Supporting Online Material for
China's Progress towards the Significant Reduction of the Rate of Biodiversity Loss

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Supporting Tables

Table S1 Groups and their trophic levels in coastal ecosystems of China

Group	Scientific name	Trophic level
Abalones nei	*Haliotis*	2.00
Akiami paste shrimp	*Acetes japonicus*	2.70
Alaska Pollock (=Walleye poll.)	*Theragra chalcogramma*	3.45
Albacore	*Thunnus alalunga*	4.44
Barracudas nei	*Sphyraena*	4.30
Barramundi(=Giant seaperch)	*Lates calcarifer*	4.35
Bigeye tuna	*Thunnus obesus*	4.50
Bigeyes nei	*Priacanthus*	3.80
Black marlin	*Makaira indica*	4.46
Black pomfret	*Parastromateus niger*	3.64
Blackhead seabream	*Acanthopagrus schlegeli*	3.24
Blackmouth croaker	*Atrobucca nibe*	3.03
Blood cockle	*Anadara granosa*	2.00
Blue marlin	*Makaira mazara*	4.50
Blue swimming crab	*Portunus pelagicus*	3.00
Bluefin gurnard	*Chelidonichthys kumu*	3.44
Butterfishes, pomfrets nei	*Stromateidae*	3.50
Cephalopods nei	*Cephalopoda*	3.26
Charybdis crabs nei	*Charybdis*	2.60
Chinese gizzard shad	*Clupanodon thrissa*	3.01
Chub mackerel	*Scomber japonicus*	3.09
Clams, etc. nei	*Bivalvia*	2.00
Clupeoids nei	*Clupeidae*	3.10
Cobia	*Rachycentron canadum*	4.31
Common dolphinfish	*Coryphaena hippurus*	4.37
Common squids nei	*Loligo*	3.25
Croakers, drums nei	*Protonibea diacanthus*	3.70
Cuttlefish, bobtail squids nei	*Sepiidae*	3.60
Daggertooth pike conger	*Muraenesox cinereus*	4.07
Dorab wolf-herring	*Chirocentrus dorab*	4.50
Elongate ilisha	*Ilisha elongata*	3.79
Filefishes nei	*Cantherhines*	2.80
Flatfishes nei	*Pleuronectiformes*	3.40
Flathead grey mullet	*Mugil cephalus*	2.13
Fleshy prawn	*Penaeus chinensis*	2.70
Flyingfishes nei	*Exocoetidae*	3.30
Fourfinger threadfin	*Eleutheronema tetradactylum*	4.35
Frigate and bullet tunas	*Auxis*	4.20
Gadiformes nei	*Gadiformes*	4.00
Gastropods nei	*Gastropoda*	2.09
Gazami crab	*Portunus trituberculatus*	2.60
Giant tiger prawn	*Portunus trituberculatus*	2.60
Goatfishes	*Mullidae*	3.34
Golden threadfin bream	*Nemipterus virgatus*	3.99
Greater lizardfish	*Saurida tumbil*	4.40
Groupers	*Epinephelus*	4.10
Hairtails, scabbardfishes nei	*Trichiurus lepturus*	4.49
Indian driftfish	*Ariomma indica*	3.40
Indian scad	*Decapterus russelli*	3.69
Indo-Pacific king mackerel	*Scomberomorus guttatus*	4.28

