

# INDIAN PENINSULA and SRI LANKAN FORESTS



**T**WELVE threatened bird species are confined to forests in this region, and two others occur as non-breeding visitors. They are found in three discrete forest areas, two Endemic Bird Areas—the Western Ghats and Sri Lanka—and one Secondary Area—the Central Indian forests. The Central Indian forests support the Critically Endangered Forest Owlet, a species only recently rediscovered after a gap of over 100 years. In the more humid forests of the Western Ghats, three of the four endemic species are confined to the higher altitude habitats in the south, but Nilgiri Wood-pigeon occurs throughout. On Sri Lanka, six of the seven endemics are confined to the moist forests of the wet zone in the south-west of the island, with only Red-faced Malkoha ranging into the dry zone of the north and east. In the wet zone, Green-billed Coucal is confined to rainforests in the lowlands, and Sri Lanka Wood-pigeon and Sri Lanka Whistling-thrush to forests at higher altitudes.

- **Key habitats** Lowland wet evergreen and semi-evergreen rainforest, moist deciduous forest and montane wet temperate forest; montane grasslands.
- **Altitude** 0–2,600 m.
- **Countries and territories** **India** (Madhya Pradesh, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Orissa); **Sri Lanka**.

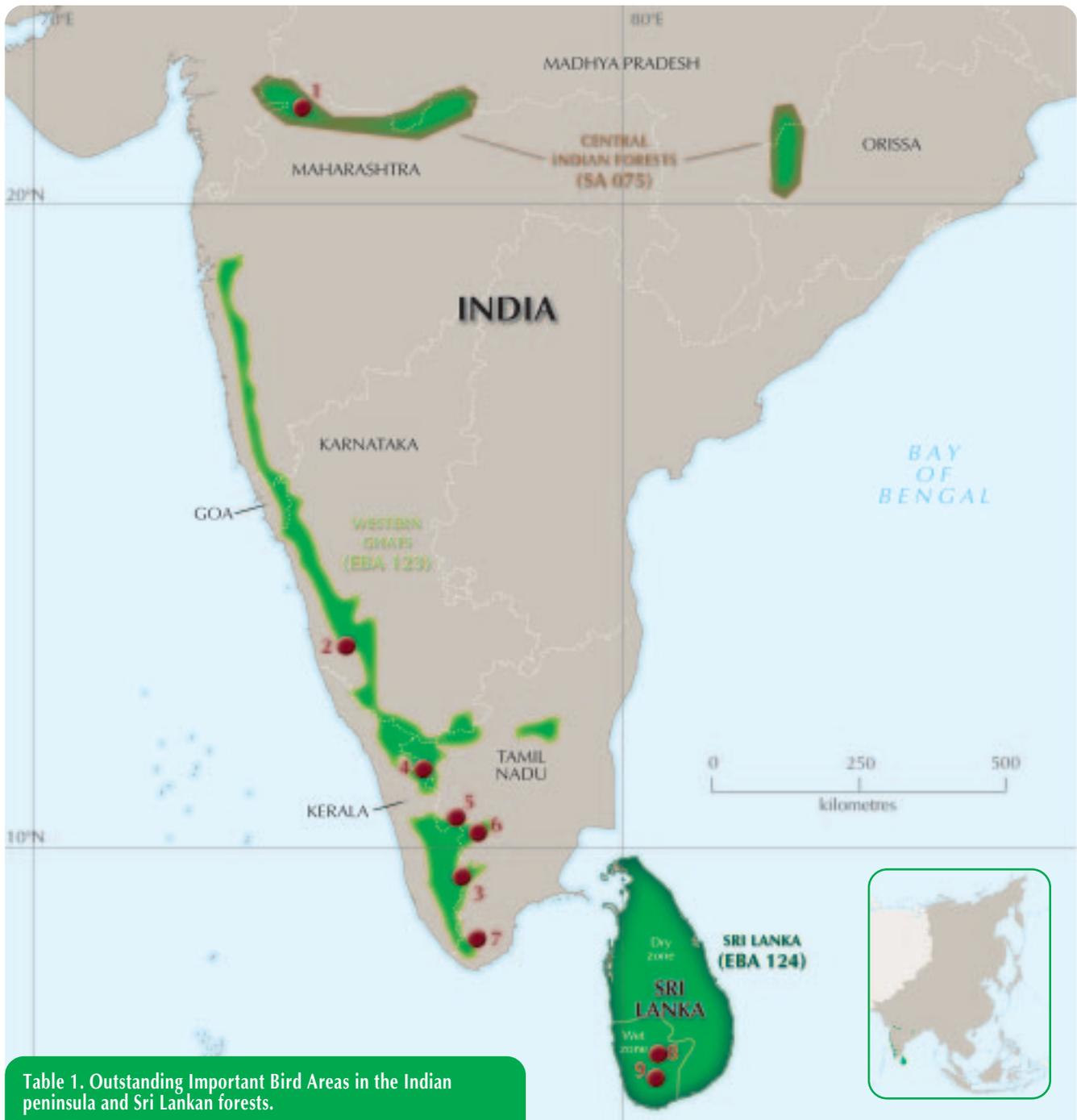
	Threatened species			Total
	CR	EN	VU	
	1	2	9	12
	—	—	—	—
	—	—	2	2
Total	1	2	11	14

