

SMALL MAMMALS SPECIES (*MAMMALIA*, *RODENTIA*, *INSECTIVORA*), THE COLLECTION OF THE NATURAL HISTORY MUSEUM, IAȘI

BY

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In the present paper we present the small mammals species (*Rodentia*, *Insectivora*) from THE Museum of Natural History, Iasi. The 43 species of small mammals that exist in Romanian fauna, in of those Museum collection are presented skulls belonging to 33 species, which were collected in Romania from different biotops.

Introduction

The small mammals collection of the Museum of Natural History, Iasi was made by Viorica Simionescu and represented the results of over 30 years of collectings effectuated in different places of Romania. (Fig.1.).

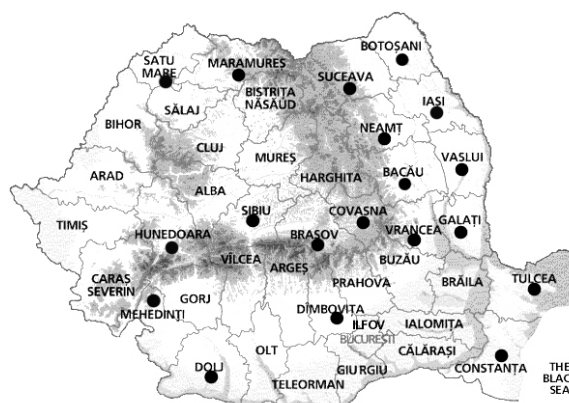


Fig1. Small mammals collecting areas

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The small mammals were collected in a period between 1950- 1983.

Concerning this, the first collection was effectuated for *Arvicola terrestris* L., 1758 species, at Întorsura Buzăului, Covasna district, in 1950 and the last collection was effectuated for *Rattus rattus* L., 1758 species in the Mehedinți district, in 1983.

Results

Our collection is formed by 3477 of skulls of small mammals belonging to 24 rodents species and 9 insectivores species and were collected from different biotops: subsistence crop (lucerne, corn,), edge, forest, rush-bed.

Out of these 3477 of skulls, 2962 belonging to *Rodentia*, and 515 belonging to *Insectivora*. Through these skulls, the most representative are the male skulls (the right number of them could not be indicated because there are skulls belonging to *Microtus arvalis* Pall., 1779 in which the sex is not indicated).

It was effectuated an apportionment by age: juveniles (602 skulls), subadults (914 skulls) and adults (1961 skulls).

The most representative skulls belong to *Mus spicilegus* Petenyi, 1882 - rodents species (780 skulls), and *Sorex araneus* - insectivores species (148 skulls), respectively. (Table 3, 4)

We are presenting in the next tables the species of small mammals and the place of collectings.

In side of the mention the species *Talpa caeca* Savi, 1822 in the table and in collection this species wasn't recognised by the International Scientific Community as a present species in our country. (Murariu, 2000)

Conclusions

The Museum of Natural History collection is formed by 33 species from two orders and nine families.

All mammals were collected in different places of the eastern Romania, from 5 m altitude (Danube Delta) to 2000 m altitude (Călimani mountains).

The small mammals collected from mountainous zone are, *Clethrionomys glareolus* Schreber, 1780, *Microtus agrestis* Pall., 1779, *Apodemus agrarius* Pall., 1771, *Apodemus flavicollis* Melchior, 1834, *Dryomys nitedula* Pall., 1779, *Muscardinus avellanarius* L., 1758, *Myoxus glis* L., 1758, *Sorex araneus* L., 1758 and *Sicista betulina* Pall., 1773.

The most numerous species of small mammals belong to *Mus spicilegus* Petenyi, 1882, a species with 780 skulls.

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Table 1. The rodents and insectivores species presented in Museum of Natural History, Iași and the places in which they were collected

No.	Species	Collecting areas																								
		Bacău	Baia Mare	Botoșani	Brașov	Călimani	Ceahlău	Constanța	Covasna	Craiova	Dâmbovița	D. Dunarii	Dolj	Durău	Galați	Hunedoara	Iași	L. Roșu	Maramureș	Mehedinți	Neamț	Rarău	Satu Mare	Sibiu	Suceava	Vaslui
1	<i>Sciurus vulgaris</i> Linnaeus, 1758														*					*						
2	<i>Spermophilus citellus</i> Linnaeus, 1766													*		*										
3	<i>Cricetus cricetus</i> Linnaeus,1758	*		*										*		*										
4	<i>Cricetulus migratorius</i> Pallas, 1773															*										
5	<i>Clethrionomys glareolus</i> Schreber, 1780	*				*	*	*																	*	
6	<i>Arvicola terrestris</i> Linnaeus, 1758		*		*				*														*	*		

