

Identification Notes for wildlife law enforcement

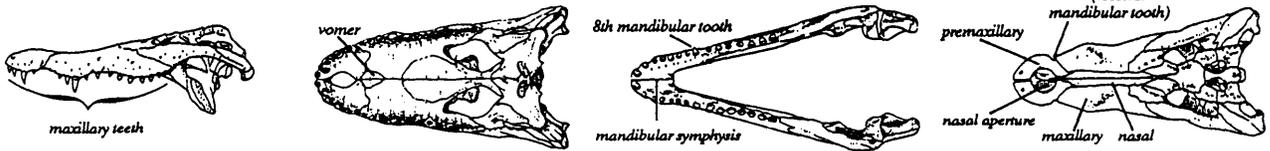
CATEGORY _____

REPTILE

Scientific Name/s: *Crocodylia*

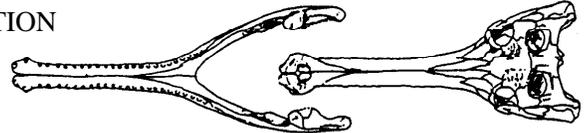
Common Name/s: Alligator, Crocodile, Caiman, Gharial

PROBLEM: Skulls of Crocodylians are often imported as souvenirs.



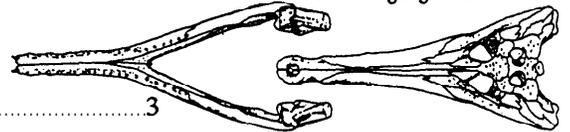
GUIDE TO PRELIMINARY IDENTIFICATION OF CROCODYLIAN SKULLS

1. Nasal bones separated from nasal aperture;
mandibular symphysis extends to the 15th tooth.....2



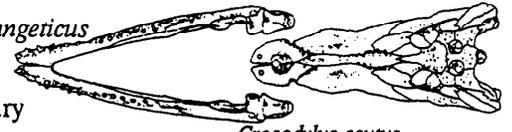
Gavialis gangeticus

Nasal bones entering the nasal aperture; mandibular
symphysis does not extend beyond the 8th tooth.....3



Tomistoma schlegelii

2. Nasal bones separated from premaxillary bones;
27 - 29 maxillary teeth, 25 - 26 mandibular teeth.....*Gavialis gangeticus*



Crocodylus acutus

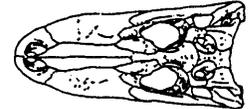
Nasal bones in contact with premaxillary bones; 20 - 21 maxillary
teeth, 18 - 19 mandibular teeth.....*Tomistoma schlegelii*

3. Fourth mandibular tooth usually fitting into a notch in the
maxillary; 16 - 19 maxillary teeth, 14 - 15 mandibular teeth.....4



Osteolaemus tetraspis

Fourth mandibular tooth usually fitting into a pit in the
maxillary; 14 - 20 maxillary teeth, 17 - 22 mandibular teeth.....5



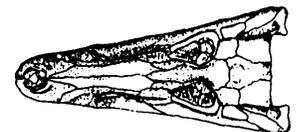
Alligator mississippiensis

4. Nasal bones do not divide nasal aperture. *Crocodylus* (12 species)

Nasal bones divide nasal aperture.....*Osteolaemus tetraspis*

5. Nasal bones do not divide nasal aperture.....6

Bony septum divides nasal aperture Alligator (2 species)



Paleosuchus trionatus

6. Five teeth in premaxillary bone.....7...

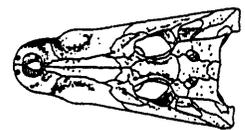
Four teeth in premaxillary bone *Paleosuchus* (2 species)



Melanosuchus niger

7. Vomer exposed on the palate.....*Melanosuchus niger*

Vomer not exposed on palate.....*Caiman* (2 species)



Caiman crocodiles

Illustrations from: Mook, C. C. 1921
Medem, F. 1951

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Common Name/s Alligator, Crocodile, **Caiman, Gharial**

REFERENCES

Medem, F. 1981. Los **crocodylia** de Sur America. Vol. 1. **Los crocodylia** de Colombia. **Colciencias**, Bogota.

Mook, C. C. 1921. Skull characters of Recent **Crocodylia**, with notes on the affinities of the Recent genera. Bull. Amer. Mus. Nat. Hist. 44:23-268.

Schmidt, K P. 1928. **Notes** on South American **Caimans**. **Zool. Ser., Field Mus. Nat. Hist.** 12(17):205-231.

Smith, H. M. & R. B. Smith. 1977., Synopsis of the her **epofauna of Mexico**. Vol. 5. Guide to Mexican **amphisbaenians** and **crocodylians**, bibliographic addendum II. John **Johnson**, N. Bennington, Vt.