Key: = breeds only in this forest region.  
 = also breeds in other region(s).  
 = non-breeding visitor from another region.

The Indian peninsula and Sri Lankan forests region corresponds closely to Conservation International's Western Ghats and Sri Lanka Hotspot (see pp.20–21).

*Montane grassland interspersed with wet temperate shola forests, a characteristic landscape of the southern Western Ghats.* PHOTO: AMEEN AHMED





**Table 1. Outstanding Important Bird Areas in the Indian peninsula and Sri Lankan forests.**

IBA name	Status	Territory	Threatened species and habitats
1 Toranmal Reserve Forest (Shahada)	—	Maharashtra	Largest known population of Forest Owlet
2 Kudremukh NP	PA	Karnataka	Large areas of both forest and grassland, supporting several Western Ghat endemics
3 Periyar TR	PA	Kerala	Large areas of both forest and grassland, supporting several Western Ghat endemics
4 Avalanche Reserve Forest	—	Tamil Nadu	Extensive shola forests in the Nilgiri hills supporting several Western Ghat endemics, notably Rufous-breasted Laughingthrush
5 Indira Gandhi WS	PA	Tamil Nadu	Large areas of both grassland and forest, supporting several Western Ghat endemics
6 Kodaikanal	—	Tamil Nadu	Important site for several Western Ghat endemics, notably White-bellied Shortwing
7 Kalakad-Mundanthurai S	PA	Tamil Nadu	Large areas of both forest and grassland, supporting several Western Ghat endemics, notably Broad-tailed Grassbird
8 Peak Wilderness S	PA	Sri Lanka	Best example of mid-altitude forest in the wet zone of Sri Lanka
9 Sinharaja FR	PA <sup>BR,WH</sup>	Sri Lanka	Largest block of lowland forest in the wet zone of Sri Lanka

Several of the forest birds of this region occur in an outstanding IBA listed for region G03, Billiranga Temple Hills WS. Note that more IBAs in this region will be included in the *Important Bird Areas in Asia*, due to be published in early 2004.

**Key** IBA name: FR = Forest Reserve; NP = National Park; S = Sanctuary; TR = Tiger Reserve; WS = Wildlife Sanctuary. Status: PA = IBA is a protected area; (PA) = IBA partially protected; — = unprotected; BR = IBA is wholly or partially a Biosphere Reserve (see pp.34–35); WH = IBA is wholly or partially a World Heritage Site (see p.34).

White-bellied Shortwing is confined to high-altitude forests of the Western Ghats.



PHOTO: TIM LOSEBY

**OUTSTANDING IBAs FOR THREATENED BIRDS** (see Table 1)

Eight IBAs have been selected, which together support populations of all of the threatened forest birds of the Indian peninsula and Sri Lanka, and include some of the largest and richest forests that remain there. Many other sites in the region with significant populations of threatened forest birds will be documented during BirdLife’s ongoing IBA Project.

**CURRENT STATUS OF HABITATS AND THREATENED SPECIES**

There has been extensive clearance and degradation of forests (and montane grasslands) in all areas. Relatively low-

Table 2. Threatened birds of the Indian peninsula and Sri Lankan forests.

