

Reproductive success of some couples of Long-eared Owl (*Asio otus*) found in the Piana Reatina area

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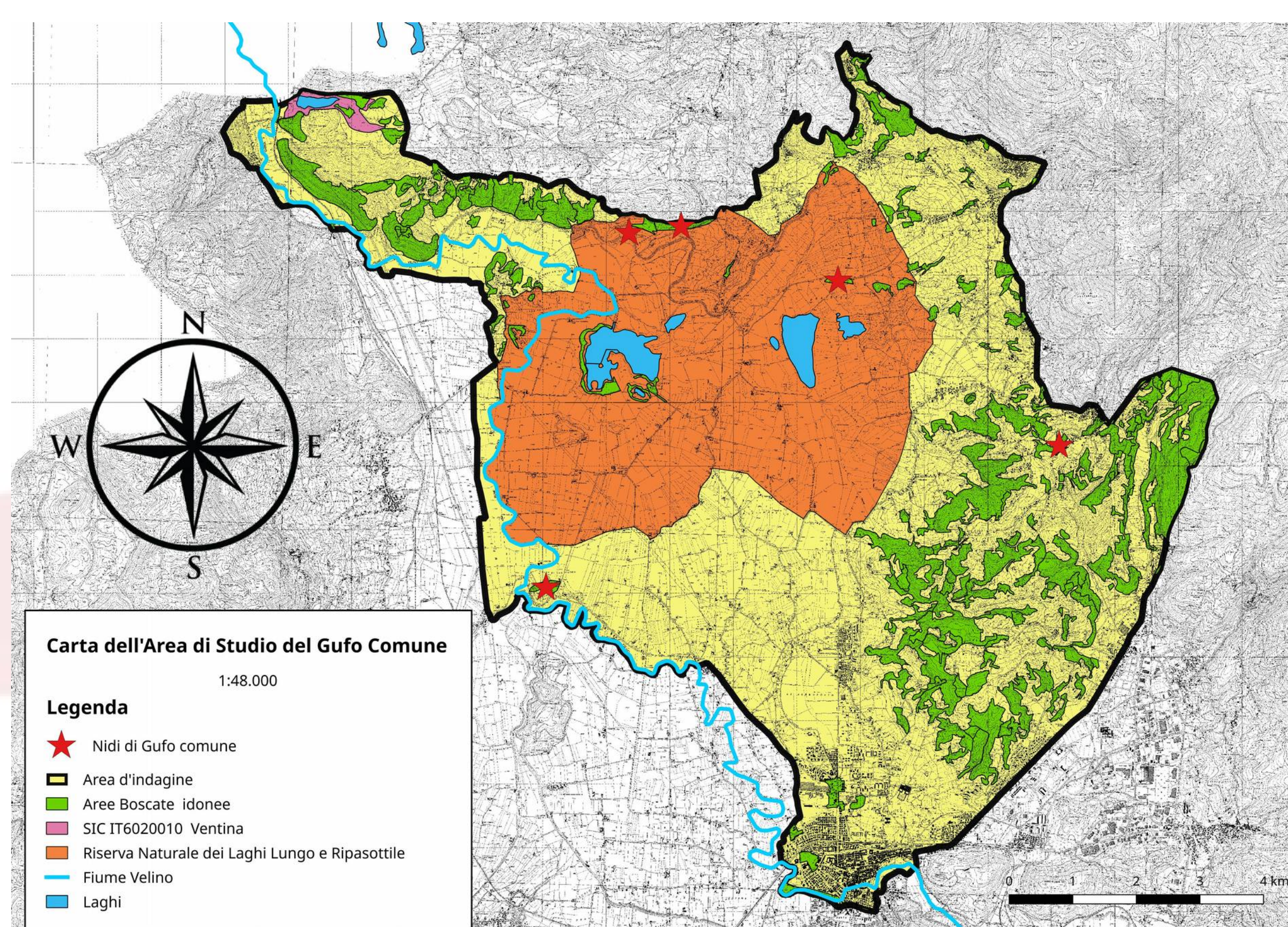
INTRODUCTION

The study has interested the reproductive success of some couples of Long-eared Owl (*Asio otus*), nesting on the area of Piana Reatina, Lazio (IT). This area includes the Nature Reserve of Lakes Lungo e Ripasottile it is a zone signed such as SIC (Sites of Community Importance), SPA (Special Protection Area) and SCA (Special Area of Conservation) IT6020011.

Study area

The study area has an extension of about 9.607 ha, with an average altitude of 370 m s.l.m. inside the area there are: two major lakes (Lungo e Ripasottile), Velino's river, delle Lame, minor lakes and a series of canals. The vegetation includes: 69,94% cultivated fields, 3% wetlands, 14,3% woodland and 8,2% area with ruins.

The Long eared owl's nests were found on woodland or in groups of trees.



Study area map

RESULTS

The outputs in the studied area have occurred regularly and allowed the identification of 5 nests belonging to the species investigated. The nestlings involved from the five nests are in totally 12, by dividing this last for the nests we get a reproductive success of 2.4.

Nestlings involved for each nest surveyed

	Nest 1	Nest 2	Nest 3	Nest 4	Nest 5
Nestlings involved	3	3	2	2	2

CONCLUSIONS

In the studied area was found the presence of the nests of the studied species in a few portions of fragmented territory; sarebbe opportuno preservare tali diversità salvaguardando, sia le piante che ospitano i nidi, sia quelle che fanno da contorno ad essi (Denver W. Holt 1997) (F. Henrioux 2002).

It will therefore be necessary to continue this study by extending it to the entire Piana Reatina, for the survey of all nesting sites of Long eared owl in order to create a paper useful for the management of the territory that reports the information collected.

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Long-eared Owl (*Asio otus*)

MATERIALS AND METHODS

Creation of fitness map

For this study has been used the Quantum Gis software, that helped the analysis of the studied area. With this software it was possible to create a fitness map to study only the areas eligible to host the Long eared owl nests. The requirements for an eligible area for this species are: broadleaved trees or coniferous trees surrounded by open areas, parks and gardens (Chiavetta M., 1992) and (Brichetti P., Fracasso G., 2006).

Calculation of the reproductive success

The calculation of the reproductive success was made by dividing the number of nestlings involved in the number of breeding pairs (surveyed). To this purpose was made a count of the nestlings involved using their ethology. In fact after they have involved, the nestlings move for some time in the area surrounding the nest by emitting a typical lure to attract parents. Using this behavior was possible survey the nestlings involved.

DISCUSSION

The study of the nesting of the couples of Long-eared Owl, discovered in the Piana Reatina territory, has highlighted a reproductive success of 2,4 nestlings for each nest, this value is far above the 0,88 obtained from David E. Glue (1977) and superior to 0,89 obtained from Davorin Tome (2011), while it turns out to be much lower to the 3,4 obtained from Jeffrey S. Marks' (1986).

This data discrepancy it is certainly attributable to the different territorial morphologies Study environments and the different trophic availability. Indeed this species studied is influenced considerably for its reproduction, from the trophic resources available in the territory (Davorin Tome 2011).

Besides the long eared owl's nests can be object of pillaging eggs, both by predators (birds and mammals) also from poachers and collectors (David E. Glue 1977).