

Biodiversity 2005

Source: United Nations Environment Programme - World Conservation Monitoring Centre, Ramsar Convention Bureau, United Nations Educational, Scientific, and Cultural Organization, World Conservation Union

EarthTrends
Data Tables:
Biodiversity and
Protected Areas



	Protected Areas						Number of Known and Threatened Species						Net Legal Trade in Selected Wildlife Products as Reported by CITES (c)		
	All Areas Under IUCN Management Categories I-V, 2004 (a)		Marine Areas, IUCN Categories I-VI, 2004	Wetlands of International Importance, 2005		Biosphere Reserves, 2004	Mammals		Birds		Plants (b)		Live Primates	Live Parrots	Animal Skins (d)
	Total Area (1000 ha)	Percent of Total Land Area	Number	Number	Number	Known Species 2004	Threatened 2003	Known Species 2004	Threatened 2003	Known Species 2004	Threatened 2003	2002	2002	2002	
World	806,722 e	6.1 e	3,459 e	1,420	459	4,629 f	..	10,000 g	..	270,000 h
Asia (excl. Middle East)	191,450	7.9	661	145 i	67	..	..	..	..	..	..	(19,001)	43,634	(723,299)
Armenia	299	10.1	..	2	..	78	9	302	12	3,553	1	..	..	0
Azerbaijan	394	4.6	3	3	..	82	11	364	11	4,300	0	2	(1)	0	
Bangladesh	66	0.5	5	2	..	131	22	604	23	5,000	12	..	335	0	
Bhutan	1,181	29.6	..	..	..	92	21	625	18	5,468	7	..	..	0
Cambodia	3,750	20.5	2	3	1	127	23	521	24	..	31	..	..	(1)
China	105,527	11.3	41	30	26	502	80	1,221	82	32,200	443	(14,322)	(53,326)	45,767	
Georgia	290	4.2	2	2	..	98	11	268	8	4,350	0	4	(5)	670	
India	15,291	4.9	120	19	4	422	85	1,180	79	18,664	246	4	75	(95)	
Indonesia	8,607	4.5	116	2	6	667	146	1,604	121	29,375	383	(3,250)	15,817	(873,858)	
Japan	3,123	8.4	164	13	4	171	37	592	53	5,565	12	5,978	17,489	292,287	
Kazakhstan	7,742	2.9	1	2	..	145	15	497	23	6,000	1	12	3	0	
Korea, Dem People's Rep	316	2.6	..	..	2	105	12	369	22	2,898	3	4	59	45,256
Korea, Rep	350	3.6	7	2	2	89	12	423	34	2,898	0	194	48	30,095	
Kyrgyzstan	608	3.1	..	1	2	58	6	207	4	4,500	1	..	..	0
Lao People's Dem Rep	..	..	..	..	..	215	30	704	21	8,286	19	..	..	0
Malaysia	1,366	4.1	67	4	..	337	50	746	40	15,500	683	196	3,791	(491,605)	
Mongolia	20,992	13.5	..	11	4	140	13	387	22	2,823	0	..	..	0
Myanmar	174	0.3	1	1	..	288	39	1,047	41	7,000	38	(2)	3	0	
Nepal	1,127	7.6	..	4	..	203	29	864	31	6,973	7	..	2	(2)	
Pakistan	3,509	4.0	5	19	1	195	17	625	30	4,950	2	..	(476)	(3)	
Philippines	1,513	5.1	38	4	2	222	50	590	70	8,931	212	(2,654)	(591)	11	
Singapore	3	5.2	2	..	..	73	3	400	10	2,282	54	10	29,328	81,980
Sri Lanka	637	9.6	19	3	3	123	21	381	16	3,314	280	5	199	0	
Tajikistan	2,603	18.3	..	5	..	76	7	351	9	5,000	2	..	..	0
Thailand	6,516	12.7	19	10	4	300	36	971	42	11,625	84	310	15,650	103,742	
Turkmenistan	1,883	4.0	..	1	1	103	12	318	13	..	0	..	..	0
Uzbekistan	2,050	4.6	..	1	1	91	7	343	16	4,800	1	..	20	0	
Viet Nam	1,099	3.4	12	1	4	279	41	837	41	10,500	145	(5,142)	2	(133,885)	
Europe	137,694	6.1	761	788 i	172	..	..	..	..	..	..	9,783	137,082	1,429,081
Albania	56	2.0	7	2	..	73	1	303	9	3,031	0	..	..	0
Austria	2,346	28.0	..	17	5	101	5	412	8	3,100	3	7	868	7,969	
Belarus	1,304	6.3	..	7	3	71	6	226	4	2,100	0	8	..	1	
Belgium	83	2.7	2	9	..	92	9	427	10	1,550	0	1,135	(2,138)	64	
