CONSERVATION ALERT

What can save the Lesser Florican *Sypheotides indicus*?

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Six years ago in *BirdingASIA* I co-authored an article on the plight of the Great Indian Bustard *Ardeotis nigriceps* (Collar *et al*. 2015). It is with a desperate sense of foreboding that I now re-use the title from that article to discuss the fate of the Lesser Florican *Sypheotides indicus*, a hugely distinctive bird in morphological and evolutionary terms whose impending loss threatens to inflict permanent damage on the fine reputation of Indian wildlife conservation.

The Lesser Florican, endemic to South Asia and virtually confined to India, shares many features typical of bustards, but combines them in striking individual ways. The male (Plate 1), with his black neck and belly, gold-spangled back and white in the wing, resembles the male of the much larger Bengal Florican *Houbaropsis bengalensis*—the two species are each other's closest relatives, but still distant enough to occupy different genera (Pitra *et al*. 2002)—but he has a wonderful ornamentation of usually around 5–6 long upcurling black feather-shafts with broader oar-like tips (someone vividly called them ribbons) projecting backwards far behind the head from under the ear-coverts, in a feature only otherwise remotely reflected in the Otididae by the sheaf of white moustachial barbs on the chin of the male Great Bustard *Otis tarda*. Like most other members of the family the species forms exploded leks, the males establishing open-country territories 1–2 ha in size and displaying in frequent little fluttering jumps (Collar *et al*. 2001) (Plate 2); the one other family member to make such jumps is the shorter but heavier Little Bustard *Tetrax tetrax* (Jiguet & Bretagnolle 2001), which

Plate 1. Male Lesser Florican *Sypheotides indicus*, Saukaba Kharmor Sanctuary, Madhya Pradesh, India, August 2014.

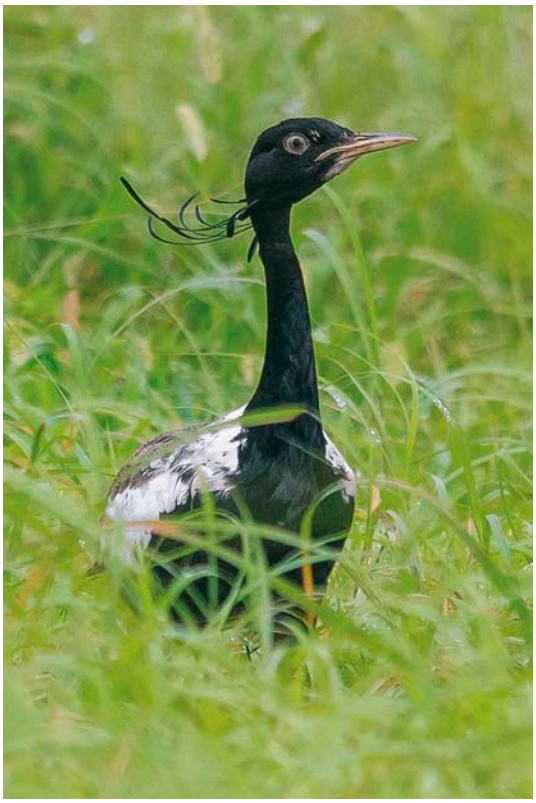

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Plate 2. A composite image of a male Lesser Florican in display. Ajmer, Rajasthan, India, August 2016.

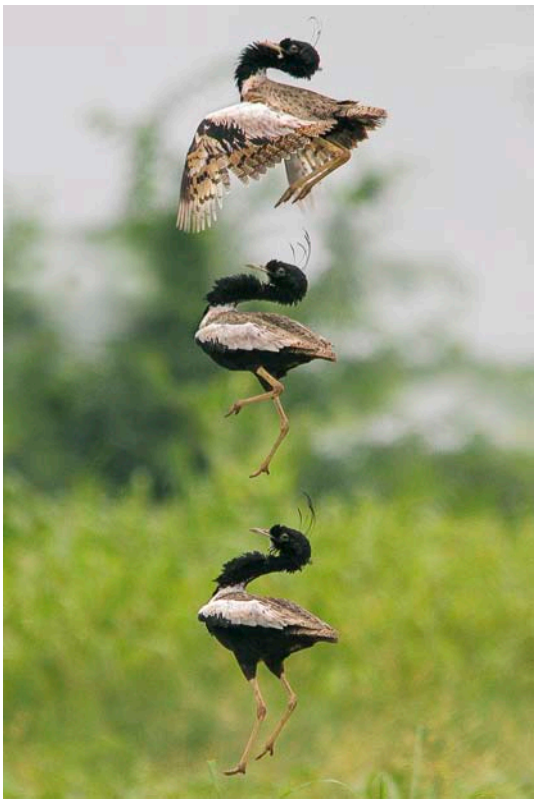

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Plate 3. Female Lesser Florican, Hesaraghatta Lake, Karnataka, India, December 2011.

