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Non-Volant Mammal Measurements - ISL Peru

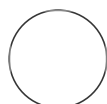
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ABSTRACT

This protocol describes the external morphological measurements taken on mammals prior to release and is actively used by Field Projects International at the Estación Biológico Los Amigos, Madre de Dios, Peru.

Note

In small mammals (e.g. rodents, mouse opossum), the measurement is mostly taken with a ruler or caliper.

In medium to large mammals (e.g. wild cat, primates), the measurement it is mostly taken with a measuring tape.

IMAGE ATTRIBUTION

Thomas Parsons

GUIDELINES

This protocol accompanies the "Handling and Sampling Mammal - ISL Peru" protocols.

MATERIALS

caliper
 measuring tape
 ruler

Lenghts

- 1 Head length:** Distance from the tip of the nose until the occipital bone.

Note

Whenever possible use a calliper, in medium size mammals and primates it is possible to use a measuring tape.

- 2 Head width:** it is measured on the widest part of the cranium. As a reference, we measure the distance in between the base of the pinnae.

Note

Whenever possible use a calliper, in medium size mammals and primates it is possible to use a measuring tape.

- 3 Body length:** is intended as the length of the truck of the body. It is measured from the shoulder blades to of terminal tail vertebra.

- 4 Total length:** Distance from the tip of nose to of terminal tail vertebra.

Note

In small mammals (e.g. rodents, mouse opossum), this measurement is taken with a ruler. While the animal is anesthetized, it is placed dorsal cubitus on the ruler to measure it.

In medium to large mammals (e.g. wild cat, primates), this measurement it is usually taken with a measuring tape. The animal is positioned with the neck extended, so that the cervical vertebra are aligned with the thoracic and lumbar ones.

5 Tail length: it is measured from dorsal flexure at base of the tail to tip of last vertebra.

6 Femur length : it refers to the length of the thigh, it is measured using the greater trochanter and the bent knee (included) as the reference points, and by connecting the two with measuring tape.

7 Tibia length: it refers to the length of the calf, it is measured using the bent knee joint and the bent tarsal joint (included) as the reference points, and by connecting this the two with measuring tape.

8 Humerus length: Distance from the shoulder joint till the bent elbow joint included.

Note

It is measured only in medium to large mammals.

9 Forearm length: Distance from the elbow joint to the carpal joint included, using a measuring tape.

Note

It is measured only in medium to large mammals.

10 Hindfoot length: Distance from proximal margin of calcaneus to tip of the longest claw.

11 **Forefoot length:** Distance from proximal margin of the wrist to tip of the longest claw.

12 **Testis and Vulva lengths:** The greatest distance along the longitudinal axis.

13 **Testis width** The greatest distance along the transversal axis.

Circumferences

14 **All the circumferences are measured only in medium to large mammals and with measuring tape**

15 **Waist circumference:** The smallest circumference of the abdomen taken close to the pelvis.

16 **Chest circumference:** The widest part of the ribcage.

17 **Neck circumference:** It is measured at the mid-neck level.

- 18 **Arm circumference:** It is measured at the mid part of the arm
- 19 **Forearm circumference:** It is measured at the widest part of the forearm
- 20 **Thigh circumference:** It is measured at the mid part of the thigh.
- 21 **Calf circumference:** It is measured at the widest part of the calf.