Table 1: Numbers of threatened species by major groups of organisms (1996–2018)

Changes in number of threatened species from year to year **should not** be directly interpreted as trends in the status of biodiversity. The figures displayed below reflect increased assessment efforts by IUCN and its Partners over time, rather than genuine changes in numbers of threatened species. For a clearer view of genuine trends in the status of biodiversity please refer to the IUCN Red List Index (see the section Trends in the status of biodiversity on the IUCN Red List web site: http://www.iucnredlist.org/about/summary-statistics#TrendsInBiodiversityStatus).

	Estimated Number of described species [1]	Number of species evaluated by 2018 (IUCN Red List version 2018-1)	Number of threatened species[2] in 1996/98	Number of threatened species[2] in 2000	Number of threatened species[2] in 2002	Number of threatened species[2] in 2003	Number of threatened species[2] in 2004	Number of threatened species[2] in 2006	Number of threatened species[2] in 2007	Number of threatened species[2] in 2008	Number of threatened species[2] in 2009 (IUCN Red List version 2009.2)	Number of threatened species[2] in 2010 (IUCN Red List version 2010.4)	Number of threatened species[2] in 2011 (IUCN Red List version 2011.2)	Number of threatened species[2] in 2012 (IUCN Red List version 2012.2)	Number of threatened species[2] in 2013 (IUCN Red List version 2013.2)	Number of threatened species[2] in 2014 (IUCN Red List version 2014.3)	Number of threatened species[2] in 2015 (IUCN Red List version 2015.4)	Number of threatened species[2] in 2016 (IUCN Red List version 2016-3)	Number of threatened species[2] in 2017 (IUCN Red List version 2017-3)	Number of threatened species[2] in 2018 (IUCN Red List version 2018-1)	Species evaluated in 2018, as % of species described [2,3]	Lower estimate of % threatened species in 2018 (number threatened as % of extant evaluated species)[2,3,4]	Best estimate of % threatened species in 2018 (number threatened as % of extant data sufficient evaluated species)[2,3,4]	Upper estimate of % threatened species in 2018 (number threatened + DD as % of extant evaluated species)[2,3,4]
VERTEBRATES																								
Mammals [5]	5,677	5,677	1,096	1,130	1,137	1,130	1,101	1,093	1,094	1,141	1,142	1,131	1,138	1,139	1,143	1,199	1,197	1,194	1,204	1,210	100%	22%	25%	36%
Birds	11,122	11,122	1,107	1,183	1,192	1,194	1,213	1,206	1,217	1,222	1,223	1,240	1,253	1,313	1,308	1,373	1,375	1,460	1,469	1,469	100%	13%	13%	14%
Reptiles	10,711	6,669	253	296	293	293	304	341	422	423	469	594	772	807	879	927	944	1,079	1,215	1,236	62%		*Insufficient coverage*	
Amphibians	7,866	6,682	124	146	157	157	1,770	1,811	1,808	1,905	1,895	1,898	1,917	1,933	1,950	1,957	1,994	2,068	2,100	2,100	85%	32%	41%	54%
Fishes	33,900	16,406	734	752	742	750	800	1,171	1,201	1,275	1,414	1,851	2,028	2,058	2,110	2,222	2,271	2,359	2,386	2,385	48%		*Insufficient coverage*	
Subtotal	**69,276**	**46,556**	**3,314**	**3,507**	**3,521**	**3,524**	**5,188**	**5,622**	**5,742**	**5,966**	**6,143**	**6,714**	**7,108**	**7,250**	**7,390**	**7,678**	**7,781**	**8,160**	**8,374**	**8,400**	**67%**			
INVERTEBRATES																								
Insects	1,000,000	7,908	537	555	557	553	559	623	623	626	711	733	741	829	896	993	1,046	1,268	1,414	1,478	0.8%		*Insufficient coverage*	
