

## PREAMBLE

In the preliminary effort towards the ENVIS - SDNP Partnership project, it was decided that the ENVIS Centre on Eastern Ghats would highlight the characteristic floral, faunal and geological aspects of the Eastern Ghats region.

A brief account with photographs of the `endangered / endemic` floral and faunal species and the geologically threatened `Borra Caves`, of the region are listed hereunder:

### **I. Some Endangered /Endemic Plants for Andhra Pradesh, Peninsular India**

**Plant Name:** *Cycas beddomei* Dyer.

**Local/Vern. Name (s):** Peritha, Pireetha

**Family:** Cycadaceae

**Assessment Information:**

**Red List Category & Criteria:**

CR (Critically Endangered)

B1ab (i,ii,iv)+2ab (i,ii,iv)

[ver 3.1 \(2001\)](#)

**Year Assessed:** 2003

**Assessor/s:** Hill, K.D.

**History:** 1997-Endangered (Walter and Gillett 1998)

**Distribution:**

**Country Names -**

Cambodia, India (Andhra Pradesh; Karnataka; Kerala; Tamil Nadu)

Lao People's Democratic Republic, Malaysia (Peninsular Malaysia)

Myanmar, Thailand, Viet Nam



#### **Summary Documentation**

**Biome:** Terrestrial

**Major Threat/s:**

Harvesting (hunting/gathering) - Medicine - Regional/international trade (ongoing)

Intrinsic factors - Poor recruitment/reproduction / regeneration (ongoing)

#### **Detailed Documentation**

**Range and Population:** Known only from the Cuddapah Hills in Andhra Pradesh State, north-west of Madras in eastern Peninsular India.

**Habitat and Ecology:** Characteristically a species of dry, open hill slopes, in open grassy woodland or grassland.

**Conservation Measures:** Listed on [CITES](#) Appendix I.

**Data Sources:** Donaldson, J.S. (ed.) 2003. *Cycads. Status Survey and Conservation Action Plan*. IUCN/SSC Cycad Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

**Citation:** Ashton, P. 1998. *Shorea roxburghii*. In: IUCN 2004. *2004 IUCN Red List of Threatened Species*. <[www.redlist.org](http://www.redlist.org)>. Downloaded on 1 December 2005.

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**Plant Name:** *Pterocarpus santalinus* Linn.f.

**Local/Vern. Name (s):** Reds Sandalwood,  
Rakta Chandan, Red Sanders Almug (E)

**Family:** Fabaceae

**Assessment Information:**

**Red List Category & Criteria:** EN (Endangered)

B1+2de [ver 2.3 \(1994\)](#)

**Year Assessed:** 1998

**Assessor/s:** CAMP Workshops on Medicinal Plants,  
India (January 1997)

**History:** 1997 - Endangered (Walter and Gillett 1998)

**Distribution:**

**Country Names - India**

**Summary Documentation**

**Biome:** Terrestrial

**Major Threat/s:**

Habitat Loss/Degradation - Extraction - Wood - Selective logging (ongoing)

Habitat Loss/Degradation - Extraction - Wood - Clear-cutting (ongoing)

Harvesting (hunting/gathering) (ongoing)



**Detailed Documentation**

**Range and Population:** Red sandalwood is restricted to the southern parts of the Eastern Ghats.

**Habitat and Ecology:** Occurring in dry deciduous forest.

**Conservation Measures:** International trade is now monitored through a [CITES](#) Appendix II listing and plantations are being established.

**Data Sources:**

Anonymous. 1997. Proposal to include *Pterocarpus santalinus* in Appendix II of CITES (unpublished).

Balakrishna, P. and Ravishankar, T. 1993. Letter with list of corrections to TPU printout for India.

FRLHT. 1995. Plants under threat - new list forged. *AMRUTH* 5: 2-3.

Molur, S *et al.* (eds). 1995. Conservation assessment and management plan (CAMP) for selected species of medicinal plants of southern India.

**Citation:** CAMP Workshops on Medicinal Plants, India 1998. *Pterocarpus santalinus*. In: 2004 *IUCN Red List of Threatened Species*. <[www.redlist.org](http://www.redlist.org)>. Downloaded on 1 December 2005.

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**Plant Name:** *Decalepis hamiltonii* Wight & Arn.

