Distinguishing the claws of mammals and birds

The loose claws of mammals (also called nails) and birds (also called talons) are often submitted for species identification. Equipped with a standards collection, an experienced examiner can identify a claw to Family of origin, foot (front or rear, right or left), and digit (toe). Claws reflect the natural history (feeding habits, locomotion) of animals. Since mammals and birds fill similar niches, their claws are similar in appearance. Therefore, the first step in the identification of these highly modified body parts is confirmation of the vertebrate Class of origin, Mammalia or Aves. This note provides some guidelines for preliminary examination of the claws of mammals and birds in the field.

Anatomy of a claw

The claw is composed of a digit (bone) that is covered with a sheath of keratin. This keratinous sheath is the unguis (plural = ungues).

Examination

To distinguish the claws of the two classes of animals, the underside (ventral = palmar or plantar) surface of the claw is examined. The claws of mammals are generally incompletely sheathed by the unguis; the margins of the unguis meet only partially underneath the claw. The claws of birds are completely sheathed; the unguis covers the top and sides of the claw, and the plantar surface of the claw is covered by a plate of keratin distinguished as the subunguis.

REFERENCES:

Identification Notes and other Lab information available at:
http://www.lab.fws.gov/for-lab.htm

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