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TAXONOMY AND NOMENCLATURE

(Prepared by the Secretariat)

Summary:

In order to assist the Scientific Council in the implementation of Resolution 11.19 on the Taxonomy and Nomenclature of Birds Listed on the CMS Appendices, the Secretariat has undertaken an analysis of the implications of adopting the taxonomic reference for passerine birds proposed by the Conference of Parties at its 11th meeting (COP11).

The CMS Appendices will be updated accordingly once the new bird reference is adopted by the Conference of the Parties at its 12th meeting.

In addition, a proposal is made to update the reference for fish taxonomy in accordance with the recommendation of the Scientific Council. A new procedure is proposed to apply this reference.

This document should be read in conjunction with UNEP/CMS/COP12/Doc.21.2.2 concerning resolutions to be consolidated.

THE TAXONOMY AND NOMENCLATURE OF SPECIES LISTED ON THE CMS APPENDICES

Background

1. In this document, three issues are addressed in particular: Bird Taxonomy and Nomenclature; Fish Taxonomy and Nomenclature; and a proposed new Resolution on Taxonomy and Nomenclature.

Bird Taxonomy and Nomenclature

- 2. Through Resolution 11.19, the Conference of Parties adopted as standard reference for bird taxonomy and nomenclature for non-passerine species the Handbook of the Birds of the World/BirdLife International Illustrated Checklist of the Birds of the World, Volume 1: Non-Passerines, by Josep del Hoyo and Nigel J. Collar (2014).
- Resolution 11.19 requests the Scientific Council to consider the implications of adopting as a standard reference for passerine birds the Handbook of the Birds of the World/BirdLife International Illustrated Checklist of the Birds of the World, Volume 2: Passerines, which was published in late 2016.
- 4. In order to assist the Scientific Council in the implementation of Resolution 11.19, the Secretariat has undertaken an analysis of the implications of adopting the new taxonomic reference for passerines. To this end, the Secretariat has checked species by species for incongruences between the former species names found in the CMS Appendices and the species names in the new reference.
- 5. Annex I shows the implications on Appendix I-listed passerines. Annex 2 does the same for Appendix II-listed passerines. In accordance with the draft consolidated resolution on taxonomy and nomenclature (UNEP/CMS/COP12/Doc.21.2.2), rules for the treatment of cases of synonymy, species splitting and species aggregation (lumping) as a result of a change of nomenclature reference apply.
- 6. The proposal to the Conference of Parties is to adopt Volume 2: Passerines. Once adopted the other bird references will be deleted from the Annex to the Resolution.

Fish Taxonomy and Nomenclature

- 7. The Sessional Committee of the Scientific Council, at its first meeting (2016), reconfirmed the recommendation made by the 18th Meeting of the Scientific Council to use as taxonomic and nomenclatural reference for fish, the online database Eschmeyer, W. N., R. Fricke, and R. van der Laan (eds.), Catalog of Fishes: Genera, Species,References (http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp)sin ce the current standard reference Eschmeyer, W.N. (1990) Catalogue of the Genera of Recent Fishes, was no longer in print. The online version is being updated continually.
- 8. It was further suggested referring to this online reference at the time of listing new species on the Appendices of CMS and to preserve a hard-copy excerpt from the online reference as the standard reference for the newly listed species.
- CITES had already faced the same issue and has adopted a similar policy. Thus, adopting
 the same procedure would also help to keep harmony between the Appendices of both
 Conventions, as requested by Parties.

- 10. It is proposed that the Scientific Council reviews the online version of the reference for the species listed on the Appendices at its last meeting before each meeting of the Conference of Parties and make recommendations as to whether the name of any listed species should be updated.
- 11. In the event that online versions of standard references for other taxonomic groups are adopted, a similar approach might be taken.
- 12. The Secretariat has undertaken an analysis of discrepancies between the name of fish taxa as currently listed on the CMS Appendices and the name of the same taxa as reflected in the online version of Eschmeyer as of 28 April 2017. Annex 3 shows the results of this analysis.
- 13. It should be noted that if the names of all fish taxa currently listed on the Appendices were harmonized with the online version of Eschmeyer, this would result in some inconsistencies with the Sharks MOU Annex 1, CITES Appendices and lists maintained by other organizations concerned with the management and conservation of these species. The Secretariat therefore recommends a conservative approach, including postponing any update of the species names on the Appendices until the new taxonomy has been confirmed by the majority of scientists and other legal frameworks such as CITES.

