

**Year-on-year fidelity to the wintering grounds
of the Bluethroat (*Luscinia svecica*) in the
Guadalhorce Valley**

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Introduction and objective

1. Description and background

The character of irrigated agriculture of the zone of the Valley of the Guadalhorce, makes that is created great extensions of cultures, ditches and channels with abundant zones soaked. Together with the banks of the river, this valley represents an optimal wintering place for the Black-necked Nightingale (*Luscinia svecica*)

The concentration of birds in this area is very high compared to other areas of the Province, taking into account the size of the area (several tens of kilometers of river) we find one of the highest wintering points of this species in the Western Mediterranean.

In an unofficial estimation, it was calculated that the population could prowl the specimen for every hundred meters of river. With such a large sample size you can work with the species with relative ease.

2. Formulation of the hypothesis

With such abundance of birds, we wonder if during the arrival of birds each year, these same birds occupy the same territories year after year and the degree of fidelity to them. That is, if they occupy exactly the same plots, ponds, ditches, etc., which they did in previous years.

Given the scarce information about this, we plan to execute a banding program with distance reading marks (rings with alphanumeric codes) during the wintering of this species, in order to be able to control a sample size sufficient to extrapolate the results to other areas Of wintering in general.

• Study area

Cited above, it is the Guadalhorce Valley itself the study area. But more nuance its structure we comment that it will develop on the banks of the river Guadalhorce and its tributaries, understanding as banks not less than 500 meters on each side of the same, being able sometimes to increase this distance if the habitat suitable for the birds is beyond Of those five hundred meters.

Extensive areas of this valley have been declared Places of Community Interest (SCI) having a degree of protection. However, special permits are not required for the performance of the banding in these areas beyond the regional permits.

• Methodology

It will be done firstly the realization of weekly transects for the location of birds and their

wintering plots. These will be listed and located using Global Situation Points (GPS).

At the end of each transept, the birds will be trapped in their plots in the next 48-72 hours, using previously primed mesh stumps with *Tenebrio molitor* worms only and exclusively.

A protocol of action on trapping and marking is established for each captured bird:

- Extraction of the bow-net
- Ring of the bird (metal and colour ring)
- Sex and Dated
- Release at the same capture point.
- Annotation of the GPS capture point.

This project is elaborated with an indefinite duration, since it is only the time, and the continuous wintering of the species that will give us the necessary information to evaluate the obtained results.

• Impact

The species in question does not receive special attention beyond the generic one in the practice of banding. We have a kind of noble characteristics in terms of aggressiveness. On the other hand the use of the trapping method has to cite several aspects to take into account. The mesh straps must be in perfect conditions of strength, since if not enough and necessary, it could be the case to catch the bird by the neck causing irreversible injuries or even death. It is advisable to check it before each day, and during the same, that there are no elements that obstruct its operation in an optimal way, such as sticks or pebbles. In addition, there is the possibility of catching birds ringed by other ringers outside the project. In this case, ring only with a remote reading ring, respecting the metal ring that the bird already has.

• Expected results

A report will be made at the end of the project, where an article will be written on it, following the instructions that may be given by the Department of Ornithology of the Aranzadi Science Society, and its publication where they deem appropriate according to their utility.