

# South African Red Data Book - Aves

W R Siegfried, P G H Frost, J Cooper and A C Kemp

Committee for Terrestrial Biology National Programme for Environmental Sciences

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## PREFACE

The National Programme for Environmental Sciences is one of several national scientific programmes administered by the CSIR. It is a cooperative undertaking of scientists and scientific institutions in South Africa concerned with research related to environmental problems. It includes research designed to meet purely local needs as well as projects being undertaken in South Africa as contributions to international scientific activities.

The increasing threat to indigenous animal and plant species in South Africa posed by development pressure, by changing vegetation patterns, by habitat destruction, by the invasion of alien species and by commercial exploitation is an environmental problem of enormous magnitude. Steps are therefore being taken within the National Programme for Environmental Sciences to collect information relating to threatened species, to promote research into their biology and to assist in finding means for their conservation. The South African Red Data Book series is an attempt to collate available information on rare and threatened vertebrates and is a part of this programme.

Subsequent South African Red Data Book volumes to be published in this series will deal with mammals, reptiles, amphibians and fish.

# ABSTRACT

Data sheets are provided on 10! South African bird species thought to be eligible for conservation attention. A list is also provided of 35 species which might qualify for inclusion in a revised South African Red Data Book.

## SAMEVATTING

Datavelle word voorsien vir 101 Suid-Afrikaanse voëlsoorte wat waarskynlik kwalifiseer vir bewaring. 'n Lys word ook voorsien van 35 soorte wat mag kwalifiseer vir insluiting by 'n hersiene Suid-Afrikaanse Rooidataboek.

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- Savanna Ecosystem Project progress report
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- 7. South African Red Data Book Aves. W R Siegfried, P G H Frost, J Cooper and A C Kemp. June 1976. 108 pp.

#### INTRODUCTION

In accordance with a decision taken in 1974 by the Working Group for Rare and Endangered Animals of the National Programme for Environmental Sciences, dossiers have been prepared for South African vertebrate populations eligible for conservation attention. It is envisaged that the information will point up priorities permitting improved, rationalized planning for conservation action.

A provisional list of vertebrate species with populations breeding in, and indigenous to, South Africa and qualifying for one or more of the categories - rare, peripheral, threatened, endangered and vulnerable (classification as per recommendation of the Survival Service Commission of the International Union for Conservation of Nature and Natural Resources, IUCN) has been compiled. Descriptive accounts of South African bird populations have been set out to accord with the main features of the format adopted in the IUCN's Red Data Book (Vincent 1966). The South African Red Data Book is, however, restricted to populations of species found breeding within the geographical area embraced by the Republic of South Africa, Lesotho and Swaziland. The status of any particular species outside South Africa's borders did not influence the process of selection. In all cases the species was taken as the basic taxon. Unless stated otherwise, nomenclature follows McLachlan and Liversidge (1970).

The South African Red Data Book consists of data sheets for 101 species. The sheets contain information obtained through a preliminary survey (W R Siegfried, P G H Frost, J Cooper and A C Kemp). It must be emphasized that: (1) the list of species requiring conservation is provisional and preliminary; (2) it may be possible to reduce the list in future when more information becomes available; (3) the list may not embrace all populations which are in need of conservation attention and, in this connection, a supplementary list including an additional 35 species has been compiled on the basis of suggestions from informed commentators; (4) the Red Data Book sheets contain incomplete and perhaps even incorrect information and have been based upon conservation priorities which are not yet well defined.

# LIST OF SPECIES REQUIRING CONSERVATION

The following is a list of species provisionally included in the South African Red Data Book. The nomenclature follows McLachlan and Liversidge (1970). Asterisks indicate species endemic to South Africa.

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## SUPPLEMENTARY LIST

The following species might qualify for inclusion in a revised South African Red Data Book. The nomenclature follows McLachlan and Liversidge (1970).

dwarf bittern little bittern

bittern

Ovambo sparrowhawk dark chanting goshawk

black harrier crested francolin Baillon's crake

finfoot

lesser black-winged plover

mourning dove

brown-headed parrot
thick-billed cuckoo

barred owl

mottled spinetail

palm swift

Bradfield's swift woodland kingfisher carmine bee-eater racquet-tailed roller

purple roller

broad-billed roller white-eared barbet

scaly-throated honeyguide

Knysna woodpecker mosque swallow house martin

white-breasted cuckoo shrike

grey penduline tit

bush blackcap

fan-tailed warbler

cinnamon-breasted warbler Stierling's barred warbler

grey waxbill

lemon-breasted canary

Ardeirallus sturmii Ixobrychus minutus Botaurus stellaris Accipiter ovampensis Meliërax metabates

Circus maurus

Francolinus sephaena

Porzana pusilla

Podica senegalensis

Stephanibyx lugubris

Streptopelia decipiens

Poicephalus cryptoxanthus

Pachycoccyx audeberti
Glaucidium capense
Chaetura ussheri
Cypsiurus parvus
Apus bradfieldi

Halcyon senegalensis Merops nubicoides Coracius spatulata Coracius naevia

Eurystomus glaucurus
Buccanodon leucotis
Indicator variegatus
Campethera notata
Cecropis senegalensis

Delichon urbica
Coracina pectoralis
Anthoscopus caroli
Lioptilus nigricapillus
Schoenicola brevirostris
Euryptila subcinnamomea
Camaroptera stierlingi
Estrilda perreini

Serinus citrinipectus

## JACKASS PENGUIN

Spheniscus demersus (Linnaeus) 1758: Cape of Good Hope

Order SPHENISCIFORMES

family SPHENISCIDAE

Present distribution: Occurs around the coast, breeding on 13 islands extending from Lambert's Bay Island on the west coast round to Bird Island, Algoa Bay, on the south coast.

Former distribution: Formerly bred on Robben Island. Certainly much more common on the other breeding islands than it is today.

Status: Widespread but declining species. Vulnerable.

Estimated numbers: Recent estimates indicate that the South African population is approximately 140 000 birds.

Breeding rate in wild: Two eggs per clutch annually. Breeding occurs throughout the year with summer and winter peaks. There are no records of pairs producing two clutches per year, except in the case of replacement clutches.

Reasons for decline: A number of factors have contributed to the species' decline. Initially, exploitation of the birds themselves, for food or as bait for rock lobster traps, and the exceptionally heavy exploitation of the birds' eggs for human consumption, apparently triggered the decline. These practices have ceased (poaching excepted). Competition with an expanding fishing industry, habitat changes on islands (paving, walling and the removal of guano deposits) and oiling may have contributed to the continued decline of the species.

Protective measures taken: The offshore breeding islands are administered by the Sea Fisheries Branch of the Department of Industries. Public access is restricted. Exploitation of the birds and their eggs has ceased. Protected by national and provincial laws.

Protective measures proposed: Some 17 000 birds occur in the immediate vicinity of the proposed Saldanha harbour complex. The future of these populations is a matter for concern. The breeding islands in and around Saldanha Bay should be declared nature reserves.

Numbers held in captivity: A partial survey in 1971 showed that 143 birds were held in 11 zoos.

Breeding potential in captivity: Good. Zoos report regular breeding.

Current research effort: Research programmes dealing with aspects of the ecology of the species are being carried out by the Percy FitzPatrick Institute, the University of Port Elizabeth and the Port Elizabeth Museum.

Remarks: The species is in no danger of extinction.

PINK-BACKED PELICAN

Pelecanus rufescens Gmelin 1789: West Africa

Order PELECANIFORMES

Family PELECANIDAE

Present distribution: A rare and localized population, resident mainly in northern Natal. The only known breeding colony in South Africa is on the Hluhluwe River near Lake St Lucia.

Former distribution: Not known to have differed from the above.

Status: Rare and threatened.

Estimated numbers: Not known, but undoubtedly few and apparently declining.

Breeding rate in wild: One brood of one to four chicks at irregular intervals.

Reasons for decline: Degradation of Lake St Lucia and human interference.

Protective measures taken: Protected by provincial laws. The breeding colony is near a proclaimed nature reserve.

Protective measures proposed: A general and all-embracing effort to stop and reverse the trend of degradation of the Lake St Lucia system.

Number held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None in South Africa.

## WHITE PELICAN

Pelecanus onocrotalus Linnaeus 1758: Africa

Order PELECANIFORMES

Family PELECANIDAE

Present distribution: Widely distributed over South Africa, but breeding birds restricted to two known sites. Lake St Lucia and Dassen Island.

Former distribution: Not known to have differed from the above, but one breeding colony (Seal Island, False Bay, Cape) no longer extant, and the St Lucia colony has suffered decline.

Status: Vulnerable.