New Resolution

14. In order to incorporate these developments, revisions have been made to the consolidated resolution contained in Annex 2 of Document 21.2.2. For background on this process please refer to Documents 21 and 21.2.

Recommended actions

The Conference of the Parties is recommended to:

- a) Take note of Annex 1, 2 and 3;
- b) Adopt the amendments to the draft Resolution on Taxonomy and Nomenclature included in Annex 4;
- c) Adopt the draft Decision included in Annex 5.

ANNEX 1

IMPLICATIONS OF ADOPTING THE HANDBOOK OF THE BIRDS OF THE WORLD/BIRDLIFE INTERNATIONAL ILLUSTRATED CHECKLIST OF THE BIRDS OF THE WORLD, VOLUME 2: PASSERINES ON APPENDIX I LISTED PASSERINES. CHANGES IN NOMENCLATURE ARE SHOWN IN BOLD AND YELLOW.

Family	Current name in Appendix I	English name	Family name in Illustrated Checklist of the Birds of the World	Species name in Illustrated Checklist of the Birds of the World	IUCN Status
Tyrannidae	Alectrurus risora	Strange-tailed Tyrant	Tyrannidae	Alectrurus risora	VU
	Alectrurus tricolor	Cock-tailed tyrant		Alectrurus tricolor	VU
Hirundinidae	Hirundo atrocaerulea	Blue Swallow	Hirundinidae	Hirundo atrocaerulea	VU
Muscicapidae	Acrocephalus griseldis	Basra Reed-warbler	Acrocephalidae	Acrocephalus griseldis	EN
	Acrocephalus paludicola	Aquatic Warbler		Acrocephalus paludicola	VU
	Acrocephalus sorghophilus	Streaked Reed-warbler		Acrocephalus sorghophilus	EN
	Zoothera guttata	Spotted Ground-thrush	Turdidae	Geokichla guttata	EN
Emberizidae	Emberiza aureola	Yellow-Breasted Bunting	Emberizidae	Emberiza aureola	EN
	Sporophila zelichi	Marsh Seedeater	Thraupidae	Sporophila palustris ¹	EN
	Sporophila cinnamomea	Chestnut Seedeater	Thraupidae	Sporophila cinnamomea	VU
	Sporophila hypochroma	Rufous-rumped Seedeater	Thraupidae	Sporophila hypochroma	NT
	Sporophila palustris	Marsh Seedeater	Thraupidae	Sporophila palustris 1	EN
Parulidae	Dendroica kirtlandii	Kirtland's Warbler	Parulidae	Setophaga kirtlandii	NT
	Dendroica cerulea	Cerulean Warbler		Setophaga cerulea	VU
Icteridae	Agelaius flavus	Saffron-cowled Blackbird	Icteridae	Xanthopsar flavus	VU
Fringillidae	Serinus syriacus	Syrian Serin	Fringillidae	Serinus syriacus	VU

¹ Sporophila zelichi and Sporophila palustris have been merged into Sporophila palustris

ANNEX 2

IMPLICATIONS OF ADOPTING THE HANDBOOK OF THE BIRDS OF THE WORLD/BIRDLIFE INTERNATIONAL ILLUSTRATED CHECKLIST OF THE BIRDS OF THE WORLD, VOLUME 2: PASSERINES ON APPENDIX II LISTED PASSERINES. CHANGES IN NOMENCLATURE ARE SHOWN IN BOLD AND YELLOW.

Family	Current name in Appendix II	English name	Family name in Illustrated Checklist of the Birds of the World	Species name in Illustrated Checklist of the Birds of the World	IUCN Status
Hirundinidae	Hirundo atrocaerulea	Blue Swallow	Hirundinidae	Hirundo atrocaerulea	VU
Tyrannidae	Alectrurus risora	Strange-tailed Tyrant	Tyrannidae	Alectrurus risora	VU
	Alectrurus tricolor	Cock-tailed tyrant		Alectrurus tricolor	VU
	Pseudocolopteryx dinellianus	Dinelli's Doradito		Pseudocolopteryx dinelliana	NT
	Polystictus pectoralis	Bearded Tachuri		Polystictus pectoralis	NT
Emberizidae	Sporophila ruficollis	Dark Throated Seedeater	Thraupidae	Sporophila ruficollis	NT
	Sporophila zelichi	Marsh Seedeater	Thraupidae	Sporophila palustris 1	EN
	Sporophila cinnamomea	Chestnut Seedeater	Thraupidae	Sporophila cinnamomea	VU
	Sporophila hypochroma	Rufous-rumped Seedeater	Thraupidae	Sporophila hypochroma	NT
	Sporophila palustris	Marsh Seedeater	Thraupidae	Sporophila palustris ¹	EN
Parulidae	Cardellina canadensis	Canada Warbler	Parulidae	Cardellina canadensis	LC
Icteridae	Agelaius flavus	Saffron-cowled Blackbird	Icteridae	Xanthopsar flavus	VU
	Dolichonyx oryzivorus	Bobolink		Dolichonyx oryzivorus	LC