Indo-Pacific sailfish	*Istiophorus platypterus*	4.50
Indo-Pacific swamp crab	*Scylla serrata*	2.80
Jacks, crevalles nei	*Alectis ciliaris*	4.80
Japanese anchovy	*Engraulis japonicus*	2.51
Japanese carpet shell	*Ruditapes philippinarum*	2.00
Japanese fan lobster	*Ibacus ciliatus*	2.60
Japanese flying squid	*Todarodes pacificus*	3.20
Japanese hard clam	*Meretrix lusoria*	2.00
Japanese jack mackerel	*Trachurus japonicus*	3.40
Japanese pilchard	*Sardinops sagax*	2.43
Japanese scad	*Decapterus maruadsi*	3.40
Japanese Spanish mackerel	*Scomberomorus niphonius*	4.50
Jellyfishes	*Scyphozoa*	2.10
Kawakawa	*Euthynnus affinis*	4.47
Kuruma prawn	*Penaeus japonicus*	2.70
Large yellow croaker	*Larimichthys croceus*	3.72
Largeeye breams	*Gymnocranius*	3.70
Largehead hairtail	*Trichiurus lepturus*	4.49
Lizardfishes nei	*Synodontidae*	4.00
Longlegged spiny lobster	*Panulirus longipes*	2.60
Longtail tuna	*Thunnus tonggol*	4.06
Marine crabs nei	*Brachyura*	2.60
Marine crustaceans nei	*Crustacea*	3.00
Marine fishes nei(not identified)		3.35
Marine molluscs nei	*Miscellaneous marine molluscs*	2.27
Marine molluscs nei	*Miscellaneous*	2.27
Marlins,sailfishes,etc. nei	*Makaira indica*	4.46
Metapenaeus shrimps nei	*Metapenaeus*	2.70
Mi-iuy (brown) croaker	*Miichthys miiuy*	3.50
Milkfish	*Chanos chanos*	2.40
Moonfish	*Mene maculata*	3.45
Narrow-barred Spanish mackerel	*Scomberomorus commerson*	4.50
Natantian decapods nei	*Shrimps, prawns*	2.65
Octopuses, etc. nei	*Octopodidae*	3.80
Oilfish	*Ruvettus pretiosus*	4.08
Pacific bluefin tuna	*Thunnus orientalis*	4.21
Pacific cupped oyster	*Crassostrea gigas*	2.00
Pacific herring	*Clupea pallasii*	3.15
Pacific rudderfish	*Psenopsis anomala*	3.45
Pacific sandlance	*Ammodytes hexapterus*	3.00
Pacific saury	*Cololabis saira*	3.71
Parrotfishes nei	*Scaridae*	2.10
Pike-congers nei	*Muraenesox bagio*	4.00
Porgies, seabreams nei	*Sparidae*	3.60
Red bigeye	*Priacanthus macracanthus*	3.80
Red-eye round herring	*Etrumeus teres*	3.50
Redtail prawn	*Penaeus penicillatus*	2.70
Sardinellas nei	*Sardinella*	2.85
Scads nei	*Decapterus*	3.40
Sea catfishes nei	*Ariidae*	3.60
Sea cucumbers nei	*Holothuroidea*	2.00
Sea urchins nei	*Strongylocentrotus*	2.10
Seerfishes nei	*Scomberomorus*	4.40
Sharks, rays, skates, etc. nei	*Elasmobranchii*	4.00
Sillago-whitings	*Sillago sihama*	3.40
Silver croaker	*Pennabia argentata*	3.47

Silver pomfrets nei	*Pampus*	3.80
Silver seabream	*Pagrus major*	3.70
Silver-stripe round herring	*Spratelloides gracilis*	3.04
Skipjack tuna	*Katsuwonus pelamis*	4.35
Slender rainbow sardine	*Dussumieria elopsoides*	3.40
Snappers, jobfishes nei	*Lutjanidae*	3.90
So-iny (redlip) mullet	*Chelon haematocheilus*	2.30
Southern rough shrimp	*Trachypenaeus curvirostris*	2.70
Squillids nei	*Squillidae*	3.50
Stolephorus anchovies	*Stolephorus*	3.30
Striped marlin	*Tetrapturus audax*	4.58
Swordfish	*Xiphias gladius*	4.55
Threadfin breams nei	*Nemipterus*	3.50
Tilefishes nei	*Malacanthidae*	3.50
Tonguefishes	*Cynoglossidae*	3.20
Torpedo scad	*Megalaspis cordyla*	4.39
Tropical spiny lobsters nei	*Panulirus*	2.60
Tuna-like fishes nei	*Scombridae*	4.20
Various squids nei	*Teuthida*	3.44
Wahoo	*Acanthocybium solandri*	4.50
Yellow croaker	*Larimichthys polyactis*	3.57
Yellowfin tuna	*Thunnus albacares*	4.30
Yesso scallop	*Pecten yessoensis*	2.10

Table S2 Corresponding of categories of threat status of two Red List assessments: China Red Data Book of Endangered Animals published in 1998, and China Species Red List published in 2004.

China Red Data Book Categories in 1998	China Species Red List Categories in 2004
	Extinct (EX)
Extinct in wild	Extinct in wild (EW)
Extirpated	Regionally Extinct (RE)
	Critically Endangered (CR)
Endangered	Endangered (EN)
Vulnerable	Vulnerable (VU)
Rare/ CD	Near Threatened (NT)
	Least Concern (LC)
Indeterminate	Data Deficient (DD)
	Not Applicable (NA)
	Not Evaluated (NE)

Table S3. Conversion matrix of land categories and area (unit: km^2) during the period between the late 1980s and 2000. Data in a column refers to increased land of the land category in the column which was transformed from other land categories. Data in a row refers to decreased land of the land category in the row which was transform into other land categories.

	Cultivated land	Afforested land	Grassland	Inland waters	Residential quarters	Unused land
Cultivated land		5152.08	6414.93	3639.84	15074.98	1341.68
Afforested land	17465.46		8110.00	400.31	922.95	283.10
Grassland	34567.63	10462.68		1503.33	764.34	9139.19
Inland waters	2847.79	251.25	914.84		389.59	1788.86
Residential quarters	86.09	20.22	36.50	19.36		0.00
Unused land	6582.33	397.36	6597.89	2279.33	489.86	

Table S4 Conversion matrix of land categories and area during the period between 2000 and 2005 (unit: km^2). Data in a column refers to increased land of the land category in the column which was transformed from other land categories. Data in a row refers to decreased land of the land category in the row which was transform into other land categories

	Cultivated land	Afforested land	Grassland	Inland waters	Residential quarters	Unused land
Cultivated land		3789.70	6441.86	3247.66	12701.65	753.22
Afforested land	2562.09		2732.56	355.77	1661.32	110.89
Grassland	12229.11	5316.58		805.48	1003.90	6144.02
Inland waters	1329.37	105.50	760.95		866.23	2326.61
Residential quarters	26.15	10.56	8.92	44.83		2.31
Unused land	4422.09	278.68	3368.83	1957.58	651.12	

Table S5. Water quality in all sea areas in China. Data were from China Environment Status Communique (2000-2007) published by China EPA, and China Marine Environmental Quality Communique published by the Sate Oceanic Administration in 2007.