Estimated numbers: Not more than 2 000 breeding birds.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: Degradation of Lake St Lucia and human interferences.

Protective measures taken: Protected by provincial laws, and on the coastal islands. The St Lucia colony is in a proclaimed nature reserve.

Protective measures proposed: A general and all-embracing effort to stop and reverse the trend of degradation of the Lake St Lucia system. The proclamation of Dassen Island as a nature reserve.

Number held in captivity: Not known, but specimens occur in at least three South African zoological gardens.

Breeding potential in captivity: Limited.

Current research effort: None in South Africa.

## BANK CORMORANT

Phalacrocorax neglectus (Wahlberg) 1855: Islands off the coast

of South West Africa

Order PELECANIFORMES

Family PHALACROCORACIDAE

<u>Present distribution</u>: Islands off the south-western Cape coast from Lambert's Bay to Cape Agulhas.

Former distribution: Not known to have differed from the above.

Status: Uncommon and vulnerable.

Estimated numbers: Recent estimates put the South African population at about 3 000 birds.

Breeding rate in wild: Two to three eggs per clutch.

Reason for decline: No evidence for a decline. However, the species is sensitive to disturbance and vulnerable to oiling, and may also be in competition with the rock lobster industry. The future of the species is inexorably linked with the future maintenance of the offshore islands as nature reserves.

Protective measures taken: The offshore breeding islands are administered by the Sea Fisheries Branch of the Department of Industries. Public access is restricted. Protected by national and provincial laws.

Protective measures proposed: Proclamation of the breeding islands as nature reserves.

Numbers held in captivity: Probably none.

Breeding potential in captivity: Limited.

<u>Current research effort:</u> A research programme dealing with aspects of the ecology of the species is being carried out by the Percy FitzPatrick Institute.

Remarks: The species is in no danger of extinction.

CROWNED CORMORANT

Phalacrocorax africanus (Wahlberg) 1855: Possession Islands

Order PELECANIFORMES

Family PHALACROCORACIDAE

<u>Fresent distribution</u>: Islands off the south-western Cape coast from Lambert's Bay to Cape Agulhas (this applies to the form *P. a. coronatus*).

Former distribution: Not known to have differed from the above.

Status: Uncommon and vulnerable.

Estimated numbers: The population probably does not exceed 1 500 birds (this for *coronatus*).

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline. However, the birds are vulnerable to disturbance and oiling.

Protective measures taken: The offshore breeding islands are administered by the Sea Fisheries Branch of the Department of Industries. Public access is restricted. Protected by national and provincial laws.

Protective measures proposed: Proclamation of the breeding islands as nature reserves.

Numbers held in captivity: Probably none.

Breeding potential in captivity: Limited.

Current research effort: None.

Remarks: The taxonomic status of this bird can be debated. We prefer to regard *coronatus* as a separate species distinct from africanus.

# GOLIATH HERON

Ardea goliath Cretzschmar 1826: White Nile

Order CICONIIFORMES

Family ARDEIDAE

<u>Present distribution</u>: Mainly sub-tropical/tropical wetland areas of South Africa. A localized and scarce resident.

Former distribution: Not known to have differed from the above.

Status: Scarce and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Breeds in a number (4) of proclaimed nature reserves.

Protective measures proposed: None at present.

Number held in captivity: Not known. One in National Zoological Gardens (Pretoria).

Breeding potential in captivity: Not known.

Current research effort: None

RUFOUS-BELLIED HERON

Ardeola rufiventris (Sundevall) 1850: Potchefstroom

Order CICONIIFORMES

Family ARDEIDAE

Present distribution: Mainly sub-tropical/tropical wetland areas of South Africa. Very local and breeds sporadically.

Former distribution: Not known to have differed from the above.

Status: Rare, peripheral and vulnerable. Only one known breeding site (Mosdene, Naboomspruit) in South Africa.

Estimated numbers: Not known, but undoubtedly few breeding birds.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

# WHITE-BACKED NIGHT HERON

Gorsachius leuconotos (Wagler) 1827: Senegambia

Order CICONIIFORMES

Family ARDEIDAE

Present distribution: Mainly the eastern littoral, tropical/sub-tropical areas of South Africa where it occurs locally and sparingly along tree-lined rivers.

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: Not known, but undoubtedly few.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

## MARABOU

Leptoptilos crumeniferus (Lesson) 1831: Senegal

Order CICONIIFORMES

Family CICONIIDAE

Present distribution: Occurs in Zululand and north-eastern Transvaal with scattered records from the eastern and northern Cape and Natal. Not yet recorded definitively as breeding, but two sites are known (in the Kruger National Park and in Swaziland).

Former distribution: Not known to have differed from the above.

Status: Rare in the extreme south of its range. A not uncommon visitor to the Kruger National Park where up to 200 have been recorded at an elephant carcass.

Estimated numbers: Not known.

Breeding rate in wild: Lays two to five eggs per year.

Reasons for decline: Not known to have declined, but could be affected by reduction in availability of carrion.

Protective measures taken: Much of the population in South Africa occurs in the Kruger National Park. Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Probably limited.

Current research effort: None.

OPENBILL STORK

Anastomus lamelligerus Temminck 1823: Senegal

Order CICONIIFORMES

Family CICONIIDAE

Present distribution: Mainly in northern Zululand. Only two known breeding colonies in South Africa. A floodplain species.

Former distribution: Not known to have differed from the above.

Status: Rare and very localized. Threatened. Apparently a small resident population is augmented seasonally by birds from the tropics of Africa.

Estimated numbers: About 100 breeding birds.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present. Consideration needs to be given to the effect of man-made changes and proposed development of the Pongolo floodplain, an important area for the Openbill Stork.

Number held in captivity: Not known.

Breeding potential in captivity: Not known, but probably very limited.

Current research effort: None.

## SADDLEBILL

Ephippiorhynchus senegalensis (Shaw) 1800: Senegal

Order CICONIIFORMES Family CICONIIDAE

Present distribution: Mainly Zululand and eastern Transvaal. Very localized and a sparse breeder.

Former distribution: Not known to have differed from the above.

Status: The resident population is rare, localized and vulnerable.

Estimated numbers: Not known. The resident population is very small. Probably fewer than 50 breeding birds.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None.

WOOD STORK

Ibis ibis (Linnaeus) 1766: Egypt

Order CICONIIFORMES

Family CICONTIDAE

Present distribution: Widely distributed in South Africa, but rare in southern region. The resident breeding population is very small and restricted mainly to the Zululand/floodplain complex.

Former distribution: Not known to have differed from the above.

Status: The resident population is rare, localized and vulnerable.

Estimated numbers: Not known. The resident population is very small. Probably fewer than 50 breeding birds.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None.

WOOLLY-NECKED STORK

Dissoura episcopus (Boddaert) 1783: Coromandel

Order CICONIIFORMES

Family CICONTIDAE

Present distribution: Mainly Natal. Very local and resident along rivers and lagoons in Zululand where it breeds sparsely.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known, but undoubtedly few with only about 10 known breeding pairs.

Breeding rate in wild: One brood of one to three chicks annually.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in Africa. A survey of the species' status in South Africa is required.

BLACK STORK

Ciconia nigra (Linnaeus) 1758: Sweden

Order CICONIIFORMES

Family CICONIIDAE

Present distribution: Widely distributed in South Africa, but localized. Breeds mainly in mountainous areas, particularly the Drakensberg range. Tends to frequent estuaries when not breeding.

Former distribution: Not known to have differed from the above.

Status: Uncommon and localized. Apparently not yet threatened, but certainly vulnerable.

Estimated numbers: Not known, but probably no more than 100 breeding birds.

Breeding rate in wild: One brood of one to four chicks annually.

Reasons for decline: No evidence for a decline.

<u>Protective measures taken:</u> Protected by provincial laws. There are nest-sites (3) in proclaimed nature reserves.

Protective measures proposed: Consideration needs to be given to protecting not only selected nest-sites and their environs but also the birds' estuarine, 'off-season' quarters, e.g., Cowie River. The species normally is shy and intolerant of human disturbance. South African estuaries are subject to ever increasing interference by humans.

Number held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None.

WHITE STORK

Ciconia ciconia Linnaeus 1758: Sweden

Order CICONIIFORMES

Family CICONIIDAE

Present distribution: Mainly a Palaearctic non-breeding migrant, widely distributed, but inclined to aggregate in areas where there is an abundance of food. Considerable numbers stay over in South Africa, migrating north at the end of the southern summer. Small numbers of birds are resident and breed in South Africa. First recorded as breeding in 1940 between Calitzdorp and Oudtshoorn. This nest soon afterwards came to grief. No other records until 1961 when one nest containing three young was found between Cape Agulhas and Bredasdorp. To date a varying number of nests has yearly been occupied in that area. In 1966 an occupied nest was located near Mossel Bay and this nest has been occupied every year since.