¹ Sporophila zelichi and Sporophila palustris have been merged into Sporophila palustris

ANNEX 3

IMPLICATIONS OF ADOPTING THE ONLINE VERSION OF THE CATALOGUE OF FISHES: GENERA, SPECIES, REFERENCES. ESCHMEYER, W.N., R. FRICKE AND R. VAN DER LAAN (EDS). CALIFORNIA ACADEMY OF SCIENCES (VERSION 28 APRIL 2017). CHANGES IN NOMENCLATURE ARE SHOWN IN BOLD AND YELLOW.

Family	Current name in Appendix I and/or II	English name	Family name in Eschmeyer et al. (online 28.04.17)	Species name in Eschmeyer et al. (online 28.04.17)
Elasmobranchii				
Alopiidae	Alopias pelagicus	Pelagic Thresher Shark	Alopiidae	Alopias pelagicus
	Alopias superciliosus	Bigeye Thresher Shark		Alopias superciliosus
	Alopias vulpinus	Common Thresher Shark		Alopias vulpinus
Carcharhinidae	Carcharhinus falciformis	Silky Shark	Carcharhinidae	Carcharhinus falciformis
Cetorhinidae	Cetorhinus maximus	Basking Shark	Cetorhinidae	Cetorhinus maximus
Lamnidae	Carcharodon carcharias	Great White Shark, White Shark	Lamnidae	Carcharodon carcharias
	Isurus oxyrinchus	Shortfin Mako Shark		Isurus oxyrinchus
	Isurus paucus	Longfin Mako Shark		Isurus paucus
	Lamna nasus	Porbeagle		Lamna nasus
Mobulidae	Manta alfredi	Reef Manta Ray	Mobulidae	Mobula alfredi
	Manta birostris	Manta Ray		Mobula birostris
	Mobula eregoodootenkee	Pygmy Devil Ray		<mark>Mobula kuhlii</mark>
	Mobula hypostoma	Atlantic Devil Ray, Lesser Devil Ray		Mobula hypostoma
	Mobula japonica	Spinetail Mobula, Spinetail Devil Ray		Mobula japonica
	Mobula kuhlii	Shortfin Devil Ray		Mobula kuhlii
	Mobula mobular	Giant Devil Ray		Mobula mobular
	Mobula munkiana	Munk's Devil Ray		Mobula munkiana

Family	Current name in Appendix I and/or II	English name	Family name in Eschmeyer et al. (online 28.04.17)	Species name in Eschmeyer et al. (online 28.04.17)
	Mobula rochebrunei	Lesser Guinean Devil Ray		Mobula hypostoma
	Mobula tarapacana	Box Ray		Mobula tarapacana
	Mobula thurstoni	Bentfin Devil Ray		Mobula thurstoni
Pristidae	Anoxypristis cuspidata	Narrow Sawfish	Pristidae	Anoxypristis cuspidata
	Pristis clavata	Dwarf Sawfish		Pristis clavata
	Pristis pectinata	Smalltooth Sawfish		Pristis pectinata
	Pristis pristis	Largetooth Sawfish		Pristis pristis
	Pristis zijsron	Green Sawfish		Pristis zijsron
Rhincodontidae	Rhincodon typus	Whale Shark	Rhincodontidae	Rhincodon typus
Sphyrnidae	Sphyrna lewini	Scalloped Hammerhead Shark	Sphyrnidae	Sphyrna lewini
	Sphyrna mokarran	Great Hammerhead Shark		Sphyrna mokarran
Squalidae	Squalus acanthias	Spiny Dogfish	Squalidae	Squalus acanthias
Actinopterygii				
Acipenseridae	Acipenser baerii baicalensis	Siberian Sturgeon	Acipenseridae	Acipenser baerii ¹
	Acipenser fulvescens	Lake Sturgeon		Acipenser fulvescens
	Acipenser gueldenstaedtii	Russian Sturgeon		Acipenser gueldenstaedtii
	Acipenser medirostris	Green Sturgeon		Acipenser medirostris
	Acipenser mikadoi	Sakhalin Sturgeon		Acipenser mikadoi
	Acipenser naccarii	Adriatic Sturgeon		Acipenser naccarii
	Acipenser nudiventris	Ship Sturgeon		Acipenser nudiventris
	Acipenser persicus	Persian Sturgeon		Acipenser persicus
	Acipenser ruthenus	Sterlet		Acipenser ruthenus
	Acipenser schrenckii	Amur Sturgeon		Acipenser schrenckii