Item / Year	Grade I	Grade II	Grade III	Grade IV	Grade IV plus	Water Quality Index
2000	/	/	/	/	/	/
2001	13.4%	28.0%	12.2%	11.9%	34.5%	54.78
2002	21.3%	28.4%	14.4%	8.9%	27.0%	61.62
2003	19.8%	30.4%	19.8%	8.5%	21.5%	63.7
2004	11.4%	38.2%	15.4%	11.8%	23.2%	60.56
2005	32.0%	35.2%	8.9%	5.5%	18.4%	71.38
2006	28.8%	38.9%	8.0%	7.3%	17.0%	71.04
2007	26.0%	36.8%	11.8%	7.1%	18.3%	69.02

Table S6. Area and occurrence of red tides in coastal waters of mainland of China. Data were from China Marine Environmental Quality Communique in 2007 issued by the Sate Oceanic Administration. Available at http://www.soa.gov.cn.

Year	Times	Area(thousand km^2)
2000	28	10.000
2001	77	15.000
2002	79	10.150
2003	119	14.550
2004	96	26.630
2005	82	27.070
2006	93	19.840
2007	82	11.610

Table S7. Water quality of inland waters of mainland of China. Data were from China Environment Status Communique (2001-2006) promulgated by China EPA which is available at http://www.sepa.gov.cn

Item / Year	Grade I	Grade II	Grade III	Grade IV	Grade V	Grade V Minus	Water Quality Index
2001	1.5%	18.0%	10.0%	17.7%	8.8%	44.0%	30.7
2002	2.7%	13.8%	12.6%	18.9%	11.1%	40.9%	31.1
2003	3.4%	21.4%	13.3%	23.8%	8.4%	29.7%	39.7
2004	4.6%	20.9%	16.3%	21.6%	8.7%	27.9%	41.5
2005	4.0%	20.0%	17.0%	25.0%	7.0%	27.0%	41.6
2006	4.0%	23.0%	19.0%	23.0%	5.0%	26.0%	44.0

Table S8 Change in status of threatened birds between 1998-2004

Species	Categories	
	1998	2004
Tetraophasis obscurus	NT	VU
Arborophila atrogularis	NT	EN
Arborophila mandellii	NT	VU
Tragopan satyra	NT	VU
Tragopan blythii	NT	VU
Tragopan temminckii	VU	NT
Tragopan caboti	EN	VU
Lophophorus sclateri	NT	VU
Lophophorus lhuysii	EN	VU
Crossoptilon crossoptilon	VU	NT
Crossoptilon auritum	VU	LC
Syrmaticus humiae	NT	VU
Dendragapus falcipennis	EN	EX
Tetrao tetrix	VU	NT
Bonasa sewerzowi	EN	NT
Oxyura leucocephala	NT	EN
Cygnus olor	VU	NT
Cygnus cygnus	VU	NT
Cygnus columbianus	VU	NT
Nettapus coromandelianus	NT	EN
Aix galericulata	VU	NT
Mergus squamatus	NT	VU
Anthracoceros albirostris	VU	NT
Buceros bicornis	EN	VU

Anorrhinus tickelli	NT	VU
Aceros nipalensis	NT	VU
Centropus sinensis	VU	NT
Centropus bengalensis	VU	NT
Psittacula derbiana	VU	NT
Psittacula alexandri	VU	NT
Columba punicea	NT	VU
Chalcophaps indica	VU	NT
Grus leucogeranus	EN	CR
Grus antigone	NT	VU
Grus monacha	EN	VU
Grus nigricollis	EN	VU
Sterna bernsteini	VU	CR
Haliaeetus pelagicus	EN	VU
Gyps bengalensis	EN	CR
Aegypius monachus	VU	NT
Circus macrourus	VU	NT
Aquila clanga	NT	VU
Egretta eulophotes	EN	NT
Threskiornis melanocephalus	NT	EN
Nipponia nippon	EN	CR
Pitta nympha	NT	VU
Gracula religiosa	VU	EN
Garrulax sukatschewi	NT	VU
Paradoxornis zappeyi	NT	VU
Paradoxornis przewalskii	NT	VU
Emberiza jankowskii	NT	VU
Sula sula	VU	LC
Sula leucogaster	VU	LC
Phalacrocorax capillatus	NT	LC
Phalacrocorax niger	VU	LC
Gallus gallus	VU	LC
Chrysolophus pictus	VU	LC
Chrysolophus amherstiae	VU	LC
Elanus caeruleus	VU	LC
Pernis ptilorhynchus	VU	LC
Haliastur indus	NT	LC
Accipiter badius	NT	LC
Accipiter trivirgatus	NT	LC
Buteo rufinus	NT	LC
Butastur indicus	NT	LC
Phodilus badius	NT	LC
Bubo bubo	NT	LC
Macropygia unchall	NT	LC
Macropygia ruficeps	NT	LC