Former distribution: Perhaps fewer wintering birds, and no, or fewer, breeding birds.

Status: Rare (resident, breeding birds).

Estimated numbers: Not more than 6 pairs known to breed locally.

Breeding rate in wild: One brood of one to three chicks annually.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: The breeding sites, all on private property, should be given some form of special protection.

Number held in captivity: Not known.

<u>Current research effort</u>: Survey sponsored by the International Council for Bird Protection of the status of the species is being undertaken.

BALD IBIS

Geronticus calvus (Boddaert) 1783: Cape of Good Hope

Order CICONIIFORMES

Family THRESKIORNITHIDAE

<u>Present distribution</u>: A South African endemic species localized in the foothills of the Drakensberg mountains, with the centre of the distribution in the eastern Orange Free State.

Former distribution: Most montane grassland areas of South Africa.

Status: Rare and localized; reduced in numbers and eliminated from large areas of its former range.

Estimated numbers: About 2 000 breeding birds.

Breeding rate in wild: One brood of one to four chicks annually.

Reasons for decline: Hunting by humans for food and modification and destruction of suitable habitat.

Protective measures taken: Protected by provincial laws. However, there is little enforcement of laws in the more remote mountain areas. A number of the species' nesting sites (cliffs) have been given special protection.

<u>Protective measures proposed</u>: Feeding grounds (in addition to nesting sites) require special protection and management.

Number held in captivity: Not known. In the past specimens were kept at the National Zoological Gardens (Pretoria).

Breeding potential in captivity: Good.

<u>Current research effort</u>: Officers of the Transvaal and Orange Free State Provincial Nature Conservancies are investigating aspects of the biology of the species.

## GREATER FLAMINGO

Phoenicopterus ruber Linnaeus 1758: Africa

Order CICONIIFORMES

Family PHOENICOPTERIDAE

Present distribution: Widely distributed over South Africa, but breeding rare and sporadic. Inhabits coastal lagoons and large, shallow inland waters.

Former distribution: Not known to have differed from the above.

Status: See remarks.

Estimated numbers: Not known.

Breeding rate in wild: Normally one chick at irregular intervals.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: See remarks.

Number held in captivity: Not known. There are a few in the National Zoological Gardens (Pretoria).

Breeding potential in captivity: None in South Africa.

Remarks: The South African population is subject to both erratic and regular fluctuations. The population is relatively large and in no danger of extinction, but breeding is rare and sporadic posing a special problem in regard to conservation of breeding sites. Has bred at Bredasdorp (15 years ago) and more recently (1972/73) at Lake St Lucia. There are breeding populations elsewhere in Africa.

# LESSER FLAMINGO

Phoeniconaias minor Geoffray 1798: Senegal

Order CICONIIFORMES

Family PHOENICOPTERIDAE

Present distribution: Most of South Africa. Inhabits coastal lagoons and large, shallow inland waters.

Former distribution: Not known to have differed from the above.

Status: See remarks.

Estimated numbers: Not known.

Breeding rate in wild: Normally one chick at irregular intervals.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: See remarks

Number held in captivity: Limited.

Breeding potential in captivity: None in South Africa.

Current research effort: None in South Africa.

Remarks: As for preceding species, but rarer in all respects. Has attempted on numerous occasions to breed in South Africa but to date apparently unsuccessfully. There are breeding populations elsewhere in Africa.

## CAPE VULTURE

Gyps coprotheres Forster 1798: South Africa.

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Most of South Africa.

Former distribution: Not known to have differed in general from the above.

Status: Threatened and vulnerable. The population has declined during historical times.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of one chick per annum.

Reasons for decline: Decrease in availability of carion, shooting, electrocution on high tension wires, poisoning, disturbance at breeding colonies.

<u>Protective measures taken:</u> Protected by provincial laws, except when causing damage to property. One Transvaal breeding colony is protected by the farmer-owner.

<u>Protective measures proposed:</u> Protection of selected breeding colonies and their surroundings.

Number held in captivity: At least four in National Zoological Gardens (Pretoria).

Breeding potential in captivity: Good, since several congeners have bred readily.

<u>Current research effort</u>: Ringing studies (Organiser J Ledger) and nest studies by Rhodesian Ph D student (P Mundy). A census in the Cape Province by Cape Department of Nature Conservation.

Remarks: The species is almost restricted to South Africa. A few peripheral breeding colonies in South West Africa, Botswana and Rhodesia. The decline of the species started over 100 years ago, is accelerating, and gives cause for concern.

# EGYPTIAN VULTURE

Neophron percnopterus Linnaeus 1758: Egypt

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Not known. A few recent sightings have been made in the Transkei.

Former distribution: Recorded regularly over most of South Africa during the last century. Authentic breeding records exist in the literature.

Status: Endangered and may no longer form a regular part of the South African fauna.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of two chicks per annum.

Reason for decline: Unknown.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The decline of the species since the turn of the century is probably due to a decrease in the availability of carrion.

PALM-NUT VULTURE

Gypohierax angolensis Gmelin 1788: Angola

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Zululand (breeding in coastal forest at Mtunzini and Kosi Bay), rarely in eastern Transvaal lowveld. Vagrants occur farther afield. Distribution coincides largely with that of the oil palm (Elaeis) on which the bird feeds.

Former distribution: Not known to have differed from the above.

Status: Peripheral and vulnerable resident.

Estimated numbers: Not known, but probably less than 100.

Breeding rate in wild: Maximum of one chick per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None

## PEREGRINE

Palco peregrinus Tunstall, 1771: Great Britain

Order FALCONIFORMES Family FALCONIDAE

Present distribution: Most of South Africa.

Former distribution: Not known to have differed from the above.

Status: F.p. minor is a rare breeding resident race, and F.p.  $\overline{calidus}$  is an uncommon Palaearctic migrant; both may be threatened.

Estimated numbers: Not known.

Breeding rate in wild: Average of two chicks per annum.

Reasons for decline: No evidence locally for a decline, but the species has been affected in Europe by organochlorine contamination, and this may also be operating here. The related Lanner Falcon F. biarmicus demonstrated high levels of contamination in South Africa.

Protective measures taken: None at present.

Number held in captivity: None.

Breeding potential in captivity: Good. Several pairs have bred successfully at Cornell University, America, rearing up to 12 chicks per pair per annum by artificial manipulation.

Current research effort: None in South Africa.

Remarks: There are populations of F.p. minor elsewhere in Africa.

## AFRICAN HOBBY

Falco cuvieri A Smith, 1830: Kei River, Cape Province

Order FALCONIFORMES

Family FALCONIDAE

Present distribution: Heavily wooded areas of the Transvaal, Natal and north-eastern Cape Province.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

## RED-NECKED FALCON

Falco chiquera Daudin 1800: Bengal

Order FALCONIFORMES Family FALCONIDAE

Present distribution: Transvaal, Orange Free State, northern Natal and northern Cape Province. In the north-eastern part of the country the species' distribution correlates closely with that of the borassus palm.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: One to four chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in Kalahari Gemsbok National Park.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known, but probably good since several congeners have bred.

Current research effort: None.

Remarks: The species is in no danger of extinction since populations occur in Africa and India. However, it is uncommon everywhere and rare in most areas.

DICKINSON'S KESTREL

Falco dickinsoni Sclater 1864: Chibasa, Shire River, Malawi

Order FALCONIFORMES

Family FALCONIDAE

Present distribution: North-eastern Transvaal. Distribution sometimes coincident with tall palm trees.

Former distribution: Not known to have differed from the above.

Status: Localized and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Part of the population occurs in the Kruger National Park.

Protective measures proposed: None at present.

Number held in captivity: Not known

Breeding potential in captivity: Not known, but probably good since several congeners have bred.

Current research effort: None.

Remarks: The limited range makes the species vulnerable, but it is in no danger of extinction as other populations are found in central Africa.

## PYGMY FALCON

Poliohierax semitorquatus A Smith 1936: Kuruman, Northern Cape

Order FALCONIFORMES

Family FALCONIDAE

Present distribution: Extreme western Transvaal, Orange Free State, and far northern Cape Province. Distribution allied to that of the Social Weaver *Philetairus socius* in whose communal nests the species breeds.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in the Kalahari Gemsbok National Park.

Protective measures proposed: None at present.

Number held in captivity: Not known, but probably good since several related falconets have bred successfully.

Current research effort: None.

Remarks: The species is vulnerable due to restricted range and specialized nesting requirements, but is in no danger of extinction.

CUCKOO FALCON

Aviceda cuculoides Swainson 1837: West Africa

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Eastern South Africa in well-wooded areas.