No.	Species	Collecting areas																	
		Bacău	Baia Mare	Botoșani	Brașov	Călimani	Ceahlău	Constanța	Covasna	Craiova	Dâmbovița	D. Dunarii	Dolj	Durău	Galați	Hunedoara	Iași	L. Roșu	Maramureș
7	<i>Pitymys subterraneus</i> Sélys-Longchamps, 1836																		
8	<i>Microtus agrestis</i> Linnaeus, 1761						*									*			
9.	<i>Microtus arvalis</i> Pallas, 1779	*	*				*		*	*		*					*		
10	<i>Ondatra zibethicus</i> Linnaeus, 1766																*		
11	<i>Rattus norvegicus</i> Barkenhout, 1769	*							*						*	*			
12	<i>Rattus rattus</i> Linnaeus, 1758																	*	
13	<i>Mus musculus</i> Linnaeus, 1758				*							*	*		*	*	*		

No.	Species	Collecting areas																	
		Bacău	Baia Mare	Botoșani	Brașov	Călimani	Ceahlău	Constanța	Covasna	Craiova	Dâmbovița	D. Dunarii	Dolj	Durău	Galați	Hunedoara	Iași	L. Roșu	Maramureș
14	<i>Mus spicilegus</i> Petenyi, 1882	*			*										*	*	*		
15	<i>Apodemus agrarius</i> Pallas, 1771											*					*		
16	<i>Apodemus flavicollis</i> Melchior, 1834	*			*				*					*	*	*	*	*	
17	<i>Apodemus sylvaticus</i> Linnaeus, 1758	*													*		*		
18	<i>Apodemus uralensis</i> Pallas, 1811	*										*			*		*		
19	<i>Micromys minutus</i> Pallas, 1771	*		*								*			*	*	*		
20	<i>Dryomys nitedula</i> Pallas, 1779					*										*	*	*	

No.	Species	Collecting areas																
		Bacău	Baia Mare	Botoșani	Brașov	Călimani	Ceahlău	Constanța	Covasna	Craiova	Dâmbovița	D. Dunarii	Dolj	Durău	Galați	Hunedoara	Iași	L. Roșu
21	<i>Muscardinus avallanarius</i> Linnaeus, 1758	*															*	
22	<i>Myoxus glis</i> Linnaeus, 1766															*		*
23	<i>Sicista betulina</i> Pallas, 1779																	*
24	<i>Sicista subtilis</i> Pallas, 1773														*		*	
25	<i>Erinaceus concolor</i> Martin, 1838								*	*	*		*				*	*
26	<i>Talpa europaea</i> Linnaeus, 1758	*							*			*					*	*
27	<i>Talpa caeca</i> Savi, 1822								*									

No.	Species	Collecting areas																
		Bacău	Baia Mare	Botoșani	Brașov	Călimani	Ceahlău	Constanța	Covasna	Craiova	Dâmbovița	D. Dunării	Dolj	Durău	Galați	Hunedoara	Iași	L. Roșu
28	<i>Sorex araneus</i> Linnaeus, 1758						*							*			*	
29	<i>Sorex minutus</i> Linnaeus, 1766																*	
30	<i>Neomys anomalus</i> Cabrera, 1907																*	
31	<i>Crocidura leucodon</i> Hermann, 1780														*	*	*	
32	<i>Crocidura suaveolens</i> Pallas, 1811	*						*									*	
33	<i>Crocidura russula</i> Hermann, 1780															*		

