

Turtle Dove Spatial Patterns: Habitats and Migrations

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The purpose of this study is to understand the migration ecology and strategies of the turtle dove to be able to develop the most effective conservation strategies possible for this declining species. Six turtle doves were tracked with GPS/GNSS transmitters in Cyprus during spring of 2023. The study included temporal migration with visuals following each bird's path, stopover behaviour interpreting the reasons for birds spending significant amounts of time in one location and habitat use analysis by over laying the CORINE 2018 land cover data. the results showed that four of the six birds reached central Anatolia while one returned back to Cyprus from the southern coast of turkey before the signal was lost and the other bird reached only up to southern turkey before its signal was lost, out of the four birds that reached central Anatolia two of them eventually found their way to Ukraine while the other two stopped transmitting GPS fixes likely before also reaching Ukraine as their paths until that point were very similar. The land cover analysis showcased a reliance on agricultural mosaics and the avoidance of urbanized and heavily forested areas.

Unfortunately, there were some data gaps as the transmitters failed to collect a signal every hour as they were programmed to and the performance of each transmitter varied greatly. Moreover, there was no cooperation with the authorities of north Cyprus and Turkey were most of the transmitters transmitted their final signal therefore the fate of all the birds remains unknown. In spite of these problems the findings are the first of their kind for turtle doves in Cyprus and provided us with enough essential information that help make the knowledge gaps for what we know about turtle dove smaller.