



## Memorandum of Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia

Distribution: General

UNEP/CMS/Raptors/TAG4/Doc. 6.2b/Rev1

12 December 2021

Fourth Meeting of the Technical Advisory Group | Online, 13-15 December 2021

### PROPOSED AMENDMENTS TO ANNEX 1 AND ANNEX 3 TABLE 1 OF THE RAPTORS MOU

*Prepared by the Coordinating Unit of the Raptors MOU in cooperation with BirdLife International*

#### Introduction

1. As part of Activity 1, Task 1a, of the TAG WorkPlan, TAG was asked to consider whether there are further possible candidate species that should be proposed to be listed on Annex 1 to the Raptors MOU. Under Activity 2, Task 2 of the TAG workplan, TAG was asked to consider any further changes to raptor taxonomy and nomenclature in relation to species listings within the MOU, having regard to CMS Resolution 12.27.

2. As highlighted in the relevant document to MOS2 (UNEP/CMS/Raptors/MOS2/13/Rev.1<sup>1</sup>), species can be proposed for Raptors MOU Annex 1 on the basis of: (1) updates to taxonomy and nomenclature to keep pace with current understanding; and, (2) enhanced understanding of their movements, which suggests they can be considered to be a “migratory species” according to the CMS definition used by the Raptors MOU. An overview of the proposed amendments to Annex 1 is given below<sup>2</sup>. This is followed by an explanation of the proposed changes to Raptors MOU Annex 3 Table 1, which categorises the Raptors MOU Annex 1 species according to their conservation status.

#### Proposed updates to Annex 1 on basis of taxonomy/nomenclature

3. TAG is asked to endorse the proposed revisions to Raptors MOU Annex 1 to be presented to MOS3 in Annex B of this document, which reflect the changes described below and contains 94 species. The Raptors MOU follows CMS in terms of its taxonomic reference for birds. As CMS resolution 12.27 on Taxonomy and Nomenclature<sup>3</sup> outlines, for non-passerine birds this is Del Hoyo, J. & Collar, N.J. (2014)<sup>4</sup>, and updates in the latest online version. In making the below updates for TAG4 the most recent taxonomy/nomenclature data from the 2021 IUCN Red List data set have been used, which will soon be made publicly available in a new release of the checklist at the BirdLife Datazone<sup>5</sup>.

<sup>1</sup> <https://www.cms.int/raptors/en/document/proposals-amendments-raptors-mou-andor-its-annexes-african-eurasian-migratory-birds-of-prey>

<sup>2</sup> Progress in this work until TAG3 is covered in document TAG3/4.1a

[https://www.cms.int/raptors/sites/default/files/document/cms\\_raptors-tag3\\_doc4.1a\\_amendments-species-list.pdf](https://www.cms.int/raptors/sites/default/files/document/cms_raptors-tag3_doc4.1a_amendments-species-list.pdf)

<sup>3</sup> <https://www.cms.int/en/document/taxonomy-and-nomenclature-0>

<sup>4</sup> Handbook of the Birds of the World and BirdLife International Illustrated Checklist of the Birds of the World. Volume 1: Non-passerines. Lynx Edicions, Barcelona

<sup>5</sup> <http://datazone.birdlife.org/species/taxonomy>

**Replace Brown Boobook with Northern Boobook**

4. As agreed at TAG3, Brown Boobook (*Ninox scutulata*) would be replaced on Raptors MOU Annex 1 by Northern Boobook (*Ninox japonica*) which is the migratory portion of a taxonomic split.

**Add Yellow-billed Kite**

5. Black Kite (*Milvus migrans*) has now been split and that results in a new raptor species within the geographic scope of the MOU: Yellow-billed Kite (*M. aegyptius*). As outlined in the TAG Microsoft Teams discussion posted on 19 October 2021 supported by the information provided as Annex A of this document, the proposed amendment for TAG to consider is to add Yellow-billed Kite (*Milvus aegyptius*) to Raptors MOU Annex 1. Should TAG decide that this species meets the CMS definition of migratory, both elements of the split should be retained in Raptors MOU Annex 1, which for the purpose of MOS would mean effectively adding Yellow-billed Kite. There appears to be sufficient evidence that this species is at least a partial intra-African migrant and information has been compiled in Annex A of this document (highlights in red boxes). There is additional useful information in the Global Raptor Impact Network<sup>6</sup>, although the taxonomic treatment there is slightly different.

6. One TAG representative from Africa has voiced agreement that Yellow-billed Kite meets the CMS definition of migratory and supports proposing it for Raptors MOU Annex 1 and there have been no responses to the contrary. The proposed addition of Yellow-billed Kite is reflected in Annex B to this document.

**Notification of a taxonomy related change to the distribution of Raptors MOU Annex 1-listed Eurasian Scops-owl**

7. While this change does not affect listings on Raptors MOU Annex 1, TAG is alerted to the fact that Cyprus Scops-owl (*Otus cypricus*) has recently been split from Eurasian Scops-owl (*Otus scops*) and recognised as a new species. *O. cypricus* is non-migratory so does not need to be added to Raptors MOU Annex 1, but TAG should note that the distribution of the Annex 1-listed Eurasian Scops-owl (*O. scops*) no longer includes Cyprus.

**Accipitriformes to be noted in Raptors MOU Annex 1 as well as in MOU text**

8. At TAG3 it was noted in TAG3/doc4.1b<sup>7</sup> that the text of the MOU needed to be updated to reflect that some of the Raptors MOU Annex 1 species covered by the MOU now fall into the more recently recognised order “Accipitriformes”. These text changes have subsequently been made through the review of the MOU Action Plan<sup>8</sup> and presented in TAG4 agenda item 6.2. However parallel changes recognising this order need to be made in Raptors MOU Annex 1 and have been indicated in Annex B to this document. TAG is asked to endorse the revised version of Raptors MOU Annex 1 to be presented to MOS3. All the above proposed amendments are reflected in Annex B of this document.

**Proposed amendments to Raptors MOU Annex 3 Table 1**

9. Table 1 of Annex 3 (the Action Plan) of the Raptors MOU allocates Raptors MOU Annex 1-listed species into Categories 1, 2 and 3 on the basis of their conservation status. Annex 1 species have been categorised according to the latest information on their conservation status as outlined in operational paragraph 3 of Annex 3 of the Raptors MOU<sup>9</sup>. The source for global IUCN Red List status and global

<sup>6</sup> <http://globalraptors.org/grin/SpeciesResults.asp?specID=8367>

<sup>7</sup> [https://www.cms.int/raptors/sites/default/files/document/cms\\_raptors-tag3\\_doc4.1d\\_amendments-mou-text.pdf](https://www.cms.int/raptors/sites/default/files/document/cms_raptors-tag3_doc4.1d_amendments-mou-text.pdf)

<sup>8</sup> <https://www.cms.int/raptors/en/document/review-cms-raptors-mou-action-plan-%E2%80%93-executive-summary>

<sup>9</sup> [https://www.cms.int/raptors/sites/default/files/basic\\_page\\_documents/raptors-mou\\_annex3\\_action-plan\\_e.pdf](https://www.cms.int/raptors/sites/default/files/basic_page_documents/raptors-mou_annex3_action-plan_e.pdf)

population trends was the 2021 IUCN Red List dataset<sup>10</sup>. Category 1 species are those recognised as globally threatened or near threatened on the IUCN Red List, Category 2 species are those in unfavourable conservation status (see Annex C of this document for more details) and Category 3 are the remainder of the Annex 1 species. The only regional scale source for conservation status data identified was the latest European Red List of Birds<sup>11</sup>, although further information on possible sources for other regions was sought from TAG members in a specific TAG Microsoft Teams post on 25 October 2021 and is still welcomed.

10. Annex D of this document summarises the proposed category amendments to Table 1 of Annex 3 of the Raptors MOU since MOS2 (2015) in simplified form<sup>12</sup>. An Excel file containing all detailed information on changes in scientific and common names, conservation status, Species of European Conservation Concern (SPEC) category and a justification for the proposed amendments is provided as an information document UNEP/CMS/Raptors/TAG4/inf.5<sup>13</sup>. Species of European Conservation Concern statuses have only been provisionally assigned at this stage, so SPEC data in UNEP/CMS/Raptors/TAG4/inf.5 is provisional at this stage and minor updates may be needed in early 2022 as this dataset is finalised.

11. The amendments proposed would result in the 94 Raptors MOU Annex 1 species being split as follows in Table 1: 32 species in Category 1, 27 species in Category 2 and 35 species in Category 3. If any amendments are needed in early 2022 once some of the contributing provisional data sources are finalised, TAG will be alerted to these amendments.

#### Looking ahead to Table 1 at MOS4

12. As highlighted in Annex C of this document, one criterion for identifying unfavourable conservation status for Category 2 relies upon global population trends while the other two criteria relate to regional level processes to identify regionally unfavourable conservation status. At the moment, the Coordinating Unit is not aware of a process to assess species conservation status at a regional scale outside Europe, but it would be valuable to be able to incorporate conservation status for other regions if such assessments are made in future.

13. If any TAG member believes there are Raptors MOU Annex 1 species for which the current IUCN Global Red List status or global population trend do not reflect their current conservation status or global population trajectory it would be helpful if they could alert the Coordinating Unit and BirdLife International to this, pointing to evidence to support their concern so that the BirdLife Red List team can review it. This could for example result in the Red List team soliciting further information from across the range through the Globally Threatened Birds Forum. In turn, this could change the Table 1 Category that the species is listed in at MOS4.

#### Table 1 Category 1 crossmatch with CMS Appendix I & comments on CMS Appendix II

14. CMS Appendix I currently provides good coverage of Raptors MOU Table 1, Category 1 species<sup>14</sup>. Black Harrier (*Circus maurus*) is the only proposed Category 1 species in Table 1, that is not already listed in CMS Appendix I, despite the fact that it could qualify because has been re-classified from Vulnerable to Endangered on the global IUCN Red List in 2017. Even prior to its global IUCN up-

<sup>10</sup> Note the dataset was provisional rather than finalised at the point of the analysis and the 2021 Red List update for birds is planned to be released by IUCN and BirdLife on 9/12/21 (<https://www.iucnredlist.org/assessment/updates>). TAG will be notified if any amendments are needed in early 2022 to reflect the finalised dataset.

<sup>11</sup> <https://www.birdlife.org/wp-content/uploads/2021/10/BirdLife-European-Red-List-of-Birds-2021.pdf>

<sup>12</sup> It is possible that a small number of raptor species could be re-assessed on the global IUCN Red List in 2022. If those assessments are finalised early enough in the year before the deadline for circulating documents to Signatories ahead of MOS3, TAG could consider making corresponding updates to Table 1 ahead of MOS3.

<sup>13</sup> <https://www.cms.int/raptors/en/document/supporting-information-annex-1-species>

<sup>14</sup> See columns AA, AB, AC in information Document UNEP/CMS/Raptors/TAG4/inf.5 for more details.

listing, TAG3 recognised this species as a potential priority for development of an international species action plan.

15. At TAG3 it was considered it would be beneficial to explore with the two range states for the species – South Africa and Namibia, whether development of an international species action plan or other coordinated conservation measures could be an effective means of halting and reversing declines and improving the conservation status of this species<sup>15</sup>. As reported in UNEP/CMS/Raptors/TAG4/Doc.3.1, the Coordinating Unit sent letters to South Africa and Namibia seeking their consideration of the value of developing a joint single-species action plan but no official response received as yet (October 2021). The TAG Vice-Chair was in contact with the South African Department of Forestry, Fisheries and the Environment and feedback was given that their available staff were engaged in the drafting of the National Vulture Conservation Action Plan and the Plan of Work for the National Wildlife Poisoning Prevention Working Group, both of which are reaching expected completion by the end of 2021 or early in 2022 and resources do not allow them to become engaged in another process until this has been completed. It would now be viable for a Party to propose this species for Appendix I at the next CMS COP if there was interest. The proposal could be tabled by any Range State, but as per Resolution 13.7<sup>16</sup> South Africa as a Range State, CMS Party and Signatory to the Raptors MOU would need to be consulted and may decide to propose the species for Appendix I (with technical support from TAG as appropriate).

