Checklist of Reptiles of Western Ghats, India

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A CAMP workshop was organized to assess the status of Western Ghats and peninsular India reptiles according to the IUCN Red List Categories and Criteria from 28 February to 4 March 2011 in Coimbatore, India. This was organized under the CEPF funded project "Enhancing Knowledge about the Conservation Status of Globally Threatened Species in the Western Ghats, with a Particular Emphasis on Reptiles". This article briefly summarizes the results for the Conservation Assessment and Management Plan workshop for assessing reptiles of Peninsular India in general and Western Ghats in particular and provides overview of the conservation status of the species following IUCN Red Listing guidelines.

For the purpose, reptiles that were described and are endemic to Western Ghats and peninsular India since the early 1800s were taken into consideration. The other parts of India in general and reptile endemic areas in particular like Andaman and Nicobar Islands and the north-east were not considered during the present assessment. Testudines were not considered during the present assessment. The assessment region was hence divided into the Western Ghats (Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu and Gujarat) and the peninsular India including the Eastern Ghats (Andhra Pradesh, Odisha, Jharkhand, Chattisgarh, Madhya Pradesh and Puducherry). A few globally widespread species that also occur in the peninsular India and Western Ghats were also considered.

The status of all species was assessed following the IUCN Red List Criteria ver. 3.1 (IUCN 2001), which is the world's most widely accepted system for measuring relative extinction risk. For all non-endemic species, assessments within southern India followed the Guidelines for Application of IUCN Red List Criteria at Regional Levels (IUCN 2003). Information on each species was compiled by a small team. Assessments were carried out with more than 40 herpetologists from the Western Ghats and peninsular India actively participated in the assessment and data review process.

The methodology for this assessment is based on the collation and analysis of existing information, requiring experts to be trained in biodiversity assessment methods including application of the IUCN Red List Categories and Criteria, and species mapping using GIS software. This provides an important tool for input to the conservation and development planning processes.

Of the 227 Indian reptiles assessed during this project, 193 species occur in the Western Ghats (Table 1). Of these 108 species are endemic to Western Ghats, which include 18 threatened species (9 Endangered, 9 Vulnerable), 8 Near Threatened species, 43 Least Concern species and 39 Data Deficient species. The rest of 85 species include 21 peninsular India endemics that also occur in the Western Ghats (including 17 Least Concern species and 4 Data Deficient species) and 64 other widespread species (including one Vulnerable species, three Near Threatened species, 59 Least Concern species (regionally) and one Data Deficient species).

Reptiles of Western Ghats are threatened due to habitat fragmentation and loss, expansion of agriculture, conversion of forest tracts into plantations and human settlements, mining and rock quarrying, tourism-related infrastructure developments and pet trade.

Further research is needed into taxonomy, population status, true distribution extent, ecology, habitat requirements and foraging niche, threats to the habitat and the species and the impact of such threats to the species. Conservation education programs, amendment of the existing legislation and implementation of conservation action plans and improving the existing protected area network are needed for better conservation of the habitat and the species.

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Table 1: Reptiles (excluding Testudines) of Western Ghats, India

