

**Figure S1 A-J.** Inferred migration route and timing of male great reed warblers determined by geolocators. Hexagons indicate breeding site (black), stop-over sites during autumn (orange) and spring (green) as well as wintering sites (blue). Lines with arrows indicate autumn migration routes (orange), winter movements (blue) and spring migration (green) whereby some parts are covered with slower migration speed (filled line indicate speed of <500 km/d) than other (double lines indicate speed of >500 km/d). Dashed lines represent great circle routes and do not necessarily represent the actual route taken by the bird due to analytical reasons (due to missing data; see text). Dates inferred from latitudinal and longitudinal data are given for departure and arrival at each site (in black); dates inferred from longitudinal movements only are given in grey. 1) The black bar in C (7V-50) indicates a stop-over where the actual position could not be determined. 2) In H (7V-72), only longitudinal data is given for this position and the actual position is located anywhere along the grey line.