16. In regards to CMS Appendix II, it is notable that no *Strigiformes* are covered on CMS Appendix I or Appendix II, whereas all migratory members of *Accipitriformes* and *Falconiformes* are currently covered on Appendix II under family level or species specific listings.

17. To explain in more detail, the Raptors MOU Annex I contains members of the order *Accipitriformes* (within families *Pandionidae* and *Accipitridae*), the order *Falconiformes* (within the family *Falconidae*) and the order *Strigiformes* (within the family *Strigidae*). Within the *Accipitriformes*, the only member of *Pandionidae* on Raptors MOU Annex 1 is covered by a species-specific listing on CMS Appendix II, while the *Accipitridae* on Raptors MOU Annex I are covered by a family level listing on CMS Appendix II. There is no equivalent family level listing for *Strigidae* on CMS Appendix I (perhaps because few members of the family are migratory). However Snowy Owl is on Raptors MOU Annex 1 and is now proposed to be placed in Category 1 of Table 1 as it has moved from Least Concern to Vulnerable on the global IUCN Red List since 2015. It is the only remaining Raptors MOU Annex 1 species that is globally Vulnerable or Near Threatened and that could therefore qualify for CMS Appendix II at the level of the whole species but is not yet covered by a CMS Appendix II listing. This species could potentially be proposed by an interested CMS Party for CMS Appendix II at the next CMS COP.

### **Proposal form to list species on Annex 1**

18. At TAG3 the members asked the Coordinating Unit to lead the development of a standard form that could be used by Signatories to propose amendments to the species list of the Raptors MOU (Annex 1). The proposed form is provided as Annex E.

### **Species document/s to MOS3**

19. TAG will need to put forward one or more documents for MOS3 covering the proposed species-related amendments to the Annexes. At this stage regarding the species-focused work TAG has undertaken the required documents are likely to be:

---

<sup>15</sup> Para 128 of the TAG3 report

[www.cms.int/raptors/sites/default/files/document/Raptors%20MOU%20TAG3%20Meeting%20Report%202015-04-2020.pdf](http://www.cms.int/raptors/sites/default/files/document/Raptors%20MOU%20TAG3%20Meeting%20Report%202015-04-2020.pdf)

<sup>16</sup> [https://www.cms.int/sites/default/files/document/cms\\_cop13\\_res.13.7\\_guidelines-assessment-listing-proposals\\_e.pdf](https://www.cms.int/sites/default/files/document/cms_cop13_res.13.7_guidelines-assessment-listing-proposals_e.pdf)

A single rationale document for the species related changes, which:

- Explains proposed changes to Annex 1 (on basis of taxonomy/ migratory status);
- Explains proposed changes to Annex 3 Table 1;
- Annexes an updated version of Annex 1;
- Annexes an updated version of Table 1; and
- Annexes the species proposal form to list species on Annex 1.

20. All proposed amendments to the species list will be circulated to Signatories well in advance of MOS3 with a request for Signatories to comment on the TAG proposals by the 150-day deadline set by the Rules of Procedures for MOS. In parallel, Signatories will be asked to propose any new species for inclusion on Annex 1 using the species proposal form (Annex E to this document). This would allow enough time for TAG to produce a written comment for each species proposal by Signatories, as well as comment on inputs by Signatories regarding the proposed technical amendments by TAG.

**Action requested:**

TAG is requested to:

- Take note of the change between Brown Boobook (*Ninox scutulata*) and Northern Boobook (*Ninox japonica*), of the exclusion of Cyprus from the range of Eurasian Scops-owl (*Otus scops*) and the recognition of the order “Accipitriformes”;
- Decide whether to recommend adding the Yellow-billed Kite (*Milvus aegyptius*) to Annex 1 and consequently to Table 1 based on its migratory status;
- Endorse the proposed category changes in Table 1 resulting from changes of conservation status or population trends of 16 Annex 1 species;
- Take note of the invitation by the Coordinating Unit to be informed of any existing or planned regional conservation assessment and of any species that would require a fresh assessment by the BirdLife Red List team;
- Decide whether to re-affirm the need for a global action plan and relevant conservation actions for the Black Harrier (*Circus maurus*);
- Consider reminding Signatories of the two Annex 1 species that could be proposed by Parties to CMS for inclusion in the CMS Appendixes;
- Consider the proposal form to list species on Annex 1: and
- Take note of the process outlined in paragraphs 18 and 19.

**Annex A: Supporting information on *Milvus migrans* and *M. aegyptius***

Black Kite *Milvus migrans* has been split and Yellow-billed kite *M. aegyptius* is now considered a separate species, which if migratory needs to be added to Annex 1

Not secure | datazone.birdlife.org/species/factsheet/black-kite-milvus-migrans/details

BirdLife INTERNATIONAL | Partnership for nature and people | Data Zone

Species ▾ Sites (IBAs) ▾ Country Profiles ▾ Case studies ▾ Tools ▾ Request data ▾ Publications ▾ Citizen Science ▾

**LC Black Kite *Milvus migrans***

Summary | Text account | **Data table and detailed info** | Distribution map | Reference and further resources

**Taxonomy**

**Taxonomic note**  
 Black Kite *Milvus migrans* (del Hoyo *et al.* 2014) has been split into *M. migrans* and Yellow-billed Kite *M. aegyptius* (Handbook of the Birds of the World and BirdLife International 2020).

Yellow-billed Kite *Milvus aegyptius* (with subspecies *parasitus*) differs from *M. migrans* by its


- Yellow vs black bill (3);
- Dark vs pale iris in adult state (2);
- Head and nape concolourous with upper body vs pale grey streaked black, contrasting with dark brown mantle (2);
- Finer black streaking below (ns[2])
- Wing (from BWP2) male 423 (7.6; n9) vs 447 (10.5; n15), effect size 2.62 (2).

Some Arabian birds (treated as *arabicus* in some places but synonymised with *aegyptius* in the Checklist) show some features of *migrans* (Forsman 2016).

**Taxonomic source(s)**  
 Handbook of the Birds of the World and BirdLife International. 2020. Handbook of the Birds of the World and BirdLife International digital checklist of the birds of the world. Version 5.  
 Available at: [http://datazone.birdlife.org/userfiles/file/Species/taxonomy/HBW-BirdLife\\_Checklist\\_v5\\_Dec20.zip](http://datazone.birdlife.org/userfiles/file/Species/taxonomy/HBW-BirdLife_Checklist_v5_Dec20.zip).



datazone.birdlife.org/species/factsheet/black-kite-milvus-migrans



Partnership for nature and people

# Data Zone


Search...

Species Sites (IBAs) Country Profiles Case studies Tools Request data Publications Citizen Science

**LC** Black Kite *Milvus migrans*

Summary Text account Data table and detailed info Distribution map Reference and further resources

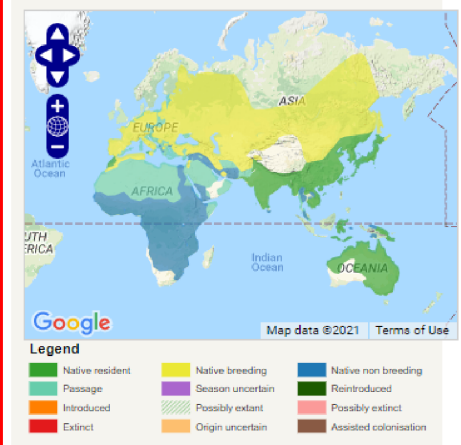
**Family:** Accipitridae (Hawks, Eagles)  
**Authority:** (Boddaert, 1783)  
**Red List Category**



Click [here](#) for more information about the Red List categories and criteria

**Justification of Red List category**  
 This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (extent of occurrence <20,000 km<sup>2</sup> combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). The population trend is unknown and therefore cannot qualify for Vulnerable under the population trend criterion (>30% decline over 10 years or three generations). The population size is extremely large, and hence does not approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in 10 years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.

**Population size:** 1000000-2499999



Legend

- Native resident
- Passage
- Introduced
- Extinct
- Native breeding
- Season uncertain
- Possibly extant
- Origin uncertain
- Native non breeding
- Reintroduced
- Possibly extinct
- Assisted colonisation

Distribution of *Milvus migrans*

datazone.birdlife.org/species/factsheet/black-kite-milvus-migrans/text



## Data Zone

Search...

- Species
- Sites (IBAs)
- Country Profiles
- Case studies
- Tools
- Request data
- Publications
- Citizen Science

### LC Black Kite *Milvus migrans*

- Summary
- Text account
- Data table and detailed info
- Distribution map
- Reference and further resources

#### Justification

##### Justification of Red List Category

This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (extent of occurrence <20,000 km<sup>2</sup> combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). The population trend is unknown and therefore cannot qualify for Vulnerable under the population trend criterion (>30% decline over 10 years or three generations). The population size is extremely large, and hence does not approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in 10 years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.

##### Population justification

In Europe, the breeding population is estimated to number 81,200-109,000 breeding pairs, equating to 162,000-218,000 mature individuals (BirdLife International 2015). Europe forms approximately 9% of the global range, so a very preliminary estimate of the global population size is 1,640,000-2,200,000 mature individuals, although further validation of this estimate is needed. It is placed in the band 1,000,000-2,499,999 mature individuals.

##### Trend justification

Despite being possibly the most common raptor in the world, the population has declined owing to poisoning, shooting, pollution of water and over-use of pesticides. Modernisation of urban environments and agricultural improvements are also thought to be causing declines locally (Ferguson-Lees and Christie 2001). However, in Europe the current population trend is stable or increasing in the three countries with the largest populations (over 90% of the total in the European Union) (BirdLife International in prep.). Outside Europe the overall trend is suspected to be overall stable: it is stable in India (State of India's Birds 2020), and has been increasing in Australia (Global Raptor Information Network 2020), but suspected to be declining in China and possible elsewhere in Asia (Global Raptor Information Network 2020).

#### Distribution and population

Very widely distributed, breeding from Australia to Spain and Morocco, with the northern extent of migratory breeders extending to northern Russia and Mongolia. Migratory over much of the Eurasian range, predominately wintering in sub-Saharan Africa. Present year-round in the Indian subcontinent eastwards through Myanmar, Lao PDR, Viet Nam, Cambodia and northern Thailand, China, the Republic of Korea, DPR Korea and far south eastern Russia, also Japan, Sulawesi and the Lesser Sundas (Indonesia), Papua New Guinea and Australia. Birds are seen on passage through central and southern Thailand and the Malaysian Peninsular, indicating that a proportion of birds in the eastern range are also migratory.

#### Ecology


**Behaviour** The species is mainly migratory, with birds from Europe and northern Asia wintering in sub-Saharan Africa and southern Asia. Those at lower latitudes do not tend to be full migrants (del Hoyo *et al.* 1994). Migrating birds leave their breeding grounds between July and October, arriving back between February and May (Ferguson-Lees and Christie 2001). It is generally a gregarious species, with birds often roosting communally and migrating in scattered flocks (del Hoyo *et al.* 1994, Ferguson-Lees and Christie 2001). **Habitat** It is found ubiquitously throughout habitats, although avoiding dense woodland, and is recorded foraging up to 4,000 m in the Himalayas (del Hoyo *et al.* 1994). **Diet** An extremely versatile feeder, it takes carrion as well as live birds, mammals, fish, lizards, amphibians and invertebrates, and is even known to forage on vegetable matter such as palm oil fruits; human refuse has become a plentiful food source in many areas (del Hoyo *et al.* 1994). **Breeding site** The nest is usually built on the fork or branch of a tree (del Hoyo *et al.* 1994). **Management information** The species has become highly commensal with people and thrives in human-dominated environments, but modernisation of cities appears to reduce its breeding success (del Hoyo *et al.* 1994, Ferguson-Lees and Christie 2001).

#### Threats

Context info on  
*Milvus migrans*



ot secure | datazone.birdlife.org/species/factsheet/yellow-billed-kite-milvus-aegyptius



Partnership for nature and people

# Data Zone


Search...

