

Papers in the Biological Sciences

Cranes of the World, by Paul Johnsgard

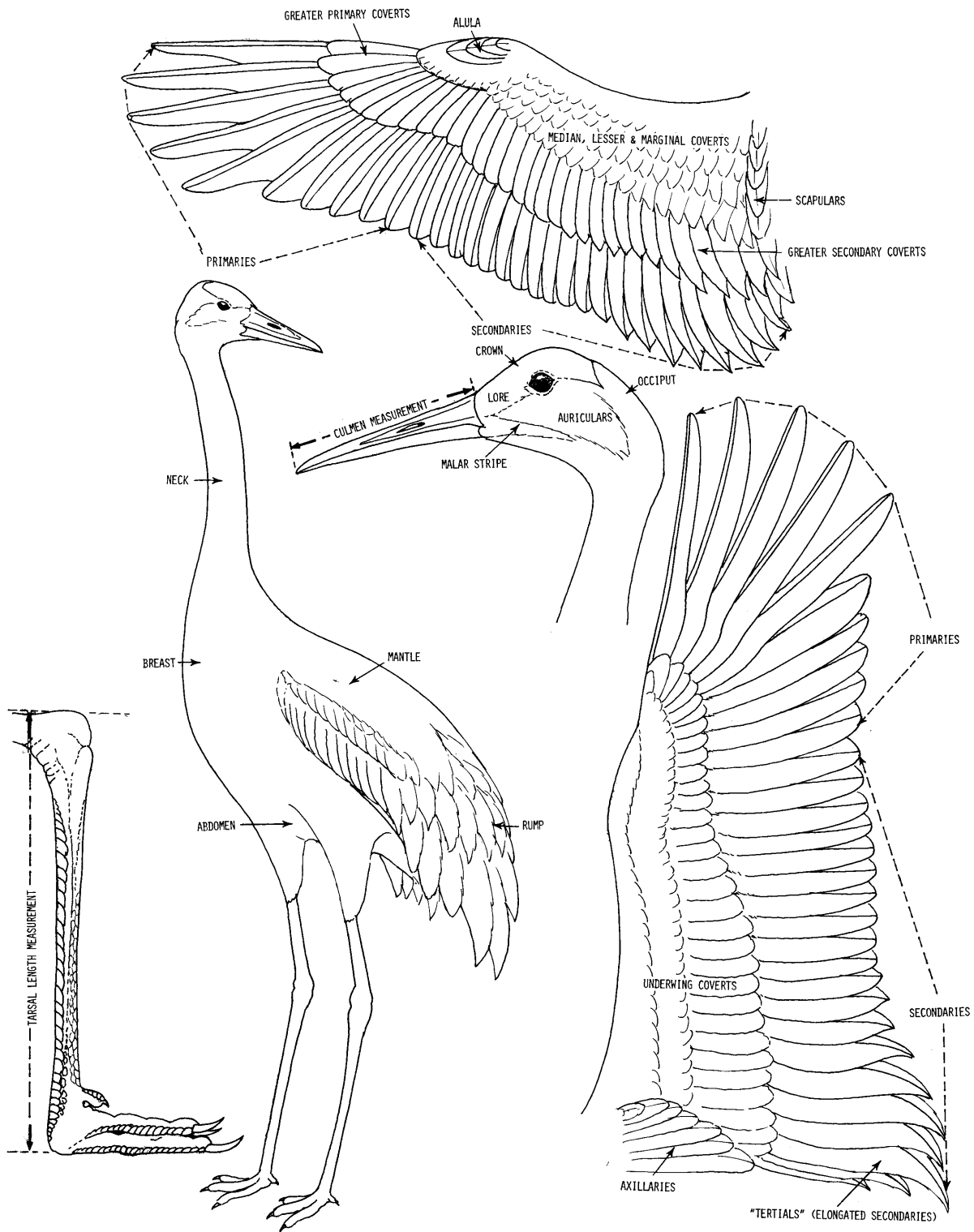
University of Nebraska - Lincoln

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Cranes of the World: KEY TO THE
SPECIES AND SUBSPECIES OF
CRANES OF THE WORLD

Paul A. Johnsgard
University of Nebraska-Lincoln, pjohnsga@unlserve.unl.edu

CRANES OF THE WORLD



14. Topography and anatomical measurements of cranes.

KEY TO THE SPECIES AND SUBSPECIES OF CRANES OF THE WORLD

Key to the Families of Gruoidea

- I. Bill short, almost chickenlike, 10 rectrices Psophidae (trumpeters)
- II. Bill elongated and tapering, 12 rectrices
 - A. Hallux large, bill nearly as long as tarsus Aramididae (limpkins)
 - AA. Hallux small, less than half as long as tarsus Gruidae (cranes)