Gallirallus striatus	NT	LC
Porzana bicolor	NT	LC
Metopidius indicus	NT	LC
Synthliboramphus antiquus	VU	LC
Syrrhaptes tibetanus	VU	LC
Gyps himalayensis	NT	LC
Gypaetus barbatus	VU	LC
Spilornis cheela	VU	LC
Pandion haliaetus	NT	LC
Paradoxornis davidianus	NT	LC
Hieraaetus fasciata	NT	LC
Hieraaetus kienerii	NT	LC
Ictinaetus malayensis	NT	LC
Lanius bucephalus	NT	LC
Ithaginis cruentus	VU	LC
Coturnix chinensis	NT	LC
Dicrurus annectans	NT	LC
Aquila chrysaetos	VU	LC
Aviceda jerdoni	NT	LC
Falco cherrug	VU	LC
Falco peregrinus	NT	LC
Egretta sacra	NT	LC
Pitta cyanea	NT	LC
Ciconia nigra	EN	LC
Gorsachius melanolophus	EN	LC
Harpactes erythrocephalus	VU	LC
Ketupa flavipes	NT	LC
Strix uralensis	NT	LC
Treron sieboldii	NT	LC
Ducula aenea	VU	LC
Lerwa lerwa	NT	NT
Tetraogallus himalayensis	NT	NT
Tetraophasis szechenyii	VU	VU
Arborophila rufogularis	NT	NT
Arborophila brunneopectus	NT	NT
Arborophila rufipectus	EN	EN
Arborophila ardens	EN	EN
Arborophila charltonii	NT	NT
Lophophorus impejanus	NT	NT
Lophura leucomelanos	NT	NT
Crossoptilon harmani	NT	NT
Crossoptilon mantchuricum	EN	VU
Syrmaticus ellioti	VU	NT
Syrmaticus reevesii	EN	VU
Pavo muticus	EN	EN

Dendrocygna javanica	VU	VU
Dryocopus javensis	NT	NT
Harpactes oreskios	NT	NT
Tyto alba	NT	NT
Treron bicincta	NT	NT
Otis tarda	VU	VU
Grus vipio	VU	VU
Grus japonensis	EN	EN
Limnodromus semipalmatus	NT	NT
Larus saundersi	VU	VU
Larus relictus	VU	VU
Haliaeetus leucoryphus	VU	VU
Sarcogyps calvus	EN	EN
Aquila heliaca	VU	VU
Gorsachius magnificus	EN	EN
Platalea minor	EN	EN
Ciconia boyciana	EN	EN
Pitta phayrei	NT	NT
Oriolus mellianus	VU	VU
Dicrurus remifer	NT	NT
Dicrurus paradiseus johni	NT	NT
Paradoxornis heudei	NT	NT
Carpodacus roborowskii	NT	NT
Emberiza koslowi	NT	NT

Table S9 Change in status of threatened mammals between 1998-2004 in China

Species	Categories	
	1998	2004
Elephas maximus	EN	EN
Nycticebus bengalensis	EN	EN
Nycticebus pygmaeus	EN	EN
Macaca arctoides	VU	VU
Macaca assamensis	VU	VU
Macaca mulatta	VU	VU
Macaca thibetana	VU	VU
Rhinopithecus bieti	EN	EN
Rhinopithecus brelichi	EN	EN
Rhinopithecus roxellana	EN	VU
Trachypithecus francoisi	EN	EN
Trachypithecus phayrei	EN	EN
Trachypithecus shortridgei	EN	EN
Bunopithecus hoolock	EN	CR
Hylobates lar	EN	CR

Nomascus hainanus	EN	CR
Nomascus leucogenys	EN	CR
Ratufa bicolor	VU	VU
Aeretes melanopterus	EN	EN
Hylopetes alboniger	EN	NT
Hylopetes phayrei	VU	VU
Trogopterus xanthipes	VU	VU
Callosciurus inornatus	VU	VU
Dryomys nitedula	VU	EN
Castor fiber	EN	EN
Sicista concolor	NT	NT
Eozapus setchuanus	NT	VU
Chiropodomys gliroides	NT	VU
Vernaya fulva	NT	EN
Atherurus macrourus	VU	VU
Ochotona koslowi	NT	EN
Lepus hainanus	VU	VU
Lepus yarkandensis	VU	VU
Hylomys hainanensis	NT	EN
Suncus etruscus	NT	CR
Neomys fodiens	NT	VU
Scapanulus oweni	NT	VU
Pteropus dasymallus	NT	EN
Sphaerias blanfordi	VU	EN
Rhinolophus luctus	VU	NT
Tylonycteris pachypus	NT	NT
Myotis chinensis	VU	VU
Manis pentadactyla	VU	EN
Catopuma temminckii	VU	CR
Felis bieti	EN	CR
Felis chaus	NT	EN
Felis manul	VU	EN
Felis silvestris	EN	CR
Lynx lynx	VU	EN
Pardofelis marmorata	EN	CR
Prionailurus bengalensis	VU	VU
Neofelis nebulosa	EN	EN
Panthera pardus	EN	CR
Panthera tigris	EN	CR
Uncia uncia	EN	CR
Arctictis binturong	EN	CR
Paradoxurus hermaphroditus	VU	VU
Chrotogale owstoni	EN	EN
Prionodon pardicolor	EN	VU
Viverra zibetha	VU	EN