Molluscs	85,000	8,442	920	938	939	967	974	975	978	978	1,036	1,288	1,673	1,857	1,898	1,950	1,950	1,984	2,187	2,195	10%		*Insufficient coverage*	
Crustaceans[6]	47,000	3,180	407	408	409	409	429	459	460	606	606	596	596	596	723	725	728	732	732	730	7%		*Insufficient coverage*	
Corals	2,175	864	1	1	1	1	1	1	4	235	235	235	235	236	235	235	237	237	237	237	40%		*Insufficient coverage*	
Arachnids	102,248	250	11	11	11	11	11	11	11	18	18	19	19	20	21	163	164	166	170	171	0.24%		*Insufficient coverage*	
Velvet Worms	165	11	6	6	6	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	7%		*Insufficient coverage*	
Horseshoe Crabs	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	100%	25%	100%	100%
Others	68,658	839	9	9	9	9	9	24	24	24	24	24	24	23	40	65	67	73	143	146	1.22%		*Insufficient coverage*	
Subtotal	**1,305,250**	**21,498**	**1,891**	**1,928**	**1,932**	**1,959**	**1,992**	**2,102**	**2,109**	**2,496**	**2,639**	**2,904**	**3,297**	**3,570**	**3,822**	**4,140**	**4,201**	**4,470**	**4,893**	**4,967**	**2%**			
PLANTS [7]																								
Mosses [8]	16,236	102	---	80	80	80	80	80	80	82	82	80	80	76	76	76	76	76	76	76	0.6%		*Insufficient coverage*	
Ferns and Allies [9]	12,000	479	---	---	---	111	140	139	139	139	139	148	163	167	187	194	197	217	246	246	4%		*Insufficient coverage*	
Gymnosperms	1,052	1,012	142	141	142	304	305	306	321	323	322	371	377	374	399	400	400	400	401	401	96%	40%	40%	42%
Flowering Plants	268,000	23,788	5,186	5,390	5,492	6,279	7,796	7,865	7,899	7,904	7,948	8,116	8,527	8,764	9,394	9,905	10,551	10,941	11,773	12,049	9%		*Insufficient coverage*	
Green Algae [10]	6,050	13	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0.2%		*Insufficient coverage*	
Red Algae [10]	7,104	58	---	---	---	---	---	---	9	9	9	9	9	9	9	9	9	9	9	9	0.8%		*Insufficient coverage*	
Subtotal	**310,442**	**25,452**	**5,328**	**5,611**	**5,714**	**6,774**	**8,321**	**8,390**	**8,448**	**8,457**	**8,500**	**8,724**	**9,156**	**9,390**	**10,065**	**10,584**	**11,233**	**11,643**	**12,505**	**12,781**	**8%**			
FUNGI & PROTISTS																								
Lichens	17,000	13	---	---	---	2	2	2	2	2	2	2	2	2	10	4	7	7	10	10	0.08%		*Insufficient coverage*	
Mushrooms	31,496	43	---	---	---	---	---	1	1	1	1	1	1	1	33	1	22	21	33	33	0.137%		*Insufficient coverage*	
Brown Algae [10]	3,784	15	---	---	---	---	---	---	6	6	6	6	6	6	6	6	6	6	6	6	0.4%		*Insufficient coverage*	
Subtotal	**52,280**	**71**	**---**	**---**	---	**2**	**2**	**3**	**9**	**9**	**9**	**9**	**9**	**9**	**49**	**11**	**35**	**34**	**49**	**49**	**0.14%**			
TOTAL	**1,737,248**	**93,577**	**10,533**	**11,046**	**11,167**	**12,259**	**15,503**	**16,117**	**16,308**	**16,928**	**17,291**	**18,351**	**19,570**	**20,219**	**21,326**	**22,413**	**23,250**	**24,307**	**25,821**	**26,197**	**5%**			

NOTES (for rows and columns as indicated by the superscripted numbers)**:**

1. The sources used for the numbers of described species in each taxonomic group are listed below.

2. Threatened species are those listed as Critically Endangered (CR), Endangered (EN) or Vulnerable (VU).

3. Where <80% of species within a group have been evaluated, figures for % threatened species are not provided because there is insufficient coverage for these groups. It is only possible to provide reliable figures for % threatened species for those groups that are completely or almost completely evaluated (e.g., mammals, birds, amphibians and gymnosperms).

