

2022 Montseny Owl Census

Introduction

Tawny Owl (*Strix aluco*) is a species of bird in the Strigidae family. This nocturnal raptor is widespread in Eurasia, especially in Europe. It usually nests in holes in the trunks of trees. This owl does not migrate and attaches great importance to its territory. This species is found in deciduous and mixed forests, and sometimes mature conifer plantations, preferring locations with access to water. It is not very demanding for the place of nesting and has a varied diet: this is why it is found in so many different biotopes. The Montseny Natural Park and World Biosphere Reserve, includes parts of the region of Osona, La Selva and El Vallès Oriental. It is formed by the Turó de l'Home ridge (1,706 meters), Les Agudes (1,703 meters), Matagalls (1,697 meters) and the Calma plateau (Mount Drau, 1,344 meters). The Congost, Tordera and Riera Major rivers cross it. A combination that means that the vegetation is very rich and that abundant fauna lives there. With little anthropocentric influence, the Montseny Natural Park can be an ideal environment for the tawny owl. However, being a nocturnal and discreet animal, the tawny owl is usually not counted during other monitoring campaigns. It was therefore necessary to create a particular protocol to determine where the tawny owl is present in Montseny.

Methodology

The census was done in different stations where listening the howl with specific protocol, the methodology for finding the station is as follows:

The first station was at the Estació Biologica Fontmartina.

Leaving Fontmartina and arriving at Plana del Coll, follow the BV-5119 road towards Santa Fe (turn right). Finally arrive at the BV-5114 road, which goes in the direction of Sant Marçal (turn left). After Sant Marçal continue on the GIV-521 (continue straight) until you reach the GI-543, where you stop. Following this itinerary, stop at each kilometre to make a station. Altogether, there were 24 stations.

For each station, the protocol is the same.

Two minutes during which the call of the Tawny Owl is emitted, followed by five minutes of listening. Repeat once if no response has been heard. As soon as a response has been heard, move on to the next station.

Several data must be noted at each station: The date, the station number, GPS coordinates (Latitude/longitude), a clearing of vegetation (Open, Semi open, Thick), the influence of the most present trees (Beech (*Fagus sylvatica*), Holy oak (*Quercus ilex*) and Pine (*Abies sp* or *Pinus sp*)), Presence/Absence.

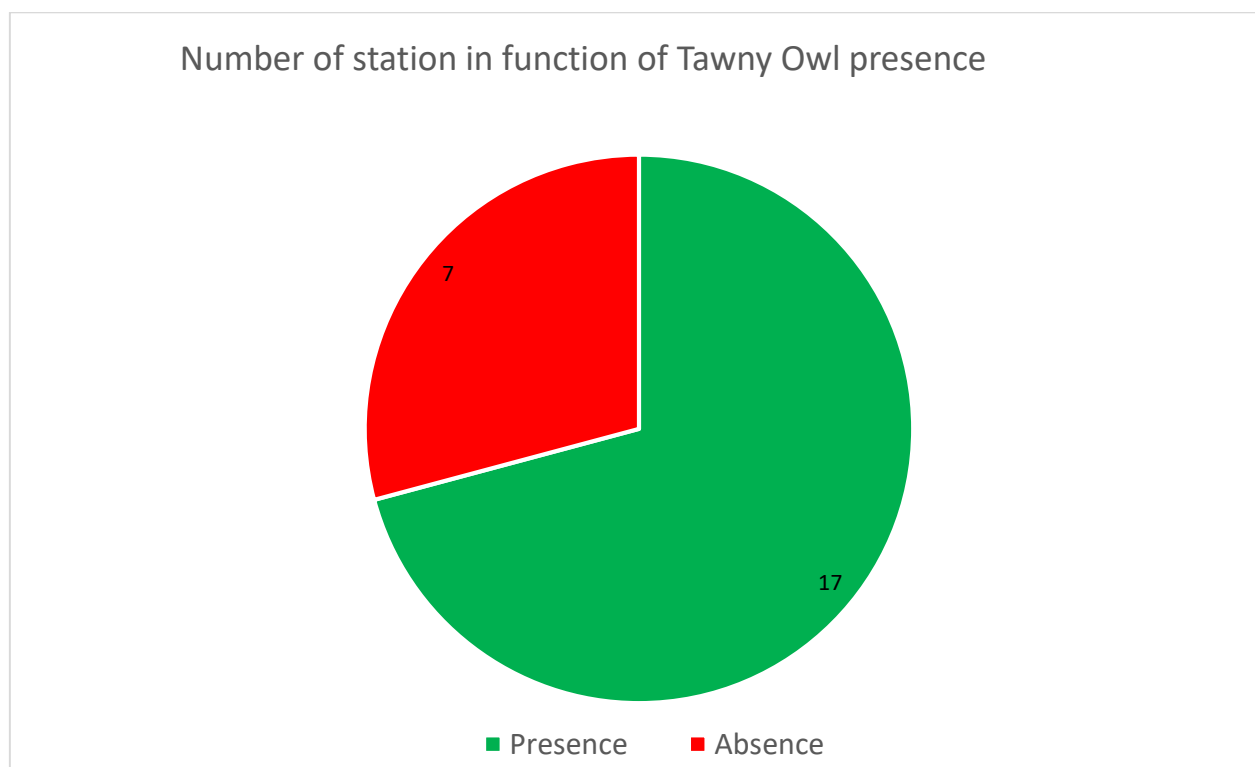
Result

The results have been summarized in this table.