Species		Distribution and habitat
<b>CENTRAL INDIAN FORESTS (SA 075)</b>		
Forest Owlet <i>Heteroglaux blewitti</i>	☉ <b>CR</b>	Recorded at six localities (recently at four in Madhya Pradesh and Maharashtra), in dry deciduous forest at c.400–500 m
<b>WESTERN GHATS (EBA 123)</b>		
Wood Snipe <i>Gallinago nemoricola</i>	✈ <b>VU</b>	Winters in forested areas at high altitudes
Nilgiri Wood-pigeon <i>Columba elphinstonii</i>	☉ <b>VU</b>	Ranges from Maharashtra to Kerala, in evergreen forest at c.50–2,000 m, but mostly at high altitudes
White-bellied Shortwing <i>Brachypteryx major</i>	☉ <b>VU</b>	Found in Karnataka, Kerala and Tamil Nadu, in evergreen forest above 1,000 m
Rufous-breasted Laughingthrush <i>Garrulax cachinnans</i>	☉ <b>EN</b>	Confined to the Nilgiri hills in Kerala and Tamil Nadu, in evergreen forest above 1,200 m
Broad-tailed Grassbird <i>Schoenicola platyura</i>	☉ <b>VU</b>	Found in Karnataka, Kerala and Tamil Nadu, in tall grassland and bracken at 900–2,000 m
Kashmir Flycatcher <i>Ficedula subrubra</i>	✈ <sup>s</sup> <b>VU</b>	Winters in forest at high altitudes
<b>SRI LANKA (EBA 124)</b>		
Sri Lanka Wood-pigeon <i>Columba torringtoni</i>	☉ <b>VU</b>	Found mainly in hill evergreen forest in the wet zone above c.900 m
Red-faced Malkoha <i>Phaenicophaeus pyrrhocephalus</i>	☉ <b>VU</b>	Tall primary forest, mainly in the wet zone, but also in riverine forests in the dry zone
Green-billed Coucal <i>Centropus chlororhynchus</i>	☉ <b>VU</b>	Virtually confined to lowland rainforest below c.760 m in the wet zone
Sri Lanka Whistling-thrush <i>Myiophonus blighi</i>	☉ <b>EN</b>	Rocky areas along streams in undisturbed hill evergreen forest in the wet zone above c.900 m
Ashy-headed Laughingthrush <i>Garrulax cinereifrons</i>	☉ <b>VU</b>	Lowland and hill forests in the wet zone below c.1,500 m
Kashmir Flycatcher <i>Ficedula subrubra</i>	✈ <sup>s</sup> <b>VU</b>	Winters in hill evergreen forest in the wet zone above c.760 m
White-faced Starling <i>Sturnus albofrontatus</i>	☉ <b>VU</b>	Lowland and hill forests in the wet zone at intermediate altitudes between 460 and 1,220 m
Sri Lanka Magpie <i>Urocissa ornata</i>	☉ <b>VU</b>	Tall trees in undisturbed lowland and hill forests in the wet zone up to above 2,135 m

☉ = breeds only in this forest region; ✈ = non-breeding visitor from another region; s = also occurs in another EBA in this region

Evergreen forests are still extensive in parts of the Western Ghats.



PHOTO: AMEEN AHMED

stature dry deciduous forest was originally extensive over the Deccan plateau of central India, but this has mostly been cleared for agriculture or replaced by plantations, leaving scattered patches of habitat suitable for Forest Owlet. In the Western Ghats, large areas of forest have been cleared or disturbed in the north (Maharashtra) as a result of shifting cultivation, collection of timber and fuelwood, cattle grazing, and the construction of roads and dams. In the south, large areas of forest and montane grassland have been replaced by agriculture and plantations (of tea, coffee, etc.), but substantial areas of natural habitat still remain. Sri Lanka has suffered large-scale forest loss and degradation as a result of logging, clearance of forest for agriculture and plantations (particularly of tea), fuelwood-gathering, gem mining and urbanisation. The wet zone in the south and west, the most important part of the island for threatened birds, was recently estimated to retain only 9% forest cover. Protected areas include most remaining wet zone forests, but some have been subject to illegal logging and encroachment, despite a moratorium passed in 1990 to protect all wet zone forests from logging.

*Red-faced Malkoha requires tall primary forest, and has declined because of forest clearance and degradation.*



PHOTO: TIM LOSEBY

## CONSERVATION ISSUES AND STRATEGIC SOLUTIONS (summarised in Table 3)

### Forest loss and degradation

#### ■ FORESTRY AND ILLEGAL LOGGING

Large-scale commercial logging is no longer taking place in this region, although all known Forest Owlet sites in central India are in reserve forests which are managed for timber extraction rather than conservation, leading to a general scarcity of trees with suitable nest holes. A moratorium on logging is currently in place on Sri Lanka, and only very limited logging is allowed in the Western Ghats (following a ban in 1991), on some private lands and in plantations for personal use and 'shade regulation'. However, small-scale illegal logging operations are a serious problem in the Western Ghats and Sri Lanka, mainly affecting reserve forests and private lands. The logging moratorium on Sri Lanka and the logging ban in the Western Ghats should be maintained. Measures should be taken to prevent illegal logging, backed up by community-based forest conservation initiatives, focusing on sites of high biodiversity importance. In central India, forestry department policies and practices should be adjusted to ensure that old growth forests are maintained in the areas that support the Forest Owlet. Nest boxes should be provided for Forest Owlet, on an experimental basis, in areas which lack suitable nest holes.

