Ecology, physiology and behaviour

Seasonal movements of GPS-tracked Eleonora's falcons (*Falco eleonorae*) from La Galite Archipelago, Tunisia

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DOI: 10.20315/evmc.2025.103

To effectively conserve migratory land bird populations during the full annual cycle, it is important to have in-depth knowledge of their spatiotemporal distribution throughout the year. Indeed, long-distance migratory populations may exhibit dissimilarities in the timing of migration, the routes they follow and convergence at ecological barriers. In this sense, tracking studies help to investigate individual-level decisions taken en route across seasonal journeys, providing key information to suggest management actions and conservation measures at the flyway scale. Here, we provide the first description of the seasonal movements of six Eleonora's falcons *Falco eleonorae* (four adults and two juveniles) tracked by GPS/GSM devices from Gallo islet, in the La Galite Archipelago (Tunisia). Birds were tagged at their breeding/natal colony in the second half of September, coinciding with the last phases of the chick-rearing period. Adults performed repeated foraging trips at sea, showing a preferred SW-NE orientation from the colony to the open sea, in order to intercept the flow of migrating passerines. Several trips to the coasts and inland areas of northern Tunisia were also recorded, until autumn migration. Except for an immature female that, after an explorative movement in Sardinia and Sicily, departed for migration on 11 October, the other three adults and two juveniles left the colony between end of October and beginning of November (27 Oct to 11 Nov). During autumn migration, the four adults followed a similar route across Libya, Chad and South Sudan, through the rainforest and towards Lake Victoria, to the east coast of Mozambique where they crossed the sea to reach their wintering grounds in northern Madagascar (end of November). The two juveniles, once left Tunisia, took a more western route across the Sahara Desert of Libya and Niger, up to Nigeria and Cameroon: from there they reoriented and converged towards Lake Victoria, and are still on the way at the time of writing the abstract. These findings represent the first data on the movement ecology of this species for North Africa, and are in line with international initiatives in other Mediterranean countries aimed at integrating research, policy and action for the conservation of these Afro-Palearctic migratory land birds at the flyway scale.