Canis lupus	VU	VU
Cuon alpinus	VU	EN
Ailurus fulgens	VU	VU
Ailuropoda melanoleuca	EN	EN
Helarctos malayanus	NT	EN
Ursus arctos	EN	VU
Ursus thibetanus	VU	VU
Aonyx cinerea	EN	EN
Lutra lutra	VU	EN
Lutrogale perspicillata	EN	EN
Gulo gulo	NT	EN
Martes foina	VU	EN
Martes zibellina	EN	EN
Mustela strigidorsa	VU	EN
Vormela peregusna	NT	VU
Equus hemionus	EN	EN
Equus kiang	VU	EN
Camelus bactrianus	EN	EN
Tragulus javanisus	EN	CR
Moschus berezovskii	EN	EN
Moschus chrysogaster	EN	EN
Moschus fuscus	VU	EN
Moschus moschiferus	EN	EN
Alces alces	VU	EN
Cervus elaphus	EN	VU
Cervus nippon	EN	EN
Muntiacus crinifrons	VU	EN
Muntiacus gongshanensis	EN	EN
Przewalskium albirostris	EN	EN
Rusa unicolor	VU	VU
Hydropotes inermis	VU	VU
Gazella subgutturosa	VU	EN
Procapra gutturosa	VU	VU
Procapra picticaudata	VU	VU
Procapra przewalskii	EN	CR
Bos grunniens	VU	EN
Budorcas taxicolor	EN	EN
Capra sibirica	EN	EN
Hemitragus jemlahicus	EN	EN
Naemorhedus baileyi	NT	EN
Naemorhedus goral	VU	EN
Ovis ammon	EN	EN
Pantholops hodgsoni	EN	EN
Pseudois nayaur	VU	VU
Pseudois schaeferi	EN	CR

Capricornis sumatraensis	VU	VU
Lepus timidus	VU	LC

Table S10 Change in status of threatened fish between 1998 and 2004 in China

Species	Categories	
	1998	2004
Acipenser schrencki	VU	EN
Acipenser dabryanus	VU	EN
Acipenser sinensis	VU	EN
Huso dauricus	VU	EN
Psephurus gladius	EN	CR
Anguilla marmorata	EN	EN
Candidia barbatus	VU	VU
Parazacco spilurus	VU	VU
Zacco chengtui	VU	VU
Gobiocypris rarus	EN	EN
Luciobrama macrocephalus	VU	VU
Leuciscus merzbacheri	VU	VU
Atrilines roulei roulei	NT	VU
Macrochirichthys macrochirius	EN	EN
Rashorinus formosae	VU	VU
Pogobrama barbatula	NT	VU
Hainania serrata	NT	VU
Anabarilius alburnops	EN	EN
Xenocypris yunnanensis	EN	EN
Xenocyprinoides parvulus	NT	VU
Hampala macrolepidota	VU	VU
Sinocyclocheilus anophthaslmua	NT	VU
Sinocyclocheilus grahami	EN	EN
Typhlobarbus nudiventris	NT	VU
Luciocyprinus langsoni	VU	VU
Cosmochilus cardinalis	NT	VU
Tor (Parator) zonatus	VU	VU
Balantiocheilus hekouensis	NT	VU
Epalzeorhynchus bicornis	EN	EN
Semilabeo obscurus	NT	VU
Sinocrossocheilus guizhouensis	NT	VU
Ptychidio macrops	EN	EN
Placocheilus cryptonemus	NT	VU
Pseudorasbora elongata	VU	VU
Squalidus minor	EN	EN
Coreius septentrionalis	EN	EN
Platysmacheilus longibarbatus	VU	VU