Table 2. The repartition of skulls on age groups

No.	Species	Age groups		
		Juveniles	Subadults	Adults
1	<i>Sciurus vulgaris</i> Linnaeus, 1758	0	1	5
2	<i>Spermophilus citellus</i> Linnaeus, 1766	3	6	20
3	<i>Cricetus cricetus</i> Linnaeus, 1758	1	0	10
4	<i>Cricetulus migratorius</i> Pallas, 1773	0	1	2
5	<i>Clethrionomys glareolus</i> Schreber, 1780	76	31	74
6	<i>Arvicola terrestris</i> Linnaeus, 1758	3	1	5
7	<i>Pitymys subterraneus</i> Sélys-Longch., 1836	3	8	16
8	<i>Microtus agrestis</i> Linnaeus, 1761	5	0	6
9	<i>Microtus arvalis</i> Pallas, 1779	121	167	347
10	<i>Ondatra zibethicus</i> Linnaeus, 1766	0	0	2
11	<i>Rattus norvegicus</i> Barkenhout, 1769	23	42	58
12	<i>Rattus rattus</i> Linnaeus, 1758	0	2	2
13	<i>Mus musculus</i> Linnaeus, 1758	46	51	107
14	<i>Mus spicilegus</i> Petenyi, 1882	164	279	337
15	<i>Apodemus agrarius</i> Pallas, 1771	2	38	99
16	<i>Apodemus flavicollis</i> Melchior, 1834	16	50	89
17	<i>Apodemus sylvaticus</i> Linnaeus, 1758	47	121	178
18	<i>Apodemus uralensis</i> Pallas, 1811	7	19	43
19	<i>Micromys minutus</i> Pallas, 1771	5	28	111
20	<i>Dryomys nitedula</i> Pallas, 1779	0	0	3
21	<i>Muscardinus avellanarius</i> Linnaeus, 1758	17	0	10
22	<i>Myoxus glis</i> Linnaeus, 1766	9	0	5
23	<i>Sicista betulina</i> Pallas, 1779	0	0	1
24	<i>Sicista subtilis</i> Pallas, 1773	0	13	26
25	<i>Erinaceus concolor</i> Martin, 1838	3	6	69
26	<i>Talpa europaea</i> Linnaeus, 1758	0	0	68
27	<i>Talpa caeca</i> Savi, 1822	0	0	8
28	<i>Sorex araneus</i> Linnaeus, 1758	46	2	100
29	<i>Sorex minutus</i> Linnaeus, 1766	5	42	30
30	<i>Neomys anomalus</i> Cabrera, 1907	0	0	7
31	<i>Crocidura leucodon</i> Hermann, 1780	0	6	81
32	<i>Crocidura suaveolens</i> Pallas, 1811	0	1	36
33	<i>Crocidura russula</i> Hermann, 1780	0	0	5
34	Total	602	914	1961

Table 3. Abundance and dominance of rodents species

No.	Species	Number of skulls	%
1	<i>Sciurus vulgaris</i> Linnaeus, 1758	6	0.20
2	<i>Spermophilus citellus</i> Linnaeus, 1766	29	0.97
3	<i>Cricetus cricetus</i> Linnaeus, 1758	11	0.37
4	<i>Cricetulus migratorius</i> Pallas, 1773	3	0.10
5	<i>Clethrionomys glareolus</i> Schreber, 1780	181	6.11
6	<i>Arvicola terrestris</i> Linnaeus, 1758	9	0.30
7	<i>Pitymys subterraneus</i> Sélys-Longch., 1836	27	0.91
8	<i>Microtus agrestis</i> Linnaeus, 1761	11	0.37
9	<i>Microtus arvalis</i> Pallas, 1779	635	21.43
10	<i>Ondatra zibethicus</i> Linnaeus, 1766	2	0.06
11	<i>Rattus norvegicus</i> Barkenhout, 1769	123	4.15
12	<i>Rattus rattus</i> Linnaeus, 1758	4	0.13
13	<i>Mus musculus</i> Linnaeus, 1758	204	6.88
14	<i>Mus spicilegus</i> Petenyi, 1882	780	26.33
15	<i>Apodemus agrarius</i> Pallas, 1771	139	4.69
16	<i>Apodemus flavicollis</i> Melchior, 1834	155	5.23
17	<i>Apodemus sylvaticus</i> Linnaeus, 1758	346	11.68
18	<i>Apodemus uralensis</i> Pallas, 1811	69	2.32
19	<i>Micromys minutus</i> Pallas, 1771	144	4.86
20	<i>Dryomys nitedula</i> Pallas, 1779	3	0.10
21	<i>Muscardinus avallanarius</i> Linnaeus, 1758	27	0.91
22	<i>Myoxus glis</i> Linnaeus, 1766	14	0.47
23	<i>Sicista betulina</i> Pallas, 1779	1	0.03
24	<i>Sicista subtilis</i> Pallas, 1773	39	1.31
25	Total	2962	-

Table 4. Abundance and dominance of insectivores species

No.	Species	Number of skulls	%
1	<i>Erinaceus concolor</i> Martin, 1838	78	15.14
2	<i>Talpa europaea</i> Linnaeus, 1758	68	13.20
3	<i>Talpa caeca</i> Savi, 1822	8	1.55
4	<i>Sorex araneus</i> Linnaeus, 1758	148	28.73
5	<i>Sorex minutus</i> Linnaeus, 1766	77	14.95
6	<i>Neomys anomalus</i> Cabrera, 1907	7	1.35
7	<i>Crocidura leucodon</i> Hermann, 1780	87	16.89
8	<i>Crocidura suaveolens</i> Pallas, 1811	37	7.18
9	<i>Crocidura russula</i> Hermann, 1780	5	0.97
10	Total	515	-