Items of interest from recent ornithological literature

Editorial note: With various ornithological advances (e.g., taxonomic, molecular, ecological etc.) appearing in the literature at ever increasing rates, it is becoming ever more daunting for many of us to keep abreast of crucial developments. Interesting and pertinent articles commonly slip off the radars of even the most up-to-date ornithologists. In order to try and bring such items to the attention of our readers, we hereby introduce a new feature for *Scopus*: ***Items of interest from recent ornithological literature***. We hope to have this feature in all forthcoming issues of *Scopus*, switching between topics based on interest and articles received. Besides the Editorial Board occasionally soliciting articles, we welcome pieces from interested persons on topics they are familiar with and that are of interest to the general *Scopus'* readership.

Raptor taxonomy: Highlights from two recent papers

With taxonomic recommendations appearing in the literature at an ever increasing rate, our perceptions of some familiar bird species and their relationship to others are likely to be constantly under review. Taxonomic changes or recommendations are useful for those readers who may be engaged in formulating (and implementing) conservation priority documents and other research material. Here, I highlight some aspects concerning the taxonomy of birds of prey (Family Accipitridae) that have appeared in the following two fairly recent publications:

i) Lerner, H. R. L. & D. P. Mindell 2005. Phylogeny of eagles, Old World vultures, and other Accipitridae based on nuclear and mitochondrial DNA. *Molecular Phylogenetics and Evolution* 37: 327-346.

ii) Helbig, A.J., Kocum, A., Seibold, I. & Braun, M.J. 2005. A multi-gene phylogeny of aquiline eagles (Aves: Accipitriformes) reveals extensive paraphyly at the genus level. *Molecular Phylogenetics and Evolution* 35:147-164.

In the first paper, Lerner & Mindell give a detailed analysis of all bird of prey families and sub-families, and in doing so make it so much easier for everyone to see just where our birds of prey fit into a vast and often complex arrangement within the Accipitriformes.

Families: Sagittariidae (Secretarybird), Pandionidae (Osprey) and Accipitridae (Kites, Old World Vultures, Eagles and other birds of prey).

Sub-Families within Accipitridae: No less than 14 sub-families are recognised, of which the following 13 occur in East Africa:

i. Elaninae: Kites noted for having a bony shield above the eye
- African Genera: *Elanus* and *Chelictinia*. (Black-shouldered and Swallow-tailed Kites)

ii. Polyboroidinae: One New World and one Old World species that seek out food found in tree cavities. Both have relatively weak bills, but

possess increased tarsus mobility and length.
- African Genera: *Polyboroides* (African Harrier Hawk)

iii. ***Gypaetinae:*** Largely small vulture-type birds with specialised feeding behaviours and vocalisations. *Gypohierax* and *Neophron* similar to each other in plumage colouration and moult stages
- African Genera: *Gypohierax, Neophron* and *Gypaetus* (Palm-nut and Egyptian Vultures and Lammergeier)

iv. ***Perninae:*** Kites that specialise on insects, bees or wasp larvae. All lack the bony eye shield in *Elaninae*
- African Genera: *Pernis, Aviceda* and probably *Macheiramphus* (Honey Buzzard, Cuckoo Hawk and probably also Bat Hawk)

v. ***Circaetinae:*** Old World species that feed on snakes, other reptiles and small mammals. All possess a reticulate pattern of heavy scales on the tarsi
- African Genera: *Circaetus*, *Dryotriorchis* and *Terathopius* (Snake Eagles, Congo Serpent Eagle and Bateleur)

vi. ***Aegypinae:*** Large Old World Vultures. All scavengers, most with long necks and lightly feathered to bare heads
- African Genera: *Necrosyrtes, Gyps, Torgos* and *Trigonoceps* (Hooded, White-backed, Rüppell's, Lappet-faced and White-headed Vultures)

vii. ***Aquilinae****:* Large eagles with feathered tarsi. Several possess short or longish crests
- African Genera: *Aquila, Lophaetus, Hieraaetus, Stephanoaetus* and *Polemaetus* (Tawny, Long- crested, Cassin's, Crowned, Martial, Verreaux's, Booted, Ayres's, Wahlberg's and all migratory eagles)

viii. ***Melieraxinae***: Open country accipiters, mostly larger than the *Accipiter* species
- African Genera: *Melierax* and *Micronisus* (Chanting Goshawks and the Gabar Goshawk)

ix. ***Circinae*****:** Broad and long-winged birds with facial feather disks and specialized outer ears, all occurring in open habitats
- African Genera: *Circus* (Pallid, Montagu's and Marsh Harriers)

x. ***Accipitrinae***: Fast fliers, specialising on small birds for food. Long and slim tarsometatarsus and toes. Occurring largely in forest and woodland habitats
- African Genera: *Accipiter* and *Urotriorchis* (African Goshawk, Shikra, all Sparrowhawks and the Long-tailed Hawk)

xi. ***Milvinae*****:** New and Old World kites with fusion of joints of the second and third toes
- African Genera: *Milvus* (Black Kite)

xii. ***Haliaeetinae:*** Large eagles found in wetlands and coastal habitats. All have a fused basal joint of the middle toe
- African Genera: *Haliaeetus* (African Fish Eagle)

xiii. ***Buteoninae*****:** Largely broad-winged soaring birds with relatively short tails and legs

- African Genera: *Buteo, Butastur* and *Kaupifalco* (All Buzzards and the Lizard Buzzard).

The second article works at the species level where Helbig and colleagues established and recommended that:

i. The African Hawk Eagle, being close to Verreaux's Eagle, should be placed in the genus *Aquila*, and be known as *Aquila spilogaster.*
ii. Wahlberg's Eagle is part of a clade that includes two small eagles (*Hieraaetus pennatus* and *H. ayresii*), and should be known as *Hieraaetus wahlbergi.*
iii. The generic placement of Cassin's Hawk Eagle (currently placed in *Aquila*) remains to be determined. The genus *Spizaetus* is now restricted to South America, while Asian members of that group are now placed in *Nisaetus*.

Finally, they also informed us that:

- The African Tawny Eagle is NOT closely related to the migratory Steppe Eagle.
- The migratory Greater and Lesser Spotted Eagles are closely related to the African Long-crested Eagle, and should be placed in the genus *Lophaetus*.

Donald A Turner
P O Box 1651, Naivasha 20117, Kenya. Email: mat@wananchi.com

Scopus 30: 70–72, October 2010
Received May 2010