RÜPPELL'S PARROT | *Poicephalus rueppellii*

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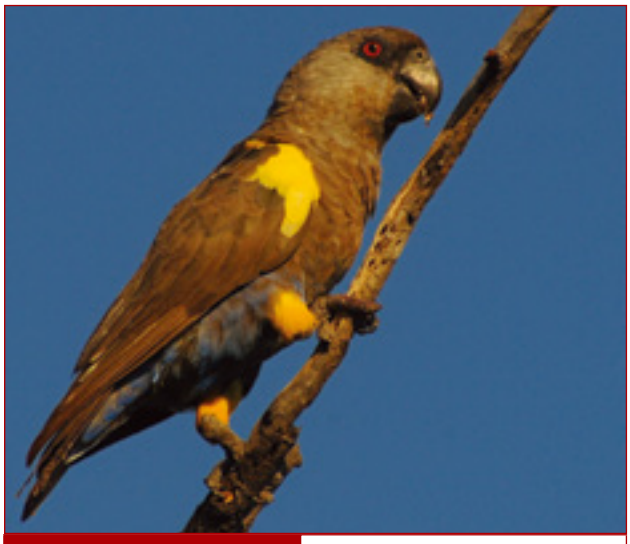
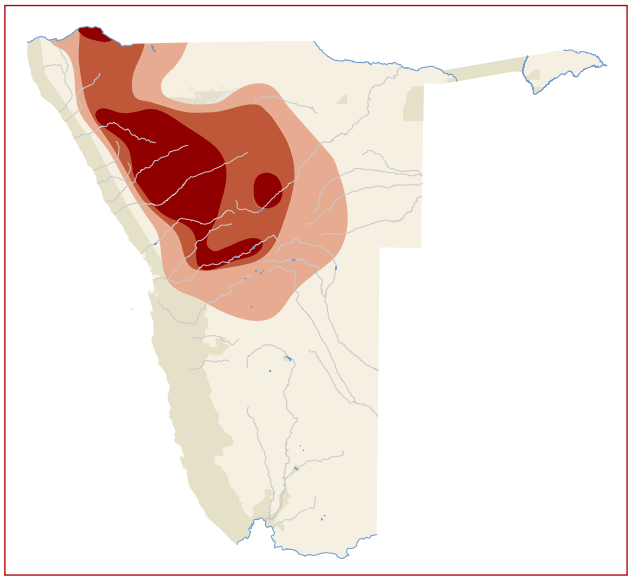


Conservation Status:	Near Threatened, near-endemic
Southern African Range:	Namibia
Area of Occupancy:	140,000 km²
Population Estimate:	13,000 to 46,000 birds
Population Trend:	Possibly declining
Habitat:	Ephemeral rivers with large seed-bearing trees, highland areas, escarpment
Threats:	Illegal trade in wild birds



DISTRIBUTION AND ABUNDANCE

This species is endemic to Namibia and southern Angola, and occurs predominantly in the escarpment and particularly the ephemeral rivers of north-central Namibia (Simmons 1997h). It is patchily distributed as far east as 18°E (Grootfontein) and south to 23.3°S (Rehoboth: Simmons 1997h). It does not occur far west of the Namibian escarpment and only penetrates the Namib Desert where the largest desert-crossing rivers (such as the Swakop and Hoarusib rivers) support large *Acacia erioloba* or *Faidherbia albida* trees (Simmons 1997h). In Angola, it usually occurs below altitudes of about 1,500 m and is predominantly found in arid woodland in the south-west and along the escarpment zones to the coast as far north as Luanda (da Rosa Pinto 1983, Dean 2000, IUCN 2012a). Its range in Namibia covers 140,000 km² (Robertson *et al.* 1995); that in Angola is approximately 20% of this (Dean 2000), giving a global range of about 170,000 km². The Etosha National Park and the Waterberg Plateau Park make up about 8% of the bird's total area of occupancy in Namibia (Jarvis & Robertson 1997).

The Namibian population is estimated at 29,500 birds (ranging between 13,000 and 46,000: Jarvis & Robertson 1999), somewhat higher than the frequently quoted 9,000 birds (del Hoyo *et al.* 1997, Simmons 1997h, Selman *et al.* 2000) derived from earlier assessments (Robertson *et al.* 1995). Populations may fluctuate with rainfall that precipitates good seed crops on favoured trees. Population density is highest in highland areas (e.g. Waterberg Plateau Park) and along large ephemeral rivers (up to 10 birds per km²), where water is available and large trees provide plentiful seed pods and breeding sites throughout the year (Robertson *et al.* 1995, Jarvis & Robertson 1999).

ECOLOGY

The Rüppell's Parrot prefers riverine habitat with large mature, seed-bearing trees. Within this habitat, rainfall explains 75% of the variation in parrot density (Jarvis & Robertson 1999). Away from the rivers, it occurs sporadically, but over a wide area and is more common at higher altitudes and in transitional vegetation zones that comprise species of *Acacia, Sterculia* and *Commiphora* (Robertson *et al.* 1995, Selman 1998). It is also found in less favourable habitats east of the escarpment where

Terminalia trees and various large *Acacia* species are common. It always occurs near water, and the construction of boreholes and provision of drinking troughs have probably increased its range.