Schizothorax biddulphi	EN	CR
Schizothorax taliensis	EN	EN
Aspiorhynchus laticeps	EN	EN
Diptychus kaznakovi	VU	VU
Oxygymnocypris stewartii	EN	EN
Chuanchia labiosa	VU	VU
Platypharodon extremus	VU	VU
Puntioplites proctozysron	NT	VU
Procypris merus	VU	VU
Procypris rabaudi	VU	VU
Cyprinus ilishaestomus	EN	EN
Cyprinus longipectoralis	VU	VU
Cyprinus megalophthalmus	EN	EN
Cyprinus micristius	EN	EN
Cyprinus pellegrini	VU	VU
Cyprinus yunnanensis	EN	EN
Gobiobotia homalopteroidea	EN	EN
Psilorhynchus homaloptera	EN	EN
Gyrinocheilus aymonieri	EN	EN
Myxocyprinus asiaticus	VU	VU
Oreonectes anophthalmus	NT	VU
Triplophysa gejiuensis	NT	VU
Triplophysa siuroides	VU	VU
Leptobotia eloagata	VU	VU
Plesiomyzon baotingensis	NT	VU
Protomyzon pachycheilus	NT	VU
Pseudobagrus medianalis	EN	EN
Cranoglanis bouderius	VU	VU
Silurus mento	EN	EN
Silurus soldatovi	VU	VU
Kryptopterus moorei	NT	VU
Pangasius sanitwangsei	NT	VU
Bagarius bagarius	VU	VU
Gagata dolichonema	NT	VU
Liobagrus kingi	EN	EN
Akysis brachybarbatus	NT	VU
Oncorhynchus masou	EN	EN
Hucho taimen	VU	VU
Brachymystax lenok	VU	VU
Coregonus ussuriensis	VU	VU
Thymallus arcticus	VU	VU
Trachidermus fasciatus	EN	EN
Coreosiniperca roulei	VU	VU
Trichogaster trichopterus	VU	VU

Table S11 Change in status of threatened higher plants between 1998 and 2004 in China

Species	Categories	
	1998	**2004**
Abies beshanzuensis	CR	CR
Abies beshanzuensis var. *ziyuanensis*	CR	CR
Abies chensiensis	LC	VU
Abies fabri	LC	VU
Abies fanjingshanensis	EN	CR
Abies fargesii	LC	VU
Abies forrestii	LC	VU
Abies kawakamii	NT	VU
Abies recurvata	LC	EN
Abies squamata	VU	VU
Acalypha suirenbiensis	VU	VU
Acer amplum subsp. *catalpifolium*	VU	VU
Acer duplicatoserratum	VU	VU
Acer miaotaiense	VU	VU
Aesculus wangii	VU	VU
Alseodaphne rugosa	EN	EN
Amentotaxus argotaenia var. *brevifolia*	VU	CR
Apterosperma oblata	VU	VU
Aquilaria sinensis	VU	VU
Betula halophila	CR	CR
Calocedrus macrolepis var. *formosana*	EN	VU
Camellia brevistyla	EN	EN
Camellia crapnelliana	VU	VU
Camellia grijsii	VU	VU
Camellia indochinensis var. *tunghinensis*	VU	CR
Camellia pubipetala	VU	VU
Camellia reticulata	VU	VU
Carpinus putoensis	CR	CR
Castanopsis concinna	VU	EN
Cathaya argyrophylla	NT	EN
Cephalotaxus latifolia	LC	VU
Cephalotaxus oliveri	VU	VU
Cephalotaxus sinensis	LC	NT
Cephalotaxus sinensis var. *wilsoniana*	EN	VU
Cerasus henryi	LC	CR
Chunia bucklandioides	VU	EN
Cinnamomum mairei	EN	VU

Cornus schindleri	VU	EN
Corylus chinensis	EN	VU
Craigia kwangsiensis	CR	CR
Cupressus chengiana var. *jiangeensis*	CR	CR
Cupressus funebris	LC	VU
Cupressus torulosa var. *gigantea*	VU	EN
Dalbergia odorifera	VU	CR
Davidia involucrata	NT	VU
Davidia involucrata var. *vilmoriniana*	VU	VU
Dipteronia dyeriana	EN	EN
Dipteronia sinensis	NT	NT
Elaeagnus mollis	VU	EN
Elaeagnus tarokoensis	VU	VU
Eucommia ulmoides	NT	VU
Eurya rengechiensis	EN	VU
Eurycorymbus cavaleriei	NT	VU
Euryodendron excelsum	CR	CR
Fagus hayatae	VU	VU
Fatsia polycarpa	NT	VU
Firmiana hainanensis	VU	VU
Firmiana major	EW	EN
Garcinia paucinervis	EN	VU
Ginkgo biloba	EN	EN
Gleditsia japonica var. *velutina*	CR	CR
Halesia macgregorii	VU	VU
Helicia shweliensis	EN	EN
Heptacodium miconioides	VU	EN
Houpoëa officinalis	NT	VU
Juniperus convallium	NT	NT
Juniperus formosana	NT	LC
Juniperus komarovii	NT	VU
Juniperus pingii	NT	NT
Juniperus przewalskii	NT	VU
Juniperus saltuaria	LC	NT
Juniperus tibetica	LC	NT
Keteleeria davidiana	LC	NT
Larix potaninii	LC	NT
Larix speciosa	NT	VU
Lirianthe delavayi	EN	VU
Litsea auriculata	NT	EN
Litsea dilleniifolia	EN	EN