#### ■ CONVERSION TO AGRICULTURE AND PLANTATIONS

Large areas of forest in central India, the Western Ghats and Sri Lanka have been converted into croplands or plantations, and a tendency to remove peripheral or riverine forest patches within plantations often reduces their value for wildlife. All Forest Owlet sites in central India are under pressure from agricultural encroachment: an area of 50 km<sup>2</sup> near Toranmal Reserve Forest, the site where the species was rediscovered, was recently cleared for people displaced by a dam. In the Western Ghats, large areas in Maharashtra are affected by shifting cultivation, and in the south plantations of tea, coffee, cardamom, *Eucalyptus* and *Acacia* (wattle) have been spreading rapidly and replacing high-altitude shola forests and montane grasslands. Many cardamom and coffee plantations have native shade trees, and are of considerable value to birds; however, these are being converted to tea, or their natural shade trees are being replaced by exotics, mainly silver oak *Grevillea robusta*, which is also widely used as a shade tree in tea estates. In Sri Lanka, encroachment into forest patches continues to threaten many sites and increase habitat fragmentation. The development of numerous vegetable farms in upland areas (such as Nuwara Eliya and Horton Plains) is removing habitat, and producing insecticide run-off which almost certainly affects stream-dependent birds, such as Sri Lanka Whistling-thrush.

There is a need to control agricultural encroachment at key sites for threatened birds. Plantation managers should enact best environmental practices, including the retention of forest patches along streams and in peripheral areas, and minimise the use of agrochemicals. In the range of Forest Owlet in central India (Madhya Pradesh, Maharashtra and Orissa), a moratorium should be imposed on clearance of forest, with plantations only expanded in areas which have already been cleared. In the Western Ghats, the expansion of plantations needs to be halted (through government policy changes), and wattle (which has spread like an invasive weed) needs to be controlled. The practice of replacing native shade trees in plantations with silver oak

Large areas of forest and montane grassland have been replaced by tea and other plantations in the Western Ghats.



PHOTO: ASAD RAHMANI

Table 3. Conservation issues and strategic solutions for birds of the Indian peninsula and Sri Lankan forests.

Conservation issues	Strategic solutions
<b>Forest loss and degradation</b>	
<ul style="list-style-type: none"> <li>■ FORESTRY AND ILLEGAL LOGGING</li> <li>■ CONVERSION TO AGRICULTURE AND PLANTATIONS</li> <li>■ EXPLOITATION OF FOREST PRODUCTS</li> <li>■ DEVELOPMENT (URBAN, INDUSTRIAL, ETC.)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Continue the logging moratorium on Sri Lanka and logging ban in the Western Ghats</li> <li>➤ Prevent illegal logging, particularly at key sites for threatened birds</li> <li>➤ Maintain old growth forest at Forest Owlet sites in central India, and experiment with the provision of nest boxes</li> <li>➤ Promote best environmental practices in plantations, including the retention of natural forest patches, and the use of native rather than exotic shade trees</li> <li>➤ Impose a moratorium on further clearance of natural forest for plantations in central India</li> <li>➤ Halt the expansion of plantations in the Western Ghats, and control the spread of wattle</li> <li>➤ Control exploitation of forest products at key sites, including through the development of community forestry plantations</li> <li>➤ Assess the environmental impact of development projects in forest and grassland areas, and minimise development at key sites</li> </ul>
<b>Protected areas coverage and management</b>	
<ul style="list-style-type: none"> <li>■ GAPS IN PROTECTED AREAS SYSTEM</li> <li>■ WEAKNESSES IN RESERVE MANAGEMENT</li> </ul>	<ul style="list-style-type: none"> <li>➤ Establish new protected areas for Forest Owlet in Maharashtra and Madhya Pradesh</li> <li>➤ Improve protection of key Western Ghats habitats by establishing new protected areas and extending existing reserves</li> <li>➤ Increase protected areas coverage in the wet zone of Sri Lanka</li> <li>➤ Strengthen the technical and management capacity of government agencies responsible for protected area management</li> </ul>
<b>Gaps in knowledge</b>	
<ul style="list-style-type: none"> <li>■ INADEQUATE DATA ON THREATENED BIRDS</li> </ul>	<ul style="list-style-type: none"> <li>➤ Continue studies of Forest Owlet in central India</li> <li>➤ Study the distribution and ecology of threatened birds in the Western Ghats and Sri Lanka, to locate new sites and improve management</li> <li>➤ Investigate the causes of forest die-back on Sri Lanka</li> </ul>

and other exotic trees should be stopped, and reversed by replanting native trees in place of these exotics. Conservation awareness work is needed, stressing the ecological services that forests provide (e.g. maintenance of water supplies) as well as their value for biodiversity.

