Mammals recorded during an expedition to Pu Mat National Park, January 15-23, 2018 VLADIMIR DINETS

I was invited to participate in an expedition (organized by Global Wildlife Conservation and the University of Vinh, led my Nicholas Wilkinson) looking for surviving populations of saola as possible sources for a captive breeding program. I saw only 33 species of mammals in 9 days, but that included some rarities. Our survey was very physically demanding, as it was conducted in a ragged habitat of steep slopes, narrow gorges and sharp ridgecrests covered with montane monsoon forest, with some giant conifers at higher elevations and extensive bamboo thickets below 900 m. The park headquarters are in an area of tower karst. I had 16 Sherman traps and one tube trap for moles, but trapping success was near zero; using a thermal imager worked better, although it, too, was of limited use because of dense vegetation. I also had a 6-m bat mistnet, but was invariably too exhausted by the end of the day to set it up (I had flu and pneumonia during the expedition). We set a large number of camera traps, but the results will not be fully known until the end of 2018. Note that access to virtually all of Pu Mat National Park is normally restricted for foreigners (but not for local hunters).

Locations: AR – access river (300 m asl); C1 – first camp (600 m); C2 – second camp (800 m); C3 – third camp (1300 m); C4 – main study area (1100 m); HQ – park headquarters (200 m).

Kloss's mole (*Euroscaptor klossi*). Many tunnels found around C1, and a few around C2. Snout of one mole briefly seen as it was trying to repair a collapsed tunnel at C1. Identified by range (Zemlemerova et al. 2016).

Himalayan water shrew (*Chimarrogale himalayica*). One observed in the stream below C2; a local student reported seeing what was likely this species in other streams in the area. Identified by range (Abramov et al. 2017).

South-east Asian shrew (*Crocidura fuliginosa*). One observed at C4; identified by large size (Francis 2008).

Indochinese shrew (*C. indochinensis*). One observed for almost an hour at C4; identified by intermediate size and nearly naked tail (Francis 2008).

Ke go shrew (*C. kegoensis*). A very small shrew seen near a limestone outcrop at HQ was likely either this recently described species (Lunde et al. 2004, a range extension of ~100 km) or a juvenile of a more common one. A survey of small mammals in the tower karst area around HQ would be highly desirable.

Northern slender-tailed treeshrew (*Dendrogale murina*). One seen near a stream at C4; a range extension of about 200 km (Francis 2008).

Malayan colugo (*Galeopterus variegatus*). One observed roosting below C1; one seen in a village after being caught by a local hunter.

Greater short-nosed fruit bat (*Cynopterus sphinx*). One observed flying and roosting at C4; identified by size and color pattern (Francis 2008).

Ashy-gray tube-nosed bat (*Murina cineracea*). Three bats seen flying and roosting in dry banana leaves below C2; identified by moth-like flight, size, color and range (Francis 2008; Francis & Eger 2012).

Harrison's tube-nosed bat (*M. harrisoni*). One bat probably of this species flushed from under a palm leaf above AR; identified by moth-like flight, size, color, and range (previously recorded from the same area, Thong et al. 2011).

Greater bamboo bat (*Tylonycteris robustula*). 3-4 bats probably of this species seen at dusk at C2; identified based on occurrence in bamboo thicket, small size, and yellow underparts (Francis 2008).

Assamese macaque (Macaca assamensis). A group of 3+ seen above C2 (identification uncertain due to poor light).

Southern white-cheeked gibbon (*Nomascus siki*). A group of 4 or more seen and two groups calling to each other heard at C4; identified by range (Francis 2008).

Yellow-throated marten (Martes flavigula). A pair seen north of C3.

Large-toothed ferret-badger (*Melogale personata*). One animal possibly of this species observed at C4; identified by extensively white tail (Francis 2008; Lariviere & Jennings 2009), but this criterion might be unreliable (Helgen & Long 2016).