**Local/Vern. Name (s):** Maredugeddal, Nannari, Sariba, Svetasariva

**Family:** Asclepiadaceae

**Habit:** Liana

**Assessment Information:**

**Red List Category & Criteria:** Endangered/Global

**Year Assessed:** 1998

**Assessor/s:** CAMP Workshops on Medicinal Plants, India (January 1997)

**History:** 1997 - Endangered



**Distribution:**

**Country Names –**

The species is endemic to Peninsular India. It has been recorded in the dry and moist deciduous forests of Karnataka (Hassan, Mysore, Bellary, Tumkur, Kolar), Andhra Pradesh (Kurnool, Chittoor, Nellore, Anantapur, Cuddapah districts) and Tamil Nadu (Chengalpattu, Coimbatore, Dharmapuri, Nilgiri)

**Summary Documentation**

Taxon Sheet Details (CAMP Workshops at)

[Western Ghats \(March 1999\)](#)

[Andhra Pradesh \(March 2001\)](#)

**Biome:** Terrestrial

**Major Threat/s:** It was facing threat due to over exploitation and habitat destruction.

**Detailed Documentation**

**Range and Population:** Red sandalwood is restricted to the southern parts of the Eastern Ghats.

**Habitat and Ecology:** Occurring in dry deciduous forest.

**Conservation Measures:** International trade is now monitored through a [CITES](#) Appendix II listing and plantations are being established.

**Data Sources:**

Anonymous, 1948-76. The Wealth of India – Raw Materials, Vol.1-11, CSIR, New Delhi.

Jadhav, S.N., D.K. Ved, Utkesh Ghate, K.N. Reddy & Ch.S. Reddy. 2001. Proceedings of the Workshop on Conservation Assessment and Management Planning for Medicinal Plants of Andhra Pradesh. [(CAMP), MPCC, Hyderabad. March 9-11, 2001]

Pullaiah, T. (1997). Flora of Andhra Pradesh, Scientific Publishers, Jodhpur.

Jadhav, S.N. and Reddy, K.N. 2002. *In situ* conservation of medicinal plants in Andhra Pradesh. Proc. National Seminar on Conservation of Eastern Ghats. pp. 39-54, Tirupati.

Anonymous. 1997. Proposal to include *Pterocarpus santalinus* in Appendix II of CITES (unpublished).

**Source:** [http://envis.frlht.org.in/botanical\\_search](http://envis.frlht.org.in/botanical_search).

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## II. Some Endangered /Endemic Fauna for Andhra Pradesh, Peninsular India

### **Slender Loris (*Loris tardigradus*)**

From Sri Lanka is assessed as Endangered. Habitat fragmentation over the years has seriously reduced the area available for this species. Between 1956 and 1993, Sri Lanka lost more than 50% of forest cover to human activities, followed by a similar rate of decline in the remaining forest cover between 1994 and 2003. (Photo with information for reference)



Source: [www.redlist.org/info/gallery2004](http://www.redlist.org/info/gallery2004).

- The same species is found in Seshachalam hill ranges, it was also Conserved/Protected in Sri Venkateswara Wildlife Sanctuary at Tirupati.

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**Scientific Name:** *Ardeotis nigriceps*

**Local/Vern. Name (s):** GREAT INDIAN BUSTARD (E),  
INDIAN BUSTARD (E)

**Family:** Otididae

**Habit:** Liana

**Assessment Information:**

**Red List Category & Criteria:** EN C2a (ii) [ver 3.1 \(2001\)](#)

**Year Assessed:** 2004

**Assessor/s:** BirdLife International



**Justification:** This bustard qualifies as Endangered because of its very small, declining population, a result of hunting and continuing agricultural development.

**History:** 1988- Threatened (Collar and Andrew 1988)  
1994- Endangered (Collar, Crosby and Stattersfield 1994)  
2000- Endangered (BirdLife International 2000)

**Distribution:**

**Country Names** – India, Nepal, Pakistan

**Summary Documentation**

**System:** Terrestrial

**Major Habitat/s:**

Grassland - Subtropical/Tropical Dry Lowland, Artificial/Terrestrial - Arable Land.

**Major Threat/s:**

Habitat Loss/Degradation - Agriculture - Crops - Agro-industry farming (ongoing),  
Harvesting (hunting/gathering) - Food (ongoing),

Harvesting (hunting/gathering) – Cultural /scientific/leisure activities (past),  
Human disturbance - Other (ongoing)

**Conservation Action/s:** Research actions - Population numbers and range (needed), Research actions - Biology and Ecology (needed), Research actions - Trends/Monitoring (needed), Habitat and site-based actions - Protected areas - Identification of new protected areas (needed), Habitat and site-based actions - Protected areas - Management (needed), Habitat and site-based actions - Other (needed), Species-based actions - Other (needed)

**Data Sources:**

Baillie, J. and Groombridge, B. (compilers and editors) 1996. *1996 IUCN Red List of Threatened Animals*. IUCN, Gland, Switzerland.