■ EXPLOITATION OF FOREST PRODUCTS

In this densely populated region, natural forests are intensively exploited for fuelwood and building materials, as well as minor forest products (e.g. cinnamon, bamboo). This causes severe forest degradation as well as disturbance to wildlife, and needs to be controlled particularly in protected areas and other important sites. Efforts should also be made

to reduce pressure on natural forests through the development of community forestry plantations.

■ DEVELOPMENT (URBAN, INDUSTRIAL, ETC.)

An underlying cause of much forest loss has been the construction of new roads, which allow access by loggers and settlers to remote regions. Mining of minerals and gems also affects habitat in the Western Ghats and Sri Lanka. Several reservoirs in the Western Ghats have inundated large areas of forest, and the construction of the Sardar Sarovar Dam in central India led to the clearance of a large area of forest at Toranmal Reserve Forest (the best site known for Forest Owlet) to rehabilitate the many people displaced by

the dam (see *Conversion to agriculture and plantations* above); the proposed Upper Tapi Irrigation Project Stage II seeks to submerge 2.44 km<sup>2</sup> of Forest Owlet habitat, in an area that was removed from the Melghat Sanctuary by the government of Maharashtra in 1994. Recent forest die-back in the high-altitude forests in the wet zone of Sri Lanka has been blamed on acidic clouds, rain and mist caused by industrial air pollution (presumably from the adjacent lowlands). Environmental impact assessments should be conducted for development projects that have the potential to damage forested areas, and new developments should be avoided near protected areas and other sites of high biodiversity value.

### Protected areas coverage and management

#### ■ GAPS IN PROTECTED AREAS SYSTEM

None of the known sites for Forest Owlet is in a protected area, and there is an urgent need to establish reserves where its habitat can be protected and managed: the largest known population is in Toranmal Reserve Forest in Maharashtra, and other current sites are Taloda Reserve Forest and Melghat Wildlife Sanctuary (in an area that was deleted from the reserve in 1994) in Maharashtra, and Khaknaar Forest Range in Madhya Pradesh. There are about 50 protected areas in the Western Ghats (covering c.10% of the geographical area), which represent all of the key habitats for threatened birds; however, some of the reserves are small, and large areas of wet evergreen forest and other habitats remain outside reserves. Recent proposals by the Wildlife Institute of India to improve protection of key Western Ghats habitats by establishing several new protected areas and extending existing reserves should be implemented. Sri Lanka has an extensive system of protected areas, including over 14% of its total land area, but coverage is least extensive in the wet zone, where most

of the threatened birds are found; the protected areas system in this part of the island needs to be revised, following the recommendations in the recent National Conservation Review.

#### ■ WEAKNESSES IN RESERVE MANAGEMENT

While management of reserves in India and Sri Lanka is relatively well funded and organised, there are still many problems affecting protected areas in both countries (some of which are outlined above). Many of these could be addressed through improved financial, technical and management capacity in the relevant government agencies, leading to better patrolling, boundary demarcation, staff training and equipment at the reserves.

### Gaps in knowledge

#### ■ INADEQUATE DATA ON THREATENED BIRDS

Since its rediscovery in 1997, there have been several studies of Forest Owlet, which have helped formulate a conservation strategy for the species. However, more surveys are required (possibly using satellite images) to locate additional sites, and to clarify the sizes of the remaining populations, and their conservation requirements. Some of the threatened birds of the Western Ghats and Sri Lanka have been studied, but there is scope for surveys to locate further sites for conservation action, particularly in less studied areas such as the central and northern sections of the Western Ghats, and ecological research to help improve habitat management at known sites. These could focus on the least known species, such as Broad-tailed Grassbird and Kashmir Flycatcher in the Western Ghats and Green-billed Coucal and Sri Lanka Whistling-thrush on Sri Lanka. A study is needed to investigate the causes of the forest die-back that has recently been observed in the high-altitude wet zone forests on Sri Lanka.

*The Forest Owlet was rediscovered in central India in 1997, after a gap of over 100 years, but all known sites are under threat.*



PHOTO: FARAH ISHTIAQ