cause & effect

CHRIS VAN ROOYEN

Drop in Lesser Kestrel numbers

The Lesser Kestrel has a broad breeding distribution, from Morocco and the Iberian Peninsula to central China. It feeds mainly on orthopterans (crickets, grasshoppers and locusts) in open habitats and has benefited from the spread of agriculture over the past few millennia. In Europe, almost all breeding colonies are situated on buildings and the species probably has bred in close association with humans for at least 2500 years. Interestingly, there are both resident and migrant populations, with most migrants wintering in southern Africa.

Because Lesser Kestrels breed and roost communally, they are one of the easier birds of prey to monitor. Estimates vary, but the total population is thought to be about 120 000 to 200 000 birds, with roost counts of almost 90 000 birds in South Africa in 2006/'07. The species was listed as Vulnerable globally in the 1990s and 2000s as a result of a rapid decline in the well-studied European population that was linked to the intensification of agriculture and the increasing use of agrochemicals. From the 1950s to the 1990s, breeding numbers in Europe fell by 46 per cent per decade and roost counts in South Africa suggested a decrease of roughly 25 per cent per decade from the 1970s.

In 2011 its status was changed to Least Concern following evidence that the European population had stabilised or possibly even increased since the early 1990s. Thanks to active conservation measures, numbers continue to recover in some areas such as Greece, Portugal and Sicily. However, in Spain, which supports roughly 40 per cent of the European population, breeding numbers have decreased at a worrying six per cent per year since 2012. A new study by José Miguel Aparicio and colleagues in *Ibis* (doi: 10.1111/ibi.13145) analysed the factors that might explain the changes observed at 12 Spanish colonies during the past two decades.

Although the provision of nest boxes initially helped populations recover, the recent decreases appear to be driven in part by the loss of foraging habitat (pastures and herbaceous crops), but mainly by decreases in the density of the large orthopterans that are the kestrel's main prey. It seems that although the current generation of agricultural pesticides and fertilisers no longer pose a major direct threat to the kestrels, they impact them indirectly through reduced food availability. The study reinforces several other reports of ongoing reductions in invertebrate populations around the world. This human-induced change will have serious consequences not only for the many birds that rely on invertebrates for food, but also for basic ecosystem functioning upon which we all rely.

PETER RYAN

above *A male Lesser Kestrel drops a trail of debris after consuming a large grasshopper in flight.*

Príncipe Scops Owl

it's official

PHILIPPE VERBELEN

In July 2016, the presence of a scops owl was confirmed on Príncipe, the smaller of the two islands that comprise the tiny island nation of São Tomé and Príncipe in the Gulf of Guinea (*African Birdlife* 5(1): 10). It took 88 years from the first rumours of an owl on the 139-square-kilometre island for it to be recorded and photographed. Now, seven years later, the owl finally has a name and its status as a distinct species has been confirmed.

The description, by Martim Melo and colleagues in *ZooKeys* (doi: 10.3897/zookeys.1128.87635) names the Príncipe Scops Owl *Otus bikegila* after Ceciliano do Bom Jesus, nicknamed Bikegila. A former Grey Parrot harvester, Bikegila now works as a ranger in the island's natural park. He was instrumental in starting the search for the owl when, in 1998, he told Melo of two sightings of owls in parrot nests. His name was also chosen to recognise the contributions of 'all the people around the world, who through their deep relationship with and knowledge of the regions they inhabit, play key roles in the description of new species and of new sites to science'.

The owl's most distinctive feature is its call, which is shorter and repeated much more rapidly than that of the São Tomé Scops Owl on the neighbouring island of São Tomé. Somewhat surprisingly, genetic evidence suggests that this is not its closest relative. The Príncipe Scops Owl is basal to a clade containing three other species: the African, Pemba and São Tomé scops owls.

The newly described owl is confined to about 15 square kilometres of lowland rainforest in southern Príncipe and is thought to have a total population of 1000 to 1500 birds. Now that it has been formally described, it is likely to be listed as Critically Endangered due to its tiny range and small population. Fortunately, its range falls entirely within the Príncipe Obô Natural Park, but it might be impacted by a small hydroelectric project under development.

PETER RYAN

MARTIM MELO

left *A Príncipe Scops Owl accidentally flushed from its daytime roost.*

above *A rufous-morph individual of Príncipe Scops Owl investigates playback of its call at night. Its call is shorter and repeated much more rapidly than that of the São Tomé Scops Owl.*