¹ Eschmeyer 2017 does not recognize the subspecies

Family	Current name in Appendix I and/or II	English name	Family name in Eschmeyer et al. (online 28.04.17)	Species name in Eschmeyer et al. (online 28.04.17)
	Acipenser sinensis	Chinese Sturgeon		Acipenser sinensis
	Acipenser stellatus	Stellate Sturgeon		Acipenser stellatus
	Acipenser sturio	Common Sturgeon		Acipenser sturio
	Huso dauricus	Kaluga Sturgeon		Acipenser dauricus
	Huso huso	Giant Sturgeon, Beluga		Huso huso
	Pseudoscaphirhynchus fedtschenkoi	Syr-Dar Shovelnose		Pseudoscaphirhynchus fedtschenkoi
	Pseudoscaphirhynchus hermanni	Small Amu-Dar Shovelnose		Pseudoscaphirhynchus hermanni
	Pseudoscaphirhynchus kaufmanni	Large Amu-Dar Shovelnose		Pseudoscaphirhynchus kaufmanni
Anguillidae	Anguilla anguilla	European Eel	Anguillidae	Anguilla anguilla
Polyodontidae	Psephurus gladius	Chinese Paddlefish	Polyodontidae	Psephurus gladius
Schilbeidae	Pangasianodon gigas	Giant Catfish	Schilbeidae	Pangasianodon gigas

ANNEX 4

DRAFT RESOLUTION

TAXONOMY AND NOMENCLATURE

NB: Proposed new text to the Resolution that has been consolidated in Document 21.2.2 Annex 2 is <u>underlined</u>. Text to be deleted is crossed out.

Recalling that with Recommendation 6.1, Recommendation 9.4, Resolution 10.13, and Resolution 11.19, the Conference of the Parties adopted standard references to be recognized and used as the bases on which the CMS Appendices and amendments thereto should be prepared;

Recalling Resolution 10.13 on Standardized Nomenclature of Birds Listed on the CMS Appendices that requests the Chair of the Scientific Council to liaise with the Chairs of the Scientific Advisory Bodies of the Biodiversity-related Conventions, the Secretariats of relevant MEAs and relevant international organizations, including IUCN, BirdLife International, Wetlands International and UNEP-WCMC, with the aim of evaluating the possible adoption of a single nomenclature and taxonomy for birds, and to inform the Scientific Council at its eighteenth meeting with a view to adopting an appropriate Resolution at COP11;

Recalling that with Resolution 3.1 (Geneva, 1991) regarding listing of species in the Appendices of the Convention, the Conference of the Parties agreed that any further additions to the Appendices of the Convention should be limited to species or lower taxa and that the migratory species covered by higher taxa listings already in Appendix II need only be identified when AGREEMENTs are being prepared;

Noting that biological taxonomy and nomenclature are dynamic;

Aware that international efforts to take coherent action to conserve and sustainably use biodiversity at the species level can be significantly hampered if there is no common understanding of which animals or plants are included under a particular species name and can present particular challenges for activities such as the implementation of conventions which have legal implications;

Recognizing that the 4th meeting of the Chairs of the Scientific Advisory Bodies of Biodiversity-related Conventions (CSAB, Gland, Switzerland 13 February 2011) expressed its support for the idea of moving towards harmonization of nomenclature and taxonomy in lists of species used by the biodiversity-related conventions, and praised the harmonization process undertaken by CITES and CMS;