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: Not known.

Breeding rate in wild: Two to three chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

### BAT HAWK

Macheirhamphus alcinus Bonaparte 1850: Malacca

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Bushveld areas of the Transvaal and Natal.

Former distribution: Not known to have differed from the above.

Status: Rare, localized and vulnerable.

Estimated numbers: Not known, but undoubtedly few.

Breeding rate in wild: Maximum of two chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: A preliminary study of a nesting pair by an officer of the Transvaal Nature Conservation Division.

Remarks: The species is in no danger of extinction. There are other populations in the Aethiopian and Oriental regions.

LONG-CRESTED EAGLE

Lophaëtus occipitalis (Daudin), 1800: Knysna District, Cape Province

Order FALCONIFORMES

Family ACCIPITRIDAE

<u>Present distribution:</u> Eastern Transvaal and northern Natal forests. A recent record from the eastern Cape Province.

Former distribution: Extended as far south as Knysna previously.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of two chicks per annum.

Reasons for decline: Cause of range reduction unknown; no evidence that reduction is still continuing.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: At least two in Natal.

Breeding potential in captivity: Not known.

Current research effort: None.

BOOTED EAGLE

Hieraaëtus pennatus (Gmelin), 1788: Hungary

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: A Palaearctic migrant all over South Africa, especially the eastern half. There is a restricted breeding population in the mountainous areas of the southern Cape Province.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable (breeding population).

Estimated numbers: Not known.

Breeding rate in wild: One chick per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measure proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction, but the distributional and numerical status of the population breeding in South Africa should be investigated.

### AYRES'S HAWK EAGLE

Hieraaëtus dubius (A Smith), 1830: Heeren Logement, Clanwilliam

District, Cape Province.

Order FALCONIFORMES

Family ACCIPITRIDAE

<u>Present distribution</u>: Well-wooded areas in eastern and southern South Africa.

Former distribution: Formerly more widely distributed.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of one chick per annum.

Reasons for decline: Not known.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction, as other populations are found in east and central Africa. However, it is rare throughout its range and, therefore, vulnerable.

MARTIAL EAGLE

Polemaëtus bellicosus Daudin 1800: Great Namaqualand

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Most of South Africa.

Former distribution: Not known to have differed in general from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Average of one chick every two years.

Reasons for decline: No firm evidence for a decline, but the species is rare in large areas where it is persecuted by farmers and others.

Protective measures taken: Protected by provincial laws. A substantial population occurs in the Kruger National Park.

Protective measures proposed: None at present.

Number held in captivity: One in the National Zoological Gardens (Pretoria); at least one in the Johannesburg zoo and one in the East London zoo.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: This large eagle inhabits flat savanna and grassland habitat, and so is the species most in conflict with livestock farmers. The species is in no danger of extinction. There are populations elsewhere in Africa.

### SOUTHERN BANDED SNAKE-EAGLE

Circaëtus fasciolatus Kaup 1850: Durban

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Northern Natal. Confined to coastal dune forests.

Former distribution: Not known to have differed from the above, although no longer found in the vicinity of Durban where originally collected. Still occurs in the Umgeni valley.

Status: Peripheral, rare and vulnerable.

Estimated numbers: Not known, but undoubtedly few.

Breeding rate in wild: One chick per annum.

Reasons for decline: No evidence for having declined, other than in areas where coastal bush has been cleared.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: This species has very special habitat requirements and so is vulnerable. It is in no danger of extinction, since other populations extend north along the east coast of Africa.

### AFRICAN FISH EAGLE

Haliaëtus vocifer Daudin 1800: Keurboom River, Cape Province

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: Most of South Africa where large rivers or bodies of water exist.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: One or two chicks per annum.

Reasons for decline: Appears to be declining in estuarine habitats and on man-made dams, mainly due to human disturbance.

Protective measures taken: Protected by provincial laws. An educational drive by the Endangered Wildlife Trust.

Protective measures proposed: None at present.

Numbers held in captivity: Not known, but at least two in the National Zoological Gardens (Pretoria) and two by members of the Transvaal Falconers' Association.

Breeding potential in captivity: Not known, but likely to be good since related congeners have bred regularly.

<u>Current research effort</u>: The species is being censused by the Transvaal Nature Conservation Division. Moult and plumage succession are being studied by the Transvaal Falconers' Association.

BEARDED VULTURE

Gypaëtus barbatus Linnaeus 1758: African = Oran, Algeria

Order FALCONIFORMES Family ACCIPITRIDAE

Present distribution: Mountains in the central Drakensberg.

Former distribution: Mountain areas throughout South Africa, including those near Cape Town, the Zoutpansberg and Uitenhage.

Status: Rare and threatened.

Estimated numbers: Probably fewer than 100 birds in South Africa.

Breeding rate in wild: Maximum of one chick per annum.

Reasons for decline: Shooting, decrease of carrion, poisoning (especially of sheep carcasses to kill jackals) and disturbance at nest sites.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: At least two in Natal

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The South African population of the subspecies G.b. meridionalis is threatened with extinction. The same subspecies is common in Ethiopia, and the species is common also in such places as the Himalayas. Most of the South African population resides in Lesotho, with only the periphery of the population spreading into the Republic of South Africa. Golden Gate Highlands National Park and Giant's Castle Nature Reserve provide sanctuary for only a few breeding pairs in South Africa. An accurate census of the breeding population is required.

# MOUNTAIN BUZZARD

Buteo buteo Hartert and Neumann, 1914: Koritscha, S. Abyssinia.

Order FALCONIFORMES

Family ACCIPITRIDAE

<u>Present distribution</u>: Forested mountainous areas of the eastern Transvaal and southern Cape.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of two chicks per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known, probably none.

Breeding potential in captivity: Not known, but probably good since congeners have bred successfully.

Current research effort: None.

Remarks: The taxonomic position of this bird has been debated. Modern authorities accept the population endemic to South Africa as Buteo oreophilus trizonatus (see Siegfried & Frost, 1973).

Reference: Siegfried, W R and P G H Frost 1973. Systematic notes on the small African buteos. Ardea 61, 123-127.

### BLACK SPARROWHAWK

Accipiter melanoleucus A Smith 1830: Baviaans River, Cape Province

Order FALCONIFORMES

Family ACCIPITRIDAE

Present distribution: The well-wooded areas of eastern South Africa, and the Transvaal highveld.

Former distribution: Probably never occurred on the open highveld until plantations were planted by humans, but otherwise not known to have differed from the above.

Status: Resident breeding species, threatened at least in parts of its range.

Estimated numbers: Not known.

Breeding rate in wild: Maximum of three chicks per annum.

Reasons for decline: No evidence for a decline, but there are suggestions for poor breeding success in the Transvaal where eggs have been found to contain very high levels of DDE organochlorine.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: At least three in the Transvaal, kept for falconry.

Breeding potential in captivity: Not known, but likely to be good since congeners have successfully bred several times and members of the genus are amenable to fertilization by artificial insemination.

Current research effort: The species' status and breeding biology in the Transvaal are being investigated by the Transvaal Nature Conservation Division and Transvaal Falconers' Association.

#### RED-BILLED FRANÇOLIN

Francolinus adspersus Waterhouse 1838: Kuiseb River Damaraland.

Order GALLIFORMES

Family PHASIANIDAE

Present distribution: Occurs in the western Transvaal in dry bushveld country.

Former distribution: Not known to have differed from the above.

Status: Common within its rather restricted range.

Estimated numbers: Not known.

Breeding rate in wild: Six to eight eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: The species is classified as a gamebird and is hunted.

<u>Protective measures proposed</u>: Consideration should be given to establishing a refuge area to ensure the continued existence of a viable population.

Numbers held in captivity: Not known.

Breeding potential in captivity: Good.

Current research effort: None.

Remarks: The species is in no danger of extinction. It occurs widely and abundantly outside South Africa. However, in view of the fact that it is hunted and that much of its present range in South Africa falls within the Bophutaswana homeland, the status of the species needs to be assessed.

BLUE QUAIL

Excalfactoria adansoni Verreaux 1851: Gabon

Order: GALLIFORMES Family PHASIANIDAE

Present distribution: Occurs in moist grassland in lowland eastern Cape, Natal and the Transvaal.

Former distribution: Not known to have differed from the above.

Status: Rare, localized and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Six to eight eggs per clutch.

Reasons for decline: No firm evidence for a decline but reduction in moist grassland, due to drainage for agricultural and building purposes, suggests that the species might have declined.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Good.

Current research effort: None.