Species ▾ Sites (IBAs) ▾ Country Profiles ▾ Case studies ▾ Tools ▾ Request data ▾ Publications ▾ Citizen Science ▾

**LC** Yellow-billed Kite *Milvus aegyptius*


Summary | Text account | Data table and detailed info | Distribution map | Reference and further resources

**Family:** Accipitridae (Hawks, Eagles)  
**Authority:** (J.F. Gmelin, 1788)  
**Red List Category**



Click [here](#) for more information about the Red List categories and criteria

**Justification of Red List category**  
 This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (extent of occurrence <20,000 km<sup>2</sup> combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over 10 years or three generations). The population size is extremely large, and hence does not approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in 10 years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.



**Legend**

- Native resident
- Native breeding
- Native non breeding
- Passage
- Season uncertain
- Reintroduced
- Introduced
- Possibly extant
- Possibly extinct
- Extinct
- Origin uncertain
- Assisted colonisation

Distribution of *M. aegyptius*



Partnership for nature and people

## Data Zone

Search...

- Species
- Sites (IBAs)
- Country Profiles
- Case studies
- Tools
- Request data
- Publications
- Citizen Science

### LC Yellow-billed Kite *Milvus aegyptius*

- Summary
- Text account
- Data table and detailed info
- Distribution map
- Reference and further resources

#### Justification

##### Justification of Red List Category

This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (extent of occurrence <20,000 km<sup>2</sup> combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over 10 years or three generations). The population size is extremely large, and hence does not approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in 10 years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.

##### Population justification

In Europe, the breeding population is estimated to number 81,200-109,000 breeding pairs, equating to 162,000-218,000 mature individuals (BirdLife International 2015). Europe forms approximately 11% of the global range, so a very preliminary estimate of the global population size is 1,470,000-1,980,000 mature individuals, although further validation of this estimate is needed. It is placed in the band 1,000,000-2,499,999 mature individuals.

##### Trend justification

Despite being possibly the most common raptor in Africa the population is suspected to have declined, most likely due to poisoning, shooting, pollution of water and over-use of pesticides. Thiollay (2007) reported declines in observations from driven transects of 70% between 1969-73 and 2000-2004. In Botswana, a partial repeat in 2015 of road transects carried out in 2000 returned a non-significant decline of 28% for Yellow-billed Kite (Garbett *et al.* 2018). However, in the Western Cape, a dramatic increase was recorded from similar paired road transect surveys comparing those driven in the 1950s and 60s to repeats in 1997-98 (Herremans & Herremans-Tonnev 2001).

#### Distribution and population

Occurs virtually throughout sub-Saharan Africa, the Comoro Islands and Madagascar, and from coastal east Africa to Egypt and the south west Arabian Peninsular. Estimates of population size are largely lacking, but considered to be likely the most abundant diurnal raptor in Africa (Orta *et al.* 2020). While birds may be present in almost the entire range at almost any time of year (eBird 2020), there are clear movements of migratory breeders to the south in the austral summer, reaching southernmost points in August-September (Global Raptor Information Network 2020). In west Africa most arrive towards the end of the rainy season (Global Raptor Information Network 2020), but again birds are often observed throughout the year (eBird 2020).

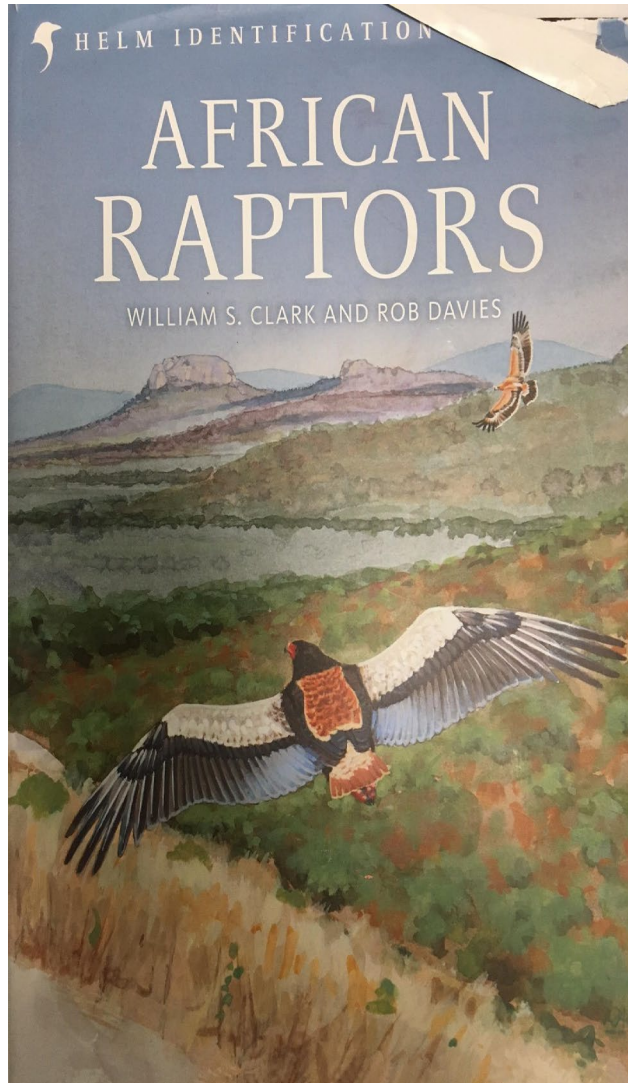
#### Ecology

**Behaviour** The species is mainly migratory, with birds from Europe and northern Asia wintering in sub-Saharan Africa and southern Asia. Those at lower latitudes do not tend to be full migrants (del Hoyo *et al.* 1994). Migrating birds leave their breeding grounds between July and October, arriving back between February and May (Ferguson-Lees and Christie 2001). It is generally a gregarious species, with birds often roosting communally and observed in scattered flocks (del Hoyo *et al.* 1994, Ferguson-Lees and Christie 2001). **Habitat** It is found ubiquitously throughout habitats, although avoiding dense woodland, and is recorded foraging up to 2,400 m in Malawi (Global Raptor Information Network 2020). **Diet** An extremely versatile feeder, it takes carrion as well as live birds, mammals, fish, lizards, amphibians and invertebrates, and is even known to forage on vegetable matter such as palm oil fruits; human refuse has become a plentiful food source in many areas (del Hoyo *et al.* 1994). **Breeding site** The nest is usually built on the fork or branch of a tree (del Hoyo *et al.* 1994). **Management information** The species has become highly commensal with people and thrives in human-dominated environments, but modernisation of cities appears to reduce its breeding success (del Hoyo *et al.* 1994, Ferguson-Lees and Christie 2001).

#### Threats

Info on the movements of *M. aegyptius*

Extract from Clark & Davies 2018 Which already recognised *M. aegyptius* - *Skip to red box*



We honour the memory of Leslie Brown, the father of African raptor study, who did so much to enhance our knowledge of raptors.

Rob Davies dedicates the artwork to his parents, Alan and Marilyn Davies, and to his son Laurence.

HELM  
Bloomsbury Publishing Plc  
50 Bedford Square, London, WC1B 3DP, UK

BLOOMSBURY, HELM and the Helm logo are trademarks of Bloomsbury Publishing Plc

First published in the United Kingdom 2018

Copyright © text by William S. Clark and Robert A. G. Davies, 2018  
Illustrations © Robert A. G. Davies, 2018

William S. Clark and Robert A. G. Davies have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as Authors of this work.

For legal purposes the Acknowledgements on page 3 constitute an extension of this copyright page.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without prior permission in writing from the publishers.

Bloomsbury Publishing Plc does not have any control over, or responsibility for, any third-party websites referred to or in this book. All internet addresses given in this book were correct at the time of going to press. The author and publisher regret any inconvenience caused if addresses have changed or sites have ceased to exist, but can accept no responsibility for any such changes.

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing-in-Publication data has been applied for

ISBN: HB: 978-1-107-65383-3; ePDF: 978-1-4729-2569-5; eBook: 978-1-4729-2570-1

2 4 6 8 10 9 7 5 3 1

Designed by Jocelyn Lucas and Julie Dando

Printed in China

MIX  
Paper from  
responsible sources  
FSC® C104723

To find out more about our authors and books visit [www.bloomsbury.com](http://www.bloomsbury.com) and sign up for our newsletters





**Black Kite, juvenile.** Shows pale head with dark area behind the eyes; wingtips of all extend to notch in long tail. Israel, April 1987 (W.S. Clark).



**Black Kite, juvenile.** Juvenile lacks the grey face and pale eyes of adult, but still shows shallowly-forked tail. Spain, August 2016 (Ivay Seminars/Burling the Strait).

**YELLOW-BILLED KITE**  
*Milvus (migrans) aegyptius*

Plate 4

**IDENTIFICATION** Yellow-billed Kite is a large, dark, long-winged and long-tailed raptor. Its buoyant flight on arched wings and flight silhouette with long, shallow-forked tail is distinctive. Adults almost always have a completely yellow bill. In flight they show a buffish bar across each upperwing. Most birds show whitish to buffish crescent-shaped to square primary panel on each otherwise dark underwing; dark barring in the panels is noticeable on close birds. Wingtips show five dark 'fingers' in flight (contra six on Black Kites) and reach beyond the central tail feathers to near the tail tip on perched birds. Shallow-forked tail tip appears square when fully fanned.

**MEASUREMENTS** Length: 43–55cm. Wingspan: 120–150cm. Weight: 560–950g.

**TAXONOMY AND GEOGRAPHIC VARIATION** *M. m. aegyptius* is resident in north-east Africa and south-west Arabia, and is a partial intra-African migrant south to East Africa. It is a bit brighter in plumage than *M. m. parasitus*, which occurs throughout most of sub-Saharan Africa. Considered by some as a separate species from Black Kite, but arguments for such are unconvincing (See Brooke 1974 and Crockett 2005). Johnson *et al.* (2005) advocate this as a separate species but present only DNA results and no morphological or other taxonomic justifications. Black Kite is nevertheless treated in a separate account here.

**SIMILAR SPECIES** **Black Kite** (Plate 4) Very similar. Adult usually distinguished by dark bill, but some adult Yellow-billed have dusky rather than yellow bills. Adult Black always has a white face, with white extending onto the upper breast. Some adult Yellow-billed have white on the front of the face. Juveniles are very similar but Black has an all-black bill and usually a dark area behind the eyes, whereas most Yellow-billed show a paler area at the base of dark (not black) bill. Black juveniles are usually more heavily streaked on their underparts. Black shows six dark 'fingers' on wingtips in flight; Yellow-billed shows five. On average, Yellow-billed has a deeper notch in the

tail and wingtips that extend further towards the tail tip compared with Black, but neither character is useful in distinguishing them.

**Red Kite** (Plate 4) Similar silhouette, including forked tail, but is larger, more rufous, longer-winged and longer-tailed; appears overall more slender and its tail is much more deeply forked. Adult's head is completely whitish. Wing panels on underwings are larger, whiter and less heavily barred. Wingtips almost reach tail fork on perched birds.

**Western Marsh Harrier** (Plate 14) Juvenile and adult female in flight can appear similar, even having pale underwing panels (adult female), but they lack the yellow bill, forked tail, and pale bars on the upperwing, and they hold their wings level, not arched.

**Booted Eagle** (Plate 39) Dark or rufous morph soaring or gliding can appear similar, even having pale median upperwing bars and arched wings, but they show white uppertail-coverts, the pale panel in the primaries is restricted to the inner primaries, and they show white



*Milvus*

'headlights' at the base of the forewing, and a yellow bill and forked tail. They also lack a yellow bill and forked tail.

**STATUS AND DISTRIBUTION** Fairly common in open areas of most of sub-Saharan Africa, and migratory in the west and central Sahel and savannah belt with the rains, and in southern Africa with the seasons. Subspecies *aegyptius* occurs locally along the Nile River in Egypt and in north-east Africa, and is a partial intra-African migrant, reaching south to East Africa.