BirdLife International 2004 *Threatened Birds of the World 2004*. CD-ROM. BirdLife International, Cambridge, U.K.

BirdLife International. 2000. *Threatened Birds of the World*. Lynx Edicions and BirdLife International, Barcelona, Spain and Cambridge, UK.

Collar, N.J. and Andrew, P. 1988. *Birds to Watch. The ICBP World Checklist of Threatened Birds*. ICBP Technical Publication No. 8. Page Bros. (Norwich) Ltd, Norfolk, England.

Collar, N.J., Crosby, M.J. and Stattersfield, A.J. 1994. *Birds to Watch 2. The World List of Threatened Birds* BirdLife International. Page Bros (norwich) Ltd, UK.

IUCN Conservation Monitoring Centre. 1986. *1986 IUCN Red List of Threatened Animals*. IUCN, Gland, Switzerland and Cambridge, UK.

IUCN. 1990. *1990 IUCN Red List of Threatened Animals*. IUCN, Gland, Switzerland and Cambridge, UK.

Scott, P. (ed.) 1965. Section XIII. Preliminary List of Rare Mammals and Birds. In: *The Launching of a New Ark*, pp. 15-207. First Report of the President and Trustees of the World Wildlife Fund. An International Foundation for saving the world's wildlife and wild places 1961-1964. Collins, London.

**Citation:** BirdLife International 2004. *Ardeotis nigriceps*. In: IUCN 2004. *2004 IUCN Red List of Threatened Species*. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on **30 January 2006**.

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**Scientific Name:** *Rhinoptilus bitorquatus*

**Common Name:** Jerdon's Courser /Kalivikodi (Telugu)

**Red List Category & Criteria:**

Endangered (Asia) / Endemic to India

**CR** (Critically Endangered) C2b

**Year Assessed:** 2002

**Endangered (Asia) / Endemic to India**

**Location:** Sri Lankamaleswara Wildlife Sanctuary,  
Andhra Pradesh, India

**Bird Family:** [Glareolinidae](#)



The Courser is a fairly long-legged bird that prefers to run rather than fly. There are nine species of Courser worldwide. One of them, Jerdon's Courser, first recorded by Dr. Jerdon in the middle of the last century, was thought to have become extinct by 1900. Naturalists searched for it in its native habitat in eastern India but without success. In 1975/76 the Bombay Natural History Society (BNHS) launched another search for it. The BNHS circulated posters showing a coloured picture of the bird in the Pennar river valley in southern Andhra Pradesh. There was a note in Telugu accompanying the posters.

One day a tribal said he had seen the bird shown in the poster and that it was known as Kalivi-Kodi in Telugu.

**Remarks:**

A very rare and highly localised species endemic to India. This photo was taken as part of a joint research project between the Bombay Natural History Society, RSPB and Reading University. The research project is funded by the UK Government's Darwin Initiative for the Survival of Species. The help of the Andhra Pradesh Forest Department is also acknowledged.

**Source:**

[http://www.dimdima.com/ecology/ecology\\_common/show\\_ecology](http://www.dimdima.com/ecology/ecology_common/show_ecology).

<http://www.orientalbirdimages.org>

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### **III. Geological significance of Eastern Ghats - Borra Caves**

Borra Caves are located at a distance of 92 Km north of Visakhapatnam. The caves open with 100 meter on horizontal plane and about 75 meters on vertical plane. These caves spread over an area of one square KM and the origin of river Gosthani which flows through the district. This you must see if you are in Araku Valley or in Visakhapatnam. This location is at a height of 800 to 1300 meters from MSL. William King the British geologist discovered this million years old cave in the year 1807.



Breath taking hilly terrain, beautiful landscape, semi-evergreen moist deciduous forests, and wild fauna of the area are a visual feast.

The humic acid in the water reacts with calcium carbonate in the limestone and dissolves the minerals breaking the rock gradually. The perennial water flow over a period of time results in the formation of caves. Stalagmites are formed due water percolating from the roof containing calcium bi carbonate and other minerals from mounds. Same way stalactites are also formed and because of their different shapes tourist and locals have given different names to them. One can see different formations of the stalactites and stalagmites as Shiv-Paravathi, Mother-Child, Rushi's Beard, Human Brain, Crocodile, Tiger and Cows udder.

On your journey by train you can see picturesque Landscape with greenery, peaks and valleys. Before reaching Borra Guhalu Railway station the train passes through 42 tunnels.

**Source:** <http://www.go2india.in/ap/borra-caves.php>

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