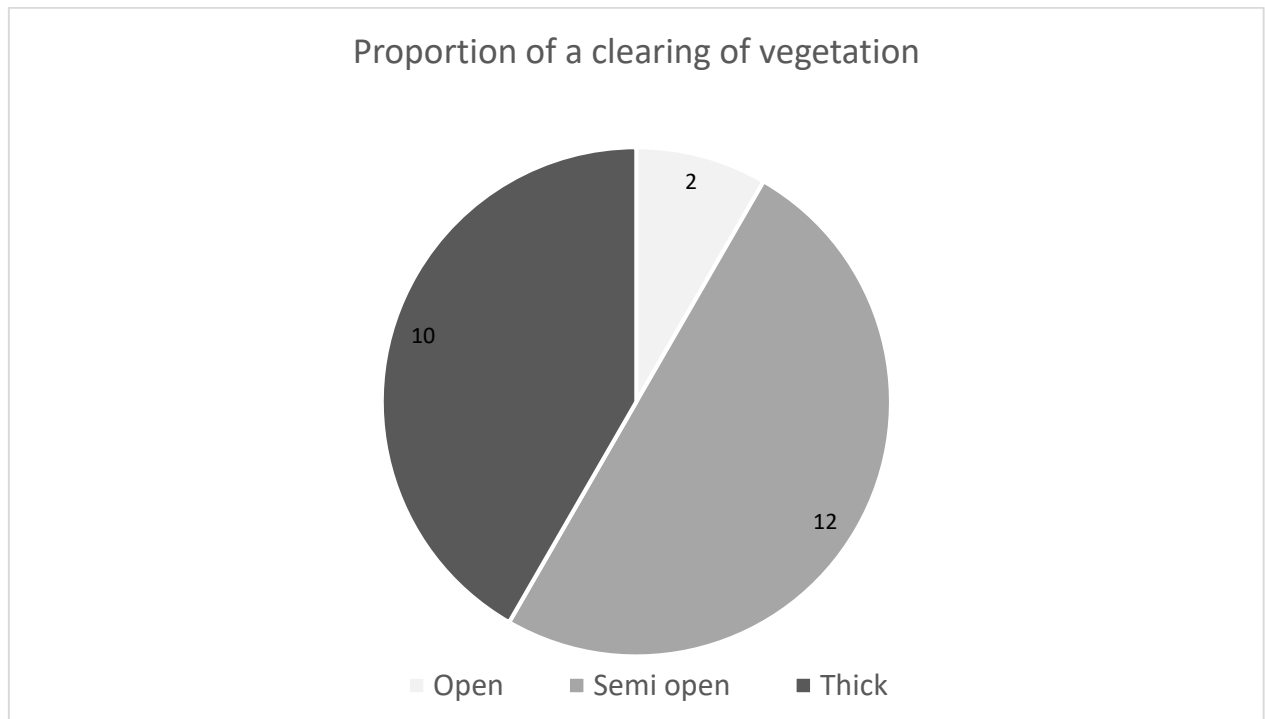
Date	Station Number	Longitude	Latitude	Forest Cover	Main trees	Weather	Presence/Absence	Species
08/02/2022	1	2.4303744	41.7595559	Semi open	Holy oak, Pine	Good	Presence	Tawny Owl
08/02/2022	2	2.4254596	41.7621536	Thick	Holy oak, Pine	Good	Presence	Tawny Owl
08/02/2022	3	2.4334858	41.7627538	Thick	Holy oak	Good	Presence	Tawny Owl
08/02/2022	4	2.4400367	41.7626258	Thick	Holy oak	Good	Presence	Tawny Owl
08/02/2022	5	2.4475848	41.7623082	Semi open	Beech	Good	Presence	Tawny Owl
08/02/2022	6	2.4528701	41.7569023	Semi open	Beech, Pine	Good	Presence	Tawny Owl
08/02/2022	7	2.4642320	41.7553874	Open	Beech, Pine	Good	Presence	Tawny Owl
08/02/2022	8	2.4679941	41.6620641	Thick	Beech	Good	Presence	Tawny Owl
08/02/2022	9	2.4649290	41;7677031	Semi open	Beech, Pine	Good	Presence	Tawny Owl
21/02/2022	10	2.4622431	41,7736251	Semi open	Beech	Windy	Presence	Tawny Owl
21/02/2022	11	2.4541364	41.7790983	Thick	Beech	Windy	Presence	Tawny Owl
21/02/2022	12	2.4536194	41.7874943	Thick	Beech	Windy	Presence	Tawny Owl
21/02/2022	13	2.4489722	41.7934882	Semi open	Beech	Windy	Presence	Tawny Owl
21/02/2022	14	2.4471516	41.7996683	Thick	Beech, Pine	Windy	Presence	Tawny Owl
21/02/2022	15	2.4394517	41.8026346	Semi open	Beech	Windy	Absence	Tawny Owl
21/02/2022	16	2.4316806	41.8035815	Semi open	Beech	Windy	Absence	Tawny Owl
15/03/2022	17	2.4196424	41.8040687	Semi open	Holy oak	Strong wind	Absence	Tawny Owl
15/03/2022	18	2.4138952	41.8087473	Thick	Holy oak	Strong wind	Absence	Tawny Owl
15/03/2022	19	2.4113706	41.8130446	Thick	Beech, Holy oak	Strong wind	Presence	Tawny Owl
15/03/2022	20	2.4086190	41.8197815	Semi open	Holy oak	Strong wind	Absence	Tawny Owl
15/03/2022	21	2.4091100	41.8265330	Semi open	Beech, Holy oak	Strong wind	Absence	Tawny Owl
29/03/2022	22	2.4074345	41.8304982	Open	Holy oak	Good	Absence	Tawny Owl
29/03/2022	23	2.4038135	41.8369573	Semi open	Pine	Good	Presence	Tawny Owl
29/03/2022	24	2.4066868	41.8457745	Thick	Holy oak, Pine	Good	Presence	Tawny Owl