Key to Cranes of the World*

- A. Bill shorter and swollen toward tip, with oval nostrils; a cluster of strawlike feathers on crown (subfamily Balearicinae) Crowned crane (fig. 15F)
 - B. Neck feathers dark gray, large throat wattle present
 - C. Generally larger and paler, with a large white area on upper cheek West African crowned crane.
 - CC. Generally smaller and darker, with a small white area on upper cheek Sudan crowned crane.
 - BB. Neck feathers light gray, a small throat wattle present
 - C. Upper margin of cheek patch rounded and lacking a knobby process South African crowned crane
 - CC. Upper margin of cheek patch extended into a knoblike process East African crowned crane
- AA. Bill longer and tapering, with linear nostrils, crown not tufted (subfamily Gruinae)
 - B. Head entirely feathered, crown feathers paler than rest of head, bill shorter than head (*Anthropoides*)
 - C. Neck and face feathers black, contrasting with gray body, iris red Demoiselle crane (fig. 15A)
 - CC. Neck and face gray, like rest of body, iris dark brown ...Blue crane (fig. 15J)
 - BB. Head partially bare in adults, bill longer than head
 - C. A feathered lappet on throat, and warty red skin extending to lappet and nostrils (*Bugeranus*, in part) Wattled crane (fig. 15I)
 - CC. No feathered lappet, no skin extending forward to nostrils.
 - D. Entire front of face bare of feathers, otherwise white with black primaries (genus *Bugeranus*, in part) Siberian crane (fig. 15E)
 - DD. Front of face not entirely bare, usually not white with black primaries (*Grus*)
 - E. Tail uniformly gray, with a darker tip, body also mostly grayish, never entirely white
 - F. Reddish bare area limited to crown
 - G. Napes, cheeks, and throat grayish white or black

*In part after Walkinshaw (1949), generally based on adult characteristics.