CRESTED GUINEAFOWL

Guttera edouardi Hartlaub 1867: Coast of Natal

Order GALLIFORMES

Family NUMIDIDAE

Present distribution: Restricted to bush and forest remnants in Zululand south to Umhlanga Rocks and Karkloof; also in the eastern Transvaal.

Former distribution: Occurred more extensively when its habitat was more widely distributed.

Status: Localized and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Five to seven eggs per clutch.

Reasons for decline: The destruction of indigenous forest.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Probably good.

Current research effort: None.

STRIPED CRAKE

Porzana marginalis Hartlaub 1857: Gabon

Order GRUIFORMES

Family RALLIDAE

Present distribution: Very few records; widely scattered (see Remarks). Inhabits short, damp grasslands.

Former distribution: Not known to have differed from the above.

Status: Not known, but undoubtedly rare.

Estimated numbers: Not known.

Breeding rate in wild: Broods of one to six chicks.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: If like other rails, then good.

Current research effort: None.

Remarks: There are populations elsewhere in Africa. The South African population apparently consists of breeding summer migrants from the central tropics whose southern limits could be a function of rainfall.

WHITE-WINGED FLUFFTAIL

Sarothrura ayresi Gurney 1877: Potchefstroom

Order GRUIFORMES

Family RALLIDAE

Present distribution: Known only from the Republic of South Africa and Ethiopia. From South Africa there appear to be only four specimens in existence. Apparently inhabits marshes and flooded areas.

Former distribution: Not known.

<u>Status</u>: Not known, but presumably extremely rare, local and vulnerable.

Estimated numbers: Not known, but undoubtedly few.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: None.

Current research effort: None.

Remarks: A survey of the distributional and numerical status of the species is required.

KORI BUSTARD

Ardeotis kori Burchell 1822: Confluence of Vaal and Orange Rivers

Order GRUIFORMES

Family OTIDIDAE

Present distribution: Widely distributed over South Africa in savanna grassland.

Former distribution: Probably not much more extensive than at present, but certainly more common within its range. It has disappeared from Tongaland where it was once common.

Status: Rare in most areas, but common in the Kalahari Gemsbok National Park. Also occurs in the Kruger National Park.

Estimated numbers: Not known.

Breeding rate in wild: One to two eggs per clutch annually.

Reasons for decline: Formerly extensively hunted. Reduction in tall savanna grassland due to grazing by domestic stock may also be implicated.

Protective measures taken: Protected by provincial laws. Substantial populations occur within nature reserves.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Limited.

Current research effort: None.

WATTLED CRANE

Bugeranus carunculatus Gmelin 1789: Cape of Good Hope

Order GRUIFORMES

Family GRUIDAE

Present distribution: Mainly southern Transvaal and western Natal, inhabiting swamps in grassland areas. Breeds sparsely in South Africa.

Former distribution: Formerly distributed more widely, particularly in the Cape Province from which it is now all but absent.

Status: Rare and threatened.

Estimated numbers: Not known, but undoubtedly few and apparently declining.

Breeding rate in wild: One brood of one or two chicks annually.

Reasons for decline: Habitat alteration and destruction, particularly of grassy views and swamps. The bird is sensitive to disturbance and normally not tolerant of human interference.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: Identification of potential conservation areas and their proclamation as nature reserves.

Number held in captivity: Not known. In the past specimens were kept at the National Zoological Gardens (Pretoria).

Breeding potential in captivity: Limited.

Current research effort: None.

BLUE KORHAAN

Eupodotis caerulescens Vieillot 1820: Eastern Cape Province

Order GRUIFORMES Family OTIDIDAE

Present distribution: Confined to the highveld grasslands of all four provinces.

Former distribution: Not known to have differed from the above.

<u>Status</u>: An endemic species, localized but common in some areas. Might be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch annually.

Reasons for decline: The species may have declined in the eastern Cape, and elsewhere as a result of the invasion of karoo vegetation into grassveld areas.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Limited.

Current research effort: None.

Remarks: A survey of the status of the species within nature reserves is required.

LESSER JACANA

Microparra capensis A Smith 1839: Algoa Bay.

Order CHARADRIIFORMES

Family JACANIDAE

Present distribution: Widespread, but sparsely localized to lagoons, lakes and rivers in Natal and the Transvaal.

Former distribution: May have occurred farther south, as witness the type locality.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

### WHITE-CROWNED PLOVER

Xiphidiopterus albiceps Gould 1834: Niger River

Order CHARADRIIFORMES

Family CHARADRIIDAE

Present distribution: The Limpopo valley below 1 000m. Inhabits mud and sandbanks along large rivers.

Former distribution: Probably similar to that of the present, though there is an old record from Potchefstroom (Ayres).

Status: Peripheral, rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in the north of the Kruger National National Park.

Protective measures proposed: None at present.

Numbers held in captivity: Probably none.

Breeding potential in captivity: Not known.

Current research effort: None.

WHITE-WINGED PLOVER

Hemiparra crassirostris Hartlaub 1855: Nubia

Order CHARDRIIFORMES

Family CHARDADRIIDAE

Present distribution: The coastal belt of Zululand, as far south as St. Lucia. Restricted to waters where there is abundant floating aquatic vegetation.

Former distribution: Not known to have differed from the above.

Status: Rare, peripheral and vulnerable. Has bred at Lake St. Lucia.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs within a nature reserve (Lake St Lucia).

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in Africa. Changes in the Zululand flood-plain complex, as a result of impounding of head waters, is possibly of importance in the conservation of the South African population of the species.

#### RED-WINGED PRATINCOLE

Glareola pratincola Linnaeus 1766: Austria

Order CHARADRIIFORMES

Family GLAREOLIDAE

Present distribution: Occurs sparsely in lowland Natal alongside rivers, estuaries and lakes. Inhabits open grassy areas.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: One to two eggs per clutch.

Reasons for decline: No evidence for a decline, but loss of preferred breeding habitat has occurred.

Protective measures taken: Protected by provincial laws. A breeding colony at the Umvoti river mouth is protected by the landowner.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

CASPIAN TERN

Hydroprogne caspia Pallas 1770: Caspian Sea

Order CHARADRIIFORMES

Family STERNIDAE

Present distribution: Sparsely distributed along estuaries and at certain inland waters. Common only at St Lucia, Zululand.

Former distribution: Probably more widely distributed than at present. Development at estuaries and coastal lagoons has resulted in disturbance and loss of habitat.

Status: Vulnerable.

Estimated numbers: Not known. A large colony (100 pairs) breeds at St Lucia, Zululand.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No firm evidence for a decline.

Protective measures taken: Protected by national and provincial laws. The breeding colony at St Lucia is within a proclaimed nature reserve. Also breeds at Barberspan nature reserve, and on some offshore islands administered by the Sea Fisheries Branch of the Department of Industries. Public access to the islands is restricted.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Poor.

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in the world. The possibility of pesticide residue effects on breeding performance should be investigated in the South African population.

ROSEATE TERN

Sterna dougalli Montague 1813: Firth of Clyde

Order CHARADRIIFORMES

Family STERNIDAE

<u>Present distribution</u>: Poorly known due to confusion in the field with two sympatric Palaeartic migrant terns. Resident population apparently confined to the coast from the south-western Cape to Algoa Bay.

Former distribution: Not known to have differed from the above, but certain breeding sites are no longer occupied.

Status: Rare and vulnerable. Breeding has been recorded from Kommetjie near Cape Town, Dyer Island, Stag Island Algoa Bay, and Cape Recife. As far as is known, now breeds regularly only at Dyer Island.

Estimated numbers: Not known. Fewer than 20 pairs breeding on Dyer Island in 1972. Fifty pairs breeding on St Croix Island in 1975; first time in six years.

Breeding rate in wild: One to two eggs per clutch.

Reasons for decline: Extinction of breeding sites (Cape Recife, Kommetjie) probably due to disturbance by humans.

Protective measures taken: The offshore breeding islands are administered by the Sea Fisheries Branch of the Department of Industries. Public access is restricted. Protected by national and provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Poor.

Current research effort: None.

DAMARA TERN

Sterma balaenarum Strickland 1852: Walvis Bay

Order CHARADRIIFORMES

Family STERNIDAE

Present distribution: The west and south coasts, from the Orange River to Cape Agulhas.

Former distribution: Formerly bred near Cape Town. No recent breeding records in South Africa.

Status: Rare and vulnerable.

Estimated numbers: Not known, but probably small.

Breeding rate in wild: One egg per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by national and provincial laws.

Protective measures proposed: Identification of breeding sites and proclamation of a breeding site as a nature reserve (see Remarks).

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: A preliminary survey by an officer of the Percy FitzPatrick Institute.

Remarks: The species is endemic to southern Africa. Only known to breed near Swakopmund (SWA). This site is not protected.