The census was done between the 08/02/2022 and the 29/03/2022.

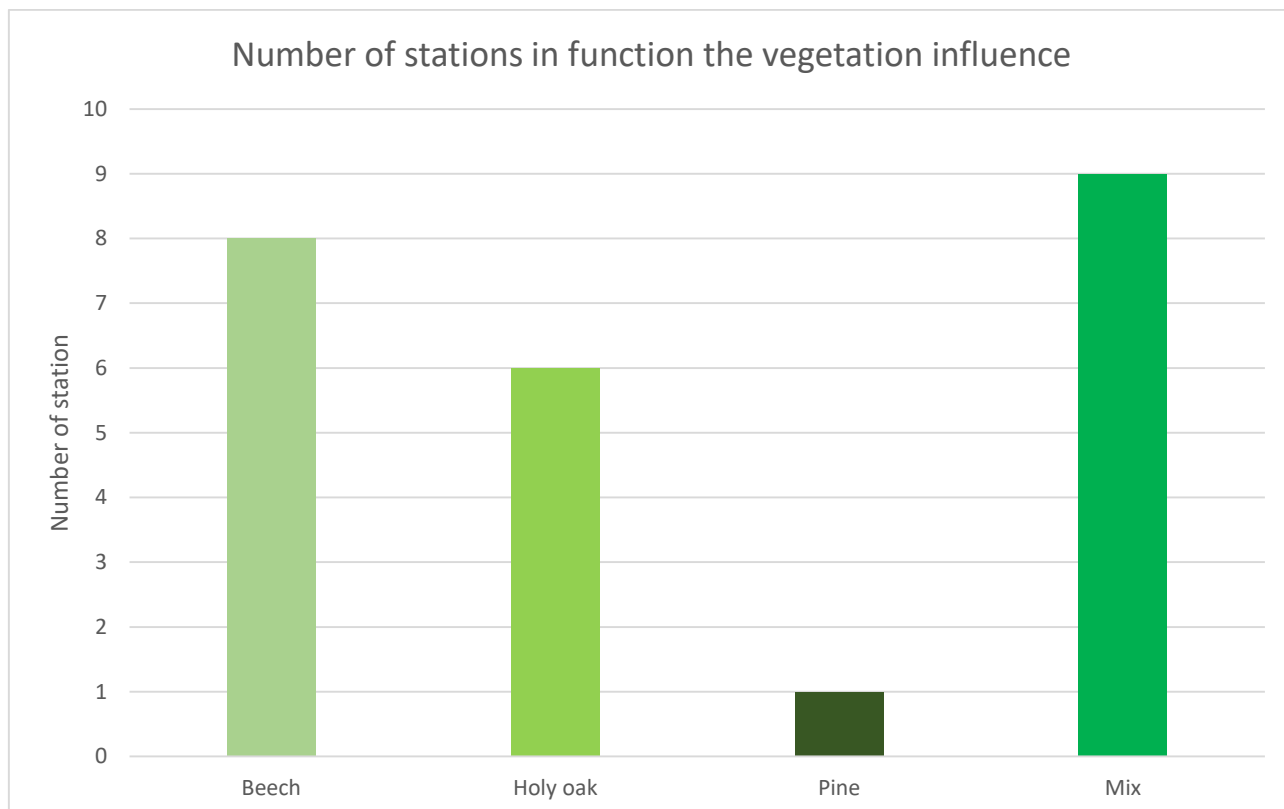
The Tawny owl have been found on seventeen of the twenty-four stations (70%).



50 % of the stations (12 out of 24) are Semi open and 9 out of 24 stations (42%) are thick. Only a few stations and 2/24 (8%) are open.



Three kinds of trees are prominent in Montseny. Beech, Holy oak and Pine. 9 out of 24 stations (38%) have a mix of these trees, 8/24 stations (33%) have Beech tree influence, 6/24 (25%) and 1/24 (4%) have Holy oak and Pine influences.



Map of owl census station in 2022