Bosnia and Herzegovina	27	0.5	..	1	..	78	8	312	8	..	1	..	(2)	0	
Bulgaria	593	5.4	1	10	16	106	12	379	11	3,572	0	(1)	26	36	
Croatia	339	6.0	18	4	1	96	7	365	9	4,288	0	11	56	26	
Czech Rep	196	2.5	..	11	7	88	6	386	9	1,900	4	31	(24,481)	8	
Denmark	933	21.8	72	38 j	1	81	4	427	10	1,450	3	(1)	(905)	2,917	
Estonia	350	7.6	..	11	1	67	4	267	3	1,630	0	4	0	130	
Finland	1,044	3.1	14	11	2	80	3	421	10	1,102	1	(1)	1	81	
France	1,624	3.0	83	22 j	10	148	16	517	15	4,630	2	3,373	30,981	272,532	
Germany	10,445	29.3	40	32	14	126	9	487	14	2,682	12	705	3,602	266,995	
Greece	239	1.8	14	10	2	118	11	412	14	4,992	2	269	17,170	2,343	
Hungary	821	8.8	..	23	5	88	7	367	9	2,214	1	37	(610)	(2,744)	
Iceland	476	4.7	9	3	..	33	7	305	0	377	0	..	97	1	
Ireland	78	1.1	12	45	2	63	4	408	8	950	1	(2)	42	2	
Italy	2,160	7.2	55	46	8	132	12	478	15	5,599	3	241	51,086	524,785	
Latvia	818	12.7	1	6	1	68	4	325	8	1,153	0	(2)	1	43	
Lithuania	592	9.2	3	5	..	71	5	227	4	1,796	0	12	236	0	
Macedonia, FYR	180	7.1	..	1	..	89	9	291	9	3,500	0	..	(176)	0	
Moldova, Rep	47	1.4	..	2	..	50	4	203	8	1,752	0	..	98	0	
Netherlands	175	4.9	10	49 j	1	95	9	444	11	1,221	0	819	(15,041)	45	
Norway	1,952	6.1	18	37 j	..	83	9	442	6	1,715	2	(1)	1,849	32	
Poland	3,417	11.0	6	8	9	110	12	424	12	2,450	4	19	649	196	
Portugal	399	4.4	26	12	1	105	15	501	15	5,050	15	11	19,732	0	
Romania	476	2.0	8	2	3	101	15	365	13	3,400	1	44	16	79	
Russian Federation	90,223	5.4	47	35	34	296	43	645	47	11,400	7	146	780	1,338	
Serbia and Montenegro	327	3.2	2	5	2	96	10	381	10	4,082	1	550	(1,241)	220	
Slovakia	357	7.3	..	13	4	87	7	332	11	3,124	2	12	(621)	41	
Slovenia	293	14.4	2	2	2	87	7	350	7	3,200	0	..	878	456	
Spain	4,059	8.0	38	49	27	132	20	515	20	5,050	14	101	34,436	304,775	
Sweden	4,364	9.8	95	51	1	85	5	457	9	1,750	3	(3)	(784)	6	
Switzerland	1,185	28.7	..	11	2	93	4	382	8	3,030	2	(13)	174	55,422	
Ukraine	1,937	3.3	17	33	6	120	14	325	13	5,100	1	5	1,264	160	
United Kingdom	3,731	15.3	153	159 j	9	103	10	557	10	1,623	13	2,266	17,798	(8,970)	
Middle East & N. Africa	33,360	2.7	91	77 i	26	..	..	..	..	..	..	194	40,945	63,360
Afghanistan	219	0.3	..	..	..	144	12	434	17	4,000	1	..	..	0
Algeria	11,864	5.1	4	26	6	100	12	372	11	3,164	2	..	3	0	
Egypt	4,536	4.6	17	2	2	118	6	481	17	2,076	2	..	39	55,111	
Iran, Islamic Rep	10,376	6.4	7	22	9	158	21	498	18	8,000	1	..	(1)	0	
Iraq	1	0.0	..	..	..	102	9	396	18	..	0	..	(1)	0
Israel	379	18.4	19	2	1	115	13	534	18	2,317	0	(250)	9,873	(464)	
Jordan	913	10.2	1	1	1	93	7	397	14	2,100	0	265	4,980	0	
Kuwait	0	0.0	4	..	..	23	1	358	12	234	0	..	2,618	0
Lebanon	4	0.3	1	4	..	70	5	377	10	3,000	0	20	1,415	1,651	
Libyan Arab Jamahiriya	122	0.1	3	2	..	87	5	326	7	1,825	1	78	3	0	
Morocco	326	0.8	4	4	2	129	12	430	13	3,675	2	(3)	7	19	
Oman	22	0.1	4	..	..	74	12	483	14	1,204	6	..	384	0
Saudi Arabia	3,922	2.0	3	..	..	94	9	433	17	2,028	3	28	7,790	3,108
Syrian Arab Rep	..	..	..	1	..	82	3	350	11	3,000	0	..	1	0
Tunisia	28	0.2	2	1	4	78	10	360	9	2,196	0	18	75	15	
Turkey	571	0.7	14	9	..	145	15	436	14	8,650	3	34	2,211	3,847	
United Arab Emirates	0	0.0	..	..	..	30	5	268	11	..	0	2	1,112	60
Yemen	..	..	..	..	1	74	6	385	14	1,650	159	..	..	12