	Family	Scientific name	Endemicity	IUCN Red List Status
1	Agamidae	*Calotes aurantolabium*	E	DD
2	Agamidae	*Calotes calotes*		LC*
3	Agamidae	*Calotes ellioti*	E	LC
4	Agamidae	*Calotes grandisquamis*	E	LC
5	Agamidae	*Calotes nemoricola*	E	LC
6	Agamidae	*Calotes rouxii*		LC
7	Agamidae	*Calotes versicolor*		LC
8	Agamidae	*Draco dussumieri*		LC
9	Agamidae	*Otocryptis beddomii*	E	EN
10	Agamidae	*Psammophilus blanfordanus*		LC
11	Agamidae	*Psammophilus dorsalis*		LC
12	Agamidae	*Salea anamallayana*	E	LC
13	Agamidae	*Salea horsfieldii*	E	LC
14	Agamidae	*Sitana ponticeriana*		LC
15	Boidae	*Eryx johnii*		NT*
16	Boidae	*Eryx whitakeri*	E	NT*
17	Boidae	*Gongylophis conicus*		NT*
18	Chamaeleonidae	*Chamaeleo zeylanicus*		LC
19	Colubridae	*Ahaetulla dispar*	E	NT
20	Colubridae	*Ahaetulla nasuta*		LC*
21	Colubridae	*Ahaetulla perroteti*	E	EN
22	Colubridae	*Ahaetulla pulverulenta*		LC
23	Colubridae	*Argyrogena fasciolata*		LC*
24	Colubridae	*Boiga beddomei*		DD
25	Colubridae	*Boiga ceylonensis*		LC*
26	Colubridae	*Boiga dightoni*	E	DD
27	Colubridae	*Boiga forsteni*		LC
28	Colubridae	*Boiga nuchalis*	E	DD*
29	Colubridae	*Boiga trigonata*		LC
30	Colubridae	*Chrysopelea ornata*		LC*
31	Colubridae	*Coelognathus helena*		LC*
32	Colubridae	*Coluber gracilis*		DD
33	Colubridae	*Coronella brachyura*		LC
34	Colubridae	*Dendrelaphis ashoki*	E	LC
35	Colubridae	*Dendrelaphis caudolineolatus*		DD*
36	Colubridae	*Dendrelaphis chairecacos*	E	DD
37	Colubridae	*Dendrelaphis girii*	E	LC
38	Colubridae	*Dendrelaphis grandoculis*	E	LC
39	Colubridae	*Dendrelaphis tristis*		LC*
40	Colubridae	*Dryocalamus gracilis*		DD
41	Colubridae	*Dryocalamus nympha*		LC*
42	Colubridae	*Elachistodon westermanni*		LC
43	Colubridae	*Liopeltis calamaria*		LC*
44	Colubridae	*Lycodon aulicus*		LC*
45	Colubridae	*Lycodon flavomaculatus*	E	LC
46	Colubridae	*Lycodon striatus*		LC*
47	Colubridae	*Lycodon travancoricus*		LC
48	Colubridae	*Oligodon affinis*	E	LC

	Family	Scientific name	Endemicity	IUCN Red List Status
49	Colubridae	*Oligodon arnensis*		LC*
50	Colubridae	*Oligodon brevicauda*	E	VU
51	Colubridae	*Oligodon nikhili*	E	DD
52	Colubridae	*Oligodon taeniolatus*		LC
53	Colubridae	*Oligodon travancoricus*	E	DD
54	Colubridae	*Oligodon venustus*	E	LC
55	Colubridae	*Ptyas mucosa*		LC*
56	Colubridae	*Rhabdops olivaceus*	E	LC
57	Colubridae	*Sibynophis subpunctatus*		LC*
58	Crocodylidae	*Crocodylus palustris*		LC
59	Elapidae	*Bungarus caeruleus*		LC*
60	Elapidae	*Calliophis beddomei*		DD
61	Elapidae	*Calliophis bibroni*	E	LC
62	Elapidae	*Calliophis melanurus*		LC*
63	Elapidae	*Calliophis nigrescens*		LC
64	Elapidae	*Naja naja*		LC*
65	Elapidae	*Ophiophagus hannah*		VU
66	Eublepharidae	*Eublepharis fuscus*		LC
67	Gekkonidae	*Cnemaspis australis*	E	DD
68	Gekkonidae	*Cnemaspis beddomei*	E	DD
69	Gekkonidae	*Cnemaspis goaensis*	E	EN
70	Gekkonidae	*Cnemaspis gracilis*	E	LC
71	Gekkonidae	*Cnemaspis heteropholis*	E	NT
72	Gekkonidae	*Cnemaspis indica*	E	VU
73	Gekkonidae	*Cnemaspis indraneildasii*	E	VU
74	Gekkonidae	*Cnemaspis jerdonii*	E	VU
75	Gekkonidae	*Cnemaspis kolhapurensis*	E	DD
76	Gekkonidae	*Cnemaspis littoralis*	E	DD
77	Gekkonidae	*Cnemaspis monticola*	E	DD
78	Gekkonidae	*Cnemaspis mysoriensis*		LC
79	Gekkonidae	*Cnemaspis nairi*	E	LC
80	Gekkonidae	*Cnemaspis nilagirica*	E	DD
81	Gekkonidae	*Cnemaspis ornata*	E	NT
82	Gekkonidae	*Cnemaspis sisparensis*	E	NT
83	Gekkonidae	*Cnemaspis wynadensis*	E	EN
84	Gekkonidae	*Geckoella albofasciatus*	E	LC
85	Gekkonidae	*Geckoella collegalensis*		LC
86	Gekkonidae	*Geckoella deccanensis*	E	LC
87	Gekkonidae	*Gehyra mutilata*		LC
88	Gekkonidae	*Hemidactylus aaronbaueri*	E	LC
89	Gekkonidae	*Hemidactylus albofasciatus*	E	VU
90	Gekkonidae	*Hemidactylus anamallensis*	E	NT
91	Gekkonidae	*Hemidactylus brooki*		LC*
92	Gekkonidae	*Hemidactylus flaviviridis*		LC*
93	Gekkonidae	*Hemidactylus frenatus*		LC
94	Gekkonidae	*Hemidactylus gracilis*		LC
95	Gekkonidae	*Hemidactylus graniticolus*		LC
96	Gekkonidae	*Hemidactylus leschenaultii*		LC*
97	Gekkonidae	*Hemidactylus maculatus*		LC