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Plate 4. Female Lesser Florican in dense cover. Hesaraghatta Lake, December 2011.

similarly produces a sound with its wings as it does so. Females (Plates 3 & 4) are cryptic to the point of near-invisibility, as in all bustards (in the 2010 survey outlined below, 83 of the 84 birds seen were male), but uniquely they are larger than males, which doubtless need to stay small to offset the energetic costs of their reputedly 500-a-day display-leaps (Raihani *et al*. 2006, Dutta *et al*. 2018).

In its annual geographical displacements, the Lesser Florican vies with the Australian Bustard *Ardeotis australis* for exhibiting the least discernible patterns (reviews in Collar *et al*. 2001, Ziembicki 2010). The most predictable component involves birds shifting north-west into Gujarat and Rajasthan as the monsoon begins in May and June, and then retreating south-east into the lower subcontinent from October for 7–8 mysterious months (when the male moults into a female-like plumage and becomes as invisible as she). Do they wander widely during this long exile, or stay hidden in one safe haven? What kind of habitat do they prefer at this time (one female in Karnataka seemed comfortable in tall dense scrubby grass amidst trees: Raghavendra 2011, Plates 3 & 4)? Satellite-tagging is starting to provide the answers, but not (yet) clear ones. A male tagged at the start of the breeding season moved less than 100 km (from Shokaliya to Bhilwara, Rajasthan: Figure 1) for the non-breeding season, indicating that some birds *may* stay on the north-west breeding grounds all year (Mohan *et al*. 2015, Sivakumar *et al*. 2016). By contrast, a female tagged in eastern Gujarat flew to Telangana state, beyond Maharashtra, and three birds tagged in Rajasthan in August 2020 flew to Madhya Pradesh and Maharashtra, but made many stopovers of 15–20 days between sites 100–200 km apart (Kateshiya 2020, MoEF&CC 2020, S. Dutta *in litt*. 2021). Moreover, we also know that birds can remain all year in central India when the monsoon fails (Collar *et al*. 2001), so the accumulating evidence across the subcontinent suggests the species makes facultative weather-driven movements. This evolutionary circumstance is, alas, one of the reasons why the Lesser Florican is now in such trouble: it is hard to create protected areas for a species which conceals from us where it spends its long 'winters' and which, even on its breeding grounds, may not always show up.

Chronicle of a death foretold

In India in the nineteenth century the Lesser Florican was widespread and abundant, but the British colonialists did what they could to change this. Jerdon (1839–1840) reported the species to be the 'most esteemed of Indian game-birds', and other writers confirmed the constant pressure it was under from hunters, who (doubtless unable to find it at any other time of year) readily killed the males when they were displaying. Consequently, Allan Hume (in Hume & Marshall 1879–1881) gloomily judged that,

> owing to the un-sportsmanlike manner in which these beautiful birds are massacred during the breeding season, they are everywhere diminishing perceptibly in numbers, and will, in another half century, be, I fear, almost extinct.

He was mistaken in this prediction, but only by a hundred years. The hunting continued in the first half of the twentieth century, with Sálim Ali (1954–1955) still bemoaning the killing of breeding males. However, in the second half the main threat shifted to something far harder to tackle: India's grasslands, which successive governments continued to treat as 'waste land', an infamous designation inherited from the British, began to be subsumed by agriculture (Tian *et al*. 2014).

So it was that a reported 'massive loss' of its grassland habitat led to the Lesser Florican's placement on the international Red List for the first time in the 1980s (Collar & Andrew 1988). In the following decade the species was reassessed

