Olive-throated Parakeet (*Aratinga nana*) in Jamaica.

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1. Legal Status:

Prior to 1998, the Olive-throated Parakeet was recognised colloquially in Jamaica as a “pest species” through its inclusion on the Second Part of the Second Schedule of Jamaica’s Wild Life Protection Act (1945; identified on the original list as Paraquet *Aratinga nana*). Under this former status, a licence could be obtained to hunt animals depredating crops. An amendment to the Act in 1998 removed the Olive-throated Parakeet from the Second Schedule, thus affording it full protection under Section 6 and Section 6a of the Act. Under the Act’s designation of “protected bird,” it is illegal to hunt (i.e., kill, capture, or wilfully molest by any method) or have in one’s possession the whole or any part of an Olive-throated Parakeet. Possession of eggs or a nest of any protected bird also is an offence under the Act. Breach of the Act can result in a maximum fine of JD 100,000 (approximately USD 1,000) and/or imprisonment for up to one year.

*Aratinga nana* is included on CITES Appendix II (CITES 2013) and on the Second Schedule of Jamaica’s Endangered Species (Protection, Conservation and Regulation of Trade) Act (2000). In both instances, the species is indirectly referenced under the category listing of “PSITTACIFORMES spp.” An Exemption under Section 22 of the Wild Life Protection Act is required to trade under the Endangered Species (Protection, Conservation and Regulation of Trade) Act.

The Wild Life Protection Act and the Endangered Species (Protection, Conservation and Regulation of Trade) Act are overseen by the Ministry of Water, Land, Environment and Climate Change. Management and enforcement of the acts are delegated to the National Environment and Planning Agency (NEPA).

2. Surveys and Population Trends:

Surveys conducted in 2002 for Jamaica’s Important Bird Areas (IBA) programme, as well as many casual observations, record the widespread distribution of the Olive-throated Parakeet across Jamaica (Figure 1). It is most common in midlevel wet and mesic limestone Broadleaf Forest, and wooded cultivation. In the northern lowlands it occurs in Tall and Short Open Dry Forest (land classification ref: Camirand and Evelyn 2003). In the southern lowlands, it is fairly common in mesic areas of Tall and Short Open Dry Forest and wooded cultivation. It intermittently visits the arid Tall and Short Open Dry Forests of Hellshire Hills and Portland Ridge, but is generally absent from ruinate woodland in the south. Although commonest at midelevs (below 1000m), it is absent from the very wet John Crow Mountains and also from montane forest, though occasionally occurs in wooded cultivation in the Blue Mountains (Lack 1976).
Comparison of the IBA surveys to other survey efforts highlight what are either seasonal fluctuations in site occupancy or natural population fluctuations; multi-year surveys still are required for population and density estimates. In Windsor, Trelawny (located on the north side of Cockpit Country), constant-effort banding and surveys (initiated in 2002), suggest a stable population in northern Cockpit Country. However, it must be emphasised that site-based Windsor Research Centre has been actively engaged in environmental outreach and anti-poaching awareness for 15 years, with a consequent positive influence on population stability for the local parakeet population. This awareness does not extend across the island.

3. Threats:
Despite legal protection under the Wild Life Protection Act, small-scale poaching for the local pet trade and hunting of parakeets for both food and as crop pests [particularly on corn (maiz) and guava (Psidium guajava)] continues. Enforcement of the Act is weak and many members of the public remain uninformed that killing a bird with a catapult (slingshot) is defined as “hunting” (i.e., “hunting” is typically viewed as killing gamebirds with a shotgun), and, consequently, illegal. When the parakeet is not merely ignored by residents, it is generally considered a “noisy nuisance” where forest interfaces with residential housing. Environmental education campaigns invariably focus on the two larger, more charismatic endemic Amazona parrots, with no recognition that West Indian parakeets have experienced a greater number of extirpations than parrots.