	Family	Scientific name	Endemicity	IUCN Red List Status
98	Gekkonidae	*Hemidactylus prashadi*	E	LC
99	Gekkonidae	*Hemidactylus reticulatus*		LC
100	Gekkonidae	*Hemidactylus sataraensis*	E	VU
101	Gekkonidae	*Hemidactylus triedrus*		LC
102	Gekkonidae	*Hemiphyllodactylus aurantiacus*		LC
103	Gerrhopilidae	*Gerrhopilus beddomii*	E	DD
104	Gerrhopilidae	*Gerrhopilus tindalli*	E	DD
105	Lacertidae	*Ophisops beddomei*		LC
106	Lacertidae	*Ophisops jerdonii*		LC
107	Lacertidae	*Ophisops leschenaultii*		LC*
108	Natricidae	*Amphiesma beddomei*	E	LC
109	Natricidae	*Amphiesma monticola*	E	LC
110	Natricidae	*Amphiesma stolatum*		LC
111	Natricidae	*Atretium schistosum*		LC
112	Natricidae	*Macropisthodon plumbicolor*		LC*
113	Natricidae	*Xenochrophis piscator*		LC*
114	Psammophiidae	*Psammophis condanarus*		LC
115	Psammophiidae	*Psammophis leithii*		LC*
116	Psammophiidae	*Psammophis longifrons*		LC
117	Pythonidae	*Python molurus*		NT*
118	Scincidae	*Chalcides pentadactylus*	E	DD
119	Scincidae	*Dasia subcaerulea*	E	EN
120	Scincidae	*Eurylepis poonaensis*	E	EN
121	Scincidae	*Eutropis allapallensis*		LC
122	Scincidae	*Eutropis beddomei*		LC
123	Scincidae	*Eutropis carinata*		LC
124	Scincidae	*Eutropis clivicola*	E	EN
125	Scincidae	*Eutropis gansi*	E	DD
126	Scincidae	*Eutropis macularia*		LC*
127	Scincidae	*Eutropis trivittata*		LC
128	Scincidae	*Kaestlea beddomei*	E	LC
129	Scincidae	*Kaestlea bilineata*	E	LC
130	Scincidae	*Kaestlea laterimaculata*	E	VU
131	Scincidae	*Kaestlea palnica*	E	DD
132	Scincidae	*Kaestlea travancorica*	E	LC
133	Scincidae	*Lygosoma albopunctata*		LC
134	Scincidae	*Lygosoma goaensis*	E	DD
135	Scincidae	*Lygosoma guentheri*		LC
136	Scincidae	*Lygosoma lineata*		LC
137	Scincidae	*Lygosoma punctata*		LC*
138	Scincidae	*Ristella beddomii*	E	LC
139	Scincidae	*Ristella guentheri*	E	DD
140	Scincidae	*Ristella rurkii*	E	DD
141	Scincidae	*Ristella travancorica*	E	DD
142	Scincidae	*Sphenomorphus dussumieri*	E	LC
143	Typhlopidae	*Grypotyphlops acutus*		LC
144	Typhlopidae	*Ramphotyphlops braminus*		LC*
145	Typhlopidae	*Typhlops exiguous*	E	DD
146	Typhlopidae	*Typhlops porrectus*		LC