**HABITAT** Occurs in a variety of habitats, usually near water, but absent from extensive forests and pure desert. They occur regularly in human settlements.

**BEHAVIOUR** Yellow-billed Kites are wonderful fliers, often remaining airborne for hours without a wingbeat. Their graceful flight is usually with few wingbeats but with constant minor adjustments of the wings and twisting of the tail. Powered flight is with slow, almost floppy wingbeats of somewhat flexible wings. Soars with wings somewhat arched; glides with wings more arched.

They take a wide array of food, including birds, mammals, insects, reptiles, and especially fish, but also garbage, refuse, and offal. They will chase each other or smaller raptors, or even other birds, trying to steal a morsel. Food is often snatched from the ground or water surface without alighting after a short steep dive,

where food is readily available (e.g. rubbish dumps, insect warms, mammal outbreaks).

They are somewhat vociferous, particularly when interacting with each other. Their drawn-out tremulous call can be heard for some distance.

They prefer to build their nests in trees, usually near water bodies. They nest singly or in loose colonies of up to 80 pairs.

They form communal night roosts of up to thousands, often with Black Kites, gathering at roost sites in the afternoon and soaring about, sometimes climbing out of sight. They usually come into the roost before dark, but some birds do not enter until long after dark.

**MOULT** Annual moult is usually complete, except for the remiges, resulting in primary wave moult. Juveniles begin preformative moult when almost a year old and at the same time as adults.

**DESCRIPTION** *M. m. parasitus* and *M. m. aegyptius* Similar to Black Kite; differences are described below. Sexes are alike in plumage; females are noticeably larger. Juvenile plumage is different from that of adult. Cere and legs are yellow. Pale primary panels on the underwings are less distinct than those of Black Kite. **Adult parasitus** are less distinct than those of Black Kite. **Adult aegyptius** Head is usually overall dull brown, but some show whitish



**Yellow-billed Kite, adult with dark bill.** A few adults lack yellow bill; adults usually lack grey on the face. South Africa, February 2008 (Johann Knobel).



**Yellow-billed Kite, adult.** Has yellow bill, head lacking grey, rufous on underparts and wing linings, and forked tail; note the paler primary panels and short legs. South Africa, December 2010 (Dieter Haas).



**Yellow-billed Kite, juvenile.** Has dark bill, dark head and streaked underparts. South Africa, February 2014 (Hugh Chittenden).

at the base of the bill. Upperparts are dull brown with paler median coverts forming a pale wing-bar on the upperwings. Upperside of flight feathers is dark brown. Underparts are dull brown, with narrow black shaft streaks on the breast and a rufous wash on the belly, leg feathers and undertail-coverts. Tail is brown above and whitish below, with narrow dark brown banding. Eyes are dark to medium-brown. Bill is usually bright yellow, but rarely is horn-coloured. **Juvenile parasitus** Similar to adult. Has pale brown head with dark brown shaft streaks, broad pale shaft streaks on the breast, and whitish feather edges to the wing-coverts and back; upperparts appear more speckled than those of adult. Dull brown underparts show broad buffish streaking.

## RED KITE

*Milvus milvus*

Plate 4

**IDENTIFICATION** Red Kite is a very large rufous kite which in Africa is restricted to the extreme north-west. Its buoyant flight on long, arched, narrow wings and flight silhouette with long, deeply forked tail are distinctive. Whitish head, large square white primary panels on the underwings, rufous body and deeply forked tail are diagnostic. Wingtips show five 'fingers' in flight and barely reach the tips of the shortest (central) tail feathers on perched birds.

**MEASUREMENTS** Length: 60–68cm. Wingspan: 154–170cm. Weight: 750–1600g.

**TAXONOMY AND GEOGRAPHIC VARIATION** Now considered monotypic, as *M. m. fasciicauda* on the Cape Verde Islands is thought to be extinct. No geographic variation.

**SIMILAR SPECIES** Black Kite (Plate 4) Similar silhouette and flight style. See under that species for distinctions.

**STATUS AND DISTRIBUTION** Rare resident in northern Morocco and locally in coastal Algeria and Tunisia. Winter migrants from Europe cross into Morocco and from Eurasia into Egypt in small numbers, and vagrants have been reported as far south as The Gambia, Senegal, Niger and South Sudan.

**HABITAT** Occurs in open woodland and adjacent open areas.

**BEHAVIOUR** Red Kites are superb flyers and appear elegant on the wing, spending much of their time in foraging flight, effortlessly using whatever wind is available to remain airborne, often without a wing flap, but with constant adjustment of the wings and twisting of the tail. Powered flight is with deep slow wingbeats of flexible wings. Soars with wings somewhat arched; glides with wings more arched. They are less gregarious than are Black Kites. However, small groups will gather at abundant food sources, e.g. rubbish dumps and slaughterhouses. They are opportunistic and take a wide spectrum of food by predation, scavenging and piracy. They regularly take offal, carrion and all manner of material from rubbish dumps. Food is often snatched from the ground without alighting after a short, steep stoop, after which the kite rises rapidly.

Pale underwing panels on the primaries are not very distinct and are usually larger than those of adult. Eyes are dark brown. **Adult aegyptius** Very similar but averages brighter in plumage.

**UNUSUAL PLUMAGES** None have been reported.

**HYBRIDS** None have been reported.

**ETYMOLOGY** *Milvus* is Latin for 'kite'; *migrans* is Latin for 'migrating', *parasitus* is apparently from its piratical taking of prey from other birds (parasitising), and *aegyptius* is for Egypt.

**REFERENCES** Brooke 1974, Crockett 2005, Johnson *et al.* 2005.



They usually nest singly, building their nests in trees and defending the immediate nest area. They lay usually 1–3 eggs.

Red Kites form small communal night roosts during the non-breeding season and migrate in small groups (which may be family groups). They join Black Kite winter night roosts in some areas.

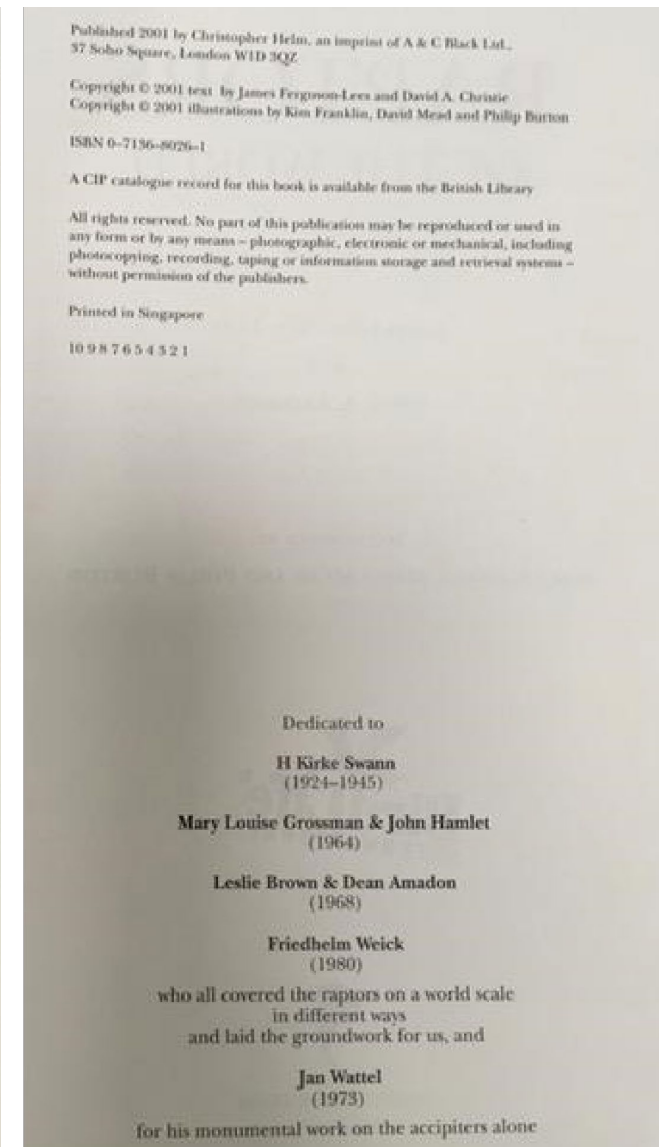
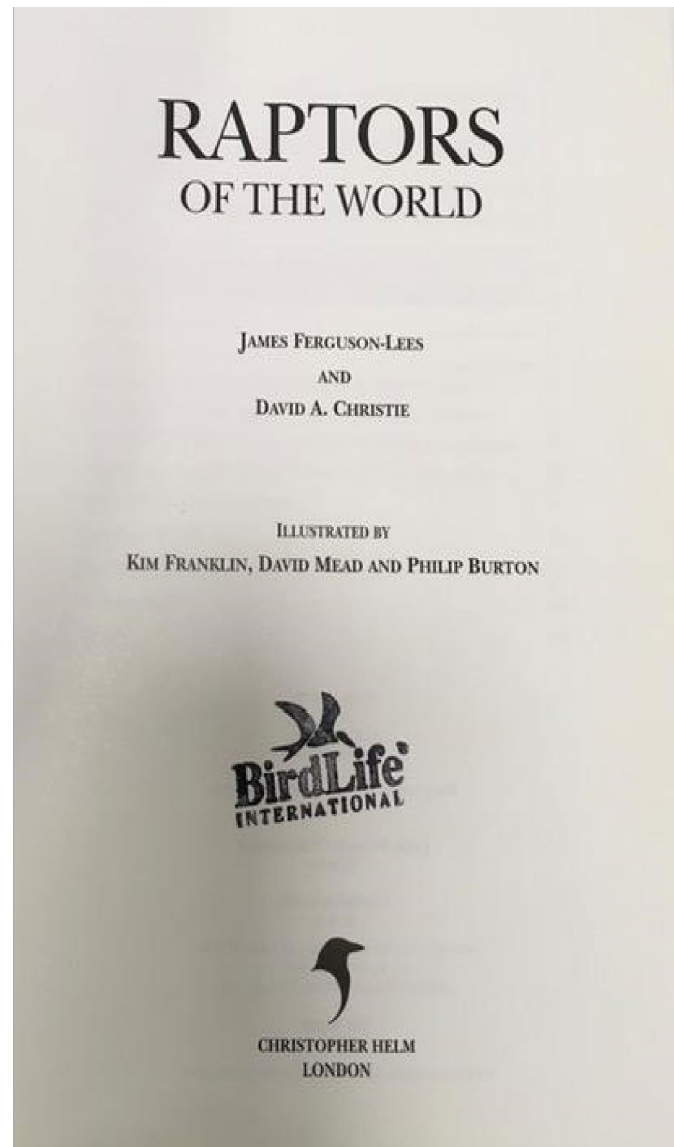
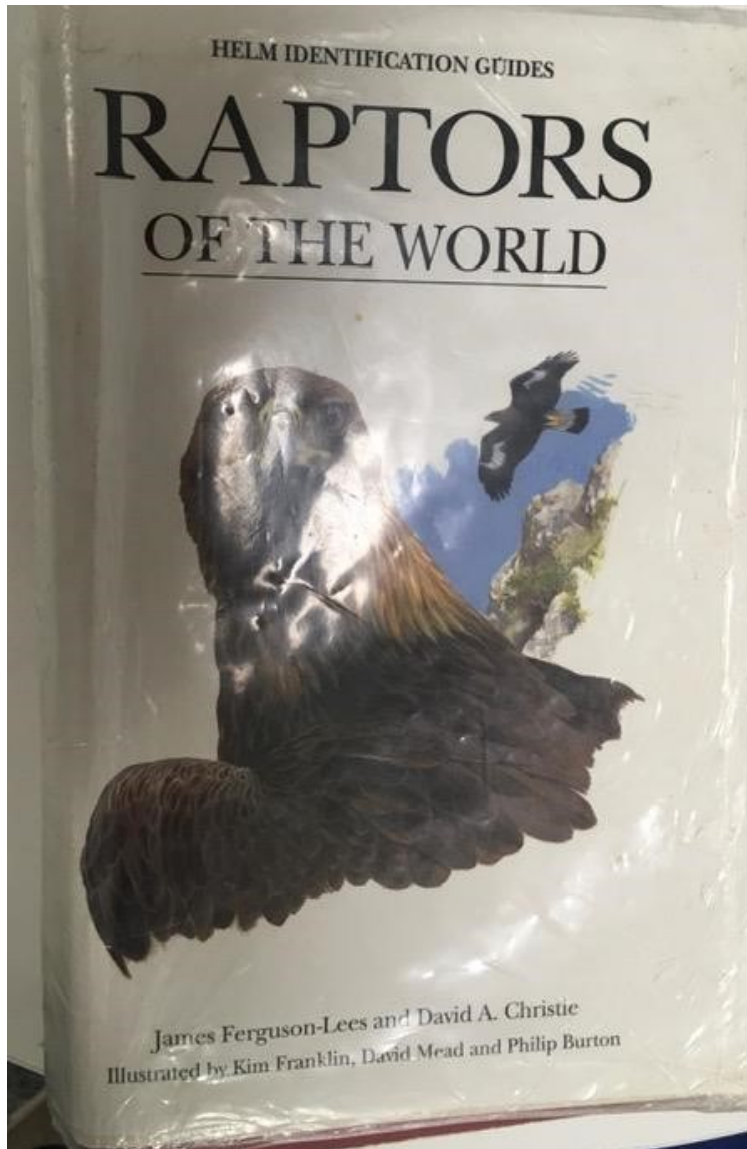
They vocalise much less than Black Kites; usually only resident pairs call when breeding.