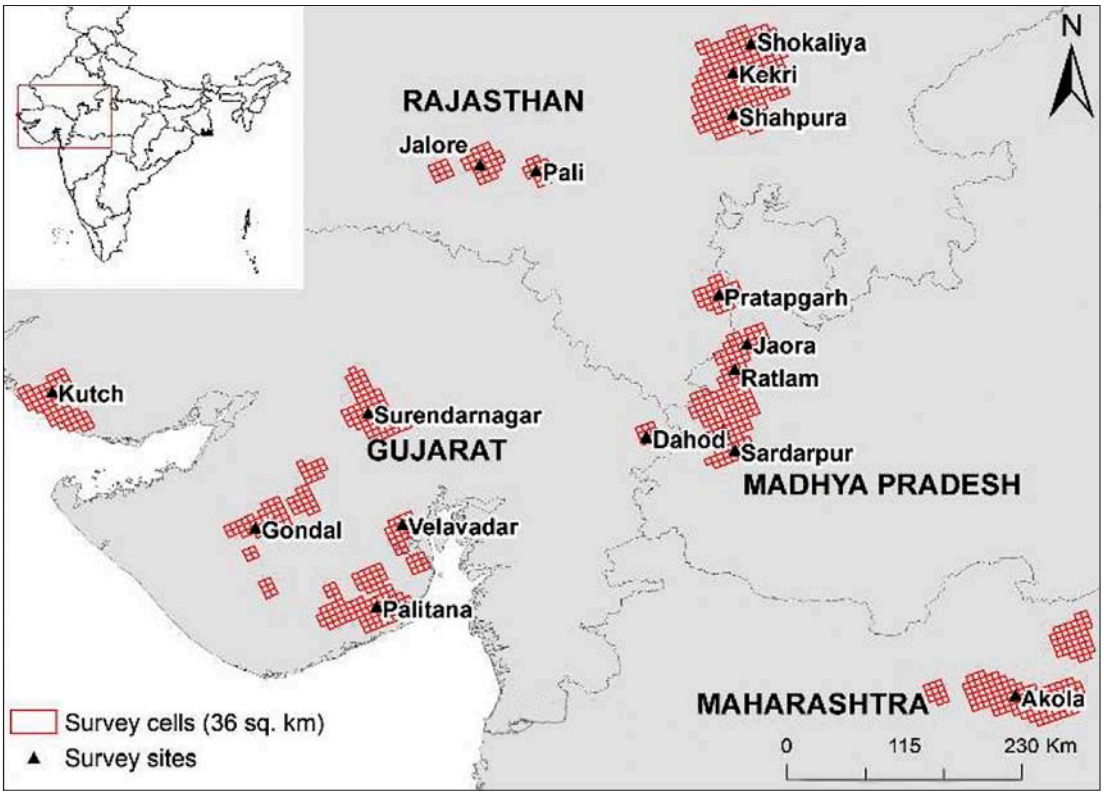

Figure 1. Lesser Florican breeding range in north-west India, as identified in surveys in 2017. Map generated through joint efforts by WII, BNHS, TCF (see text for initials) and state governments of Rajasthan, Gujarat, Maharashtra and Madhya Pradesh, and copied with permission from Dutta *et al*. (2018). Red hatching = survey squares; black triangles = survey sites.

against newly developed IUCN Red List criteria, found to be 'restricted as a breeding bird… to tiny patches of habitat in western India' and assigned to the highest category of threat, Critically Endangered (Collar *et al*. 1994), with the comment:

> Its population is judged to have plummeted by 80% from 1982 (4,374 birds) to 1989 (750), with little optimism for its long-term survival.

This second prognostication of doom again proved to be mistaken, but again only in its prematurity. Just as it was published, Ravi Sankaran was compiling new evidence that the low population figure for 1989 was a reflection of the failure of rains in 1985–1987, and that in 1994 the world held some 2,200 birds; better still, his survey work in 1999 allowed the global total to be revised further upwards to 3,530, and consequently in the next review the species was 'downlisted' to Endangered (Collar *et al*. 2001).

Did the Indian authorities and NGOs take this change of status to mean that nothing needed to be done? Conservation measures recommended at the time comprised a wide range of interventions—site protection, hunting control, creation of 'ecologically viable grasslands', changes in livestock management, local involvement, awareness campaigns and scientific research (Collar *et al*. 2001)—but were any of these things enacted? Judging by the results of an attempt in August 2010 to replicate Sankaran's 1999 survey, it appears not: researchers visited 91 grassland patches in the known breeding range across north-west India, with records of birds as follows (1999 numbers in brackets): Gujarat 54 (141), westernmost Madhya Pradesh 12 (63) and Rajasthan 18 (34), in a total of 24 (37) grasslands (Bhardwaj *et al*. 2011). These figures indicate a decline of 65% in the number of birds (total here extrapolated to 1,246) and 35% in the number of occupied sites, and suggest that virtually nothing happened to help the species in the decade between the two surveys.