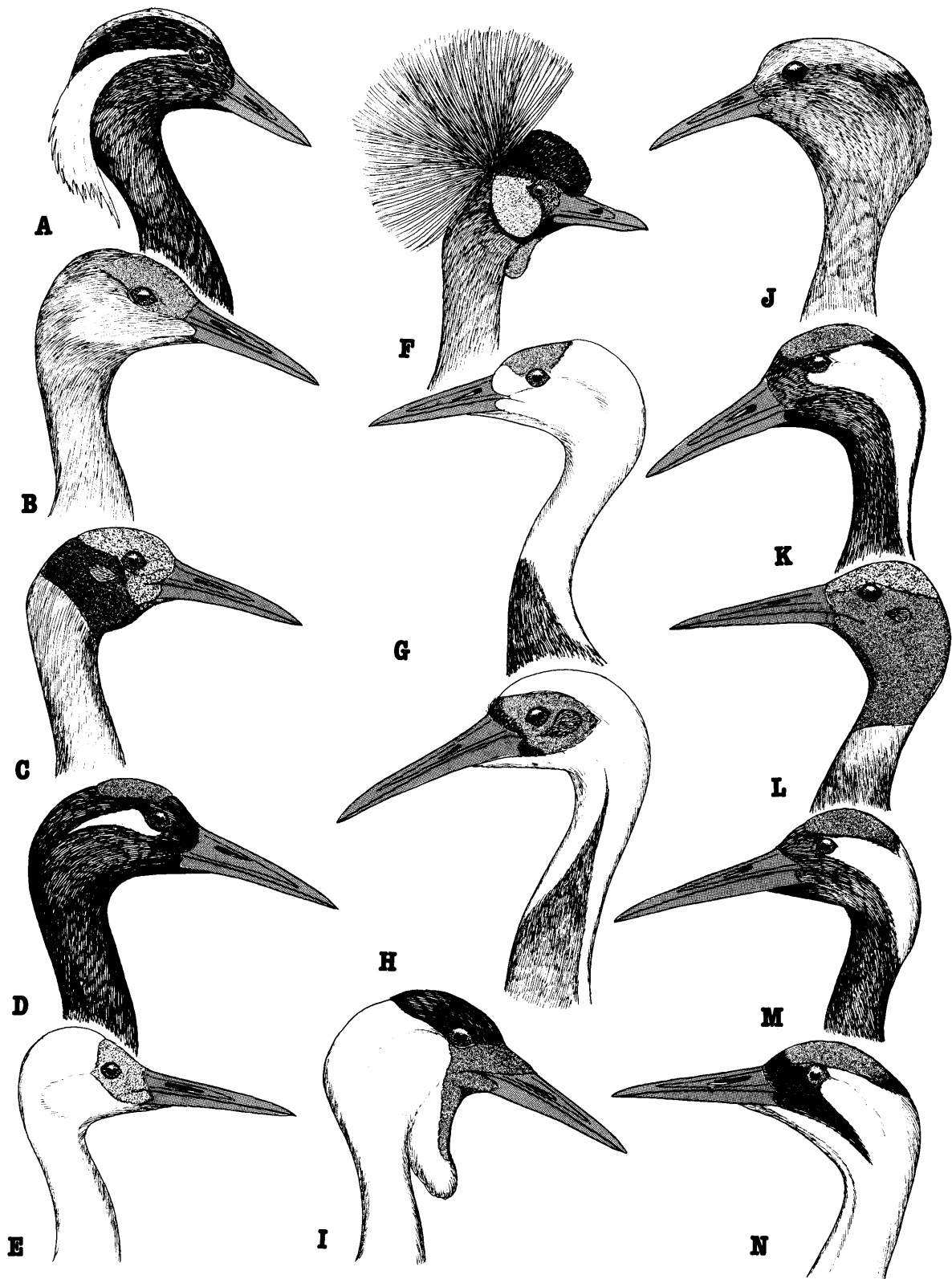
CRANES OF THE WORLD

- H. Lower neck black in front, white behind Eurasian crane (fig. 15K)
 - I. Plumage ashy gray throughout Western Eurasian crane
 - II. Plumage more pearly gray, with lighter inner secondaries Eastern Eurasian crane
- HH. Neck entirely gray Sandhill crane (fig. 15B)**
 - I. Wing averaging over 500 mm (min. 490 mm), culmen averaging over 130 mm (min. 113 mm) Greater sandhill crane
 - II. Wing averaging under 500 mm (max. 525 mm), culmen averaging under 130 mm (max. 144 mm)
 - J. Tarsus averaging under 200 mm (max. 228), culmen averaging under 100 mm (max 110 mm) Lesser sandhill crane
 - JJ. Tarsus averaging over 210 mm (min. 203 mm), culmen averaging over 100 mm (min. 93 mm)
 - K. Culmen averaging at least 125 mm (min. 110 mm) Florida sandhill crane
 - KK. Culmen averaging under 125 mm (max. 127 mm)
 - L. Limited to Cuba and Isle of Pines Cuban sandhill crane
 - LL. Limited to North American mainland Canadian sandhill crane
- GG. Nape and throat pure white, lores blackish
 - H. Foreneck dark gray, legs reddish White-naped crane (fig. 15H)
 - HH. Foreneck white, legs blackish Hooded crane (fig. 15G)
- FF. Bare red or grayish skin covering all of head except for ear coverts
 - G. Legs reddish, body plumage pale grayish blue to whitish Sarus crane (fig. 15L)
 - G. With white collar and white inner secondaries Burmese sarus crane
 - GG. Lacking white collar, inner secondaries gray Indian sarus crane
- FF. Legs blackish, body plumage uniformly gray Australian crane (fig. 15C)
 - G. Darker above and below Southern Australian crane
 - GG. Paler above and below Northern Australian crane
- EE. Tail either black or white, body pale gray to white, at least on underparts
 - F. Tail black or blackish, no white on nape Black-necked crane (fig. 15D)
 - FF. Tail white, white also present on nape or hindneck
 - G. Secondaries black, neck mostly dark gray Japanese crane (fig. 15M)
 - GG. Primaries black, neck and body entirely white Whooping crane (fig. 15N)

Key to Greater, Canadian, and Lesser Sandhill Cranes, by Sex

- A. Adult males
 - B. Total body index (wing + exposed culmen + tarsus) under 850mm
 - C. Tarsus + culmen usually under 285 mm (max. 338 mm), under 3.75 kg Lesser
 - CC. Tarsus + culmen usually over 340 mm (min 312 mm), over 3.75 kg Canadian
 - BB. Total body index over 850 mm
 - C. Wing + culmen usually under 620 mm (max. 652mm), under 4.9 kg Canadian
 - CC. Wing + culmen usually over 685 mm (min. 624 mm), over 4.9 kg Greater
- AA. Adult females
 - B. Total body index under 815 mm
 - C. Tarsus + culmen usually under 275 mm (max. 302 mm), under 3.5 kg Lesser
 - CC. Tarsus + culmen usually over 325 mm (min. 303 mm), over 3.5 kg Canadian
 - BB. Total body index over 820 mm
 - C. Wing + culmen usually under 575 mm (max. 606 mm), under 4.3 kg Canadian
 - CC. Wing + culmen usually over 650 mm (min. 603mm), over 4.3 kg Greater

**If sex is known, see following key for separating *tabida*, *rowani*, and *canadensis*.



15. Heads of cranes of the world, including demoiselle crane (A), sandhill crane (B), Australian crane (C), black-necked crane (D), Siberian crane (E), crowned crane (F), hooded crane (G), white-naped crane (H), wattled crane (I), blue crane (J), Eurasian crane (K), sarus crane (L), Japanese crane (M), and whooping crane (N).