	Family	Scientific name	Endemicity	IUCN Red List Status
147	Typhlopidae	*Typhlops thurstoni*	E	DD
148	Uropeltidae	*Brachyophidium rhodogaster*	E	LC
149	Uropeltidae	*Melanophidium bilineatum*	E	VU
150	Uropeltidae	*Melanophidium punctatum*	E	LC
151	Uropeltidae	*Melanophidium wynaudense*	E	LC
152	Uropeltidae	*Platyplectrurus madurensis*	E	EN
153	Uropeltidae	*Platyplectrurus trilineatus*	E	DD
154	Uropeltidae	*Plectrurus aureus*	E	DD
155	Uropeltidae	*Plectrurus canaricus*	E	DD
156	Uropeltidae	*Plectrurus guentheri*	E	DD
157	Uropeltidae	*Plectrurus perroteti*	E	LC
158	Uropeltidae	*Rhinophis fergusonianus*	E	DD
159	Uropeltidae	*Rhinophis sanguineus*	E	LC
160	Uropeltidae	*Rhinophis travancoricus*	E	EN
161	Uropeltidae	*Teretrurus sanguineus*	E	LC
162	Uropeltidae	*Uropeltis arcticeps*	E	LC
163	Uropeltidae	*Uropeltis beddomii*	E	DD
164	Uropeltidae	*Uropeltis bicatenata*	E	NT
165	Uropeltidae	*Uropeltis broughami*	E	DD
166	Uropeltidae	*Uropeltis ceylanicus*		LC
167	Uropeltidae	*Uropeltis dindigalensis*	E	DD
168	Uropeltidae	*Uropeltis ellioti*		LC
169	Uropeltidae	*Uropeltis liura*	E	DD
170	Uropeltidae	*Uropeltis macrolepis*	E	LC
171	Uropeltidae	*Uropeltis macrorhynchus*	E	DD
172	Uropeltidae	*Uropeltis maculatus*	E	DD
173	Uropeltidae	*Uropeltis myhendrae*	E	DD
174	Uropeltidae	*Uropeltis nitidus*	E	DD
175	Uropeltidae	*Uropeltis ocellatus*	E	LC
176	Uropeltidae	*Uropeltis petersi*	E	DD
177	Uropeltidae	*Uropeltis phipsonii*	E	VU
178	Uropeltidae	*Uropeltis pulneyensis*	E	LC
179	Uropeltidae	*Uropeltis rubrolineatus*	E	LC
180	Uropeltidae	*Uropeltis rubromaculatus*	E	LC
181	Uropeltidae	*Uropeltis smithi*	E	LC
182	Uropeltidae	*Uropeltis woodmasoni*	E	LC
183	Varanidae	*Varanus bengalensis*		LC
184	Viperidae	*Daboia russelii*		LC*
185	Viperidae	*Echis carinatus*		LC*
186	Viperidae	*Hypnale hypnale*		LC*
187	Viperidae	*Peltopelor macrolepis*	E	NT
188	Viperidae	*Trimeresurus gramineus*		LC
189	Viperidae	*Trimeresurus malabaricus*	E	LC
190	Viperidae	*Trimeresurus strigatus*	E	DD
191	Xenodermatidae	*Xylophis captaini*	E	LC
192	Xenodermatidae	*Xylophis perroteti*	E	LC
193	Xenodermatidae	*Xylophis stenorhynchus*	E	DD

* **Regional Status**