#### SKIMMER

Rhynchops flavirostris Vieillot 1816: Senegal

Order CHARADRIIFORMES

Family RYNCHOPIDAE

Present distribution: Occurs as a vagrant at Lake St Lucia, Zululand. Other sporadic records from Natal and Transvaal. Inhabits coastal lagoons and large rivers.

Former distribution: Not known to have differed much from the above, though formerly bred at Lake St Lucia.

Status: Peripheral and rare. Breeding status not clear.

Estimated numbers: Not known, but likely to be small.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: Not known.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Poor.

Current research effort: None.

### SPOTTED SANDGROUSE

Pterocles burchelli W Scalter 1922: near Griquatown

Order CHARADRIIFORMES

Family PTEROCLIDIDAE

Present distribution: Confined to the northern Cape, western Orange Free State and western Transvaal in Kalahari sand and thornveld habitats.

Former distribution: Not known to have differed from the above.

Status: Not known. Might be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: The species is classified as a gamebird and is hunted in three provinces, but is protected in the Kalahari Gemsbok National Park.

Protective measures proposed: None at present.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in Africa. The status of the South African populations needs to be investigated.

### YELLOW-THROATED SANDGROUSE

Pterocles gutturalis A Smith 1836: near Kurrichane

Order CHARADRIIFORMES

Family PTEROCLIDIDAE

Present distribution: Occurs only in Kalahari thornveld in the western Transvaal.

Former distribution: Not known to have differed from the above.

Status: Not known. Might be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: The species is classified as a gamebird and is hunted in the Transvaal.

Protective measures proposed: None at present.

Numbers held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in Africa. The status of the South African population needs to be investigated.

# BRONZE-NAPED PIGEON

Turturoena delegorguei Delegorgue 1847: Durban.

Order COLUMBIFORMES

Family COLUMBIDAE

Present distribution: Mainly Zululand and north-eastern Transvaal. Rare in the eastern Cape Province. A forest species.

Former distribution: Not known to have differed from the above.

Status: Rare and local. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Current research effort: None.

BLUE-SPOTTED WOOD DOVE

Turtur afer Linnaeus 1766: Senegal

Order COLUMBIFORMES

Family COLUMBIDAE

Present distribution: Confined to dense, evergreen woodland in the northern Transvaal.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: None at present.

Number held in captivity: Nineteen in the Transvaal.

Breeding potential in captivity: Good.

Current research effort: None.

BROWN-NECKED PARROT

Poicephalus robustus Gmelin 1778: Eastern Cape Province

Order PSITTACIFORMES

Family PSITTACIDAE

Present distribution: Confined to forests in the eastern Cape Province, Natal and eastern Transvaal.

Former distribution: Not known to have differed from the above.

Status: Uncommon and local. Vulnerable.

Estimated number: Not known.

Breeding rate in wild: Normally four eggs per clutch.

Reasons for decline: Destruction of forest. Illegal trade.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Fifty in the Transvaal.

Breeding potential in captivity: Good

Current research effort: None.

Remarks: The species is in no danger of extinction. There are populations elsewhere in Africa. However, the nominate and local race is threatened in the Cape Province.

ROSY-FACED LOVEBIRD

Agapornis roseicollis Vieillot 1817: Cape of Good Hope

Order PSITTACIFORMES

Family PSITTACIDAE

Present distribution: The lower Orange River, Cape Province. Possibly also in the north-western Transvaal (Waterberg).

Former distribution: Not known to have differed from the above.

Status: Local and vulnerable.

Estimated number: Not known.

Breeding rate in wild: Four to six eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Thousands.

Breeding potential in captivity: Good.

Current research effort: None.

BLACK COUCAL

Centropus toulou Müller 1776: Madagascar

Order CUCULIFORMES

Family CUCULIDAE

<u>Present distribution</u>: Zululand. Moves into the eastern Transvaal only during summers of exceptionally heavy rainfall. Depends on areas supporting tall-grass vleis.

Former distribution: Coastal Natal south to Durban.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: Has undergone reduction in range in Natal.

Protective measures taken: Protected by provincial laws. Occurs in the Kruger National Park and at St Lucia.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Current research effort: None in South Africa.

Remarks: The species is in no danger of extinction. Populations occur elsewhere in Africa, but it is nowhere common.

SENEGAL COUCAL

Centropus senegalensis Linnaeus 1766: Senegal

Order CUCULIFORMES

Family CUCULIDAE

Present distribution: Northern Kruger National Park only. Prefers well-vegetated areas near water.

Former distribution: Not known to have differed from the above.

Status: Not known, but probably very rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected in the Kruger National Park

Protective measures proposed: None at present.

Number held in captivity: Not known.

Current research efforts: None in South Africa.

GREEN COUCAL

Ceuthmochares aereus Vieillot 1817: Congo

Order CUCULIFORMES

Family CUCULIDAE

Present distribution: Coastal forest in Natal and very rare in the eastern Cape Province.

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline, other than that associated with destruction of forest.

Protective measures taken: Protected by provincial laws and occurs in most of the coastal nature reserves in Natal.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

CAPE EAGLE OWL

Bubo capensis A Smith 1834: South Africa: Cape Town

Order STRIGIFORMES

Family STRIGIDAE

Present distribution: Mountainous country in eastern and southern South Africa.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two and three chicks per pair per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Good, since several congeners have bred readily, and the East African race B.c. mackinderi has bred in the London zoo.

Current research effort: None.

Remarks: The species is uncommon and requires specialized habitat, and so is vulnerable, although in no danger of extinction since populations occur elsewhere in Africa.

FISHING OWL

Scotopelia peli Bonaparte 1850: Ashanti, West Africa

Order STRIGIFORMES

Family STRIGIDAE

Present distribution: Dense riparian forests in the north-eastern Transvaal and northern Natal.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Probably one chick per pair per annum.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in the Ndumu nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is rare and is restricted to special habitat, but is in no danger of extinction, since populations occur elsewhere in Africa.

NATAL NIGHTJAR

Caprimulgus natalensis Smith 1845: Durban

Order CAPRIMULGIFORMES

Family CAPRIMULGIDAE

Present distribution: Natal and the eastern Cape Province. Confined to palm-studded coastal grasslands.

Former distribution: Not known to have differed from the above.

Status: Rare and very local. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch

Reasons for decline: No evidence for a decline

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

BOEHM'S SPINETAIL

Chaetura boehmi Schalow 1882: Tabora

Order APODIFORMES

Family APODIDAE

Present distribution: North-eastern Transvaal

Former distribution: Not known to have differed from the above.

Status: Rare and local.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in the Kruger National Park, but not known to breed there.

Protective measures proposed: None at present.

Number held in captivity: Poor.

Current research effort: None.

## MANGROVE KINGFISHER

Halcyon senegaloides Smith 1834: Durban

Order CORACIIFORMES

Family ALCEDINIDAE

Present distribution: Coastal and inland to 300m asl, from Port Alfred, eastern Cape Province, to the Mocambique border. Local in mangrove habitat, at least during the non-breeding season. Breeding may take it into forested areas inland from the coastal swamps, and up to the 300m contour.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Only one nest has ever been found in South Africa.

Reasons for decline: Although the decline is not documented, the destruction of mangrove swamps, as a result of development of the coastline for harbours and residential areas, is likely to have reduced the species in South Africa.

Protective measures taken: Protected by provincial laws. Efforts have been made to preserve remnants of mangrove swamps in Natal, viz Beachwood Swamp, Durban North, but destruction of mangroves has been widespread around Durban and north to Richards Bay.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Poor.

Current research effort: None.

Remarks: The species occurs north to Somalia. Until large scale destruction of mangrove occurs in these areas, its numbers are unlikely to be reduced to its uncommon status in South Africa. A survey of mangroves remaining in Natal and the Cape, and the degree of dependence of the species on these swamps should be investigated.

## GREEN BARBET

Buccanadon olivaceum (Shelley) 1880: Rabai, nr Mombasa, Kenya.

Order PICIFORMES

Family CAPITONIDAE

Present distribution: Ngoye Forest, Zululand, Natal. Restricted.

Formet distribution: Not known.

Status: Not uncommon in the Ngoye forest, but not found anywhere else in South Africa. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Part of the Ngoye forest receives full protection. The species is fully protected by laws in Natal.

Protective measures proposed: None at present.

Numbe held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is widely spread through Mocambique north to Kenya; it is the race B o woodwardi which is restricted to the Ngoye forest and does not occur outside the area.

SHORT-CLAWED LARK

Mirafra chuana Smith 1836: Country beyond Latakoo

Order PASSERIFORMES

Family ALAUDIDAE

<u>Present distribution</u>: Northern Cape Province and western Transvaal. Occurs in vaalbos *Tarchonanthus* shrub-bushveld

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Current research effort: None.

