Standard procedures for small mammal sampling and taxonomy in the field

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Codification of trap lines

❑ Each trap line (or group of traps set in a given habitat) must be coded with 8 digits as follows:

__ __ __ __ __ __ __ __

Site   Year   Month   N° line
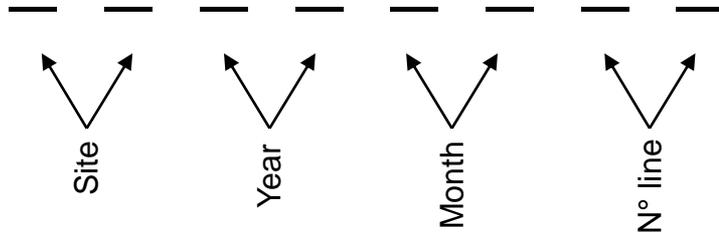
N° line (last 2 digits):

- Standard lines (ie 25 traps set up for 3 nights): start with AA, AB, AC …
- Non standard (any other trapping design): start with SA, SB, SC …

Example: M K 0 5 0 9 B Z: trap line n° BZ set up in MaerKang in september 2005

❑ Location of each trap line must be georeferenced with GPS using the above code. Ideally, a photo of habitat/landscape were the line is set up should be taken

Site codes already attributed		
Symbol	Location	Province
CD	Cao Di He	Gansu
HC	Han Chuan	Gansu
SC	Shang Cao Tan	Gansu
NH	Narinhoburg	Xinjiang
SN	Shi Nan Hai	Qinghaï
KK	Kokehada	Xinjiang
BB	Ban Ban Wan	Gansu
HH	Huang He	Gansu
HA	Baihaba	Gansu
FU	Fuhai	Xinjiang
GP	??	Gansu
MK	MaErKang	Sichuan
NX	??	Ningxia
RT	RangTang	Sichuan
SR	RangTang	Sichuan
XQ	Serxu	Sichuan
XJ	Xiji/Longde	Ningxia
XQ	cao Di He	Sichuan
NT	Narati	Xinjiang
HL	HongLong	Sichuan

Small mammal taxonomy

- ❑ Each animal must be coded with the 8 digits of the trap line plus 2 digits coding for each individual animal.

- ❑ Ideally, a photo of one specimen of each (suspected) species should be taken, with the code label and a scale on the photo

Example: M K 0 5 0 9 B L 0 2: animal #02 trapped on the line n° BL set up in MaerKang in september 2005

Small mammal taxonomy

❑ Basic morphometric measurments should be:

Wheight

Body and tail length

From the tip of the nose to first tail vertebra (animal placed on the back so that backbone is stretched)

From the first to the last tail vertebra excluding protruding hairs

Each information should be quoted in the dissection form (see file attached).

Also, a general description of hair color pattern is appreciated.

Hindfoot and ear length

From the back edge of heel to the tip of the longest toe (excluding claw)

From the notch at the base to the furthermost point of the edge

Small mammal taxonomy

❑ Tissue sample preservation:

| Hindfoot for DNA identification | Skull for morphological identification |

Store with *ad libidum* 95° ethanol
(e.g. 1 vol. tissue / 9 vol. ethanol).
Change ethanol after 24 hours.

Store head in zip-locked bags
with 5 to 10% formaline

NB: Each sample should be accompanied with the full code on a hard paper label

| Entire specimen |

It might be interesting to preserve one specimen of each (suspected) species

Small-size small mammals (eg *Microtus*): fix the body in 10% formalin solution for 10 days. Do not store too many animals in a small amount of formalin. Formalin concentration should be higher (20%) if higher temperatures and/or large animals. Shake material every 2 hours during the first day. It is convenient to store all animals in a water-proof tank in 2-3 litres of formalin solution. In this case, all animals should be securely labelled (e.g. label attached to foot using iron wire). When back to the lab, rinse with running water for 30 minutes. Ensure that the inside part of the body is in contact with water. Drain. Store in 95° ethanol for 1 month, and then store in 70° ethanol.