Acknowledging that in order to strengthen the global effort to meet the Aichi Biodiversity Targets in order to reduce the rate of biodiversity loss by 2020, it would be sensible to try to ensure greater harmonization between biodiversity-related multilateral environmental agreements in the field of taxonomy and nomenclature;

Further noting that the case for such harmonization is made more compelling by the fact that of the 124 CMS Parties, only one is not also a member of CITES;

Acknowledging that the harmonization of nomenclature can lead to a more integrated process, reduction of duplication and greater sharing of information between biodiversity-related Multilateral Environmental Agreements (MEAs);

Recalling that this objective was noted by the 6th Meeting of the Liaison Group of the Biodiversity-related Conventions (Bonn, May 2008), and was thereby included in the

CITES/CMS List of Joint Activities adopted by the 34th Meeting of the CMS Standing Committee (Rome, November 2008); and the CMS-CITES Joint Work Programme 2012-2014 adopted at the 38th meeting of the CMS Standing Committee (Bergen, November 2011);

Further aware that a harmonization of bird taxonomy and nomenclature among MEAs and other partners, such as CMS, CITES, Ramsar, IUCN, BirdLife International, Wetlands International and UNEP-WCMC, can improve synergies benefitting migratory species conservation and better implementation of CMS Family instruments;

Recognizing that the Chairs of the Scientific Advisory Bodies of the Biodiversity-related Conventions (CSAB) have repeatedly expressed their support for the idea of moving towards harmonization of nomenclature and taxonomy in the lists of species that they use, and requested stronger cooperation among MEAs towards that goal;

Taking note of the report of the Ad Hoc Meeting on Harmonization of Bird Taxonomy which took place in Formia (Italy) on 8 October 2013 (UNEP/CMS/ScC18/Inf.9.1) and thanking the Chair of the Scientific Council for convening that Meeting;

Taking note also of the report of the CITES Animals Committee that took place in Veracruz (México) from 28 April to 3 May;

Stressing that notwithstanding the adoption, for practical reasons, of standard nomenclatural references at the species level, biological diversity at all taxonomic levels should be valued, conserved and used sustainably;

Taking note of the recommendations of the 15th meeting of the CMS Scientific Council (Rome, 27-28 November 2008) concerning revision of the reference nomenclature for terrestrial and aquatic mammalian species listed in CMS Appendices;

Noting the recommendation provided by the CMS Scientific Council at its 18th Meeting (Bonn, 1-3 July 2014), on a standard nomenclature reference for non-passerine birds;

Noting that regarding albatrosses and petrels, COP10 adopted the taxonomy used by ACAP as the Convention's standard nomenclatural reference, and that ACAP takes account of the most recent taxonomic information on species of albatrosses and petrels;

Acknowledging that the adoption of a new reference may imply cases of synonymy, species aggregation (lumping) and/or splitting of species, and that CMS has agreed rules on how to act in such cases and their consequent reflection in the Appendices;

Noting the advice of the CMS Scientific Council at its 17th Meeting (Bergen, November 2011);

Emphasizing that stability over time in the taxonomy and nomenclature of species listed under CMS is essential to ensure legal security for the implementation of the Convention;

Recognizing that the taxonomy used in the Appendices to the Convention will be most useful to the Parties if standardized by nomenclatural references;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

1. *Adopts* the list of standard references ¹ included in Annex 1 to be recognized and used as the bases on which the CMS Appendices and amendments thereto, are prepared;

¹ As of yet there has been no need for a standard taxonomic reference for insects or reptiles (except marine turtles).

