



CONSERVATION WORK TO SAVE THE MAURITIUS KESTREL

In the 1970s, the Mauritius Kestrel was considered as one of the rarest birds in the world, with only four individuals thought to be remaining in the wild. The Mauritian Wildlife Foundation (MWF), with the support of its partners, introduced intensive conservation measures (clutch and brood manipulations, hand rearing, captive breeding, release, provision of artificial nest boxes, provision of supplementary food etc). This led to the successful restoration of the population in the Black River Gorges National Park and surrounding areas on the West coast and allowed the reintroduction of kestrels back to the Bambou Mountains on the East Coast, where they had become locally extinct some 20 years earlier.

Management and monitoring of the Mauritius Kestrel was discontinued on the West Coast in the early 2000s as the restoration project was hailed a success, when we reached 500-600 birds island-wide. Over the following years, anecdotal evidence indicated that the Mauritius Kestrel on the West Coast were being observed less frequently. In response to this, monitoring and management was reinstated by MWF in 2007. Since then, it has become clear that following the initial population recovery, the population had begun to decline. Intensive conservation management measures were reinstated as from 2016, specifically the hack-release of hand-reared birds on the West Coast. The population currently (2022) stands at around 267 individuals, with the East Coast at c. 163 birds, and the West Coast c. 104 birds and declining.

This breeding season (2021/2022), these intensive conservation management efforts continued through the hack-release of hand-reared Mauritius Kestrel alongside the usual management (e.g., artificial nest box provision) and monitoring of the species. MWF is releasing 16 Mauritius Kestrels from five nest boxes in the Macchabé / Brise Fer area in the Black River Gorges National Park. The source of this release were eggs collected from Mauritius Kestrel artificial nest boxes in the Bambou Mountains and two chicks that were rescued from a cliff cavity (that is usually unsuccessful) in the Black River Gorges National Park.

The eggs and chicks were brought to the captive rearing facility in the Black River village (managed by MWF and the National Parks and Conservation Service) and were hand reared until the chicks reached an age of approximately 28 days by specialist hand-rearing staff. At 28 days the chicks are brought to the forest and released into artificial nest boxes. The chicks are hack released, which means that the team feed them every day until the birds fledge completely. The amount of food provided is reduced over time so that the chicks are motivated to begin hunting and find their own food. When the young kestrels reach 100 days, they are considered independent and are no longer fed. This year's chicks will reach independence in February.

The releases into the Maccabé / Brise Fer area should provide a boost to the declining West Coast subpopulation by introducing additional birds, bringing missing genetic diversity back to the subpopulation from the Bambou Mountains, and through the establishment of an artificial nest box

network in this northern part of the park. The majority of Mauritius Kestrel in this area breed in cliff cavities. These natural cavities are of varying quality (e.g., some flood, some are shallow, some are at high risk from predators such as monkeys), and as a result Mauritius Kestrels tend to produce more chicks from artificial nest boxes than natural cavities.

The MWF team will closely monitor the young kestrels as they develop, and it is hoped that most of the released birds will survive to independence. The ultimate test will be whether these birds survive to become breeding adults in future seasons, ideally breeding in the nest boxes we have provided them. The first step in reaching this goal was achieved this breeding season (2021/2022), when the MWF team discovered that one of the release nest boxes used during the 2019/2020 breeding season was used by a Mauritius Kestrel breeding pair. The breeding female was confirmed to be a female from the West coast, whilst the male was confirmed to be one of the birds released in the area (sourced from eggs taken from the East coast) in 2019/2020. This was a particularly encouraging find for the field team as it confirmed that hack-release helps establish nest boxes as breeding sites and since this pairing of two birds from different subpopulations will allow the mixing of genes that should be beneficial to the population in the long term. Unfortunately, this breeding attempt was not successful this season; it is common for new breeding pairs to take a few years to become successful breeders. Nonetheless, this is still a great step forward, and this first breeding attempt found in a nest box in the region will hopefully be the first of many.

Another great milestone for the Mauritius Kestrel this season is, following a proposal by MWF, the Government of Mauritius has accepted to declare the Mauritius Kestrel as the 'The National Bird of the Republic of Mauritius' to celebrate the 30th anniversary of the accession of Mauritius to the status of Republic. This title will build more awareness around the Mauritius Kestrel which in turn will help bolster our conservation work in the future.

MWF is grateful to the Adit Foundation whose contributions allow the project to continue functioning and has made the intensive conservation actions discussed above possible in the last year. With the continued support of funders like the Adit Foundation, we hope to reverse the decline of the subpopulation in and around the Black River Gorges National Park and secure the long-term survival of the Mauritius Kestrel.

Mauritian Wildlife Foundation

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