Two years prior to this second inventory, in 2008, the Bombay Natural History Society (BNHS) is credited with having estimated a population of only 2,500 (Dutta *et al*. 2013), which would represent a decline of 30% in nine years. The results of transect surveys in 2014 and 2015 at seven sites in the three key states of Gujarat, Rajasthan and Madhya Pradesh were extrapolated to yield a population estimate of 1,091 (689–1,729)

birds (Sivakumar *et al*. 2016); assuming with reasonable confidence that numbers elsewhere in the country were negligible, this represents a decline of around 70% on Sankaran's 1999 figure. Neither of these estimates had the authority of a full explanation with any methods detailed, but they fitted the pattern: 30% decline in 2008, 65% in 2010, 70% in 2014–2015.

Then in 2017 a major national survey (Dutta *et al*. 2018) was organised by the Wildlife Institute of India (WII) on an impressively thorough scale and to exacting field and analytical protocols. With male Lesser Floricans displaying for some 45–75 days in the period July–September, the time window was so narrow that WII enlisted the help of BNHS, The Corbett Foundation (TCF) and state forest departments, involving a total of 121 observers. The WII team made digitised maps of the Lesser Florican's known and potential breeding areas, checking the results with niche modelling techniques and local expertise, overlaid on them a grid of 6×6 km squares and sent teams in vehicles out to sample 75% of these sites for florican occupancy, this being done by spatially appropriate ten-minute breaks ('stop-overs') to search for birds. Sites found to hold displaying floricans were then further sampled by walked line transects to assess the density of the males. Altogether 428 sites were sampled for occupancy by 5,564 'stop-overs', and 32 sites found to hold floricans were sampled for density by 218 transects totalling 479 km. All told, just 64 males were counted, and from this a population of 340 (162–597) territorial males was extrapolated, conservatively estimated downwards to 240 (or in another part of the document 264). Allowing as many females as males (as in previous estimates), a total of 480 represents an 86% decline in 18 years (or 80% in nine years, or 56% in 2.5 years).

This is a bombshell. One of the most distinctive and exceptional bird species on the planet is clearly about to disappear forever. Dutta *et al*. (2018) themselves acknowledged this at the end of their 'results' section with a photograph of a male bird walking away from us down a track under the huge headline: A SPECIES ON ITS PATH TO EXTINCTION.

Blueprint for survival

But Dutta *et al*. (2018) is not just a bombshell. It is also, brilliantly, a blueprint. The commendably thorough care with which the survey was planned and executed allowed the authors to make detailed assessments of each area in terms of threats and responses and to offer well-supported priorities for conservation management. These are worth outlining, because the document itself is a somewhat unwieldy 27.5 MB and its basic findings have not otherwise been published.

SUJIT NARWADE

Plate 5. Modern agriculture is hemming in the Lesser Florican. Sarana, Rajasthan, July 2019.

The report itemised 13 types of threat to the Lesser Florican, but some of them involved repetitions and overlaps, and can be amalgamated and reshuffled into 10. I leave them in the order in which the report listed them, although this should not be interpreted as reflecting their order of importance.

1. Poaching, trapping, and egg collection
2. Pesticide usage in breeding grounds
3. Agricultural land-use changes involving intensification, cash crops and new cropping patterns
4. Grassland fragmentation and disturbance involving infrastructure (wind-turbines, roads), industries/housing, saltpans, mining and powerlines ('prevalent across lesser florican breeding sites')
5. Grassland mismanagement in the form of excessive grazing, untimely harvesting, and invasion and plantation of shrubs/trees
6. Free-ranging dogs in prime breeding habitats
7. Erratic and changing rainfall patterns under climate change
8. Unethical photography
9. Lack of local awareness regarding importance of grasslands and Lesser Floricans
10. Paucity of ecological and conservation information

This list accidentally omits what the report elsewhere indicated as probably the single greatest problem, namely the widespread, chronic and relentless *conversion* of grasslands to agriculture: between 1880 and 2010, grassland/shrubland cover almost halved in India, with 14.8 million ha being converted to cropland, the process accelerating after 1980 and with Rajasthan exhibiting the greatest degree of change (see Figure 4 in Tian *et al*. 2014). The reduced and fragmented grassland cover gave Dutta & Jhala (2014) an insight highly relevant to the florican's conservation biology, that larger grasslands attract and host proportionately larger numbers of birds:

large areas of superior habitat have utmost ecological/conservation significance for exploded lek breeders as they can support more females to attract males or larger male aggregations to attract females for benefits of mate choice and nest protection.

Even so, it is not just the decline in total area of its grassland habitat that affects the florican; it is also the decline in grassland quality (as areas are degraded by overgrazing and invasive alien plants).