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 Agrees to refer to the online version of Eschmeyer, W. N., R. Fricke, and R. van der Laan (eds.), Catalog of Fishes: Genera, Species, References (http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatm ain) as reference for fish at the time of listing new species on the Appendices of CMS and Instructs the Secretariat to preserve a hard-copy excerpt from the online reference as the standard reference for the newly listed species;
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 Instructs the Scientific Council to review the online version of the fish reference for the species listed on the Appendices at its last meeting before each meeting of the Conference of Parties and make recommendations as to whether the name of any listed species should be updated;
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 Agrees to follow a conservative approach in the use of the online reference to update names of listed species, waiting for a new taxonomy to be confirmed by the majority of scientists and other legal frameworks such as CITES before implementing any change;
- 1. quinquiens Agrees to adopt the same approach for other taxonomic groups in the event that online versions of standard references will be adopted for those groups;
- 2. Reaffirms the rules adopted by the Convention for the treatment of cases of synonymy, species splitting and species aggregation (lumping) as a result of a change of standard nomenclatural reference, as follows:
 - Synonymy: corrections can be made automatically as there is no change of status for any listed population;
 - Splitting: when a listed taxon is split into two or more, each of the resulting taxa retains the listing status of the former aggregate taxon; and
 - Aggregation (lumping): if a taxon listed in either Appendix I or Appendix II of the
 Convention is merged with one or more unlisted taxa, under its name or that of one of
 the unlisted taxa, the entire aggregate taxon will be listed in the Appendix that included
 the originally listed, narrower taxon in all cases where the unlisted entity thus added
 has the same conservation status as, or a worse one than, that of the previously listed
 taxon. In all other cases, a taxonomic or geographical restriction will be introduced,
 pending consideration by the Scientific Council and the Conference of the Parties of
 extended listing proposals;
- 3. *Urges* other MEAs to adopt the same standard taxonomic reference for passerine birds; and
- 4. Repeals
 - a) Recommendation 6.1, Standardized Nomenclature for the CMS Appendices;
 - b) Recommendation, 9.4, Standardized Nomenclature for the CMS Appendices;
 - c) Resolution 10.13, Standardized Nomenclature of Birds Listed on the CMS Appendices; and
 - d) Resolution 11.19, *The Taxonomy and Nomenclature of Birds Listed in the Appendices*.

Annex 1 to the Resolution

LIST OF STANDARD REFERENCES ADOPTED BY THE CONFERENCE OF THE PARTIES

Mammals

Marine mammals:

Perrin W.F., Wursig B. and Thewissen J.G.M. (Editors), (2009), Encyclopaedia of Marine Mammals, Second edition. Academic Press as the standard nomenclatural reference for Marine Mammals as recommended by the 15th meeting of the Scientific Council;

Terrestrial mammals:

Wilson, D. E. & Reeder, D. M. (ed.) (2005): Mammal Species of the World. A Taxonomic and Geographic Reference. Third edition, John Hopkins University Press as the standard nomenclatural reference for terrestrial mammals, as recommended by the 14th meeting of the Scientific Council;

Birds

Non-passerine species:

Handbook of the Birds of the World/BirdLife International Illustrated Checklist of the Birds of the World, Volume 1: Non-passerines, by Josep del Hoyo, Nigel J. Collar, David A. Christie, Andrew Elliot and Lincoln D.C. Fishpool (2014);

Passerine species:

For taxonomy and nomenclature at the level of orders and families:

<u>Handbook of the Birds of the World/BirdLife International Illustrated Checklist of the Birds of the World, Volume 2: Passerines, by Josep del Hoyo and Nigel J. Collar (2016);</u>

Morony, J.J., Bock, W.J. and Farrand, J. (1975). Reference List of the Birds of the World. Department of Ornithology, American Museum of Natural History, New York, New York.

For taxonomy and nomenclature at the level of genera and species:

Sibley, C.G. and Monroe, B.L. (1990). Distribution and taxonomy of birds of the world. Yale University Press, New Haven.

Sibley, C.G. and Monroe, B.L. (1993). A supplement to distribution and taxonomy of birds of the world. Yale University Press, New Haven.

Albatrosses and large petrels

The taxonomy used by ACAP.

Marine Turtles

Eckert, K.L., Bjorndal, K.A., Abreu-Grobois, F.A. and Donnelly, M. (Eds) (1999). Research and management techniques for the conservation of sea turtles. IUCN/SSC Marine Turtle Specialist Group Publication No. 4.

Fishes

Online version of the Catalogue of Fishes: Genera, Species, References. Eschmeyer, W.N., R. Fricke and R. van der Laan (eds). California Academy of Sciences (continuously updated)

Eschmeyer, W.N. (1990). Catalogue of the Genera of Recent Fishes. California Academy of Sciences, San Francisco, California.

ANNEX 5

DRAFT DECISION

Text as presented in Document 21.2.2 Annex 3.

Directed to the Secretariat

12.AA Instructs The Secretariat, in consultation with the Scientific Council and the Depositary, shall adapt the CMS Appendices according to the new bird reference adopted and the rules outlined above Resolution 12.X on Taxonomy and Nomenclature.