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## An eyeless Eurasian Wild Pig (*Sus scrofa*) surviving in northern Laos

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On 12 February 2012, while conducting wildlife surveys in the Nam Et-Phou Louey (NEPL) National Protected Area (5,959 km<sup>2</sup>) in northern Lao PDR (hereafter Laos), we came across an eyeless Eurasian Wild Pig (*Sus scrofa*) that was foraging along the edge of a stream. The NEPL covers mountainous terrain in the northern highlands of Laos (19°50'-20°50'N and 103°00'-103°53'E) along the border with Vietnam. Elevation in NEPL ranges from 400 to 2,288 m, and vegetation is dominated by mixed evergreen-deciduous forest up to 1,500 m, transitioning into evergreen forest at 1,500-1,800 m, with interspersions of beech (*Fagus* spp.) and *Rhododendron* spp. > 1,800 m (Johnson *et al.*, 2006). About 91% of the area has slopes >12%. Annual rainfall (mainly May to October) is 1,400-1,800 mm, and temperatures range from 5°C (December- February) to 30°C

(April-July). Large (> 15 kg) carnivore species recorded in NEPL include the tiger (*Panthera tigris*), leopard (*P. pardus*), dhole (*Cuon alpinus*), clouded leopard (*Neofelis nebulosa*), Asiatic black bear (*Ursus thibetanus*), and sun bear (*U. malayanus*; Johnson *et al.*, 2006). Smaller carnivores in NEPL are described by Johnson *et al.* (2009). Other wild ungulate species recorded in NEPL include gaur (*Bos frontalis*), sambar (*Cervus unicolor*), Chinese serow (*Capricornis milneedwardsii*), and muntjac (primarily red muntjac [*Muntiacus muntjak*]; Johnson *et al.*, 2006).

Our observation was made at 09:46 in the Na Vene district of western NEPL. This area was within the restricted core zone of NEPL, where human activities and livestock are prohibited. The elevation was 838 m and surrounding vegetation was mixed evergreen-deciduous forest. We initially saw the Wild Pig approximately 20 m away from us after we rounded the corner of a stream. At that distance it appeared normal, and we watched it for several minutes as it casually rooted around near the edge of a stream. The Wild Pig was solitary, and we approached downwind from it and came to within 2 m of it before it noticed us. At that time, we first realized that both eyes were missing, and instead there were large open holes around both eye sockets (Fig. 1). The holes appeared to be old wounds that had healed completely. Upon smelling us, the Wild Pig grunted, bluffed charged us, then ran away into the nearest thick vegetation. It did not appear to have any other wounds, and otherwise moved normally. We assumed the Wild Pig was female because it did not have protruding tusks, and the scrotum was not visible.

The wounds around the eye sockets were not fresh, as blood or open flesh was not visible. Consequently, the Wild Pig must have been living in this condition for days, and probably weeks. Surprisingly, although somewhat thin, the Wild Pig was not emaciated, suggesting it was obtaining sufficient food resources despite being eyeless. Adult female Wild Pigs are not normally solitary (Lekagul and McNeely, 1977), so it appeared that the family group of this individual must have abandoned it. We are unsure what made the wounds around the eye sockets, but we suspect that the Wild Pig survived an attack by dholes. Dholes are relatively common in NEPL, and a recent study showed Wild Pigs comprised 8% of the dhole diet in NEPL based on frequency of occurrence in dhole scats (Kamler *et al.*, 2012). Additionally, we recorded fresh canid tracks, presumably from dholes, approximately 200 m further downstream from where we observed the Wild Pig. Dholes are a pack hunting species, and previous researchers reported that dholes commonly attack the eyes of large ungulates to blind and disorientate them (Grassman *et al.*, 2005), thereby making it easier, and possibly safer, for the pack to handle and bring down large prey. Interestingly, Austin (2002) reported significant eye injuries of an adult sambar that escaped from a dhole attack in Thailand. Consequently, we suspect that the eyeless Wild Pig survived an attack by one or more dholes, and that something must have scared the dholes away after the initial attack, possibly other Wild Pigs from its family group. In fact, dholes selectively avoid preying on Wild Pigs compared to other ungulate species (Johnsingh, 1992; Kamler *et al.*, 2012), probably because of the aggressiveness, group living and protective behavior of Wild Pigs (Johnsingh, 1992).

To our knowledge, this is the first description of a Wild Pig surviving in the wild without both eyes. Our observation shows the resiliency of Wild Pigs, and indicates Wild Pigs are capable of foraging and surviving alone even after their eyes are lost due to a major injury.



**Figure 1.** An eyeless Eurasian Wild Pig with healed wounds around both eye sockets in northern Laos. This Wild Pig possibly escaped from an attack by dholes.

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