4. The percentage of threatened species can be calculated for those groups that are completely or almost completely evaluated (>80% of species evaluated), but the actual number of threatened species is often uncertain because it is not known whether Data Deficient (DD) species are actually threatened or not. Therefore, a range of percentages is provided: **lower estimate** = % threatened extant species (if all DD species are not threatened); **best estimate** = % threatened extant species (if DD species are equally threatened as data sufficient species); **upper estimate** = % threatened extant species (if all DD species are threatened). If a single figure is required for reporting purposes, the best estimate figure should be used.

5. The number of described and evaluated mammals excludes domesticated species like sheep (*Ovis aries*), goats (*Capra hircus*), Dromedary (*Camelus dromedarius*), etc.

6. Crustaceans include six classes: Malacostraca (crabs, lobsters, shrimp, woodlice, etc.); Branchiopoda (fairy shrimp, clam shrimp, etc.); Cephalocardia (horseshoe shrimp); Ostracoda (seed shrimp); Maxillopoda (barnacles, copepods, etc.); and Remipedia (remipedes)

7. The plant numbers **DO NOT** include species from the *1997 IUCN Red List of Threatened Plants* (Walter and Gillett 1998) as those were all assessed using the pre-1994 IUCN system of threat categorization. Hence the numbers of of threatened plants are very much lower when compared to the 1997 results. The results from this Red List and the 1997 Plants Red List should be combined together when reporting on threatened plants.

8. Mosses include the true mosses (Bryophyta), the hornworts (Anthoceratophyta), and liverworts (Marchantiophyta).

9. The ferns and allies include club mosses and spike mosses (Lycopodiopsida), quillworts (Isoetopsida), horsetails (Equisetopsida) and ferns (Marattiopsida, Polypodiopsida and Psilotopsida).

10. Seaweeds are included in the green algae (Chlorophyta, Charophyta), red algae (Rhodophyta), and brown algae (Ochrophyta or Heterokontophyta).

Sources for Numbers of Described Species:

Vertebrates

Mammals – Largely from Wilson, D.E. and Reeder, D.M. (eds). 2005. Mammal Species of the World, 3rd Edition. John Hopkins University Press, Baltimore (available at http://vertebrates.si.edu/msw/mswCFApp/msw/index.cfm). But there are some deviations, especially in cases where there are alternative taxonomic treatments; in such cases the Global Mammal Assessment coordinating team working with the relevant IUCN SSC Specialist Group advise on which treatment to follow. A number of differences and deviations are also based on new revisions and published papers that have appeared since the accounts in Wilson and Reeder (2005) were published. There are a number of recently described species which are currently under review and hence these are not included in the numbers cited here.

Birds – HBW and BirdLife International (2017) Handbook of the Birds of the World and BirdLife International digital checklist of the birds of the world. Version 2. Available at: http://datazone.birdlife.org/userfiles/file/Species/Taxonomy/HBW-BirdLife_Checklist_Version_2.zip.

Reptiles – Based on the figures (as of March 2018) provided by *The Reptile Database* compiled by Peter Uetz and Jirí Hošek. Available at: http://www.reptile-database.org. Accessed: 12 June 2018.

Amphibians – Frost, D.R. 2018. *Amphibian Species of the World: an Online Reference. Version 6.0 (12 June, 2018).* Electronic Database accessible at: http://research.amnh.org/herpetology/amphibia/. American Museum of Natural History, New York, USA. Accessed: 20 June 2018.

Fishes – Based on Froese, R. and Pauly, D. (eds). 2018. *FishBase.* World Wide Web electronic publication. www.fishbase.org, version (02/2018). Accessed: 12 June 2018.

Invertebrates

Insects – Estimates of the number of insects in the world vary from about 720,000 to more than 1 million, but the most reasonable mid-point figure appears to be about 1 million (see discussion in Chapman, A.D. 2009 . *Numbers of Living Species in Australia and the World, 2nd edition* . Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html#insecta. Accessed 17 June 2012).

Crustaceans – The estimated number of described species of Crustacea in the world varies from 25,000 to 68,171 but the best estimate is 47,000 (see discussion in Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html#crustacea. Accessed 17 June 2012).

