

How do juvenile Bearded Vultures use supplementary feeding stations?

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Supplementary feeding stations (SFS) have long been implemented as one of the most helpful anthropic tools to sustain conservation programs. Over last decade, a critical scientific view has discussed their effects on the behavioural ecology and conservation of avian scavengers. Its possible role as an ecological trap have been already described for the obligate scavenger species, who have evolved for searching for unforeseeable feeding sources in both spatial and temporal scales. Here, we test the impact that these SFS could have on the post-fledging period of an endangered vulture species, the Bearded Vulture *Gypaetus barbatus*. We analysed some factors influencing the species behavior according to the origin of the birds (reintroduced vs wild individuals), the specific SFS management, concerning both temporally and spatially food predictability, and other environmental factors. To assess a possible routine behavior of the species with respect to the SFS, we analysed a total of 18 tracks made by juveniles, including 7 individuals reintroduced in France (Central Massif, Corse and Alps), and 9 wildborn individuals from Spain and France (Pyrenees and Alps), GPS-recorded for 3 months (from August to October) at a rate of 1 location every 5 minutes. Reintroduced individuals seem to be more attached to the specific SFS at which they were accustomed to be fed during the hacking process than the wildborn individuals are attached to the closest SFS to their nest. Furthermore, we expect that birds foraging periodically at SFS are more prone to develop routine behaviours than those surrounded by more randomly managed feeding points. Considering the existing reintroduction programs aimed to restore Bearded Vulture populations, a deep comparative analysis in terms of the differential space use between reintroduced and wild individuals regarding the use of SFS should be extremely useful to address and optimize future conservation and management measures. Data origin: Spanish telemetry data sit on the ECOGYE EFA 089/15 project, INTERREG V - A - España - Francia -Andorra (POCTEFA 2014 - 2020) program, and French telemetry data are collected as part of the National Action plan, under the ringing licence of Olivier Duriez (PP961 from CRBPO).