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Popular Article

Preservation of bones of Himalayan Griffon Vulture (*Gyps himalayensis*) through cost effective technique

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Abstract

The Himalayan griffon vulture (*Gyps himalayensis*) is an Old World vulture. They are mainly found in the Himalayas and foothills in North and Northeastern India as well as the adjacent Tibetan Plateau. It is world's largest true raptors among the old world's vulture. This method of preservation of bone will be helpful to the wildlife veterinarian in diseases control regime.

Introduction:

The Himalayan griffon vulture (*Gyps himalayensis*) is an Old World vulture. They are mainly found in the Himalayas and foothills in North and Northeastern India as well as the adjacent Tibetan Plateau. It is world's largest true raptors among the old world's vulture. As per the IUCN Red list, it is considered as Near Threatened (Birdlife International ,2017). The Himalayan vulture has dark brown

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greater covert feathers, tail as well as wing quills, but a pale buff uniform upper side and paler tipped inner secondaries. Its legs are also covered with buffy feathers and vary in colour from greenish grey to pale brown. The weight of the Himalayan griffon vulture ranges from 6kg to 12.5kg. The wing span ranges from 2.56 to 3.1meter (Winker,1998).The Himalayan griffon vulture lives mainly in the higher regions of the Himalayas as well as the Tibetan Plateau at the elevation range of 1,200–5,500 meter. They mainly feed on carrion. They start egg laying from 25th, December to 7th March. The eggs are coarse and oval. The height and width of the egg of Himalayan griffon vulture are 7 to 103.6 mm and 65 to 74mm, respectively (Brown and Amadon,1986). The population of Himalayan griffon vulture is decline due to diclofenac. Apart from the population is also decline due to reduction of nesting in Nepal. (Acharya *et al.,* 2009 and Virani *et al.,* 2008).

Fig.1: Photograph showing the carcass of Himalayan Griffon vulture after removal of the muscle.

Fig.2: Photograph showing the bones of Himalayan Griffon vulture after removal from the 20 percent Potassium hydroxide.

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Fig.3: Photograph showing the bones of Himalayan Griffon vulture during boing.

Fig.4: Photograph showing the skeleton of Himalayan Griffon vulture during sun drying.

Methods of Preservation:

Methods 1:

First removed the muscle of from the carcass of the Himalayan griffon vulture (Fig.1) and then kept in 20 percent potassium hydroxide for periods of twenty days. The remaining muscle of the carcass was decomposed with in this period. Then, the bone of the Himalayan griffon vulture was washed in running tap water (Fig.2) and then, boiled in water for a period of forty-five minutes (Fig.3). After boiling, the bones were wash in running tap water and sun dried for period of 10 days. After sun dried, bones were finally rubbed with boric acid for long time preservation (Fig.4).

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Methods 2:

First removed the entire muscles from the carcass the Himalayan griffon vulture (Fig.1) and then, made a frame of iron wire as per the size of the skeleton of Himalayan griffon vulture. Then the skeleton of the vulture kept in sun light till drying. After sun drying the skeleton was finally rubbed with boric acid for long term preservation.

Conclusion:

This method of preservation will be helpful to the students of biological science for education purposes. It will also helpful for the wildlife veterinarian in diseases control regime.

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