**MOULT** Annual moult is complete, except for the remiges, resulting in primary wave moult. Preformative moult begins in the spring of the second year.

**DESCRIPTION** Sexes are alike in plumage; females are noticeably larger. Juvenile plumage is different from that of adult. **Adult** Head and neck are whitish with narrow black shaft streaking on the face and heavier, wider black shaft streaking on the crown and nape. Dark brown back feathers have rufous edges. Upperwing-coverts are dark brown with broader rufous edges; paler median coverts form a pale bar across each upperwing. Upperside of flight feathers is dark brown. Uppertail and uppertail-coverts are bright rufous; outer tail feathers have blackish tips. Underparts are rufous with prominent black shaft streaking on the breast and belly, but not on the leg feathers and undertail-coverts.



Extract from Ferguson-Lees & Christie (2001) which recognised *Milvus migrans aegyptius* as a race only Skip to red box



Observations in 1990s identified goat carcasses and large grasshoppers as favoured food. Probably opportunist predator like congeners.

**SOCIOSEXUAL BEHAVIOUR** Now usually seen singly. (Said formerly to concentrate at rubbish tips, sources of fish-offal, and tideline flotsam, but much past confusion with Black Kite [39].) No descriptions of aerial displays.

**BREEDING** Few data, and no nest actually recorded since one on São Nicolau in 1968. Apart from one October record (B&A), January–June (mostly March onwards). Stick nest on cliff or rock ledge. Clutch 2–3. No information on incubation or fledging.

**POPULATION** In 1950s reported as ‘common everywhere, especially about the slums in the towns and along the shore’, but the co-existence of Black Kites [39] was not understood at that time. It can be argued that there is only one certain record (male and female specimens, October 1924) for São Vicente, where the habitat is mostly flat, dry and barren, leaving evidence of established presence of Cape Verde Kites on the only four mountainous (and mostly larger) islands with areas of lush vegetation. These total under 2,200 km<sup>2</sup> (one-third less than the area of central Wales that held 177 pairs of Red Kites in 1997: p.379) and it seems unlikely that the population was ever higher than three figures. In the late 1980s it was put at only 50–100 birds (including hybrids), and in the mid 1990s at ‘some tens of pairs’, confined to the two largest islands, with the bulk apparently centred in the wild and rugged southwest hinterland of Santo Antão, in mountains and ravines behind the coastal townships of Monte Trigo and Tarrafal; it was considered rare in interior Santiago (where its status and the involvement of hybrids far from clear), and extinct everywhere else. But even those recent estimates probably far too high: in 1996 and 1997, the first complete censuses of kites ever conducted in the archipelago located only four to six Cape Verde Kites, all on Santo Antão and one of them in the southwest, while a further thorough search in 1999 produced just two, one in the north and one in the south of that island (in same surveys, three to five Black Kites found in 1996–97 and only one in 1999). Conservation of this threatened endemic should be a priority on Santo Antão, but almost certainly already too late to save it from extinction.

Though a few Black Kites had been collected on the islands long before the specimens of Cape Verde Kite from which this endemic taxon was first described in 1914, it was until the 1960s generally assumed that all

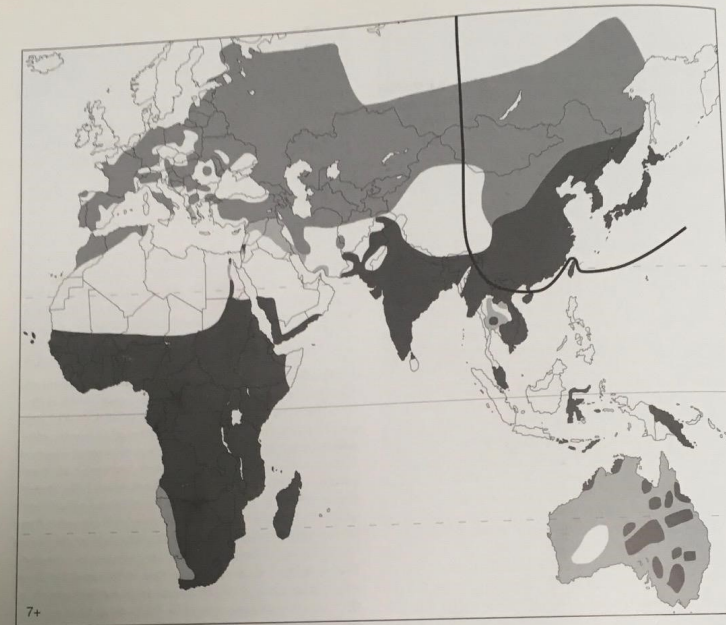
kites there were the same species. Then the endemic was ‘found only (and alone) in the extreme northwest [Santo Antão and São Nicolau],... having been driven back recently by the expanding [Black Kites]’ (de Naurois). These Black Kites, being of ancient Palearctic stock, were probably long established on the easternmost islands and only relatively recently spread westward, but they too are now all but extinct and the other Cape Verde scavenging raptors are also now declining throughout these islands: one very likely cause is the widespread practice of trying to reduce the numbers of feral dogs and cats by putting out poisoned meat in towns and villages and then dumping the carcasses (‘up to 50 at a time’) in the open countryside. This and the widespread use of rodenticides, changes made in the landscape and in the keeping of livestock by an increasing human population, and consequent shortage of food, combined with human persecution, appear to have driven both kites to the brink of extinction in the Cape Verdes.

**GEOGRAPHICAL VARIATION** Monotypic. Generally treated as race of Red Kite [37], but significantly different from that otherwise monotypic species in size, proportions and various aspects of plumage and behaviour, and clearly far longer isolated than the (now extinct) Canary Islands population. Also thought to have interbred with later-colonising Black Kites [39], resulting in at least F<sub>1</sub> hybrids, but this now being questioned (Hille & Thiollay). Because this species is intermediate in character between the other two *Milvus* kites, because the differences between those are greatest where they are sympatric in the western Palearctic, and because Black Kites elsewhere show certain characters which in Europe are features more of Red Kite (e.g. bold whitish windows, redder underparts, yellow on bill), the Cape Verde Kite may represent a relict population closer to a common ancestral stock (see de Naurois, Hazevoet). Cape Verde Kite treated here as forming a superspecies with Red Kite.

**MEASUREMENTS** ♂ wing 420–475 mm, ♀ 434–482 mm; ♂ tail 280–337 mm, ♀ 268–350 mm; ♂ tarsus 49–60 mm, ♀ 53–60 mm (measurements of 25 specimens: Cj Hazevoet). **Weights** No data.

**REFERENCES** Alexander (1898), Bannerman & Bannerman (1968), Barone & Delgado (1999), Bourne (1955, 1986), Chrabryj *et al.* (1989), Collar (1996), Cramp & Simmons (1980), de Naurois (1969, 1972, 1984, 1987), Hartert (1914), Hartog (1990), Hazevoet (1995, 1996, 1997, 1999a/b), Hazevoet *et al.* (1996), Hille (1998), Hille & Thiollay (in press), Madge (1985), Ortlieb (1988, 1997), Sangster (2000), Summers-Smith (1984), Vaurie (1965).

yan and Australasian (67°N to 38°S), but absent from New World; order 7+; despite declines (especially of highly migratory nominate race in northwest Africa, much of Europe and western Asia), still abundant in Africa and southern Asia, and probably commonest raptor in world terms. Breeds throughout much of sub-Saharan Africa east into the Comoro Islands, Madagascar and



southwest Arabia, west into the Cape Verdes (where now all but extinct) and north up Red Sea and Nile valley into Egypt; in northwest Africa (north Morocco, northernmost Algeria, northwest Tunisia) and most countries of continental Europe (north to 64–66°N in European Russia, but very rare and local, irregular, or old records only, along northwestern fringe from Belgium through Netherlands and Denmark into Fennoscandia, and absent except as migrant from Mediterranean islands) and across much of mainland Asia (north to 59–67°N in Russia as far as Okhotsk, but missing from deserts of western China and surrounding highest mountains, and very local in much of Middle East and Arabia through to Iran); also in southern Kurile Islands, Japan, Taiwan, Hainan, Andaman Islands and Sri Lanka; and, after gap (absent Greater Sunda and Philippines), locally in Sulawesi, Lesser Sunda (Lombok to Timor), easternmost New Guinea, New Britain, and northern and central Australia.

**MOVEMENTS** Most Eurasian populations migratory, or largely so, except those of southern and eastern Asia south of line from east Pakistan and Himalayas northeast through China and Korea to southern Ussuriland and Japan, which sedentary or, at most, make pre-monsoon movements or disperse locally according to availability of food. Birds of the nominate European race, including those of westernmost Siberia (see Geographical Variation), leave mainly in August (July–September) and winter almost anywhere – except dense forest – in sub-

Saharan Africa south to Cape Province, where they appear in October, and, departing north again in February, mostly arrive back in April (end February–May); a few remain in Mediterranean region and rather more (probably from westernmost Asia) in Middle East down to southern Arabia. In general, other Asiatic birds do not leave until late August–early September (August–early October) and winter mainly in southern Asia from east Pakistan eastwards, but some as far west as southern Iraq and Iran. In Australia, population varies from sedentary or partially migratory to eruptive in response to drought, heavy rains or food shortage, then occurring in many non-breeding areas; it may be that many or all Black Kite records from Lesser Sunda relate to migrants moving north from Australia. Indian birds similarly move in relation to monsoon seasons, but migrations of native African populations more complex: in broad terms, while some present in many areas throughout year and breeding does occur in West Africa in March–June, most breeding is in September–March, more northerly birds move down to about equator southwards around August–October and return north again by March, and southernmost breeders correspondingly move north to equatorial East Africa after breeding. Spectacular migration movements can be seen at either end of Mediterranean and across Sicilian Channel, west and east of Black Sea, and through Himalayan passes and gorges: often these take form of seemingly endless streams of singles and small groups, rather than big flocks. In Gibraltar region, 40,000–60,000 pass through

### 39 BLACK KITE *Milvus migrans* (Boddaert, 1783)

Plate 7

Other names: Black-eared/Eared/Large Indian Kite (*Asiatic lineatus*), Pariah/Small Indian Kite (*Indomalayan govinada*), Fork-tailed Kite (*Indonesian and Australasian affinis*), Yellow-billed Kite (*African aegyptius* and *parasitus*), Common Kite.