Biodiversity 2005

	Protected Areas						Number of Known and Threatened Species						Net Legal Trade in Selected Wildlife Products as Reported by CITES (c)		
	All Areas Under IUCN Management Categories I-V, 2004 (a)		Marine Areas, IUCN Categories I-VI, 2004	Wetlands of International Importance, 2004		Biosphere Reserves, 2004	Mammals		Birds		Plants (b)		Live Primates	Live Parrots	Animal Skins (d)
	Total Area (1000 ha)	Percent of Total Land Area	Number	Number	Number	Known Species	Threatened	Known Species	Threatened	Known Species	Threatened	2002	2002	2002	
						2004	2003	2004	2003	2004	2003				
Sub-Saharan Africa	142,025	5.9	153	102	50	..	..	..	..	..	..	(8,916)	(198,174)	(383,039)
Angola	5,271	4.2	4	..	..	296	11	930	20	5,185	26	(1)	(4)	0
Benin	778	6.7	..	2	2	159	6	485	2	2,500	14	..	2	(2,500)	
Botswana	10,499	18.1	..	1	..	169	6	570	9	2,151	0	2	50	4	
Burkina Faso	3,135	11.5	..	3	2	129	6	452	2	1,100	2	..	0	0	
Burundi	146	5.4	..	1	..	116	7	597	9	2,500	2	..	(6)	0	
Cameroon	3,456	7.4	2	..	3	322	42	936	18	8,260	334	(3)	(16,490)	(20)	
Central African Rep	7,320	11.8	..	2	2	187	11	663	3	3,602	15	(1)	(10)	(4)	
Chad	11,494	9.0	..	2	..	104	12	531	5	1,600	2	1	2	(43,538)	
Congo	4,861	14.1	..	1	2	166	14	597	4	6,000	35	..	(8,201)	0	
Congo, Dem Rep	11,868	5.1	..	2	3	430	29	1,148	30	11,007	65	..	(5,966)	0	
Côte d'Ivoire	1,953	6.1	3	1	2	229	23	702	11	3,660	105	(4)	(4,017)	0	
Equatorial Guinea	455	16.8	3	3	..	153	17	418	6	3,250	61	..	..	0
Eritrea	501	4.1	..	..	..	70	9	537	7	..	3	..	..	0
Ethiopia	5,518	4.9	..	..	..	288	35	839	20	6,603	22	..	(1)	(207)
Gabon	80	0.3	2	3	1	166	11	632	5	6,651	107	6	(28)	(5)	
Gambia	1	0.0	5	1	..	133	3	535	2	974	4	60	..	0	
Ghana	1,104	4.6	..	6	1	249	15	729	8	3,725	117	(11)	2	(6)	
Guinea	51	0.2	..	12	4	215	18	640	10	3,000	22	(27)	(10,068)	(10)	
Guinea-Bissau	..	..	..	1	1	101	5	459	1	1,000	4	(3)	(4)	0
Kenya	3,485	6.0	11	4	6	407	33	1,103	28	6,506	103	1	(1)	(2,461)	
Lesotho	7	0.2	..	1	..	59	3	311	7	1,591	1	..	..	0
Liberia	129	1.3	1	1	..	183	20	576	11	2,200	46	..	(1,656)	(1)	
Madagascar	1,404	2.4	7	3	3	165	49	262	34	9,505	276	2	(3,754)	(8,036)	
Malawi	1,059	8.9	..	1	1	207	7	658	13	3,765	14	..	6	(60)	
Mali	4,532	3.6	..	1	1	134	12	624	5	1,741	6	..	(12,750)	(56,413)	
Mauritania	250	0.2	5	3	..	94	7	521	5	1,100	0	..	..	0
Mozambique	3,285	4.2	6	1	..	228	12	685	23	5,692	46	..	(19)	(291)	
Namibia	3,214	3.9	4	4	..	192	10	619	18	3,174	24	2	828	(101)	
Niger	9,694	8.2	..	7	2	123	10	493	2	1,460	2	(7)	1	0	
Nigeria	3,254	3.6	..	1	1	290	25	899	9	4,715	170	(3)	0	(4)	
Rwanda	194	7.7	..	..	1	206	13	665	9	2,288	3	..	..	0
Senegal	2,096	10.7	7	4	3	191	11	612	5	2,086	7	(1)	(20,245)	(5)	
Sierra Leone	145	2.0	..	1	..	197	12	626	10	2,090	47	..	(100)	0	
Somalia	180	0.3	1	..	..	182	15	642	13	3,028	17	..	..	0
South Africa	6,460	5.3	27	17	4	320	29	829	36	23,420	75	(678)	(114,898)	(49,156)	
Sudan	8,616	3.5	1	..	2	302	16	952	10	3,137	17	(90)	(154)	(107,111)	
