

# Hunting of Little Bustards *Tetrax tetrax* in Azerbaijan: the global conservation perspective

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It is easy—and entirely reasonable—to assume that the global conservation status of a species is correlated with the size of its (breeding) range; indeed, in mammals and reptiles the relationship has been demonstrated (Cardillo *et al* 2008, Böhm *et al* 2016). On this basis the Little Bustard *Tetrax tetrax*, distributed from northern Morocco to western China, a span of over 7000 km, ought not to concern conservationists. Like the largely sympatric Great Bustard *Otis tarda*, the Little Bustard lived for thousands of years in the company of farmers, tolerating their conversion of its natural grassland habitat and profiting from their clearance of woodland and other habitats it could not otherwise use (Collar 1996). Nevertheless, over the past century the accelerating modernisation of food production has heavily eroded the ecological conditions in which the species thrives, leading to the ever-greater disjunction of its ‘western’ and ‘eastern’ populations and to its long-term IUCN categorisation as Near Threatened (BirdLife International 2021). Now, with alarming suddenness, the situation is deteriorating further: the western—mainly Iberian—population, judged to comprise as many as 114 000–222 000 individuals less than a decade ago (BirdLife International 2015), is declining dramatically in response to changes in agricultural policy and practice (Santos *et al* 2016, Silva *et al* 2018, Marques *et al* 2020, Ramos *et al* 2021).

The situation in the eastern population is much less easy to define. Indeed, even the geographical limits of the area in question—which for convenience we call ‘Central Asia’—are disconcertingly vague. Generally this range, for breeding populations, covers the great swathe of level lowland farmland and remnant steppe that extends from eastern Ukraine and the Volga basin in south-west Russia across Kazakhstan (itself constituting almost a third of the longitudinal span of the species) to Dzungaria in northern Xinjiang, China (Collar *et al* 2017, BirdLife International 2021). At one time the numbers of Little Bustards present in this vast area very likely ran into millions, but populations declined sharply in the Soviet era as subsidised state farming severely disrupted steppe ecosystems, such that by 1980 fewer than 5000 adult individuals were understood to remain in the entire USSR (Borodin *et al* 1984). Then came a reprieve: with the end of the Soviet system in 1991 45 million hectares of arable land were abandoned (Kämpf *et al* 2016) and livestock, a cause of serious overgrazing, declined by 80% (Dara *et al* 2020), resulting in the recovery of Little Bustard numbers at least in western Central Asia (Kamp *et al* 2011). Even so, the wintering range of the species has not shown an equivalent response: having once comprised a broad swathe of land from the Crimea, Middle East and Caucasus eastwards to southern Central Asia and Tajikistan, today it has contracted to a few sites in three key nations spanning two general areas: Azerbaijan to the west of the Caspian Sea, Turkmenistan to the east of it, and portions of Iran adjacent to both (Spangenberg 1951, Gubin 2007).

In the vast steppes to the east of the Caspian, where the Little Bustard has always been patchily distributed (Gavrin 1962), survey coverage has been weak and breeding and wintering population sizes have never been estimated. The species remains listed as ‘Endangered’ and ‘Rare’, respectively, in the latest Red Books of Kazakhstan and Turkmenistan, which both identify habitat conversion and poaching as the major threats (Gubin 2010, Saparmuradov 2011). North-eastern Iran hosted 7000 birds in the winter of

2014–2015, representing a minimum estimate for this eastern Caspian flyway (Yousefi *et al* 2017). Numbers in the western flyway have been easier to assess owing to the bottleneck effect of the Black and Caspian Seas and the mountains between them. Birds breeding in Ciscaucasia (the Kuma–Manych Depression), along the Volga River and in the Caspian Depression unite in Kalmykia to funnel down a narrow route along the Caspian shoreline, through Dagestan (Russia) and past Azerbaijan’s Besh Barmag mountain at the eastern end of the Greater Caucasus (Bliznyuk 2018). In 2016, 93 000 Little Bustards were counted along the Kalmyk portion of this flyway (Ubushaev *et al* 2016), while in 2011 115 000 were counted crossing the Besh Barmag bottleneck, 82 000 of them on a single November day (Heiss & Gauger 2011, Heiss *et al* 2020). Clearly, then, the Caspian Sea’s south-western lowland plains in Azerbaijan and Iran host globally significant populations of the Little Bustard, at least on par with those in Iberia.

On the basis of the numbers above, Azerbaijan bears a crucial responsibility for the global welfare of the Little Bustard: not only does it provide an environment for the survival of probably at least one-third of the world’s population for roughly half their annual cycle but it also offers twice-yearly transit space to the populations that travel further south into Iran. Paradoxically, however, this responsibility only increases with the evidence that the abandoned farmland across the breeding range is again being targeted for intensive cultivation and pasture (Kamp *et al* 2011, Meyfroidt *et al* 2016), already leading to significant declines in breeding populations (Oparina & Oparin 2020). While conservationists develop ways to ensure that new programmes of food production balance all interests appropriately in order to prevent a needless repeat of the declines in wildlife populations observed in this region during the twentieth century (Baumann *et al* 2020, Pazur *et al* 2021), it is vital that the Little Bustard is not subject to other pressures on its wintering grounds.