Remarks: The species occurs mainly in South Africa. Nothing is known about its biology and numerical status.

BOTHA'S LARK

Botha fringillaris (Sundevall) 1850: north of Drakensburg, Transvaal

Order PASSERIFORMES

Family ALAUDIDAE

<u>Present distribution</u>: The catchment area of the upper Vaal River in the Transvaal and the Orange Free State. Endemic to South Africa. Apparently confined to dry *Cymbopogon - Themeda* grassveld.

Former distribution: Not known to have differed from the above.

Status: Rare, but the distribution could theoretically cover a very large area.

Estimated numbers: Not known.

Breeding rate in wild: The clutch-size is two, recorded from one nest only in the Thaba Nchu region of the Orange Free State.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: Virtually nothing is known about this endemic species.

RUDD'S LARK

Heteromirafra ruddi (Grant) 1908: Wakkerstroom, Transvaal

Order PASSERIFORMES

Family ALAUDIDAE

Present distribution: The Drakensberg plateau from Griqualand East, upper Natal and south-eastern Transvaal north as far as Belfast in the north-eastern Transvaal. Endemic to South Africa. Apparently confined to mountain grassveld.

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: No data.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The bird is very local, preferring open grassland on the sides of high mountains. This habitat is a delicate one susceptible to overgrazing and erosion. Very little is known about this endemic species.

RED LARK

Certhilauda burra (Bangs) 1930: "Bushman Flats"

Order PASSERIFORMES

Family ALAUDIDAE

Present distribution: Arid karoo grassveld on red Kalahari sands from Bushmanland to Brandvlei and Vanwyksvlei. Endemic to South Africa.

Former distribution: Not known to have differed from the above.

Status: Localized to red sand areas

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is apparently not uncommon, but virtually nothing is known about its status.

SCLATER'S LARK

Spizocorys sclateri (Shelley), 1902: Hauntop River: Great Namaqualand

Order PASSERIFORMES

Family ALAUDIDAE

Present distribution: Great Namaqualand, eastwards in karoo broken veld to the Philipstown district.

Former distribution: Not known to have differed from the above.

Status: A localized species thinly distributed, though birds apparently form flocks in non-breeding periods.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: There is very little information on this species and none that gives any real clue to its present status.

#### BLUE SWALLOW

Hirundo atrocaerulea Sundevall, 1850: Umvoti, Natal

Order PASSERIFORMES

Family HIRUNDINIDAE

Present distribution: Highland grassveld on the eastern side of the Drakensberg. Also in the Transvaal.

Former distribution: Not known to have differed from the above.

Status: Local and nowhere common. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three egss per clutch.

Reasons for decline: Pine tree plantations apparently have affected the birds adversely, particularly in the Natal midlands.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction, it occurs locally in tropical Africa. It appears to be a migrant in parts of its range. The status of the South African population needs to be investigated. The bird no longer occurs anywhere near the type locality and the species now appears to be rare in Natal where it has not been seen for several years at places where it formerly bred regularly.

SPOTTED CREEPER

Salpornis spilonota (Franklin) 1831: Vindhyiana hills, India

Order PASSERIFORMES

Family CERTHIIDAE

Present distribution: Single locality in the Kruger National Park. The species prefers mature woodland.

Former distribution: Not known to have differed from the above; the isolated population in the Kruger National Park may be considered a relic.

Status: Very localised and rare. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline. The nature of the species' preferred habitat makes it vulnerable.

Protective measures taken: Occurs only in the Kruger National Park.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the status of the species within the Kruger National Park is needed. The species is in no danger of extinction. Populations occur elsewhere in Africa.

ORANGE THRUSH

Turdus gurneyi Hartlaub, 1864: near Pietermaritzburg, Natal.

Order PASSERIFORMES

Family TURDIDAE

Present distribution: The higher forested areas from the eastern Cape north through the Natal interior and Transvaal Drakensberg.

Former distribution: Probably occurred more widely within its present range prior to the destruction of its forest habitat.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in the Pongolo Bush nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the distribution and numerical status of the species is required. The species occurs in Rhodesia.

NATAL THRUSH

Turdus fischeri Hellmayr, 1901: Pangani River, Tanganyika

Order PASSERIFORMES Family TURDIDAE

Present distribution: The coastal forests of Pondoland and Natal from St Lucia south. Reported from the Naga forest near East London.

Former distribution: Presumably more widespread prior to the destruction of coastal forests from the eastern Cape northwards.

Status: Rare and vulnerable. Populations appear to migrate during the nonbreeding season (March-September) north to Natal.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline, but the destruction of coastal forests poses a continued threat.

Protective measures taken: Protected by provincial laws. Breeds in the Oribi Gorge nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the distribution and numerical status of the species is required. The extralimital populations may be endangered, and the South African population may be the only remaining viable one left.

ARNOT'S CHAT

Myrmecocichla arnoti (Tristram), 1869: Victoria Falls

Order PASSERIFORMES

Family TURDIDAE

<u>Present distribution</u>: North-eastern Transvaal. The South African population is restricted entirely to dense Mopane (*Colophospermum*) woodland mainly east of Punda Milia. Localized and restricted.

Former distribution: Not known to have differed from the above.

Status: Peripheral and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: One to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Trotective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

### KNYSNA SCRUB WARBLER

Bradypterus sylvaticus Sundevall, 1858: Knysna

Order PASSERIFORMES

Family SYLVIIDAE

<u>Present distribution</u>: Known only from the coastal forests of the south-western Cape, Knysna to near Port Elizabeth and from Pondoland to southern Natal. Endemic to South Africa.

Former distribution: Not known to have differed from the above.

Status: Not uncommon, but localized. May be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in several state forest areas.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

## VICTORIN'S SCRUB WARBLER

Bradypterus victorini Sundevall, 1858: Knysna

Order PASSERIFORMES

Family SYLVIIDAE

Present distribution: Confined to mature fynbos on the mountains of the southern Cape, from the northern Cedarberg and French Hoek east to Uitenhage. Endemic to South Africa.

Former distribution: Not known to have differed from the above.

Status: Not uncommon, but localized. May be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in several state forest areas.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

RUDD'S APALIS

Apalis ruddi (Grant) 1908: Coguno, Inhambane, Mocambigue

Order PASSERIFORMES

Family SYLVIIDAE

Present distribution: Inland forests in north-eastern Zululand.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs laid per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: Outside South Africa, the species is restricted to southern Mocambique where its habitat is also threatened through destruction of forests.

KAROO GREEN WARBLER

Eremomela gregalis (A Smith) 1829: Northern Little Namaqualand

Order PASSERIFORMES

Family SYLVIIDAE

Present distribution: Namaqualand and the Karoo east to Oudtshoorn. Occurs in karoo scrub.

Former distribution: Not known to have differed from the above.

Status: Not common and may be vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: Outside South Africa, the species occurs in southern South West Africa and Botswana.

WOODWARD'S BATIS

Batis fratrum (Shelley), 1900: Zululand

Order PASSERIFORMES

Family MUSCICAPIDAE

Present distribution: Dense forests in the littoral from Mtunzini, Zululand, northwards.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

WATTLED-EYED FLYCATCHER

Platysteira peltata Sundevall 1851: Unlaas

Order PASSERIFORMES

Family MUSCICAPIDAE

Present distribution: Riverine fringes and mangrove swamps in Natal as far south as Durban. Also along the Limpopo riparian fringe as far west as Messina, Transvaal.

Former distribution: Not known to have differed from the above.

Status: Peripheral.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occurs in some of the nature reserves in Zululand.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

SHORT-TAILED PIPIT

Anthus brachyurus Sundevall 1851: Durban

Order PASSERIFORMES Family MOTACILLIDAE

Present distribution: Scattered localities in Natal, Zululand, and southern and eastern Transvaal. Occurs in tall grassveld.

Former distribution: Not known to have differed from the above.

Status: Not known.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species is in no danger of extinction. Populations occur elsewhere in Africa. The species is included here because so little is known about its status.

YELLOW-BREASTED PIPIT

Anthus chloris Lichtenstein 1842: Eastern Cape

Order PASSERIFORMES

Family MOTACILIIDAE

Present distribution: Restricted to short grassveld areas of the eastern Cape, Orange Free State, southern Transvaal and higher western districts of Natal. Endemic to South Africa. An altitudinal migrant.

Former distribution: Not known to have differed from the above.

Status: Local, but not uncommon where it occurs.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Breeds in Giant's Castle nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species does not appear to be endangered, vulnerable or rare. However, it is included here because very little is known about its status.