Tanzania, United Rep	13,786	14.6	8	4	3	375	34	1,056	37	10,008	239	(844)	(39)	(1,384)	
Togo	429	7.5	..	2	..	175	7	565	2	3,085	10	(24)	(508)	(1,500)	
Uganda	1,763	7.3	..	2	1	360	29	1,015	15	4,900	38	3	(24)	(2)	
Zambia	6,366	8.4	..	2	..	255	11	770	12	4,747	8	3	100	(27,609)	
Zimbabwe	3,103	7.9	..	..	..	222	8	661	10	4,440	17	1	(465)	(88,934)
North America	131,738	6.7	659	57	60	..	..	..	..	..	..	20,739	36,241	(25,113)
Canada	52,069	5.3	219	36	13	211	16	472	19	3,270	1	1,209	3,473	(12,497)	
United States	79,664	8.4	399	21	47	468	40	888	71	19,473	240	19,530	32,759	(12,616)	
C. America & Caribbean	6,041	2.2	397	101	32	..	..	..	..	..	..	(1,525)	(2,370)	595,983
Belize	633	28.6	22	1	..	147	5	544	3	2,894	30	(2)	1	0	
Costa Rica	477	9.3	21	11	2	232	13	838	18	12,119	110	4	1,918	0	
Cuba	96	0.9	36	6	6	65	11	358	18	6,522	163	(3)	(20,103)	0	
Dominican Rep	1,113	22.9	14	1	1	36	5	224	16	5,657	30	57	526	0	
El Salvador	..	..	3	1	..	137	2	434	3	2,911	25	(7)	(6)	(1)
Guatemala	594	5.4	3	4	2	193	7	684	10	8,681	85	7	2,270	0	
Haiti	7	0.3	..	..	..	41	4	271	15	5,242	28	..	..	0
Honduras	529	4.7	18	5	1	201	10	699	6	5,680	111	..	1,429	0	
Jamaica	0	0.0	4	1	..	35	5	298	12	3,308	208	..	12	0	
Mexico	1,205	0.6	37	55	16	544	72	1,026	57	26,071	261	341	12,152	602,606	
Nicaragua	777	6.0	5	8	2	181	6	632	8	7,590	39	2	(5,038)	(4)	
Panama	483	6.5	14	4	2	241	17	904	20	9,915	195	..	2,580	(6,629)	
Trinidad and Tobago	24	4.8	9	1	..	116	1	435	2	2,259	1	..	308	0	
South America	106,018	5.9	196	76	40	..	..	..	..	..	..	(1,518)	(46,218)	(917,236)
Argentina	5,911	2.1	29	13	11	375	32	1,038	55	9,372	42	3	(16,517)	(230,030)	
Bolivia	12,082	11.1	..	8	3	361	26	1,414	30	17,367	70	2	..	(33,720)	
Brazil	32,866	3.9	82	8	5	578	74	1,712	120	56,215	381	(4)	983	2,769	
Chile	2,650	3.5	27	9	7	159	22	445	32	5,284	40	13	167	103	
Colombia	9,786	8.6	13	3	5	467	39	1,821	86	51,220	222	3	9	(547,545)	
Ecuador	2,308	9.3	4	11	3	341	34	1,515	69	19,362	..	1	..	1	
Guyana	486	2.3	..	..	..	237	13	786	3	6,409	23	(918)	(12,264)	(1,000)
Paraguay	1,391	3.5	..	6	1	168	11	696	27	7,851	10	..	(6,552)	(91,317)	
Peru	4,010	3.1	3	10	3	441	46	1,781	94	17,144	274	(298)	(3,301)	(197)	
Suriname	1,846	12.7	7	1	..	203	12	674	0	5,018	27	(318)	(9,859)	0	
Uruguay	30	0.2	4	2	1	118	6	414	24	2,278	1	2	(1,004)	(83)	
Venezuela	31,357	34.2	19	5	1	353	26	1,392	25	21,073	67	(4)	2,120	(16,217)	
Oceania	58,396	6.9	541	74	12	..	..	..	..	..	..	247	(11,136)	(38,122)
Australia	51,895	6.7	339	64	12	376	63	851	60	15,638	56	266	(95)	(10,147)	
Fiji	16	9.9	15	..	..	15	5	112	13	1,518	66	..	18	(1)
New Zealand	6,401	24.0	76	5	..	73	8	351	74	2,382	21	(24)	(1,459)	106	
Papua New Guinea	7	0.0	14	2	..	260	58	720	33	11,544	142	..	..	(28,080)
Solomon Islands	..	..	1	..	..	72	20	248	21	3,172	16	..	(9,594)	0
Developed	353,555	6.3	2,010	963	..	..	..	..	..	..	..	35,832	84,241	1,637,264
Developing	454,467	5.9	1,430	464	..	..	..	..	..	..	..	(35,821)	(84,241)	(1,635,648)