The greatest on-going threat to parakeets is habitat loss [particularly conversion of coastal habitats for hotel, residential and commercial development; annual deforestation rates estimated 0.1%; Evelyn and Camirand 2003)] and habitat fragmentation. There exists scant information on foraging behaviour (Lack 1976) and we have no understanding of the movements of individuals and flocks as they travel across the landscape in search of
seasonally-available food resources. As a frugivore, the species is vulnerable to starvation following extreme weather events, such as hurricanes. Compounding the short-term loss of food from the forest canopy, hungry parakeets have been observed feeding on fruits blown to the ground during a hurricane; this behaviour may render them more vulnerable to predation by invasive alien predators, such as mongoose (*Herpestes auropunctatus*) and cats (*Felis catus*), or to persecution by humans. Additionally, temporary loss of natural food resources may make them more prone to attack any crops which escaped the ravages of strong winds and rain; this also will lead to persecution by farmers.

The species has been reported to nest only in arboreal termite nests, which must be supported by medium-to-large trees. During a study of the Jamaican Boa (*Épicrates subflavus*), an endemic snake which is a natural predator of parakeet nestlings, researchers quantified the abundance of termite nests in Windsor, Trelawny (S. Koenig, unpubl. data). Results indicate that the number of quality termite nests may be a limiting factor of parakeet reproductive performance. No information exists on the species’ roosting habitat preferences.

In the absence of basic natural history and demographic information, identification and protection of critical habitats is hindered. Indeed, because the species has only recently been recognised as an endemic species, it has generally been ignored, both in conservation planning efforts and in Environmental Impact Assessments (EIAs), which, in accordance with Terms of Reference, focus on “rare, threatened, endemic, and endangered species.”

A final threat to *Aratinga nana* on Jamaica is the importation and escape into the wild of alien psittacines. Invasive alien psittacines pose threats via the introduction of harmful pathogens and parasites, competition for food resources, and, depending upon the species, may compete for nesting substrates. Currently, there is no pre-importation screening for the most common virulent diseases in the psittacine pet trade. Diseases of high concern include: Psittacine Circovirus / Psittacine Beak & Feather Disease; Polyomavirus; Psittacid Herpesvirus 1 & 2 / Pacheco’s & Internal Papillomatous Disease; and Proventricular Dilatation Disease. At least one alien species of parakeet, the Rose-ringed Parakeet (*Psittacula krameri*) has become established in Jamaica. The population occurs in Kingston / St. Andrew and is expanding in number.

With the recognition that *Aratinga nana* is a unique species distinct from *A. astec* (previously considered a subspecies *A. nana astec*), should *Aratinga nana* experience catastrophic declines in the future, it is not appropriate to consider translocating individuals from the mainland to bolster the island’s populations.

4. **IUCN Red List Assessment**

Given the presently-available information, we judge *Aratinga nana* on Jamaica to be “Near Threatened (NT)”’. It is likely to qualify for Vulnerable (VU) in the near future
because of on-going threats.

Relevant criteria towards meeting criteria for Vulnerable include:

**A4.** *Aratinga nana* population can only decline because of on-going and predicted future destruction of suitable habitat, notably in northern lowland areas for casinos, hotels, and other human habitations and in southern lowland areas, such as the Portland Bight Protected Area, which is under extreme pressure to be converted to a Post-Panamax trans-shipment port, logistics hub, and industrial development zone.

**B1.** Jamaica is approximately 11,000 km²

**B1b(iii, iv).** Because of on-going conversion of lowland ecosystems; these types of ecosystems are not rehabilitated or restored in Jamaica. Commercial and urban land use effectively and almost irreversibly reduce the extent of occurrence.

**B1c(iii).** Climate change models predicting greater frequency and intensity of hurricanes in the Caribbean render small populations in Jamaica’s heavily fragmented landscape vulnerable to localized extirpation.

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5. **Literature reviewed:**

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