**DISTRIBUTION** Afro-Malagasy, Palearctic, Indomala-



each autumn (over 13,000 have been recorded on one day) and, according to wind direction, others may be up to 100 km or more west or east of narrowest crossing; at Cap Bon, Tunisia, two- and three-week March–May counts have totalled 2,400 and 4,200; in Israel, highest spring total at Eilat has been 36,680 (including 20,450 on one day), while highest autumn total at Kafr Qasim only 1,195 (cf. Western Honey-buzzard [18]); at Arhavi and Borcka in northeast Turkey, 50-day autumn total of 5,575 included 1,217 on 30th August; in Bhutan, several hundreds passed down one gorge in half an hour and the stream was continuing (Ludlow 1937). Most immatures of Eurasian populations travel no farther north than the south of the breeding range in their first summer. Vagrants have occurred north to Scotland, Denmark and Norway and, in eastern Asia, east to Kamchatka and Nansei-shoto, and southeast to Palawan (Philippines), Borneo and Sumatra.

**HABITAT** Very varied, if most typical of lowland and foothill areas, especially wetlands, river edges, estuaries and coasts, and villages, towns and, regionally, big cities, as well as cultivation, savannah and woodland; not in dense forest or, except on migration, pure desert, but sometimes in open forest or clearings, and in semi-desert or around nomad encampments. Sea-level to 4,900+ m over range as whole, but mostly below 1,000 m in Europe, foraging to 2,000 m or, in Caucasus, even 3,000+ m; in Africa breeds at up to 3,000 m and in Himalayas 4,900 m, occurring even to 5,300+ m.

**FIELD CHARACTERS** Largish and relatively stocky kite, mainly dingy brown to blackish but for often paler head and some rufous below, with fairly heavy bill, longish wings and shallow-forked tail (fork often less obvious on juvenile), and rather short weak legs, tarsi half-feathered at front. Often gregarious; perches upright on trees, posts or buildings, or stands horizontally on ground; walks, hops or runs; wing-tips near to tail-tip in northern migratory populations, but hardly reach base of fork in southern tropics. Sexes similar, and female averages only 2–6% larger (different races) and 10–17% heavier; juvenile distinguishable; as adult after completion of moult towards end of first year.

**PERCHED ADULT** In different populations, ground colour of dark-streaked head varies from greyish-white, with or without rufous tinge, to brown, or crown darker and forehead and face paler with variably obvious dark eye-patches through to ear-coverts (see Geographical Variation); otherwise all dark brown above, with lighter feather-edges, except for dark-streaked paler wing-panels, fairly to very conspicuous in different races, formed by median and, to different extents, lesser wing-coverts; primaries contrastingly blacker; tail inconspicuously barred; underbody more or less tinged rufous with fine dark shaft-streaks. **Juvenile** Somewhat paler and more contrasted, particularly in fresh plumage, though individually and, again, racially variable; ground colour almost as dark brown as adult, but crown, hind-neck, breast and flanks made paler by white to creamy spots and shaft-streaks, while blackish primary and greater coverts and flight-feathers, and more heavily barred tail, all have thin whitish tips; sometimes white streaks on top of head predominate so that, with pale cheeks, whole head looks whitish but for dark eye-patches, which generally stronger than on adult; wing-

panels usually more extensive and more obvious, particularly in fresh plumage, when most rufous and all gradually whiten and later abrade; even in worn plumage, underbody paler than adult, without rufous, and belly and crissum palest of all. **Bare parts** Adult eyes to grey-brown. Cere yellow; bill usually black over most of range, but lower mandible may be more or less yellow (see Geographical Variation). Adult legs yellow to orange-yellow, juvenile yellow.

**FLIGHT** Dark medium-sized raptor, compact yet quite slender, with small head, longish narrow-looking wings (usually six clear fingers, but juvenile may show only five) and shallow-forked tail (notched when closed, almost straight-ended when spread); wingspan 2.4 times total length. Buoyant floppy flight with slow beats, wings often rowed and flexed independently, tail twisted and spread, body moving up and down; glides and soars on flatish or somewhat bowed wings, often wrists forward, combining with down-pointed head to give distinctively hunched look; occasionally hovers briefly and clumsily. **Adult** Dingy brown to dark brown above, rather uniformly so apart from variably contrasting and often diffuse inner wing-panels of lighter brown, and obscure pale windows behind blackish fingers, in different races, streaky head may or may not look greyish, or show paler face or dusky mask or, in Africa, have yellow bill (see previous paragraph and Geographical Variation); apart from this head variation, also rather uniformly dusky below, with more or less rusty tinge to underbody, but tail paler with indistinct dark barring, and primary-windows varying from almost invisible, except from directly underneath, to nearly as conspicuous as on Red Kite [37]. **Juvenile** Generally less uniform than adult, at least until pale feather-tips wear off: top of head variably streaked whitish, dark mask usually conspicuous, diagonal upperwing-panels larger and more obvious, pale lines along tips of greater and primary coverts, as well as along tips of flight-feathers and tail; below, brown breast and flanks streaked and spotted with cream, contrasting with pale throat, belly and crissum (though note belly and crissum can also be lighter on adult of eastern Asiatic race *lineatus*); undertail two-toned, paler and more obviously barred at base, in contrast to broad dark subterminal band and thin whitish tip; underwings generally look darker than body, although linings tipped pale rufous-buff, white lines along greater and primary coverts, and often larger and more obviously dark-barred whitish windows.

**CONFUSION SPECIES** Generally not difficult to identify, but in West Palearctic some juveniles in strong light can look rufous enough to be mistaken for young Red Kite [37] (which also see): this applies especially in Middle East, where wandering immatures of longer-tailed and bolder-windowed Asiatic race *lineatus* and deeper tail-forked and more rufous-bodied Arabian race *aegyptius* may occur (but Red slimmer, more elegant, with longer, narrower, five-fingered wings and longer, more clearly forked tail which, even as juvenile, looks reddish above and paler and more uniform below apart from dark distal corners). In Eurasia and Africa, otherwise, dark-morph Booted Eagle [230] (more compact

build, heavier head and bill and feathered tarsi when perched, but in flight can look very similar at distance, not least because of upperwing pattern, but tail squared when folded, rounded when spread, uniform in colour above and below, and paler than rest of underside, also white 'lamps' beside heavier head, whitish U on upper-tail-coverts, pale wedge on inner primaries below) and all-dark immature Northern Marsh Harrier [100] (more pointed wings always distinctively raised in shallow V when gliding or soaring, slightly rounded tail) need to be distinguished; in Africa alone, especially also darker morphs of Wahlberg's Eagle [229] (small-eagle shape, baggy thighs and feathered tarsi when perched, 'crossed planks' in flight with narrow parallel-edged wings at right-angles to well projecting head and long narrow tail usually folded with squared or slightly rounded tip) and, only when perched, just possibly juvenile Grasshopper Buzzard-hawk [159] (white throat, dusky moustaches, almost invariably some rufous showing in wings, which reach tail-tip). In east and southeast Asia, similarly, the other three *Butastur* buzzards [160–162] can look slightly kite-like at rest, while from India and south China to Australia juvenile Brahminy Kite [41] (tips reach end of shorter rounded tail, broader wings with no pale panels above) must also be borne in mind. In Australia and New Guinea, however, main confusion species are Whistling Kite [40] (paler, or more spotted above, with grey cere and creamy feet, broader and more rounded wings with different underpattern, and rather plain pale tail well rounded) and dark-morph Little Eagle [231] (stockier, with heavier bill and head, feathered legs and big feet, shorter primaries and shorter squared tail); although sometimes Black misidentified as Square-tailed Kite [35], latter very different (including strikingly long wings—especially hands—exceeding tail-tip when perched, and raised harrier-like in gliding flight, showing barred fingers and plain white windows below). Except for Brahminy and Whistling Kites, all confusion species normally solitary.

**VOICE** Often noisy, not only in pre-breeding and nesting seasons, but also in prolonged active post-breeding period in situations varying from contact between pair-members (sometimes duetting) to, at any time, intra- or interspecific conflicts at food, daytime loafing sites or roosts. Basic call is long-drawn mewling squeal, *klee-errrrrrr*, downslurred with essentially peevish gull-like quality, but, according to mood and circumstances, varying in volume, emphasis, pitch and tone; *pee-pee-pee...* notes may be substituted for second part or, in aggression, harder *kik* or *hi* in similar series. Quality may vary from squeal or whistle to quavering trill or whinny.

**FOOD** Varies seasonally, regionally and individually. Readily attends carrion of all sizes, often preceding vultures at larger carcasses, and dense urban concentrations of kites depend largely on mammal- and fish-offal, human food scraps and other garbage. But also takes wide variety of live prey—many small rodents and other mammals (to size of young rabbits and hares), terrestrial and wetland birds and their young, lizards and snakes, amphibians, fish, insects, earthworms, molluscs and crustaceans—and in West Africa frequently eats pericarp of oil palms *Elaeis*. Versatile, agile and dextrous: forages mainly in flight, low or fairly low, at 10–90 m,

suddenly swivelling around and swooping down to snatch up almost anything edible from ground, water, tree or busy street: piece of offal, dead or live mouse or small bird or frog or fish, or, more particularly in India and Africa, items from market stalls, food in pots or baskets carried on people's heads, even sandwiches from picnicers' hands. Follows fishing boats and larger ships in river mouths or close inshore for offal or scraps; also snatches live fish in shallow water. Attracted to bird colonies: forages among seabirds for scraps of fish, or eggs or young, or snatches whole nests of weavers. Occasionally chases and even catches smaller birds in flight, or harasses other raptors to force them to drop prey, and recorded snatching fish or disgorged material from herons, ibises, storks, even Giant Kingfisher *Megaceryle maxima*. Insects, especially termites and orthopterans, also dragonflies and beetles, are caught and eaten on the wing, or may be picked up on foot, especially by termite mounds or in vicinity of grass fires.

**SOCIOSEXUAL BEHAVIOUR** Usually gregarious, especially when feeding or roosting (sometimes thousands together); may breed solitary, especially in Europe, but often in loose groups, and in tropics sometimes densely concentrated in urban areas, with nests separated by only few metres; also tends to migrate in scattered flocks or long streams, though sometimes singly. High-circling frequent by flocks, pairs or single birds, but other aerial displays limited to slow-flapping by pair, male diving at female, and occasional talon-grasping sometimes developing into mutual cart-wheeling down almost to ground or trees.

**BREEDING** With breeding range spanning 105° from north to south, wide range of dates: temperate Eurasia mainly March/April–July/August, but February onwards at latitudes of Egypt, Assam and south China; tropical Africa December–June in north, August/October–February/March in south, and almost year round near equator; in peninsular India September–April, but December onwards in Sri Lanka; Australia December–August in north, July–February in south. Compact but untidy platform of mainly dead sticks and twigs, often based on old nest, typically 45–70 (30–90) cm across and 30–45 cm deep, lined and decorated with rags, paper, plastic, wire, dung, wool, bones and other rubbish, rarely greenery, at 5–30 m on branch, fork or crown of any tree, singly or at woodland edge, sometimes on ledge or emergent bush on cliff, occasionally on pylon or, locally, building. Clutch 2–3 (1–5). Incubation 25–38 days. Fledging 42–56 (66) days; independence 15–50 days later.