a. Extent of protected areas may include marine components that artificially inflate the percentage of land area protected. b. Total plant species refer to vascular plants only. Threatened plant species include both vascular plants and mosses. c. CITES trade is expressed as the balance of imports minus exports; negative numbers represent net exports. d. Trade in animal skins includes the skins of crocodiles, wild cats, lizards, and snakes. e. Global totals were calculated by WRI. f. Global estimate is from Wilson and Reeder's *Mammal Species of the World*, 1993. g. Estimate from Birdlife International's *Avibase* database. h. 1992 estimate from *Scientific American*. i. Transboundary sites may be included more than once in regional totals. See technical notes for full details. j. Includes sites in overseas territories.

VARIABLE DEFINITIONS AND METHODOLOGY

A **Protected Area** is defined by the World Conservation Union (IUCN) as "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means." Since September 2002 the World Database on Protected Areas (WDPA) consortium has been working to produce an improved and updated database, available to the public and maintained by the United Nations (UN) Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC). The WDPA contains summary information for over 100,000 sites, including the legal designation, name, IUCN Management Category, size in hectares, location (latitude and longitude), and year of establishment. WRI calculated protected area data using the 2004 WDPA database.

IUCN categorizes protected areas by management objective and has identified six distinct categories of protected areas. WRI has calculated **Total Area** in thousand hectares and **Percent of Land Protected** for categories I-V.

Category Ia. Strict nature reserve: a protected area managed mainly for scientific research and monitoring; an area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features, and/or species.

Category Ib. Wilderness area: a protected area managed mainly for wilderness protection; a large area of unmodified or slightly modified land and/or sea retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

Category II. National park: a protected area managed mainly for ecosystem protection and recreation; a natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations; (b) exclude exploitation or occupation inimical to the purposes of designation of the area; or (c) provide a foundation for spiritual, scientific, educational, recreational, and visitor opportunities, all of which must be environmentally and culturally compatible.

