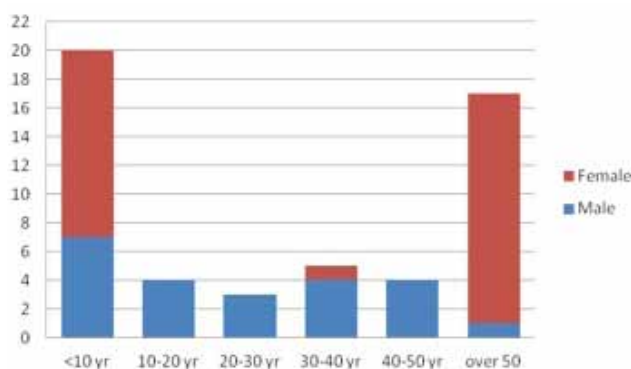


Figure 1. Death of 53 elephants by age and sex during 2011-2012 in MTE.

Elephant health problems in MTE

Eye problems

Around 2 to 4% of elephants have catarrhal and cloudy eyes (Fig. 2). Most eye problems are found in adult and old elephants because during logging eyes can be accidentally struck with objects such as twigs of bushes, trees and bamboo. These injuries lead to conjunctivitis, catarrhal and cloudy swelling.

Treatment for eye problems in MTE is not very successful. In the past Calomel powder has been used to treat eye problems. Nowadays, Dexamethazone and Gentamycin are used by mixing in equal amounts and given as eye drops. After 10 days of treatment with this injured eye injuries tend to heal, clearing up and becoming normal.

Table 1. Elephant deaths in 2010-2011 in MTE.

Cause of death	No.
Old age	10
Viral disease (suspect EEHV)	7
GI infection and diarrhoea	6
Constipation and bloating	4
Snake bite	4
Elephant attack	3
Land slide	3
Lung abscess	2
General weakness	2
Heart disease	1
Pneumonia	1
Parasitic infestation	1
Unknown diseases	9
Total	53



Figure 2. Eye opacities in elephants.

Fracture of hind leg

MTE uses selective felling with elephants, as extraction with elephants is best for forest sustainability. The working season for elephants are the rainy and winter seasons as elephants can skid logs easily because the ground is wet with water and snow, which saves elephant's energy. However, logging elephants are faced with unexpected incidents such as log strikes to hind leg. Such incidents can fracture the hind leg and disable the elephant (Fig. 3). Some fracture cases can recover with long periods of nursing and treatment. The broken leg is put in a splint made with bamboo for immobilization (Fig. 3). Analgesic and anti-inflammatory drug are used for treatment. Food supplement to injurious elephants is very important. Inflammation can be reduced by applying hot fermentation with herbal plants.

Heavy fibrosis due to ill fitting harness

During rainy season, elephants work 7 to 8 h a day. In the hot season, elephants work only early morning and evening. Working capacity is limited for each adult elephant. For a budget year, MTE allows only 240 tons of skidding per elephant. The MTE manual specifies the application of pig oil on the breast band and skin of elephants as a lubricant to avoid abrasion. Some stupid mahouts



Figure 3. Elephants with hind leg fractures.



Figure 4. Removed fibrous tissue and suturing an opened wound..

do not properly set up the harness for logging and the working elephants can get swellings on the upper and lower shoulder region.

The treatment for it is hot fermentation in early stages but long term swelling can cause abscesses and fibrosis. In this stage, surgery has to be done to remove old abscesses and fibrosis (Fig. 4). It takes a long time for treatment, around 40-60 days or more depending on the status of the wound. Combined antibiotics and vitamin supplements are used for wounded elephants. Dressing and cleaning the wound with potassium permanganate and hydrogen peroxide is important for good healing (Fig. 4).

Nutritional problems

Nutrition is important especially in old and orphanage elephants. The most common cause of death in elephants is malnutrition due to diet deficiencies in orphaned elephants and also due to heavy parasitic infestation. Heavy parasitic infestation can lead to diarrhea. Blood and stool of MTE elephants are examined for parasites at four months intervals (Fig. 5). Depending on the results elephants are dewormed with anthelmintic drugs. The drugs used are Albendazole and Ivermectin.



Figure 5. Gastrointestinal parasites.