Loropetalum subcordatum	VU	EN
Machilus nanmu	EN	EN
Madhuca hainanensis	VU	VU
Malania oleifera	VU	VU
Manglietia forrestii	VU	VU
Manglietia grandis	VU	EN
Manglietia ovoidea	EN	EN
Metasequoia glyptostroboides	CR	EN
Michelia coriacea	EN	EN
Michelia fulva	EN	EN
Michelia wilsonii	EN	EN
Michelia xanthantha	EN	EN
Nyssa yunnanensis	CR	CR
Oncodostigma hainanense	VU	EN
Ormosia hosiei	NT	VU
Ormosia howii	EX	CR
Ostrya rehderiana	CR	CR
Oyama sinensis	VU	VU
Oyama wilsonii	EN	VU
Pachylarnax sinica	CR	CR
Parakmeria kachirachirai	EN	EN
Parakmeria lotungensis	NT	VU
Parakmeria omeiensis	CR	CR
Paranephelium hainanensis	EN	CR
Pellacalyx yunnanensis	EN	CR
Phoebe bournei	NT	VU
Phoebe chekiangensis	VU	VU
Phoebe zhennan	VU	VU
Picea asperata	LC	LC
Picea asperata var. *aurantiaca*	EN	CR
Picea brachytyla	VU	VU
Picea crassifolia	LC	NT
Picea likiangensis var. *hirtella*	VU	VU
Picea likiangensis var. *montigena*	EN	CR
Picea meyeri	LC	NT
Picea neoveitchii	EN	VU
Picea purpurea	LC	NT
Picea wilsonii	LC	LC
Pinus armandii var. *mastersiana*	EN	VU
Pinus densata	LC	LC
Pinus fenzeliana var. *dabeshanensis*	VU	EN

Pinus massoniana var. *hainanensis*	EN	CR
Pinus morrisonicola	LC	EN
Pinus squamata	CR	CR
Pinus taiwanensis	LC	NT
Pinus yunnanensis	LC	LC
Podocarpus macrophyllus var. *maki*	LC	NT
Podocarpus nakaii	EN	CR
Premna szemaoensis	VU	EN
Pseudotaxus chienii	EN	VU
Pseudotsuga brevifolia	VU	VU
Pseudotsuga sinensis	VU	VU
Pterospermum kingtungense	CR	CR
Pterospermum menglunense	CR	CR
Pterospermum yunnanense	CR	EN
Pterostyrax psilophyllus	VU	VU
Pyracantha koidzumii	EN	EN
Reevesia rotundifolia	CR	CR
Rhododendron cyanocarpum	VU	VU
Rhododendron kanehirae	EW	EW
Rhododendron rex	NT	VU
Rhododendron selense subsp. *jucundum*	VU	VU
Salix kusanoi	EN	EN
Salix magnifica	VU	VU
Semiliquidambar cathayensis	NT	VU
Sinojackia dolichocarpa	VU	EN
Sinojackia xylocarpa	VU	EN
Sinowilsonia henryi	NT	VU
Sonneratia x hainanensis	CR	CR
Sorbus amabilis	VU	VU
Syndiclis lotungensis	VU	CR
Tapiscia sinensis	VU	NT
Torreya grandis	LC	VU
Torreya jackii	EN	VU
Tsuga chinensis	LC	NT
Tsuga chinensis var. *forrestii*	VU	VU
Tsuga longibracteata	EN	VU
Ulmus chenmoui	EN	EN
Ulmus elongata	VU	EN
Ulmus gaussenii	CR	CR
Yulania amoena	VU	VU
Yulania cylindrica	VU	VU

Yulania sargentiana	EN	VU
Yulania zenii	CR	CR

Table S12 Discharge of major pollutants in mainland of China. Data were from China Environment Status Communique (1998-2007) promulgated by China EPA. Available at http://www.sepa.gov.cn