In response to these threats, Dutta *et al.* (2018) made eight recommendations for any *in situ* conservation effort for the species, as follows:

1. provide protection by creating conservation areas and implementing strict patrols
2. prevent infrastructural, industrial and saltpan developments, and mitigate powerlines
3. manage grasslands by consolidating contiguous areas, restricting grazing in monsoon months and removing exotic shrub/tree plantations
4. promote florican-friendly practices, e.g. organic farming, monsoon stall-feeding
5. create networks of 'florican friends' to report and prevent detrimental activities
6. control dog populations in a holistic program in neighbouring villages
7. study florican ecology using satellite telemetry and associated surveys
8. conduct outreach programs to generate support among multiple stakeholders

A ninth recommendation was to establish a captive colony as an insurance policy.

The 2017 survey identified five states known to host displaying males, listed here by state and then district (see Figure 1), with any relevant protected area placed in brackets (NP = national park, WLS = wildlife sanctuary):

- Gujarat, in Dahod, Bhavnagar (Blackbuck NP, a.k.a. Velavadar), Amreli, Surendranagar and Kutch (Lala-Naliya WLS);
- Rajasthan, in Ajmer (Shokaliya Community Reserve), Bhilwara, Tonk, Pali and Pratapgarh;
- Madhya Pradesh, in Ratlam (Sailana WLS), Dhar (Sardarpur WLS), Jhabua and Sheopur (Kuno WLS);
- Maharashtra, in Yavatmal, Akola, Washim, Chandrapur and Nashik; and
- Andhra Pradesh, Kurnool (Rollapadu WLS).

Of these, the survey did not cover Andhra Pradesh (although six males were reported from Rollapadu in 2017), while in Madhya Pradesh and Maharashtra no birds were encountered, suggesting that very few could be expected to remain in either. Worse, in Gujarat and Rajasthan the species was found to be faring poorly except in one general area of each state. In Gujarat, Velavadar/Blackbuck NP (and its environs), in Bhavnagar district, held an estimated 96–115 male Lesser Floricans. In Rajasthan, 110–136 males were predicted in Ajmer, from Bhinai in the west through Shokaliya and Nasirabad to Malpura in the east, dispersed over an estimated 22 agricultural sites—an order of magnitude larger than at Velavadar.

Inevitably, therefore, 'Velavadar' and 'Ajmer' (especially around Shokaliya) became top priorities for conservation management in Dutta *et al.* (2018). However, the report did not give up on the other sites where the species was recently recorded. In a meticulous exercise that deserves the highest praise, over a quarter of the 120-page document was dedicated to the tabulation of key geophysical, socio-economic and agricultural data on every site, alongside maps detailing the survey's findings, and tables indicating its recommendations. For Shokaliya, which presents a particular challenge because of the wide dispersion of floricans across

Plate 6. Floricans and farmers may ignore each other, but the habitat is far from optimal. Kumhariya Kheda, Rajasthan, July 2019.

SUJIT NARWADE

its farmed landscape, the report identified 11 areas totalling 4,196 ha which it proposed as 'Community Conservation Areas' (CCAs), a key designation under Indian law, with appropriate subsidies and compensations, for the preservation of 'florican-friendly' environments. But every square offering hope to the species was highlighted for attention. Even Madhya Pradesh and Maharashtra were given wide-ranging sets of conservation recommendations despite not having yielded a single record during the survey.

Last chance to save—or just last chance to see?

The report by Dutta *et al*. (2018) is perhaps the single most intelligent, thorough and helpful piece of investigation, analysis and instruction that anyone could wish to encounter when seeking a framework for securing a highly threatened species from extinction. It is a gift to conservationists, environmental NGOs, state and national governments. But it did not receive the wide publicity it deserved and has not rallied new forces to the cause. Instead, the monumental task of saving the florican remains largely in the hands of a few long-committed NGOs, notably BNHS in Shokaliya, Rajasthan, and TCF in Kutch, Gujarat.