**POPULATION** Probably still world's commonest raptor, though suffering, particularly in Europe, parts of Asia and the Mediterranean region, from carcass poisoning, agricultural pesticides and water pollution, as well as centuries of shooting. Breeding distribution extends over 65–70 million km<sup>2</sup> in more than 100 countries on four continents. National estimates between late 1970s and early 1990s seem to suggest European breeding population of 80,000–90,000 pairs, of which three-quarters in European Russia, perhaps 9,000 in Spain (put at 25,000 in 1970s) and 5,800–8,000 in France, with Germany, Switzerland and Italy the only others believed to have more than 1,000 pairs apiece. These numbers are not



particularly large, but suggest that some 250,000 birds may move south from Europe into Africa in autumn and perhaps 200,000 return in spring (though these are higher figures than indicated by maximum counts at migratory funnels: see Movements and cf. Western Honey-buzzard [18]). If we assume that the population of Palearctic Asia is at least as large as that of Europe – the species is common across to Japan – we may have a zoogeographical pre-breeding total of at least 400,000. In areas of Europe where species reasonably common, recorded densities have varied from 1.4 pairs/km<sup>2</sup> in Switzerland (with local concentrations up to 17 pairs/km<sup>2</sup>) and 2 pairs/km<sup>2</sup> in Germany to 8.6 pairs/km<sup>2</sup> in Russia. The species is also widespread and reasonably common in Australia (e.g. 47 pairs occupied 20 km of floodplain, flocks of up to 2,800 recorded), but it is in sub-Saharan Africa and the Indian subcontinent that it is really common. Few data on densities or numbers are available, and it has to be remembered that these more southerly populations are usually breeding, often in concentrations, at much the same time as the Palearctic migrants are present, which means that impressions of abundance are increased. Yet in Delhi, India, in 1968–69 it was calculated that around 2,400 pairs were nesting in 150 km<sup>2</sup>: the average was thus about 16 pairs/km<sup>2</sup>, but in the old city the density was 50–80 pairs/km<sup>2</sup> and in the new development (now New Delhi) less than 2 pairs/km<sup>2</sup>. Thus, as cities are modernised, the habitat becomes much less suitable: in Istanbul, Turkey, 500 pairs in 1990s were reduced to 10 pairs in 1970s. Urban areas are by no means the only breeding sites, but it is adaptability to artificial environments that has made this kite so successful and, as towns lose their old character and farming methods change, so it is likely to decrease. Now almost extinct on Cape Verde (see discussion under Cape Verde Kite [38]).

**GEOGRAPHICAL VARIATION** At least 12 races named, including 'reichenowi' and 'arabicus' referred to below under *M. m. migrans* and *M. m. aegyptius*, but usually not more than eight recognised and here only six.

*M. m. migrans* (almost entirely migratory in north-west Africa, Europe and west Asia east roughly to Pechora, Kazakhstan, Kirgizstan, Afghanistan and Baluchistan, wintering mainly in subtropical Africa but also Mediterranean area through Middle East to Pakistan and perhaps northwest India; sedentary relict population on Cape Verde now nearing extinction) As above; tail-fork 20–35 mm.

*M. m. lineatus* (chiefly migratory in central and east Asia south to Himalayas and northern Indochina, wintering in south Asia, but sedentary in Japan, far east Russia, Korea and China southwards) Largest race; browner on crown and underbody, contrasting creamy-buff belly and crissum, large white patches on underwings.

*M. m. govinda* (mainly sedentary in Indian subcontinent, including much of Pakistan, Sri Lanka and east through Burma and Thailand to southern Indochina, wandering south to peninsular Malaysia) Averages smaller than *migrans* or *lineatus*; intermediate in plumage, including wing-patches, but crown more rufous.

*M. m. affinis* (largely sedentary in Sulawesi, Lesser

Sundas, east New Guinea, New Britain, and north and central Australia, wandering farther south in Australia) Smallest race, barely overlapping sex for sex, with any other; rather uniformly dark brown apart from pale face, clear diagonal on underwings.

*M. m. aegyptius* (largely sedentary in Sinai, Nile valley and both coasts of Red Sea, wintering south to Sudan and, perhaps chiefly on coast, Kenya) Averages smaller than European birds, but same size as northwest African population of nominate *migrans* (formerly separated as 'nichnawi'), and tail-fork 30–45 mm; more uniformly brown head and neck, more rufous underbody, more distinctly barred tail; adult bill usually all yellow (juvenile black), but in still smaller birds of southern Arabia and north Somalia, at least migrating south to coastal Kenya ('arabicus'), 'varies individually from yellow to blackish' (Vaurie). *M. m. parasitus* (sub-Saharan Africa, also Comoros and Madagascar, with strong seasonal intracontinental movements north and south) Smaller than typical *aegyptius*, with tail-fork 30–46 mm; more cinnamon-rufous below; adult bill always yellow.

These last two small, yellow-billed, deeper-torted and less streaky forms are sometimes treated as a species distinct from the black-billed populations of Eurasia (but see comments on 'reichenowi' and 'arabicus'). The large eastern Asiatic *lineatus* has also been considered a separate species, but it has wide zone of intergradation with nominate *migrans* in western Asia, and much narrower one with *govinda* in Himalayas, so there is even less justification for that. Apart from the above, two island populations are often distinguished: (a) 'formosanus' (sedentary in Taiwan), which is very like *lineatus* but averages smaller; and (b) 'tenebrosus' (Cape Verde), whose situation is complicated by interbreeding with the resident kite (see Cape Verde Kite [38]).

**MEASUREMENTS** *M. m. migrans* ♂ wing 417–475 mm, ♀ 430–482 mm; ♂ tail 230–281 mm, ♀ 254–282 mm; ♂ tarsus 50–62 mm. *M. m. lineatus* ♂ wing 433–505 mm, ♀ 460–529 mm; ♂ tail 288–345 mm, tarsus 58–67 mm. *M. m. govinda* ♂ wing 410–453 mm, ♀ 418–465 mm; ♂ tail 246–289 mm, ♀ 244–290 mm; ♂ tarsus 49–58 mm. *M. m. affinis* ♂ wing 383–402 mm, ♀ 414–420 mm. *M. m. aegyptius* ♂ wing 403–443 mm, ♀ 400–465 mm; ♂ tail 229–271 mm, ♀ 268–286 mm. *M. m. parasitus* ♂ wing 408–425 mm, ♀ 425–450 mm; ♂ tail 240–272 mm, tarsus 41–49 mm. **Weights** *M. m. migrans* ♂ 630–928 g, ♀ 750 g–1,08 kg, unsexed from 542 g. *M. m. lineatus* ♂ 750 g–1,08 g. *M. m. affinis* ♂ 500–640 g, ♀ 560–671 g, unsexed 360–775 g. *M. m. parasitus* ♂ 567–650 g, ♀ 617–734 g.

**REFERENCES** Abuladze (1992), Ali & Ripley (1978), Allan (1978), Baker-Gabb (1984b), Beaman & Madge (1998), Bell (1985), Bergier (1987), Brazil (1991), Brooke (1974), Brown *et al.* (1982), Bustamante & Hiraldo (1989, 1990, 1993), Campbell J (1985), Coates (1985), Cramp & Simmons (1980), Cupper & Cupper (1981), Delibes (1975), Dementiev & Gladkov (1951), Desai & Malhotra (1977, 1979), Etchécopar & Hübner (1978), Fuczyński (1981), Fuczyński & Wendland (1968), Flint *et al.* (1984), Forsman (1999), Galushin (1971), Génsbol (1986, 1995), Ginn *et al.* (1989), Glutz von Blotzheim *et al.* (1971), Goodman *et al.* (1989), Gore (1990), Grimmett *et al.* (1998), Hagemeyer & Blair (1997), Handrinos & Akriotis (1997), Handrinos & Demetropoulos (1983), Haneda &

Koizumi (1966), Hille & Thiollay (in press), Hiraldo *et al.* (1990), Hobbs (1987), Hollands (1984), Kemp & Kemp (1987), Klapste (1983), Kaystaus (1993), Koga & Shirashi (1987), Koga *et al.* (1989a/b/c), Kuhlman (1981, 1987), Langrand (1990), Lavery & Johnson (1993), Macdonald (1980b), Maclean (1993), Makatsch (1953), Marchant & Higgins (1993), Meyburg (1966, 1967), Meyburg & van Balen (1994), Olsen *et al.* (1993), Olsen & Marples (1993), Pakendam (1979), Porter *et al.* (1981, 1996), Roberts (1982), Roberts

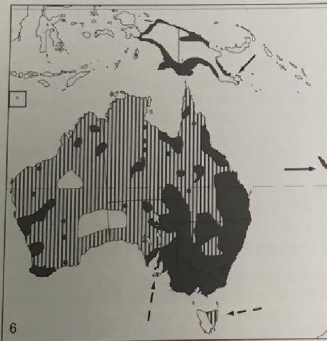
(1991), Rogacheva (1992), Satheesan (1989a/b/c, 1990a/b), Schifferli (1967), Schodde & Tidemann (1988), Shirihai (1993), Shirihai & Christie (1992), Shirihai & Yekutieli (1991), Shirihai *et al.* (1996), Smythies (1986), Souter (1981, 1987), Souter (1977a/b), Thiollay (1976b, 1978c, 1989c), Uitenhoeke (1952), van Balen (1994), Vaurie (1965), Veiga & Hiraldo (1990), Viñuela (1993), Viñuela & Sunyer (1992), Wells (1999), White & Bruce (1986), Witherby *et al.* (1939), Zimmerman *et al.* (1996).

#### 40 WHISTLING KITE *Haliastur sphenurus* (Vieillot, 1818)

Plate 15

Other names: Whistling Hawk, Whistling Eagle

**DISTRIBUTION** Australasian (1°S to 43°S); order 6; variously uncommon to abundant. New Guinea (except western Irian Jaya, mountains and dense forest), New Caledonia, Australia (except inland deserts) and, more recently, eastern Tasmania.



**MOVEMENTS** Sedentary, partially migratory, or nomadic; more migratory in southeast Australia, resulting in autumn and winter influxes in coastal areas of north and east, also corresponding decreases inland. Longest recorded ringing recovery 2,430 km (near Darwin to northern New South Wales).

**HABITAT** Almost anywhere from open forest to savannah and plains, but usually in vicinity of trees near water; thus, in Australia commonest in eucalyptus woodland near lakes, swamps, rivers, estuaries and coasts; in New Guinea frequents similar wet habitats, and also grasslands, paddocks, airstrips and forests if water nearby; largely absent from closed-canopy forest and urban areas, though not uncommon in such places in southwest Australia. Sea-level to 1,400 m, but commonest below 800 m.

**FIELD CHARACTERS** Large, scruffy-looking kite, sandy and brown as adult but juvenile spotted above, with small head, slight crest, fairly long wings and tail, short legs. Perches rather upright, often openly on dead branches of wetland trees or, in coastal habitats, on buoys, posts

and boat masts; walks easily with fairly horizontal posture; wing-tips fall short of tail-tip. Sexes similar and overlap in size, though female may be as much as 21% larger and 42% heavier (mid-ranges 8% and 24%); juvenile separable, but apparently starts moulting direct to adult plumage during second half of first year (timing unclear and at least some juvenile wing-feathers may be retained into second year).

**PERCHED Adult** Mainly sandy-brown with slightly darker back, much darker brown secondaries, blacker primaries and plain greyish tail; pale-streaked brown head, more blotchy cream and pale brown underbody, slightly darker shoulders and rufous-tinged scapulars also all have fine dark shaft-streaks; no yellow in bare parts.

**Juvenile** Broadly similar, but darker and more rusty-brown above, with less contrasting flight-feathers, all clearly spotted buff or white; head (except for plainer lores and cheeks) and underbody more obviously streaked pale brown and creamy-buff. Becomes paler with wear and sunlight. **Bare parts** Adult eyes dark brown, juvenile blacker-brown. Adult cere pale grey, juvenile dark grey with pale grey edges. Legs cream to yellowish- or bluish-white at all ages.