Category III. Natural monument: a protected area managed mainly for conservation of specific natural features; an area containing one or more specific natural or natural/cultural features that is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities, or cultural significance.

Category IV. Habitat/species management area: a protected area managed mainly for conservation through management intervention; an area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

Category V. Protected landscape/seascape: a protected area managed mainly for landscape/seascape conservation and recreation; an area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological, and/or cultural value, and often with high biological diversity.

Category VI. Managed mainly for the sustainable use of natural ecosystems. These areas contain predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while also providing a sustainable flow of natural products and services to meet community needs.

IUCN defines a **Marine Protected Area (MPA)** as: "any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment."

These MPAs include areas that are fully marine or littoral. "Littoral" is defined as any site which is known to incorporate at least some intertidal area.

Many MPAs have large terrestrial areas. The extent of the marine portion of most protected areas is rarely documented. The degree of protection varies from one country to another, and may bear little relationship to the legal status of any site. The total number of marine areas in IUCN categories I-VI is shown in this table.

Wetlands of International Importance, or Ramsar sites, are defined under the Wetlands Convention, signed in Ramsar, Iran, in 1971. In order to qualify as a Ramsar site, an area must have "international significance in terms of ecology, botany, zoology, limnology or hydrology." The Convention on Wetlands is an intergovernmental treaty that provides the framework for national action and international cooperation

for the conservation and wise use of wetlands and their resources. As of January 2005 there were 1420 Ramsar sites in 146 countries with an overall extent of 123,914,362 hectares.

Biosphere Reserves are terrestrial and coastal environments recognized under United Nations Educational, Scientific, and Cultural Organization's (UNESCO's) Man and the Biosphere Programme. Selected for their value to conservation, they are intended to foster the scientific knowledge and skills necessary for improving the balance between people and nature, and for promoting sustainable development. Ideally, biosphere reserves perform three main roles: (a) conservation in situ of natural and semi-natural ecosystems and landscapes; (b) the establishment of demonstration areas for ecologically and socio-culturally sustainable resource use; and (c) the provision of logistic support for research, monitoring, education, training, and information exchange. Biosphere reserves normally consist of three elements: a minimally disturbed core area for conservation and research; a buffer zone where traditional land uses, research, and ecosystem rehabilitation may be permitted; and a transition area. Biosphere reserves are nominated by national governments and remain under the sovereign jurisdiction of the state where they are located. As of November 2004 there were 459 biosphere reserves in 97 countries.

The **Total Number of Known Species** refers to the total number of a particular type of species in a given country. Data on **known mammals** exclude marine mammals. Data on **known birds** include only birds that breed in that country, not those that migrate or winter there. The number of **known plants** includes higher plants only: ferns and fern allies, conifers and cycads, and flowering plants.

The number of known species is collected by WCMC from a variety of sources, including, but not limited to, national reports from the Convention on Biodiversity, other national documents, independent studies, and other texts. Data are updated on a continual basis as they become available; however, updates vary widely by country. While some countries (WCMC estimates about 12) have data that were updated in the last six months, other species estimates have not changed since the data were first collected in 1992.

The **Number of Threatened Species** listed for all countries includes all species that are "critically endangered, endangered, or vulnerable" as defined by the IUCN, but excludes introduced species, species whose status is insufficiently known (categorized by IUCN as "data deficient"), those known to be extinct, and those for which status has not been assessed (categorized by IUCN as "not evaluated"). Species are classified as vulnerable or endangered if they face a risk of extinction in the wild in the immediate future (critically endangered), in the near-term (endangered), or in the medium-term (vulnerable). Threat categories are assigned based on total population size, distribution, and rates of decline.

Net Legal Trade in Selected Wildlife Products is the balance of imports minus exports of live primates, live parrots, and animal skins reported by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Negative values represent net exports. **Live primates** includes all species of monkeys, apes, and prosimians listed under CITES that were traded live in 2002. **Live parrots** includes individuals from the Psittaciformes species listed under CITES that were traded live in 2002. **Animal skins** includes whole skins of all crocodile, cat, lizard, and snake species that were traded in 2002. Data are obtained from trade records submitted by parties to the CITES convention and compiled by the secretariat in the CITES Trade Database.