The situation at Shokaliya is particularly challenging. BNHS began work there before the survey of 2017, quickly establishing that the floricans were entirely confined to traditional farmland, with males performing their display-leaps from the cover of various long-favoured crops (Narwade *et al*. 2017, Plates 5 & 6). With the disappearance of the grasslands, all either overgrazed by cattle or overgrown by mesquite *Prosopis juliflora*, the birds evidently found an equivalence in these agricultural plots, which Dutta *et al*. (2018) took as evidence of 'prominent behavioral plasticity'. Such habitat usage may, however, merely reflect an involuntary tolerance: Sankaran (1997) long before noted that floricans move to cropfields when grasslands are overgrazed; and of course, the far greater density of displaying males at Velavadar in 2017 is a strong indication that grassland is indeed—as earlier authors always reported—the true habitat of the species. If, then, traditional agriculture is a secondary habitat, it is likely to represent a 'sink' (Pulliam 1988)—a suboptimal habitat in which a species can survive but not breed well enough to replace its numbers over time. In this regard it is cautionary to note that this same relatively benevolent landscape hosted 55 Great Indian Bustards in the 1990s but holds none now, for reasons that can only be speculated (Mishra & Ghosh 2020). It is notable, too, that Little Bustard productivity is positively correlated with grasshopper abundance, which in turn depends on *unploughed* land (Bretagnolle *et al.* 2011); if Lesser Floricans are similarly dependent on grasshoppers, the implications are stark. We therefore urgently need to protect, preserve and (re-)create as much grassland habitat as possible within the Shokaliya landscape and to do all we can to shield the crop-nesting floricans from all negative influences—of which, alas, there are far too many.

Plate 7. Former Forest Department grassland now overgrown with *Prosopis*. Arwad, Rajasthan, April 2019.

SUJIT NARWADE

This, to its great credit, BNHS has been doing. Its team identified three 'reserve forests' belonging to the Rajasthan Forest Department which were basically overgrown grasslands, and by the 2022 monsoon—a year from the time of writing—these areas, already fenced against predators and totalling 9 km^2, will be cleared of *Prosopis* and therefore, in theory, available to floricans (A. Jain, S.S. Narwade *in litt*.; Plate 7). The team also greatly extended the analysis of the Shokaliya landscape, based on small clusters of displaying males, to increase the number of potential CCAs there from 11 to 26 (Narwade *et al*. 2020). These 26 sites embrace 266 km^2, an area 30 times larger than the currently recovering Forest Department grassland. CCA designation gives local stakeholders the right to control the use of the landscape and deflect those many factors—opencast stone mining, increasing pesticide use, conversion to cash-crops, wind-turbine and solar installations, growing urbanisation and road infrastructure—that floricans cannot tolerate. In February 2020, BNHS organised a *kisan chaupal* [farmers' meet] to promote traditional 'florican-friendly' agricultural practices (e.g. choice of crop, use of traditional tools and organic compounds, delayed harvesting, reduced mechanised disturbance—Plate 8) and publicise the plight of the florican to villagers across the Shokaliya landscape, using plays, songs, dances and competitions to win their support, with the florican, as a harbinger of good harvest and a consumer of bad insects, becoming the mascot of Ajmer (Narwade *et al*. 2020; Plate 9).

CHANDRAPRAKASH PRAJAPAT

Plate 8. Tractor disturbance (drivers often play loud music, 'jamming' the wing-sound of the displaying bird) in a florican territory. Shokaliya, Rajasthan, August 2019.

SUJIT NARWADE

Plate 9. Bombay Natural History Society staff work with schoolchildren in Ajmer, Rajasthan. February 2020.

Meanwhile, in Abdasa and Mandvi subdistricts, Kutch, Gujarat, where some 20 Lesser Florican males were displaying in 2020 (D. Gadhvi *in litt*.), TCF has been at work restoring community grasslands in the hope of attracting birds into them. At Kanakpar village, Abdasa subdistrict, the community has fenced a plot of 16 ha, cleared *Prosopis* from it, and introduced a system of rotational grazing compatible with the florican breeding cycle but still capable of producing, in 2020, a harvest of 30 tonnes of grass (D. Gadhvi, K. Gore *in litt*.). TCF is encouraging other communities to follow suit.

In both regions, dogs can be dealt with: intensive work in Desert NP, Rajasthan, suggests that sterilisation programmes can work effectively and swiftly (Jhala *et al*. 2020). Other initiatives have also shown promise. Over a decade ago, a pride-and-education programme in schools at Madhya Pradesh's Sailana WLS, which was established by Sálim Ali for the Lesser Florican but generated local hostility because of uncompensated loss of land rights, was so successful that in the years 2005–2008 there were always at least 27 male floricans in the reserve (34 in 2008) and children were demanding the species be declared the state bird (Jhunjhunwala & Gupta 2009). The response of the floricans to this intervention was contrasted with the continuing absence of the birds from the much larger Sardarpur WLS to the south. In 2018, however, floricans were induced to return to Sardarpur following the planting up of 30 hectares with 'moong' (green gram) and 'urad' (black gram) pulse crops, chosen because they attract insect pests and thus provide food for the birds; by the last week of July 14 males had appeared in the sanctuary (Gupta 2018a). Further south, Maharashtra's marginalised Phasepardhi community, who once hunted floricans for subsistence (Kasambe & Gahale 2010), were trained in goat and poultry keeping by the NGO Samvedana, targeting 10 tribal villages across 800 km^2 in Washim and Akola districts (Pandharipande 2015, Narwade *et al*. 2015, Broome & Bajpai 2019). Although no birds were seen in these districts in 2017 (Dutta *et al*. 2018), this was explained as an artefact of survey time (see Pinjarkar 2018).