Cuc Phuong ferret-badger (*M. cucphuongensis*). One animal possibly of this species seen at close range at C2; identified by overall dark coloration, narrow black face with a single white dot on the forehead, and lack of white tail tip (Nadler

et al. 2011), but these criteria might be unreliable (Helgen & Long 2016) and the species might be synonymous with **small-toothed ferret-badger** (*M. moschata*).

Small-toothed ferret-badger (*M. moschata*). A skull was found by a local hunter near C1.

Asian clawless otter (Aonyx cinerea). Fresh tracks seen at AR on two separate occasions.

Masked palm civet (*Paguma larvata*). A broken skull found at C4.

Owston's civet (*Chrotogale owstoni*). One observed at C1 as it attempted to extract bait (fish sausage) from a large Sherman trap.

Small Asian mongoose (Herpestes javanicus). One seen at AR.

Asian elephant (*Elephas maximus*). Fresh dung and tracks observed at AR. Hunters reported presence of a single individual in the area.

Wild boar (*Sus scrofa*). Nests, numerous tracks, and rooting sites found at C4; also a few old rooting sites along the trail from C2 to C3.

Chinese serow (*Capricornis milneedwardsi*). Numerous trails and tracks, as well as one latrine site with signs of browsing, found at C4; one trail also at C3.

Saola (*Pseudoryx nghetinhensis*). One briefly observed at C4 under poor viewing conditions, identified by size and horns shape; tracks of two different individuals and sites of repeated browsing also found.

Black giant squirrel (*Ratufa bicolor*). Many observed at C2, at C4, and along the trail between them; one photographed at C4.

Inornate squirrel (*Callosciurus inornatus*). Twice observed at C4.

Pallas's squirrel (*C. erythraeus*). A few seen at HQ and one near C2.

Eastern striped squirrel (*Tamiops maritimus*). Common at C4; identified by range and pelage pattern (Lunde & Truong Son 2001; Francis 2008; Koprowski et al. 2016).

Red-cheeked squirrel (*Dremomys rufigenis*). One seen on a trail at C4; identified by reddish cheeks (Lunde & Truong Son 2001).

Lesser giant flying squirrel (*Petaurista elegans*). One seen and photographed at C4 in a hollow tree; identified by size and coloration (Lunde & Truong Son 2001, Francis 2008; Koprowski et al. 2016). A range extension according to Lunde & Truong Son 2001, but not according to Francis 2008 and Koprowski et al. 2016.

Hairy-footed flying squirrel (*Belomys pearsonii*). One seen and photographed at C4 in a large oak; identified by size and coloration; a range extension of ~50 km (Lunde & Truong Son 2001, Francis 2008; Koprowski et al. 2016).

Phayre's flying squirrel (*Hylopetes phayrei*). Two seen at C1; identified by small size and contrasting white cheeks (Lunde & Truong Son 2001, Francis 2008; Koprowski et al. 2016).

Particolored flying squirrel (*H. alboniger*). One seen at C4, identified by size and coloration (particularly black eye rings, Lunde & Truong Son 2001).

Indochinese arboreal niviventer (*Niviventer langbianus*). One caught in a treefall area at C1 but escaped before being measured and photographed; identified by size and coloration, particularly orange stripe on flank (Francis 2008).

Neill's giant rat (*Leopoldamys neilli*). A large rat was caught by hunters at C2, measured and photographed. It had entirely white tail, and its coloration and measurements (hb 220, t 280, e 28, hf 46) don't match any of the *Leopoldamys* species known from the area, although *L. neilli* seems the most likely candidate. The taxonomy of this genus is debated (Balakirev et al. 2013, Latinne et al. 2013).

Lesser marmoset-rat (*Hapalomys delacouri*). One observed at C3; identified by range (Abramov et al. 2017).

Indomalayan pencil-tailed tree-mouse (*Chiropodomys gliroides*). One seen at C1 in a bamboo thicket.

Long-tailed climbing mouse (*Vandeleuria oleracea*). Two observed at C4 in treefalls.