**FLIGHT** Medium-sized soaring raptor, slightly smaller than biggest Australian kites [35, 36], but still averaging larger than Little Eagle [231], with small head, relatively slim body (may look fatter because of pattern of axillaries and thighs), longish wings with long fingers often separated, and longish round-tipped tail. Slow flight, with rather deep and jerky rowing action and some up-and-down body movement; soars, wheels, dips and manoeuvres with ease and grace, usually at no great height above ground; forages mainly by gliding and circling with distal halves of wings bowed down and carpal thrust slightly forward, resulting in curved trailing edges; hovers rarely and rather clumsily. **Adult** From above, shows pale brown head and wing-coverts with slightly darker back, greyer tail, contrasting dark brown secondaries and black primaries; comparable pattern from below made more distinctive by still paler undersides of body, tail and wing-linings against dark secondaries and outer primaries now separated by light wedge on inners; at closer ranges, thighs, axillaries and mid-wing diagonals stand out as paler still, but faint barring on secondaries and tail always hardly visible. **Juvenile** Pattern generally similar below, though flight-feathers less contrasted and body more streaked; above,

Note the newly recognised *M. aegyptius* includes *M. m parasitus* (as a subspecies)

**Annex B: Proposed amended Annex 1 for TAG4****LIST OF AFRICAN-EURASIAN MIGRATORY BIRDS OF PREY****ACCIPITRIFORMES*****Pandionidae***

|                          |               |
|--------------------------|---------------|
| <i>Pandion haliaetus</i> | <i>Osprey</i> |
|--------------------------|---------------|

***Accipitridae***

|                                |                           |
|--------------------------------|---------------------------|
| <i>Chelictinia riocourii</i>   | Scissor-tailed Kite       |
| <i>Pernis apivorus</i>         | European Honey-buzzard    |
| <i>Pernis ptilorhynchus</i>    | Oriental Honey-buzzard    |
| <i>Aviceda cuculoides</i>      | African Cuckoo-hawk       |
| <i>Aviceda jerdoni</i>         | Jerdon's Baza             |
| <i>Aviceda leuphotes</i>       | Black Baza                |
| <i>Gypaetus barbatus</i>       | Bearded Vulture           |
| <i>Neophron percnopterus</i>   | Egyptian Vulture          |
| <i>Circaetus gallicus</i>      | Short-toed Snake-eagle    |
| <i>Circaetus beaudouini</i>    | Beaudouin's Snake-eagle   |
| <i>Circaetus pectoralis</i>    | Black-chested Snake-eagle |
| <i>Circaetus cinereus</i>      | Brown Snake-eagle         |
| <i>Sarcogyps calvus</i>        | Red-headed Vulture        |
| <i>Trigonoceps occipitalis</i> | White-headed Vulture      |
| <i>Necrosyrtes monachus</i>    | Hooded Vulture            |
| <i>Gyps himalayensis</i>       | Himalayan Griffon         |
| <i>Gyps bengalensis</i>        | White-rumped Vulture      |
| <i>Gyps africanus</i>          | White-backed Vulture      |
| <i>Gyps indicus</i>            | Indian Vulture            |
| <i>Gyps tenuirostris</i>       | Slender-billed Vulture    |
| <i>Gyps coprotheres</i>        | Cape Vulture              |
| <i>Gyps rueppelli</i>          | Rüppell's Vulture         |
| <i>Gyps fulvus</i>             | Griffon Vulture           |
| <i>Aegypius monachus</i>       | Cinereous Vulture         |
| <i>Torgos tracheliotos</i>     | Lappet-faced Vulture      |
| <i>Nisaetus nipalensis</i>     | Mountain Hawk-eagle       |
| <i>Clanga pomarina</i>         | Lesser Spotted Eagle      |
| <i>Clanga clanga</i>           | Greater Spotted Eagle     |
| <i>Aquila rapax</i>            | Tawny Eagle               |
| <i>Aquila nipalensis</i>       | Steppe Eagle              |
| <i>Aquila adalberti</i>        | Spanish Imperial Eagle    |
| <i>Aquila heliaca</i>          | Eastern Imperial Eagle    |



|                               |                        |
|-------------------------------|------------------------|
| <i>Aquila chrysaetos</i>      | Golden Eagle           |
| <i>Hieraetus wahlbergi</i>    | Wahlberg's Eagle       |
| <i>Hieraetus pennatus</i>     | Booted Eagle           |
| <i>Hieraetus ayresii</i>      | Ayres's Hawk-eagle     |
| <i>Circus aeruginosus</i>     | Western Marsh-harrier  |
| <i>Circus spilonotus</i>      | Eastern Marsh-harrier  |
| <i>Circus maurus</i>          | Black Harrier          |
| <i>Circus cyaneus</i>         | Hen Harrier            |
| <i>Circus macrourus</i>       | Pallid Harrier         |
| <i>Circus melanoleucos</i>    | Pied Harrier           |
| <i>Circus pygargus</i>        | Montagu's Harrier      |
| <i>Accipiter badius</i>       | Shikra                 |
| <i>Accipiter brevipes</i>     | Levant Sparrowhawk     |
| <i>Accipiter soloensis</i>    | Chinese Sparrowhawk    |
| <i>Accipiter gularis</i>      | Japanese Sparrowhawk   |
| <i>Accipiter virgatus</i>     | Besra                  |
| <i>Accipiter ovampensis</i>   | Ovambo Sparrowhawk     |
| <i>Accipiter nisus</i>        | Eurasian Sparrowhawk   |
| <i>Accipiter gentilis</i>     | Northern Goshawk       |
| <i>Haliaeetus leucoryphus</i> | Pallas's Fish-eagle    |
| <i>Haliaeetus albicilla</i>   | White-tailed Sea-eagle |
| <i>Haliaeetus pelagicus</i>   | Steller's Sea-eagle    |
| <i>Milvus milvus</i>          | Red Kite               |
| <i>Milvus migrans</i>         | Black Kite             |
| <i>Milvus aegyptius</i>       | Yellow-billed Kite     |
| <i>Butastur rufipennis</i>    | Grasshopper Buzzard    |
| <i>Butastur indicus</i>       | Grey-faced Buzzard     |
| <i>Buteo lagopus</i>          | Rough-legged Buzzard   |
| <i>Buteo auguralis</i>        | Red-necked Buzzard     |
| <i>Buteo buteo</i>            | Eurasian Buzzard       |
| <i>Buteo japonicus</i>        | Japanese Buzzard       |
| <i>Buteo trizonatus</i>       | Forest Buzzard         |
| <i>Buteo rufinus</i>          | Long-legged Buzzard    |
| <i>Buteo hemilasius</i>       | Upland Buzzard         |

## **FALCONIFORMES**

### **Falconidae**

|                          |                   |
|--------------------------|-------------------|
| <i>Falco naumanni</i>    | Lesser Kestrel    |
| <i>Falco tinnunculus</i> | Common Kestrel    |
| <i>Falco alopex</i>      | Fox Kestrel       |
| <i>Falco vespertinus</i> | Red-footed Falcon |
| <i>Falco amurensis</i>   | Amur Falcon       |

|                          |                   |
|--------------------------|-------------------|
| <i>Falco eleonorae</i>   | Eleonora's Falcon |
| <i>Falco concolor</i>    | Sooty Falcon      |
| <i>Falco columbarius</i> | Merlin            |
| <i>Falco subbuteo</i>    | Eurasian Hobby    |
| <i>Falco cuvierii</i>    | African Hobby     |
| <i>Falco severus</i>     | Oriental Hobby    |
| <i>Falco biarmicus</i>   | Lanner Falcon     |
| <i>Falco cherrug</i>     | Saker Falcon      |
| <i>Falco rusticolus</i>  | Gyr Falcon        |
| <i>Falco peregrinus</i>  | Peregrine Falcon  |

### **STRIGIFORMES**

#### **Strigidae**

|                          |                         |
|--------------------------|-------------------------|
| <i>Ninox japonica</i>    | Northern Boobook        |
| <i>Surnia ulula</i>      | Northern Hawk-owl       |
| <i>Aegolius funereus</i> | Boreal Owl              |
| <i>Otus scops</i>        | Eurasian Scops-owl      |
| <i>Otus brucei</i>       | Pallid Scops-owl        |
| <i>Otus sunia</i>        | Oriental Scops-owl      |
| <i>Asio otus</i>         | Northern Long-eared Owl |
| <i>Asio flammeus</i>     | Short-eared Owl         |
| <i>Asio capensis</i>     | Marsh Owl               |
| <i>Strix uralensis</i>   | Ural Owl                |
| <i>Strix nebulosa</i>    | Great Grey Owl          |
| <i>Bubo scandiacus</i>   | Snowy Owl               |

## Annex C: Reminder of the purpose of Table 1

In Table 1 of the MOU, Annex 1 species are divided into three categories depending on their global and regional conservation status:

- **Category 1:** Globally threatened and Near Threatened species as defined according to the latest IUCN Red List and listed as such in the BirdLife International World Bird Database;
- **Category 2:** Species considered to have Unfavourable Conservation Status at a regional level within the Range States and territories listed in Annex 2 to the MoU; and
- **Category 3:** all other migratory species.

Category 2 includes species that are considered to have an Unfavourable Conservation Status at a regional level within the area (as defined in Annex 2) of the MOU. Effectively this comprises Annex 1 species which are Least Concern on the Global IUCN Red List, but are either:

- a) Listed as threatened or Near Threatened on the latest European Red List of Birds; or
- b) On the basis of BirdLife International latest data, would meet criteria to be considered as Species of European Conservation Concern SPEC1, SPEC2 or SPEC3 as defined in BirdLife International (2004)<sup>17</sup>; or,
- c) Have a declining global population trend according to the latest data in BirdLife International database.

SPEC1 – Species of Global Conservation Concern, i.e. classified as Globally threatened, or Near Threatened

SPEC2 – Species that are concentrated in Europe and have an unfavourable conservation status in Europe

SPEC3 – Species that are not concentrated in Europe but have an unfavourable conservation status in Europe.

---

<sup>17</sup> Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International Conservation Series No. 12)

**Annex D: Proposed amended Table 1 of the Raptors MOU Action Plan**

| <b>2021 Scientific name</b>  | <b>2021 Common Name</b> | <b>Table 1 category (2015)</b> | <b>Table 1 category (2021)</b> | <b>Table 1 Category change since MOS2?</b> | <b>Reason for category change</b>  |
|------------------------------|-------------------------|--------------------------------|--------------------------------|--|--|
| <i>Strix nebulosa</i>        | Great Grey Owl          | CAT3                           | CAT2                           | YES  | Qualifies as SPEC  |
| <i>Bubo scandiacus</i>       | Snowy Owl               | CAT2                           | CAT1                           | YES  | Global RL status uplisted from LC to VU  |
| <i>Chelictinia riocourii</i> | Scissor-tailed Kite     | CAT2                           | CAT1                           | YES  | Global RL status uplisted from LC to VU  |
| <i>Pernis apivorus</i>       | European Honey-buzzard  | CAT2                           | CAT3                           | YES  | Global population trend now stable   |
| <i>Pernis ptilorhynchus</i>  | Oriental Honey-buzzard  | CAT3                           | CAT2                           | YES  | Global population trend now declining  |
| <i>Circaetus cinereus</i>    | Brown Snake-eagle       | CAT3                           | CAT2                           | YES  | Global population trend declining  |
| <i>Nisaetus nipalensis</i>   | Mountain Hawk-eagle     | CAT2                           | CAT1                           | YES  | Global RL status uplisted from LC to NT  |
| <i>Aquila rapax</i>          | Tawny Eagle             | CAT2                           | CAT1                           | YES  | Global RL status uplisted from LC to VU  |
| <i>Hieraetus ayresii</i>     | Ayres's Hawk-eagle      | CAT3                           | CAT2                           | YES  | Global population trend now declining  |
| <i>Accipiter brevipes</i>    | Levant Sparrowhawk      | CAT3                           | CAT2                           | YES  | Qualifies as SPEC  |
| <i>Milvus milvus</i>         | Red Kite                | CAT1                           | CAT3                           | YES  | Global RL status downlisted from NT to LC, global population trend now increasing, no longer qualifies as SPEC |
| <i>Milvus migrans</i>        | Black Kite              | CAT2                           | CAT3                           | YES  | No longer qualifies as SPEC  |
| <i>Buteo trizonatus</i>      | Forest Buzzard          | CAT3                           | CAT1                           | YES  | Global RL status uplisted from LC to NT  |
| <i>Falco columbarius</i>     | Merlin                  | CAT3                           | CAT2                           | YES  | Now qualifies as SPEC  |
| <i>Falco severus</i>         | Oriental Hobby          | CAT2                           | CAT1                           | YES  | Global RL status uplisted from LC to NT  |
| <i>Falco rusticolus</i>      | Gyrfalcon               | CAT3                           | CAT2                           | YES  | Qualifies as SPEC  |