#### PINK-THROATED LONGCLAW

Macronyx ameliae de Tarragon 1845: Port Natal = Durban

Order PASSERIFORMES

Family MOTACILLIDAE

Present distribution: Short grass habitat bordering marshy areas in the coastal zone of Zululand.

Former distribution: Formerly occurred as far south as Durban.

Status: Rare, localized and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three eggs per clutch.

Reasons for decline: Much of the species' original habitat was reduced in the last century by the planting of sugar cane in Natal. The species' refuge in north-eastern Zululand was largely destroyed in the early 1960's by the planting of pine trees in the coastal grasslands.

Protective measures taken: Protected by provincial laws. The species occurs in the St Lucia nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the distribution and numerical status of the species is required. The few birds which occur in the St Lucia reserve may be insufficient to constitute a viable population. Populations occur elsewhere in Africa.

BLACK-FRONTED BUSH SHRIKE

Chlorophoneus nigrifrons Reichenow 1896: Marangu, Kilimanjaro

Order PASSERIFORMES

Family MALACONOTIDAE

Present distribution: Montane forest in the eastern Transvaal and in the densely forested areas of the northern Kruger National Park.

Former distribution: Not known to have differed from the above.

Status: Rare and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The population in the Kruger National Park is protected.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

CHESTNUT-FRONTED HELMET SHRIKE

Sigmodus scopifrons Peters 1854: Mozambique

Order PASSERIFORMES

Family LANIIDAE

Present distribution: Occurs sporadically in mature woodland at Ndumu in the extreme north of Natal.

Former distribution: Not known to have differed from the above.

Status: Rare and peripheral. Not known whether the species breeds in South Africa.

Estimated numbers: Not known.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Recorded in the Ndumu nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The status of the species in northern Zululand needs to be investigated. The future of Ndumu nature reserve is not unequivocally assured. The species is in no danger of extinction. Populations occur elsewhere in Africa.

LONG-TAILED GLOSSY STARLING

Lamprotornis mevesii Wahlberg, 1857: Okavango River

Order PASSERIFORMES

Family STURNIDAE

Present distribution: Mopane Colophospermum veld in the extreme northern Transvaal. The range of the species is bound up with that of Mopane trees growing on only alluvial soils.

Former distribution: Not known to have differed from the above.

Status: Peripheral.

Estimated numbers: Not known.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in the northern Kruger National Park, along the Levubu River at Pafuri.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

## YELLOW-BILLED OXPECKER

Buphagus africanus Linnaeus, 1766: Senegal

Order PASSERIFORMES

Family BUPHAGIDAE

Present distribution: Not known in South Africa. A bushveld and savanna woodland species.

Former distribution: Previously occurred as far south as the eastern Cape Province.

Status: Rare and possibly endangered in South Africa.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: Decline of ungulate hosts, and nesting habitat, together with the extensive dipping of domestic stock have contributed to this species' decline.

Protective measures taken: Protected by provincial laws. The species apparently does not occur in the Kruger National Park.

Protective measures proposed: See under remarks.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

<u>Current research effort:</u> None, though work is being carried out on the related and commoner Red-billed Oxpecker in the Kruger National Park.

Remarks: The species must be considered to be in danger of extinction within South Africa. A survey of the status of the species in South Africa is urgently needed. Populations occur elsewhere in Africa.

GURNEY'S SUGARBIRD

Promerops gurneyi Verreaux 1871: Natal

Order PASSERIFORMES

Family PROMEROPIDAE

<u>Present distribution</u>: Proteaceous bush of the Amatole Mountains and the Natal and Transvaal Drakensberg. Also occurs on the Natal south coast where native stands of Protea occur.

Former distribution: Not known to have differed from the above.

<u>Status</u>: The species' is vulnerable because of its attachment to protea veld which, within the bird's range, is scattered widely.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in the Giant's Castle nature reserve and the Blyde River Canyon nature reserve.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species occurs in Rhodesia where it is restricted to small areas and is not common. It is in no danger of extinction.

PURPLE-BANDED SUNBIRD

Cinnyris bifasciatus Shaw, 1811: Malimba

Order PASSERIFORMES

Family NECTARINIIDAE

<u>Present distribution</u>: Confined to the lowlands of Natal from Durban northwards. Prefers trees and riverine bush but also occurs in coastal bush in Zululand.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in the Lake St Lucia, Ndumu and Mkuzi nature reserves.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the status of this species within existing nature reserves is needed. The species is in no danger of extinction. Populations occur elsewhere in Africa.

NEERGARD'S SUNBIRD

Cinnyris neergaardi C Grant, 1908: Conguno, P E A

Order PASSERIFORMES

Family NECTARINIIDAE

Present distribution: Sand forest in Zululand from St Lucia northwards.

Former distribution: Not known to have differed from the above.

Status: Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. The species occurs in the Lake St Lucia, Mkuzi and Ndumu nature reserves.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: The species has the most restricted distribution of all southern African sunbirds. A survey of the species' status in the Zululand nature reserves is required. A population occurs in Mocambique.

## YELLOW-BELLIED SUNBIRD

Cinnyris venustus Fischer and Reichenow, 1884: Lake Naivasha

Order PASSERIFORMES

Family NECTARINIIDAE

Present distribution: Recorded from three localities in the Kruger National Park. Occurs in moist, scrub-fringing forest.

Former distribution: Not known to have differed from the above.

Status: Peripheral and rare. The species is very localized.

Estimated numbers: Not known.

Breeding rate in wild: Two eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: The only recorded localities for this species in South Africa are in the Kruger National Park.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

Remarks: A survey of the status of the species is required. The species is in no danger of extinction. Populations occur elsewhere in Africa.

BROWN-THROATED GOLDEN WEAVER

Ploceus xanthopterus Finsch and Hartlaub, 1870: Shupanga

Order PASSERIFORMES

Family PLOCEIDAE

Present distribution: From Durban, Natal north into Mocambique. Occurs in reed-beds and riverine thickets in coastal areas.

Former distribution: Not known to have differed from the above.

Status: Rare and localized.

Estimated numbers: Not known.

Breeding rate in wild: Four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

GREEN TWINSPOT

Hypargos nitidulus Hartlaub 1865: Natal

Order PASSERIFORMES

Family ESTRILDIDAE

Present distribution: From the forests of the Amatole Mountains in the eastern Cape, north along the coastal bush of Natal and Zululand. One record from Skukuza in the Kruger National Park.

Former distribution: Not known to have differed from the above.

Status: Rare.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known, but much sought after by aviculturists. Forty two in the Transvaal.

Breeding potential in captivity: Good.

Current research effort: None.

GOLDEN-BACKED PYTILIA

Pytilia afra Gmelin, 1789: Angola

Order PASSERIFORMES

Family ESTRILDIDAE

Present distribution: Northern Transvaal. Occurs in dense riverine thornbush.

Former distribution: Not known to have differed from the above.

Status: Very local. Vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Three to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

## PINK-THROATED TWINSPOT

Hypargos margaritatus Strickland, 1844: Inhambane

Order PASSERIFORMES

Family ESTRILDIDAE

Present distribution: Zululand, from St Lucia northwards. Occurs in sand forest.

Former distribution: Not known to have differed from the above.

Status: Local and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Not known.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws. Occur in the St Lucia and Mkuzi nature reserves.

Protective measures proposed: None at present.

Number held in captivity: Not known. Ten in the Transvaal.

Breeding potential in captivity: Good.

Current research effort: None.

 $\underline{\text{Remarks}}\colon$  Populations occur in Mocambique. The species is in no danger of extinction.

BLACK-EARED SEED-EATER

Poliospiza mennelli Chub, 1908: Rhodesia

Order PASSERIFORMES

Family FRINGILLIDAE

Present distribution: Zululand. Occurs in tall-tree woodland.

Former distribution: Not known to have differed from the above.

Status: Local and vulnerable.

Estimated numbers: Not known.

Breeding rate in wild: Two to three eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: None.

PROTEA SEED-EATER

Poliospiza leucoptera Sharpe, 1871: Paarl, C.P.

Order PASSERIFORMES

Family FRINGILLIDAE

Present distribution: A South African endemic species localized in mature fynbos in the mountains of the southern Cape region.

Former distribution: Not known to have differed from the above.

Status: Rare and localized.

Estimated numbers: Not known.

Breeding rate in wild: Two to four eggs per clutch.

Reasons for decline: No evidence for a decline.

Protective measures taken: Protected by provincial laws.

Protective measures proposed: None at present.

Number held in captivity: Not known.

Breeding potential in captivity: Not known.

Current research effort: Information is being collected by members of the Percy FitzPatrick Institute.

Remarks: A survey of the species' distributional and numerical status is required.

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