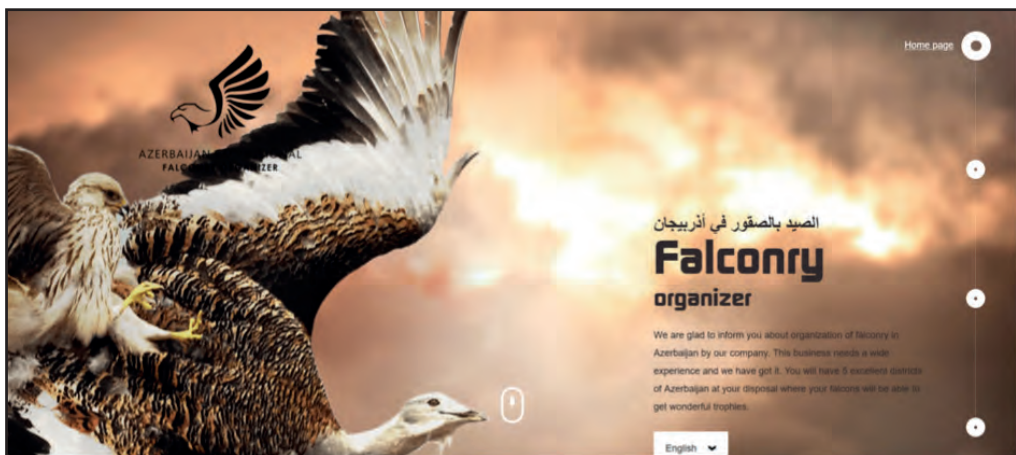
Unfortunately, however, it is. Hunters have targeted Little Bustards in Azerbaijan for at least 90 years, and official quotas of up to 35 000 (reportedly exceeded by 15 000) birds a year were established in the 1930s (Vereshchagin 1940, Patrikeev 2004). The species became legally protected in the country when it was placed on the USSR Red List in 1984 (Borodin *et al* 1984), and that status has remained ever since (Law of Azerbaijan Republic No. 637-IIQ). Despite this, a study in the late 2010s found that Azerbaijan was responsible for by far the greatest level of illegal bird killing anywhere in non-Mediterranean Europe, with Little Bustard emerging as the species with the largest proportion of its global population estimated to be killed in the country illegally per year (Brochet *et al* 2019). Seemingly at around the same time, videos began appearing on social media revealing that this illegal hunting had become internationalised (*eg* Anon 2017, 2018), with hunting companies in the country advertising their services online to foreigners, particularly Gulf state falconers (Anon 2020, <http://falconry.gs-host.com>), who are well known for their interest in bustards as quarry (Collar 1996, Dolman *et al* 2021). Simultaneously a sharp increase in the number of Little Bustards moving south to overwinter in the low-disturbance border zones of north-western Iran was also noted (Yousefi *et al* 2017).

In early 2021 outrage erupted within Azerbaijan itself over this foreign hunting. As the country’s public observed a partial lockdown to prevent the spread of the COVID-19 pandemic, they watched clips posted to social media by a group of foreigners to whom the nation’s rules seemed not to apply. Despite travel restrictions and the national nature conservation laws, the clips showed the group visiting one of Azerbaijan’s protected areas, where they used falcons and rifles to poach a variety of species, outside even the country’s legal hunting season. Among these were a Common Crane *Grus grus* of the rare subspecies *archibaldi* (Anon 2021a) and many Black-bellied Sandgrouse *Pterocles orientalis* (Anon 2021b), both also protected under Azerbaijan law. Concerned members of the international conservation community, including the chairman of OSME and ourselves as leaders of

the IUCN Bustard Specialist Group, added their voices to the chorus within the country calling on the government to halt this illegal behaviour.

On 6 April 2021, Mr Mukhtar Babayev, Minister of Ecology and Natural Resources, wrote to assure us that action had been taken against the hunters in question and to invite us to hold discussions with his officials on ways to improve nature conservation and biodiversity protection in his country. We are in the process of taking up this invitation. If these discussions proceed, we will want to emphasise four points.

1. Azerbaijan's protected and unprotected steppe areas are supremely important for the global survival of the Little Bustard (Patrikeev & Wilson 2000), which Soviet history and recent experience in both Iberia and the Volga region of Russia show to be highly sensitive to environmental deterioration. These steppes would also be important for the recovery of the Great Bustard, for which Azerbaijan once served as a winter stronghold (the few remaining birds which venture into the country today encounter intense persecution).
2. Azerbaijan must address the illegal hunting of Little Bustards, whether by nationals or foreigners, despite the seemingly high numbers that the country hosts. Hunting must be scrupulously monitored so as to ensure that laws protecting Azerbaijan's natural heritage are observed and, if necessary, enforced. Images on commercial websites that imply opportunities for illegal activity, as on the homepage of <http://falconry.gs-host.com> as at 7 September 2021: Plate 1), should be removed by order.
3. An opportunity exists to defray the costs of nature conservation in general and Little Bustard protection in particular through the promotion of environmental tourism to witness such spectacles as the migratory flocks of Little Bustards, as well as other bird species that enter Azerbaijan in volume during the autumn, winter and spring seasons. The country could easily establish a new regional identity as a wildlife haven and the guardian of the natural heritage of both the Caucasus and Central Asia.
4. Another opportunity exists to enlist the international conservation and academic communities to join with national researchers to undertake intensive long-term studies on the Little Bustard in the Caucasus and Central Asia, using tracking devices to elucidate its migrations, demography and ecology (Collar *et al* 2017). Similar programmes could be initiated on threatened wildfowl, Common Cranes and the Sociable Lapwing *Vanellus gregarius*, especially as most of the latter's global population moves through the country (Donald *et al* 2021).



**Plate 1.** Current home page of <http://falconry.gs-host.com/>, purporting to depict a Gyr Falcon *Falco rusticolus* attacking a Great Bustard *Otis tarda*, a species that was 'very common' in winter in the past (Patrikeev 2004) but which is now a rare visitor and fully protected under Azerbaijan law.

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