Indicator \ Year		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Discharge of chemical oxygen demand (ten thousand ton)	Subtotal	1495.6	1388.9	1445.0	1404.8	1366.9	1333.6	1339.2	1414.2	1428.2	1383.4
	Industrial sewage	800.6	691.7	704.5	607.5	584.0	511.9	509.7	554.7	542.3	
	Domestic sewage	695.0	697.2	740.5	797.3	782.9	821.7	829.5	859.4	885.9	
Discharge of sulfur dioxide, soot dust and industrial dust in waste gases (ten thousand ton)	Sulfur dioxide	2091.4	1857.5	1995.1	1947.8	1926.6	2158.7	2254.9	2549.3	2588.8	2468.2
	Soot dust	1455.1	1159.0	1165.4	1069.8	1012.7	1048.7	1094.9	1182.5	1088.8	986.3
	Industrial dust	1321.2	1175.3	1092.0	990.6	941.0	1021.0	904.8	911.2	808.4	699.0
Discharge of toxic and harmful pollutants in waste water (ton)	Mercury	12.2	10.9	10.1	5.6	4.8	5.5	3.0	2.7	2.6	
	Cadmium	158.2	163.2	138.5	110.5	105.6	84.5	56.3	62.1	49.4	
	Hexavalent chromium	234.0	117.6	119.7	121.4	111.1	103.1	150.8	105.6	96.4	
	Plumbum	1063.8	778.3	655.2	489.9	484.8	568.5	366.2	378.3	339.1	
	Arsenic	844.1	672.6	578.7	408.4	346.2	373.7	306.1	453.2	245.2	
Emission intensity of chemical oxygen demand of key industries(ton/ ten thousand RMB)	Papermaking industry	/	0.332	0.249	0.168	0.121	0.094	0.075	0.069	0.054	
	Chemical manufacturing industry	/	0.015	0.010	0.010	0.010	0.007	0.007	0.006	0.005	
	Textile industry	/	0.013	0.013	0.008	0.009	0.008	0.008	0.006	0.005	
Discharge of solid wastes (ten thousand ton)		7048	3880	3186	2894	2635	1941	1762	1655	1302	1197
Discharge of waste water (ten million ton)	Subtotal	395.3	401.1	415.2	433.0	439.5	460.0	482.4	524.5	536.8	556.7
	Industrial sewage	200.5	197.3	194.3	202.7	207.2	212.4	221.1	243.1	240.2	246.7
	Domestic sewage	194.8	203.8	220.9	230.3	232.3	247.6	261.3	281.4	296.6	310.2

Table S13. Application of fertilizer and pesticide in mainland of China. Data were from China Statistic Databases published by the National Bureau of Statistics available at http://www.stats.gov.cn, and Report on Agricultural Development in China promulgated by the Ministry of Agriculture available at http://www.agri.gov.cn.

Year	Application of fertilizers (Ten thousand ton)	Application of pesticide (Ten thousand ton)
1980	1269.4	
1981	1406.9	
1982	1513.4	
1983	1659.8	
1984	1739.8	
1985	1775.8	
1986	1930.6	
1987	1999.3	
1988	2141.5	
1989	2357.1	
1990	2590.3	
1991	2805.1	76.5
1992	2930.2	79.9
1993	3151.9	84.5
1994	3317.9	97.9
1995	3593.7	108.7
1996	3827.9	114.1
1997	3980.7	119.5
1998	4083.7	123.2
1999	4124.32	132.2
2000	4146.412	128
2001	4253.763	127.5
2002	4339.39	131.2
2003	4411.56	132.5
2004	4636.58	138.6
2005	4766.218	146

Table S14. Density of railways and expressways in mainland of China.

Year	Total mileage of expressway (km)	Total mileage of railway (km)	Expressway density (km/ ten thousand km^2)	Railway density (km/ ten thousand km^2)
1989	271	53200	0.28	55.42
1990	522	53378	0.54	55.60
1991	574	53400	0.60	55.63
1992	652	53800	0.68	56.04
1993	1145	53802	1.19	56.04
1994	1603	53992	1.67	56.24
1995	2141	54616	2.23	56.89
1996	3422	62507	3.56	65.11
1997	4771	64300	4.97	67.00
1998	8733	66429	9.10	69.20
1999	11605	66410	12.09	69.18
2000	16285	67394	16.96	70.20
2001	19437	70057	20.25	72.98
2002	25130	71898	26.18	74.89
2003	29745	73002	30.98	76.04
2004	34288	74408	35.72	77.51
2005	41005	75438	42.71	78.58
2006	45300	77084	47.19	80.30
2007	53900	78000	56.15	81.25

Table S15. The number and proportional coverage of nature reserves in mainland of China.

Yea	Number of nature reserves	Ratio of terrestrial nature reserves area to national terrestrial territory (%)
1956	1	0
1965	19	0.07
1978	34	0.13
1982	119	0.40
1985	333	2.10
1987	481	2.47
1989	573	2.82
1990	606	4.00
1991	708	5.54
1993	763	6.80
1995	799	7.20
1997	926	7.64
1999	1146	8.8
2000	1227	9.85

2001	1551	12.9
2002	1757	13.2
2003	1999	14.37
2004	2194	14.8
2005	2349	14.99
2006	2395	15.16
2007	2531	15.19

Table S16. Investment in environmental pollution control and forestry conservation in mainland of China.

Year	Investment in environmental pollution control (ten million RMB)	Investment in forestry conservation (ten million RMB)	Proportion of total investment in environmental pollution control and forestry conservation to GDP (%)
1990	45.4	2.55	0.26
1991	59.7	3.49	0.29
1992	64.7	4.46	0.26
1993	69.3	11.89	0.23
1994	81.43	14.45	0.20
1995	98.7	16.26	0.19
1996	95.6	20.31	0.16
1997	116.4	24.47	0.18
1998	123.8	49.58	0.21
1999	152.5	76.18	0.26
2000	239.4	110.64	0.35
2001	1106.6	179.58	1.17
2002	1363.4	255.8	1.35
2003	1627.3	333.92	1.44
2004	1908.6	351.1	1.41
2005	2388	361.63	1.50
2006	2567.8	353.33	1.38