International trade in wildlife and wildlife products, worth billions of dollars annually, causes serious declines in the numbers of many species of animals and plants. In response, CITES entered into force in 1975 with the purpose of protecting wildlife against overexploitation and preventing international trade from threatening species with extinction. Species are listed in appendices to CITES according to their degree of rarity and the threat posed by trade. International trade in either the listed species themselves or in products derived from the species requires permits or certificates for export, import, and re-export.

FREQUENCY OF UPDATE BY DATA PROVIDERS

Protected Areas Data are updated annually by the WDPA. **Wetlands of International Importance** and **Biosphere Reserves** information is updated several times a year as new sites are added. Data for **Known Species** are updated when new information is provided to WCMC (see above). **Threatened Species** data are updated by IUCN on a continual basis. Species trade data are published in annual reports; the data presented here were published in 2004.

DATA RELIABILITY AND CAUTIONARY NOTES

Protected Areas: Due to variations in consistency and methodology of collection, data on protected areas are highly variable among countries. Some countries update their information with greater regularity or have more accurate data on extent of coverage. Many countries have an underreported number and/or extent of protected areas within their borders. Please see <http://parksdata.conserveonline.org> for the latest revision.

Biosphere Reserves and Wetlands of International Importance: Reserves can be conterminous or overlapping. Regional wetland totals may include some double counting of sites that are contained in more than one country. A full listing of these sites is available at <http://www.unesco.org/mab/BR-WH.htm> and at <http://www.unesco.org/mab/BR-Ramsar.htm>.

Number of Known Species: Values are preliminary estimates based on a compilation of available data from a large variety of sources. They are not based on species checklists. Data have been collected over the last decade without a consistent approach to taxonomy. This can result in significant variations in data quality among countries. Additionally, while the number of species in each country does change, not all countries have been updated; some data may not reflect recent trends. At best, only about 2% of the total species of the world are represented in the UNEP-WCMC Species Database. For this reason, it is important to recognize that numbers of known species in this table are vast underestimates of the actual species worldwide. Data for plant species are less reliable and consistent than data for birds and mammals. Global estimates were not obtained from UNEP-WCMC; see below for citations.

Number of Species Threatened: The total number of threatened species in species groups worldwide are frequently underestimated. For all species groups, there are many species that have yet to be described and whose status is yet unknown. In addition, while threat assessments have been conducted for all described species of mammals and birds, only a small portion of described plant species have been assessed.

Net Legal Trade in Selected Wildlife Products: Data on net exports and net imports as reported by CITES correspond to legal international trade and are based on permits issued, not actual items traded. Figures may be overestimates if not all permits are used that year. Some permits issued in one year are used at a later date; therefore, numbers of exports and imports may not match exactly for any given year. Species traded within national borders and illegal trade in wildlife and wildlife products are not reflected in these figures. CITES trade data also do not reflect legal trade between non-CITES members. In addition, data on mortality of individuals during capture or collection, transit, or quarantine are also not reflected in these numbers.

SOURCES

Protected Areas (IUCN management categories, marine protected areas): United Nations Environment Programme - World Conservation Monitoring Centre (UNEP-WCMC). 2004. World Database on Protected Areas (WDPA). CD-ROM. Cambridge, U.K. Available at <http://sea.unep-wcmc.org/wdbpa/download/wdpa2004/index.html>.

Ramsar Sites (Wetlands of International Importance): Ramsar Convention Bureau, Gland, Switzerland. Available at <http://ramsar.org/sitelist.pdf>.

Biosphere Reserves: United Nations Educational, Scientific, and Cultural Organization (UNESCO), Man and the Biosphere Programme, UNESCO-MAB Biosphere Reserve Directory, available at <http://www.unesco.org/mab/wnbr.htm>.

Known Species of Mammals, Plants, and Breeding Birds: United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC). 2004. Species Data (unpublished, September 2004). Cambridge, England. UNEP-WCMC Web site available at <http://www.unep-wcmc.org>.

Endangered Species of Mammals, Plants and Birds: International Union for Conservation of Nature and Natural Resources (IUCN). 2003. *2003 IUCN Red List of Threatened Species*. IUCN: Gland, Switzerland. Available at <http://www.redlist.org/info/tables/table5.html>.

International Legal Net Trade Reported by CITES: United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC). 2004. *Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) annual report data, World Conservation Monitoring Centre (WCMC) CITES Trade Database*. Cambridge, U.K. Available at <http://www.cites.org>.