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NOTE

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Sai Sein Lin Oo, Nang Lao Kham, Kyaw Myo Naing & Swen C. Renner

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SOME RECENT EVIDENCE OF THE PRESENCE OF THE CRITICALLY ENDANGERED *GYPS* VULTURE POPULATIONS IN NORTHERN SHAN STATE, MYANMAR

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Four species of vultures are found in Myanmar, namely, *Sarcogyps calvus* Red-headed Vulture, *Gyps bengalensis* White-rumped Vulture, *G. tenuirostris* Slender-billed Vulture, and *G. himalayensis* Himalayan Vulture (Htin Hla et al. 2011). Of these, the latter three are present in Kachin, Shan State and Sagaing Region (Tordoff et al. 2007; Htin Hla et al. 2011; Shwe & Aung 2016), and *G. himalayensis* is additionally observed in Chin State (Htin Hla et al. 2011).

Gyps bengalensis was abundant in Myanmar and considered as the most common vulture in Myanmar throughout the plains in the early 20th Century (Smythies 2001; Naing et al. 2012). The population of vultures decrease in many parts of their former distribution ranges has been generally attributed to food shortage, chemical poisoning (i.e., diclofenac), and other human impact. Consequently, the population size decreased

(Robson et al. 1998; BANCA 2007; Tordoff et al. 2007; Htin Hla et al. 2011; Shwe & Aung 2016), and the more recent status remains uncertain for all four species for most of the country (Pain et al. 2003, 2008).

On 27 November 2018, we observed a flock of *G. bengalensis* (Critically Endangered; BirdLife International 2017), *G. tenuirostris* (Critically Endangered; BirdLife International 2016b), and *G. himalayensis* (Near Threatened; BirdLife International 2016a), in Man Sant Village, Mong Yai Township, Northern Shan State, Myanmar (22.43°N, 97.92°E; see map). The flock was feeding on the carcass of cattle (likely accidental death). The most notable feature of our observation was the presence of *G. bengalensis* and *G. tenuirostris*: we could observe as many as 38 vultures of three species (*G. bengalensis*: 31, including six juveniles; *G. tenuirostris*: 5; *G. himalayensis*: 2).

The vulture flock departed westwards three days after they completely consumed the carcass. The local people were apparently familiar with vultures, informed us that they also occur in Nar Ma Lan Village, Nam Lan Village and Ho Ti Village, all of which are located within a 15-km radius from Man Sant Village.

Unfortunately, we failed to observe any nests or nesting sites of the flock. The local people confirmed frequent observations of the three species from April to May (the local breeding season according to the information we obtained from the locals; October to March after Robson 2011) in the area of interest, particularly before monsoon, indicating possible breeding attempts in the area.



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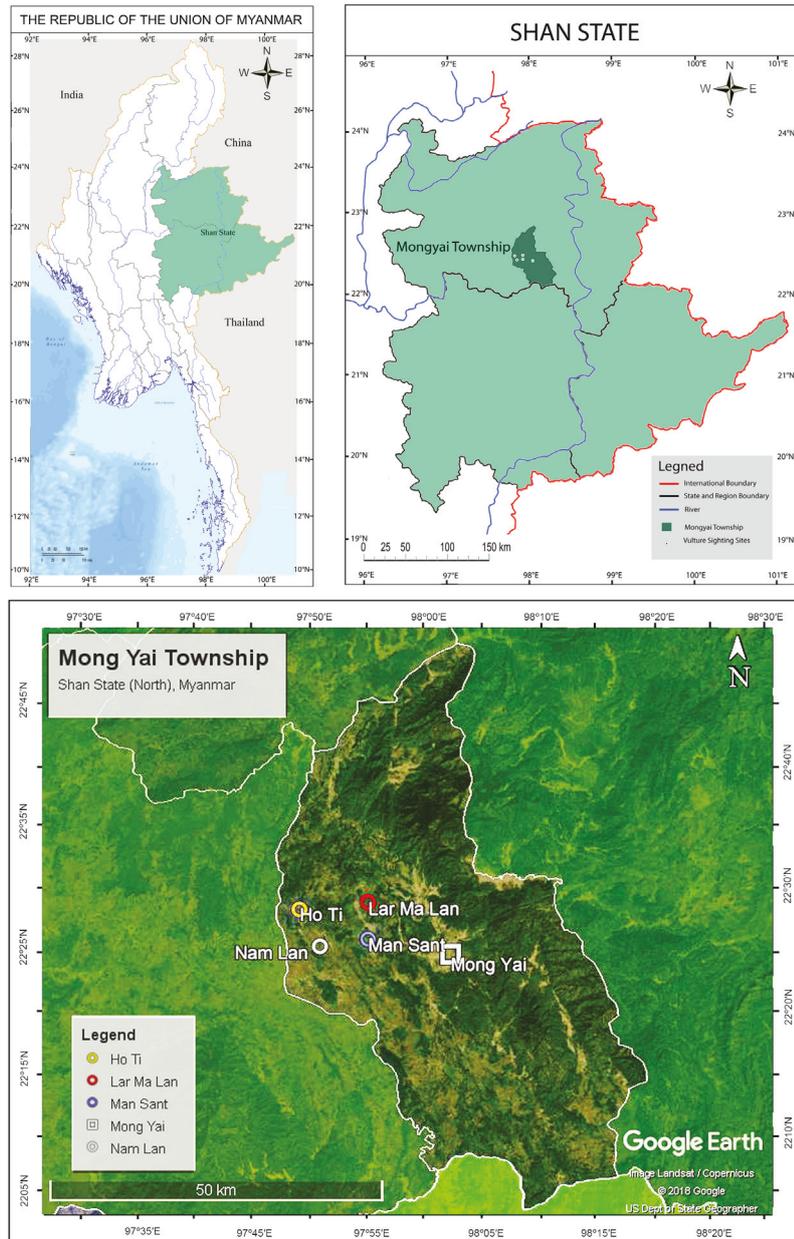


