

BIBLIOMETRIC ANALYSIS OF GEOGRAPHICAL HUNTING STUDIES IN SPAIN (1978-2015)

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I. INTRODUCTION

Spain is one of the main exponents of hunting activity in the European context. According to the Federation of Associations for Hunting and Conservation of the European Union (FACE, 2010), Spain registers 980,000 hunters, being the second country with more hunters after France. The percentage of hunters in relation with the Spanish population is 2,21 %. Regarding the area, about 43,019,411 ha are hunting lands, which means an 85,02 % of the national territories. Economically speaking, hunting makes 3,635,756,996€ and produces about 54,000 jobs (Garrido, 2012). Finally, the environmental and faunistic diversity are reflected as well in the existence of a complex hunting catalogue composed by 50 species and a wide spectrum of hunting modalities. Some of the most remarkable captures would be deer and wild boars in big game hunt, and rabbit, thrush, pigeon and quail in small game hunt.

I.1. Hunting as a research topic in Spain

Due to its social and territorial implications, hunting presents a spatial dimension hence it can be considered as a geographic issue and the distribution it creates can be scientifically studied (López Ontiveros, 1991 a, 1992 a and 1993). According to López Ontiveros (1992 a) in order to fully comprehend hunting in geographical terms, three complementary fields have to be considered: nature, leisure geography and agrarian geography. The duality of leisure and agrarian hunting in a rural environment was already discussed in Diaz Moreno (1979).

II. EARLY GEOGRAPHICAL RESEARCH ON HUNTING IN SPAIN

The main part of geographical research regarding hunting in Spain took place at the end of the 20th century, even though there are former researches that include it in more generic sections (Rosselló Verger, 1964).

The destructive consideration towards hunting found in the initial geographical researches may derive from the influences of French authors such as Jean Brunhes or Eliseé Reclus who criticized in the early 20th century the destructive facet of hunting linked to practical, commercial and sportive aims. Even Brunhes develops the concept of *Raubwirtschaft* (plundering economy) which was formerly introduced by the German geographer Ernst Friedrich. González Pellejero (1993) also mentions this devastating conception of hunting in the first geographical thesis that covers the relation between hunting – resources – natural – territory.

The trend started by López Ontiveros was followed by a group of geographers from the universities of Cordoba, Extremadura, Oviedo, Madrid, Jaén and Balearic Islands. The main research topics were the geography of hunting, hunting tourism, agrarian hunting and hunting conflicts (López Ontiveros and Mulero Mendigorri, 1997)

The first researches fully devoted to hunting in Spain from a geographical point of view are registered in the latter half of the 70's in Universidad de Córdoba. Valle Buenestado (1978) was the first Spanish geographer to sense the relevance of hunting. Díaz Moreno (1983) presented *Caza y usos del espacio rural en España* (Hunting and use of the rural land in Spain) in the VI Geographical Colloquium during October of 1979.

López Ontiveros (1981) coined the concept of *Boom Cinergético* (Hunting Boom) in reference to the great peak of the hunting activity in Spain that features an increment of hunting licenses from the end of the Spanish Civil War, an increase of private hunting preserves and a remarkable economical repercussion of hunting.

III. BIBLIOMETRIC ANALYSIS OF GEOGRAPHICAL PUBLICATIONS ABOUT HUNTING IN SPAIN

It is intended to analyze the publications about hunting in Spain between 1978 and 2015 by means of an extensive and detailed bibliographic corpus in order to analyze the scientific production in this field. The criteria adopted to select the publications are based on:

- I. Researches signed by geographers
- II. Researches with the main focus on hunting.

The main sources have been:

- I. Geographical journals included in the catalogue of DICE
- II. Minutes of Colloquium of Rural Geography in the group AGE.
- III. Leading papers, specifically López Ontiveros et al (1990) and Sarmiento (1991)
- IV. Journal *Agricultura y Sociedad* issue 58 (Gómez –dir–, 1991) monographic on hunting.
- V. TESEO
- VI. DIALNET
- VII. GOOGLE SCHOLAR

With this research, a total of 150 publications about geography and hunting have been found.

III.1. Topic distribution of publications

The topics defined are as follows:

- a) Overall publications: considered leading publications about the geographical research of hunting in Spain which cover wide periods of time and generally include the whole Spanish territory. In this section there are 17 publications.
- b) Geography of hunting species: focused on the species involved in both big and small game hunting in Spain. In this section there are 10 publications.
- c) Hunting and agrarian geography: centered on the transformation of rural land to improve hunting. There are 64 publications about this topic.
- d) Geography of hunting territories: related to the social and/or territorial aspects of hunting and, more precisely, about leisure hunting. The main part of the 46 publications found deal with this issue regionally.
- e) Hunting tourism: includes all the activities done by people who travel to a certain place attracted by hunting. There is a compilation of 13 publications.

III.2. Temporal distribution of publications

The publications included in the present paper cover a period of time between late 70s and 2015 (Table 1).