Regrettably, however, these initiatives, while important in themselves, do not amount to a concerted conservation programme of the type that Indian conservationists have been advocating for a decade—create a national policy on grassland management, expand the protected area network through CCAs, eradicate *Prosopis* from key areas, introduce 'florican-friendly' land-use management, promote community involvement, undertake vital research and produce state recovery plans (Bhardwaj *et al*. 2011, Rahmani 2012, Dutta *et al*. 2013, Mohan *et al*. 2015, Sivakumar *et al*. 2016). Have these individual NGO interventions therefore just been extending the time we have to see the species before it vanishes forever? In some cases they may not even have achieved that: Sailana and Sardarpur sanctuaries, both ironically created for the Lesser Florican, have now reportedly lost the species (Tomar 2020), possibly simply because the good work done there was unthinkingly allowed to lapse.

Three absentees: cognisance, commitment, coordination

Three major elements needed in the struggle to save the Lesser Florican are notable by their absence. First, there is virtually no political or administrative awareness of how serious the situation is. Time to extinction, setting aside a 'tail' as a few isolated birds cling on in the last best areas, is clearly *under 10 years* and possibly under five (see Figure 2). Second, state commitment of resources (financial and otherwise) is negligible when it should be

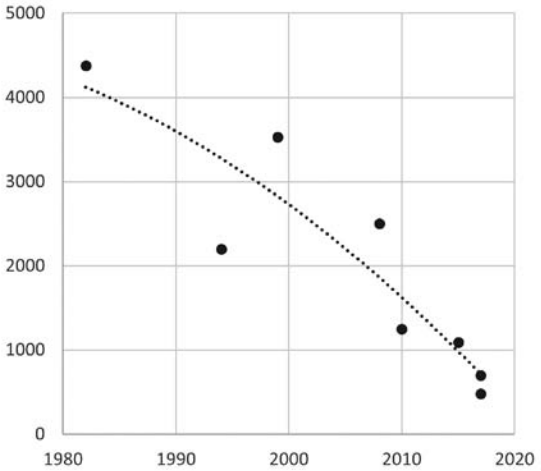

Figure 2. Global population trajectory of Lesser Florican based on censuses reported in this article (with census of 750 in 1989 omitted). The lower black dot for 2017 represents the value 480; the upper dot represents 700, mentioned in several informal accounts as an estimated population size.

massive. The BNHS work in Rajasthan has been funded by BirdLife International; the WCS India programme on the species, still in development, is only happening courtesy of an external grant. Where are the national and state governments in this crisis? Third, there is no coordination. Dutta *et al*. (2013) wisely declared that 'a centrally planned conservation program is much required'. But through the eyes of a passionate well-wishing outsider, it appears that India has not registered the scope, speed and scale of the response it needs to make. Never before has the situation been so incontestably urgent. Never before have the solutions been so compellingly explicit. Yet there is no evidence of prioritisation, strategy or organisation and, if anything, the overall conservation response since Dutta *et al*. (2018) seems only to have fragmented, with individual states and NGOs doing what they can without reference to a collectively agreed authority or plan.

This is well illustrated by the sudden appearance of captive breeding in the headlines. Dutta *et al*. (2013, 2018) proposed the measure as an insurance; this is supportable, in my view, as long as it does not divert expertise, attention and finance from *in situ* commitments. But how is it that Gujarat (Khakhariya 2018, Gupta 2021), Rajasthan (Saini 2019, Mishra & Ghosh 2020) and Madhya Pradesh (Mishra & Ghosh 2020, Tomar 2020) are now *each* launching *ex situ* programmes? This seems like overkill by uncoordinated states when there are far more pressing *in situ* measures, such as habitat restoration and the creation of CCAs, to plan, pay for and implement. I once wrote that 'for many well-intentioned conservationists faced with often overwhelming odds, experiments with the captive breeding of bustards have been an attractively convenient means of *not doing nothing*' (Collar 1983), and I fear that this may now be what is happening as states scramble to provide themselves with a relatively cheap shield against accusations of inertia.