Molluscs – The estimated number of described mollusc species ranges from 50,000 to 120,000. The best estimate by Chapman (2009) appears to be about 85,000 species. (For further discussion on the numbers of molluscs, see Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html#mollusca. Accessed 17 June 2012).

Corals – Corals fall under the Phylum Cnidaria and are primarily in the Class Anthozoa, although there are some in the Class Hydrozoa. The number of described species reported here are for species typically regarded as 'corals' and are largely based on Spalding *et al* . (2001) (Alcyonarian corals); and Cairns (1999) (Scleractinian corals). The remainder of the cnidarians, anemones, jellyfish, etc., are treated under 'Others'.

Arachnids (spiders, scorpions, etc) – Estimates of the number of described arachnids vary from 60,000 to 102,248, the latter is from Chapman (2009) and is calculated from a breakdown of the numbers by Order and appears to be the best figure to use (see discussion in Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html#arachnida. Accessed 17 June 2012).

Velvet Worms – The number of described species of Onychophora (velvet worms) would appear to be around 165 (for further details see discussion in Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html#onychophora. Accessed 17 June 2012).

Horseshoe Crabs – Horseshoe crabs are placed on the Red List under the traditional class "Merostomata" which excludes the fossil sea scorpions; only four species are extant today (see http://en.wikipedia.org/wiki/Merostomata for further details).

Others – This is a miscellaneous group of invertebrate species that have been assessed for the IUCN Red List. The total number of described species is based on the estimated totals for the following groups from which the assessed species come: Annelida - segmented worms (16,763), Cnidaria - anemones, jellyfish, etc. but excluding the corals which are treated separately (7,620), Echinodermata -starfish (7,003 species), Myriapoda - centipedes and millipedes (16,072), Nemertina - ribbon worms (1,200), and Platyhelminthes - flat worms (20,000). (For further details on the numbers in these groups see: Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-02-groups-invertebrates.html. Accessed 17 June 2012).

Plants

Mosses – Based on information provided by Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-03-groups-plants.html#bryophyta. Accessed 17 June 2012.

Ferns and allies – Based on information provided by Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-03-groups-plants.html#ferns. Accessed 17 June 2012.

Gymnosperms – Cycads based on Osborne *et al* . in press (in Haynes 2009); conifers based on Farjon (2010); Ephedraceae and Gnetaceae based on Govaerts (2010); others based on Mabberley (2008) and Chapman (2009). (For further discussion see Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-03-groups-plants.html#gymnosperms. Accessed 17 June 2012).

Flowering Plants (Magnoliophyta = Magnoliopsida+Liliopsida) – The number of described species ranges from 223,300 to 315,903. The number used here is based on Chapman (2009). For alternative views on the numbers of seed plant species see Mabberley (1997), Schmid (1998), Govaerts (2001, 2003), Bramwell (2002), Thorne (2002), Scotland and Wortley (2003), Paton *et al* . (2008), Kier *et al* . (2009), and Joppa *et al* . (2010). (For further discussion see Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-03-groups-plants.html#magnoliophyta. Accessed 17 June 2012).

Fungi & Protists

Lichens - The figure of 10,000 from Groombridge and Jenkins (2002) appears to be too low, so the number described is now based on information provided by Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-04-groups-fungi.html#lichen. Accessed 02 September 2010.

Mushrooms - Number of mushroom-forming fungi (=Basidiomycota excluding the 7 lichenised species) based on Kirk *et al* . (2008) (for discussion see Chapman, A.D. 2009 . Numbers of Living Species in Australia and the World, 2nd edition. Australian Biological Resources Study, Canberra. Available at: http://www.environment.gov.au/biodiversity/abrs/publications/other/species-numbers/2009/04-04-groups-fungi.html#fungi. Accessed 02 September 2010).

Green (Chlorophyta), Red (Rhodophyta) and Brown (Ochrophyta or Heterokontophyta) Algae – From Guiry, M.D. and Guiry, G.M. 2015. *AlgaeBase* . World-wide electronic publication, National University of Ireland, Galway. http://www.algaebase.org. Accessed on 12 June 2015.