Table 1
PUBLICATIONS ABOUT THE GEOGRAPHY OF HUNTING
(1978 - 2015)

Years	Publications	Years	Publications	Years	Publications
1978	1	1990	3	2003	6
1979	0	1991	24	2004	3
1980	0	1992	3	2005	3
1981	1	1993	5	2006	4
1982	1	1994	3	2007	4
1983	5	1995	2	2008	3
1984	4	1996	2	2009	6
1985	3	1997	4	2010	5
1986	5	1998	1	2011	4
1987	6	1999	2	2012	2
1988	6	2000	1	2013	7
1989	6	2001	2	2014	7
		2002	3	2015	3
Total					150

III.3. Territorial field

Publications have been analyzed by territorial field, considering it as the autonomous region where publications were made. There is a group of studies that refer to the whole nation which are classified in a general category labeled Spain (Table 2)

Tabla 2
TERRITORIAL DISTRIBUTION OF PUBLICATIONS ABOUT THE GEOGRAPHY OF HUNTING (1978 - 2015)

Territorial field	Publications
España - ESP	44
Andalucía - And	44
Castilla La Mancha - CLM	17
Illes Balears - IB	17
Extremadura - Ext	14
Asturias - Ast	7
Madrid - Ma	2
Castilla y León - CL	1
Galicia - Gal	1
Murcia - Mur	1
País Valenciano - Cval	1
País Vasco - PV	1
TOTAL	150

Source: Prepared by the authors based on the information found.

III.4. Publishing source

The sources of publication of the mentioned publications have been structured in five categories: doctoral theses, books, scientific journals, compilations and specialized journals. (Table 3).

Table 3
PUBLISHING SOURCE OF PUBLICATIONS ABOUT THE GEOGRAPHY OF HUNTING (1978 - 2015)

Source	Publications
Doctoral theses	6
Book	19
Journal	50
Compilations	62
Specialized journals	13
Total	150

Source: Prepared by the authors based on the information found.

III.5. Production by authors

All 150 publications in the present paper were written by 71 different researchers (Table 4).

Table 4
PRODUCTION BY AUTHORS

Author	pub.	Author	pub.	Author	Pub.
López Ontiveros	28	Rios-Saldaña	2	Melchor	1
Martínez Garrido	27	Vargas	2	Moraleda	1
Mulero	15	Vidal	2	Naranjo	1
Barceló	15	Villafuerte	2	Obiol	1
Araque	13	Aguiló, J. A.	1	Ocaña	1
Rengifo	10	Arroyo	1	Ortega	1
Crespo	10	Balsara	1	Ortigosa	1
Alvarado	8	Bover, P.	1	Osuna	1
Valle	8	Campos	1	Palmer, M.	1
Cecilia	6	Cantero	1	Pérez	1
Seguí	6	Cañadilla	1	Pons, G. X.	1
Fernández	5	Castelló, M.	1	Rivera	1
Sánchez, J.D.	5	Cooke	1	Sánchez	1
García, F	4	Delibes-Mateos	1	Sánchez Urrea, J.	1
Bajo	3	Díaz	1	Sánchez, M.A.	1
Moya	3	Doctor	1	Sánchez, M.J.	1
Binimelis	2	Gallego, V. J.	1	Santandreu	1
Brunet	2	Garcia, A	1	Sanz	1
García Amengual, A	2	García, B	1	Serrano	1
Garrido	2	García, E.L	1	Silva	1
Grimalt	2	Garzón	1	Torija	1
Leco	2	Gómez	1	Urzainki	1
Sarmiento	2	González	1	Utanda	1
Castro	2	Manera, J.	1		

Source: Prepared by the authors based on the information found.

IV. CONCLUSION

All publications analyzed show that hunting is an issue of research in the field of geography in Spain. Even though, it should be highlighted that all researches happen to be recent and that their relevance is relative in terms of comparison to other scientific fields as well as in relation to other topics in the field of geography itself. In fact, doctoral theses dealing

with the geography of hunting are scarce, and likewise the contributions on the topic in the biannual Colloquium of Rural Geography hosted in Spain by the Group of Rural Geography from AGE.

Taking into consideration both social and territorial dimensions of hunting in Spain, it can be said that, in general, it is far from being a proportionally addressed in the geographical research due to the irregularity of publications, the inexistence of clear research issues and the lack of territorial homogeneity.

Even so, hunting is present in the rural environment and helps preserve habitats and species, and in the leisure dimension, it contributes to rural economy which has raised the interest of researchers from regions where this activity is important. The most recurring themes collide with agrarian geography and hunting territories, although the most recent researches lead towards concise issues such as hunting tourism whilst economical researches remain in the background.

Given this perspective, hunting is a prolific topic to be studied in geography considering its transversal condition towards other rural thematic, either from a physical or human point of view. Furthermore, the main primary sources of information regarding the hunting activity are barely researched. In the same manner, in the main part of Spanish regions, there are few precedents of classification of patrimonial elements linked to hunting, analysis of social profile of hunters, hunting associations, modalities and species, amongst other relevant issues.

To sum up, there are many approaches regarding the scientific research of hunting and it represents an endless field of study for geographers to develop.