Saving the Lesser Florican is, however, a daunting, gigantic challenge. Organisation and goal setting are everything, and demand the precision, efficiency and speed of a military operation. The recommendations in Dutta *et al*. (2018) must be translated into commitments, plans, schedules and targets: everything should be time-lined so that the goals are a combination of numbers and deadlines. It will not be enough to slow or even halt the rate of decline. To save the Lesser Florican the population must be made to increase, rapidly, *immediately*. Given the continuing inevitable deterioration of conditions within its range, the practical strategic response must be to improve those conditions dramatically through intensive programmes where the best opportunities for boosting the population exist. The urgency and value of this are underlined by the consideration that, if drought caused the population to crash from 4,374 in 1982 to 750 in 1989, another drought—which is inevitable one day (at the time of writing, April 2021, forests are burning in the Himalaya after months without rain)—could cause existing populations to wink out entirely; and the only bulwark against this possibility is to *increase numbers rapidly*.

So every single opportunity to help the species must be taken. Is it too naive, too perverse, too radical to dare to suggest that Gujarat's Blackbuck NP, which is clearly *vitally* important to the florican's survival, might be at least partially repurposed for an emergency 'war effort'? It and its immediate environs currently host around 100 displaying male floricans (hence possibly 40% of the world population), but it also reportedly hosts some 14,000 Blackbuck *Antilope cervicapra* (Meena & Saran 2018), a species that, with over 30,000 in neighbouring Rajasthan alone (Saran & Meena 2018) and 37,000 in Maharashtra (Habib *et al*. 2018), is Least Concern on the IUCN Red List and at no risk whatsoever of extinction. Some rapid rethinking of habitat management priorities would set Blackbuck NP and its environs targets of, say, 150 displaying floricans by 2025, 200 by 2030 and 500 by 2040, with no lasting effect on the Blackbucks. Rajasthan's Ajmer region equally requires a comprehensive plan to quintuple florican numbers through skilful equitable negotiations and agreements with local communities to enshrine organic agriculture and florican conservation as their core socio-economic value. Every square identified in Dutta *et al*. (2018) as worthy of

management needs a rehabilitation programme, with targets and timeframes for each. Other protected grasslands, such as Tal Chhapar in Rajasthan (brimful with Blackbuck!), should be charged with revising their management plans to help regenerate former florican habitat and populations.

Two factors may still undermine the endeavour—powerlines and the unknown. The evidence may be weak that Lesser Floricans die in powerline collisions—just one report in Collar *et al*. (2001) and another possible in Narwade *et al*. (2020)—and it is heartening that in April 2021 India's Supreme Court ordered the burial of low-tension powerlines in priority bustard areas in Rajasthan and Gujarat and the fitting of diverters on all high-tension lines in key habitats. However, of all the threats found within 200 m of displaying floricans in the Shokaliya landscape in 2020, powerlines were by far the most frequent (Narwade *et al*. 2020). Worse, line marking may not even work for bustards (Shaw *et al*. 2021), and in any case the floricans perform significant movements across India, spending 75% of the year in non-priority areas and habitat. Of course, what is happening in these areas and to these habitats remains unknown, but we get glimpses of the likely trends and challenges: the discovery of a wintering female florican in the Hesaraghatta Lake grassland in Karnataka (Plates 3 & 4) added to the argument for preserving the area from conversion to a film studio complex (Kakani 2021), but the case only points to the likelihood that grasslands are being converted to other uses all across central India without the floricans in them ever being noticed.

So the campaign to save the Lesser Florican has to be waged on many fronts and, inevitably, over many decades. We can be confident that the campaign *can* be won, given the quality of the Indian scientists and conservationists involved and available. But we can be *certain* that, without a dramatic step change in the support these heroes receive, the Lesser Florican will very soon be no more than a series of beautiful images in the photograph album of conservation shame.

Postscript

The name Lesser Florican is a little frustrating. 'Lesser' once indicated smaller size but now mostly connotes inferiority; but as Gupta (2018b) observed, it is 'a bird lesser than none'. 'Little', by contrast, connotes vulnerability and promotes affection. For all the furious reaction that changes of English bird names inevitably provoke, I invite readers to consider whether we might call it henceforth the Little Florican, and see if it wins more hearts as a result. What is there to lose, except one of the most wonderful species of bird on the planet?

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