Figure 1. Vulture sighting locality in Shan States (dots in inset) and Shan States within Myanmar.

Htin Hla et al. (2011) reported *G. bengalensis* as more abundant than *G. tenuirostris* during their survey in Chin State, Kachin State, and Shan State. Additionally, they also stated that *G. bengalensis* were recorded regularly associating with other vulture species in Myanmar (1997 to 2006). In Shan and Chin states, *G. bengalensis* was regarded as the most common vulture species in the early 20th Century (Rippon 1901), but was hardly reported in recent decades (Sayer & Han 1983; Htin Hla 2003; Bezuijen et al. 2010). Although the current population status of *G. bengalensis* in these states is not known, Htin Hla et al. (2011) estimated a minimum of 62 individuals during surveys in 2006 and 2007. They

also estimated that the overall population of vultures in Myanmar was at least 136 individuals. Congruent with these observations, Tordoff et al. (2007) reported *G. bengalensis* with a daily maximum of 62, along with 12 *G. tenuirostris* in the Kamaing area, Kachin State.

Using open interviews questions, we also recorded information on the beliefs of some local villagers; the locals use body parts (especially bones) of vultures for belief-based use. Shwe & Aung (2016) found the vulture bone trade in southern Shan State as a significant challenge for vulture conservation. Similarly, feathers, bones, meat, beak, claws, faeces and internal organs of vultures have been used as traditional 'medicine' since



Image 1. Himalayan Vulture *Gyps himalayensis* and Slender-billed Vulture *G. tenuirostris*, roost on the Banyan tree nearby the carcass (27 November 2018).



Image 2. A flock of White-rumped Vulture *Gyps bengalensis*, on the Banyan Tree (*Ficus elastica*) near the carcass.



Image 3. Slender-billed Vulture *Gyps tenuirostris*.



Image 4. A juvenile White-rumped Vulture *Gyps bengalensis*, in flight around Man Sant Village, Mong Yai Township, Northern Shan State, Myanmar (27 November 2018).

ancient times in China (Leung 2006). Many Myanmar do not have a positive attitude towards vultures, but the local people informed us that they avoided consumption of vultures or their parts, because they are considered disgusting (in taste) and have a putrid odour. Additionally, as in Nepalese communities, many people assume that vultures are a bad omen and bring ruin or bad luck, because vultures are associated with death (Baral & Gautam 2007).

Threats to vulture populations in Myanmar are manifold; but the major threats are nest destruction (tree), poisoning (poison baits targeting other species such as mammals) and low food supply (Htin Hla et al. 2011). Contrasting with many sites in India, diclofenac has not been documented so far for Maing Yaw Village, Lashio, Naung Pho Mae Village, Shan State, Naung Kwin, Indawgyi Lake, or Kachin State (Htin Hla et al. 2011; Shwe & Aung 2016). Congruent with this observation, the township medical officer of the Livestock Breeding and Veterinary Department in Shan State informed us that the practice of using veterinary diclofenac is

absent for cattle treatment in the township (Dr. Soe Naing Win, pers. comm. 2018), while diclofenac is used by many veterinarians widely in Myanmar (Bowden 2019). Although *G. bengalensis* and *G. tenuirostris* were distributed in most of the Indian subcontinent and southeastern Asia, its population declined rapidly in the 1990s and 2000s (Bildstein 2017). Bildstein (2017) indicated a decline of over 95% of the entire population in a rough estimation. Our recording of several juveniles suggests breeding may well occur in Myanmar although the dispersal range of vultures is huge.

We recommend further surveys of the vultures in the region, paying particular attention to locating any breeding attempts for all three species. Finally, food is likely the limiting factor for vulture populations in Myanmar (Bowden 2019), hence maintaining uncontaminated food resources to support the local population should be beneficial.

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