This parrot prefers to nest in holes in tall live trees, often in downward-facing hollows that make access difficult for predators. Some competition with other hole-nesting species sometimes prevents parrots from breeding (Selman *et al.* 2004). Breeding in Namibia is timed to the highest availability of "highest availability of fruit and summer insects (Selman 1998). Eggs are mainly laid between January and March, and nestlings fledge between April and June (Dean 1974, Selman 1998, Jarvis *et al*. 2001, Simmons & Selman 2005). Three to five eggs are laid, but breeding success varies between years. Breeding success of nests monitored in the Waterberg Plateau Park varied between 0.8 (n=10 nests) and 2.2 young (n=13 nests) in consecutive years (Selman 1998). The Rüppell's Parrot is known to take pods of *Acacia* and *Faidherbia*, flowers and fruits of *Grewia* and endocarps of *Ficus*, *Acacia* and *Combretum*. It also feeds on the nectar of flowering *Tapinanthus* mistletoe, as well as on some shoots and on insects (Rowan 1983). Its diet constantly shifts throughout the year, as one tree comes into fruit followed sequentially by others (Selman *et al.* 2000, 2004). Of 20 tree species utilised over a 12-month monitoring period in the Waterberg Plateau Park, the three most heaviliy exploited trees during breeding were *Terminalia prunioides*, *Albizia anthelmintica* and *Acacia erioloba* (Selman 1998).

THREATS

The illegal trade in wild parrots is perhaps the biggest threat to this species. Investigations into the illegal trade from Namibia found that between 600 and 1,000 birds are probably exported to South Africa or Europe (especially Germany) each year (Selman 1998). Up to 80% of captured birds can die in transit (Selman 1998). Birds are often caught by farm labourers using specialised traps that can capture up to six birds at a time. These birds are then smuggled across the border to South Africa (Glueck 1994) and some breeders there are said to have accumulated large flocks. It is illegal to capture or trade in wild birds in Namibia, but the fine for doing so is inadequate in light of the profits made, especially because this parrot's restricted range in Namibia and Angola imparts a particularly high price on wild-caught pairs. Given that 64% of the population in Namibia is believed to occur on commercial farmland (Jarvis & Robertson 1997), the potential for over-exploitation is high. Because it is difficult to induce this species to breed in captivity, with only a handful of breeders succeeding in Namibia (W Rudolph, P Lane pers. comm.) and South Africa (M Perrin pers. comm.), the capture of wild birds is likely to continue. Prices fell in the early 2000s (P Lane pers. comm.), suggesting that illegal trade may be declining due to increasing success of captive breeding birds or due to the European Union's ban on exports of this species (M Perrin pers. comm.).

CONSERVATION STATUS

This species is classified as *Near Threatened* because of its restricted range and the threats posed by the illegal trade in wild-caught birds, and because of an apparent disappearance of large flocks from areas around Windhoek, Okahandja and Outjo (Selman 1998, P Lane pers. comm.). It is not globally classified as threatened (IUCN 2012a). Because of the illegal trade, the Rüppell's Parrot needs to be designated as a *Specially Protected* species in any new or revised Namibian Parks and Wildlife legislation. It has been included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

ACTIONS

Preventing the illegal trade in this species is the highest priority because of the drain that this has on the adult population. Prosecuting offenders and infiltrating the black market in this trade (see Mulliken 1995) to determine who is funding and buying illegally caught birds is a priority. Preventing birds from leaving and entering Namibia is possible by alerting customs officials to the species that are most at risk, and by rewarding them for successfully capturing smugglers. Posters with information on the bird's identity and plight were produced (Selman & Hunter 1998) and distributed to all border posts and to schools in northern Namibia. Random inspections at border posts and ports where smuggling occurs could ensure better adherence to the law, especially at Walvis Bay, where smuggling is believed to occur, but few prosecutions have ever been successful. This suggests that the law and related regulations must be tightened and updated to facilitate successful prosecutions of offenders.

Increasing the breeding yield of wild pairs under nest box conditions is a useful technique for conserving threatened parrots (Beissinger & Bucher 1992). Although initial efforts to breed wild birds in nest boxes, from which a sustainable harvest could then be taken (Simmons 1995b, Selman 1998), were unsuccessful because birds ignored boxes in preference to natural cavities, further investigations into how to induce wild Rüppell's Parrots into boxes where no natural cavities exist would be worthwhile. Breeding programmes at the University of KwaZulu-Natal, South Africa, are assisting in investigating captive-breeding techniques (M Perrin pers. comm.). Captive breeding of parrots in order to flood the market with easily obtainable low-price birds may be the best way to reduce illegal trade, once breeders know the trick to captive breeding in this species (Selman 1998).