DUMITRU MURARIU, PH. D., CORRESPONDING MEMBER OF THE ROMANIAN ACADEMY, DEPUTY DIRECTOR OF "EMIL RACOVIȚĂ" INSTITUTE OF SPELEOLOGY BUCHAREST, AT HIS 75TH BIRTH ANNIVERSARY

SORIN GEACU



Dumitru Murariu was born in Epureni Village (Ungureni Commune), Botoşani County, on the 21st of September, 1940 in a farmer's family with five children (three girls and two boys).

He attended primary and secondary schools in the villages of Epureni, Ungureni and Plopenii Mari (Botoşani County) and high-school in Botoşani ("A.T. Larian" College, 1954–1958). After completing his military service (1958–1961), he was appointed teacher at the Epureni village school.

A lover of nature, Dumitru Murariu graduated at the Faculty of Biology-Geography, Biology-Zoology Section, "Al. I. Cuza" University in Iaşi. His graduation thesis (June 1966), "General characters, systematics, spread and some working models on the representatives of sub-order Ensifera in Moldavia", supervised by prof. Filimon Cârdei, had 132 pages, 100 drawings, 19 maps and 13 photos.

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¹ Unless otherwise stated, the works mentioned in this paper are in Romanian.

Between 1966 and 1969 he worked as biologist-bacteriologist at Pantelimon TBC Hospital in Bucharest.

From 1969 to 2014 he worked at "Grigore Antipa" National Museum of Natural History in Bucharest, achieving all scientific and managerial positions in the hierarchy: junior museographer, senior museographer (1971), head of the Restauration-Taxidermy Section (1976–1988) and of the Vertebrate Section (1986–1988), director of the Museum (1988) and general director (1990–2014). Since February 25, 1991 he is a senior researcher.

As the Museum did not have a mammalogist, M. Băcescu, member of the Romanian Academy, assigned D. Murariu to the study of mammals, guiding his scientific progress with great tact and discretion.

Between 1971–1975 he was a Ph.D. student of the Faculty of Biology, University of Bucharest. His doctoral thesis "The tegumentary glands of insectivores (Mammalia) in Romania. Anatomy, histology and histochemistry", (supervised by Prof. Gheorghe T. Dornescu), was presented on July, 11, 1975. Ph.D. commission members: Acad. Olga Necrasov (Faculty of Biology-Geography, "Al. I. Cuza" University of Iaşi), Acad. Mihai Băcescu ("Grigore Antipa" Natural History Museum, Bucharest) and Reader dr. Dumitru Mişcalencu (Faculty of Biology, University of Bucharest).

Dumitru Murariu benefited from a one-year Fulbright study grant in the U.S. (September 1975–September 1976), where he specialized in problems of mammalian systematics, morphology and ecology, but also in the techniques of animal naturalization and conservation. He had the opportunity to study at some prestigious scientific institutions: the Smithsonian Institute – Washington D.C., the Natural History Museum of Pittsburgh (Pennsylvania) and Kansas State University in Lawrence. He continued his documentation at other Natural History Museums e.g. the Universities of Colorado (Boulder), Utah (Salt Lake City), California (Berkley), Cheyenne-Wyoming, Los Angeles, San Diego, Chicago (Illinois), New York and at the Museum of Earth Sciences (Provo-Utah).

D. Murariu began his wide-ranging scientific activity at Pantelimon Hospital, being co-author of an article published in "Ftiziologia" journal (ANAGNOSTE *et al.*, 1968).

Hard-working and fully devoted to his scientific activity, Murariu has produced over 200 works, more than half of them being fundamental science. Some of these works have been published abroad: Acta Zoologica Fennica (MURARIU, 1985), Natural History Collections, Mammal Review (ARNOLD *et al.*, 2011, CHIŞAMERA *et al.*, 2014), Ökologie und Schutz des Feldhamster (Murariu, 1998), Journal of Mammalogy (Wilson et al., 2011) etc., the majority in French and English and only 70 in Romanian. Most of them appeared in the Museum's scientific journal – *Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa"*.

The focus of his studies is mammalian anatomy, histology, genetics, geographical distribution, ecology, conservation and nomenclature.

He contributed to the elaboration of 4 fascicles (790 pages) of the "Fauna României" academic series (Romanian Academy Publishing House), namely 1, 2, 4 and 5 in vol. XVI, devoted to mammals, either as single author (Insectivora, Lagomorpha, Cetaceea, Artiodactyla and Perissodactyla) (MURARIU, 2000, 2004) (or in collaboration for the chapters on rodents and carnivores (POPESCU *et al.*, 2001, MURARIU & MUNTEANU, 2005). In the same series ("Fauna României" – Romania's Fauna), D. MURARIU (2014) published in English the first Fascicle on insectivores (163 p.)

In 2008, the Romanian Academy Publishing-House published the first bibliography on mammals in Romania (MURARIU & GEACU, 2008).

Dr. Murariu worked many years at the elaboration of a collection "From the World of Mammals" (Din Lumea Mamiferelor), devoted to the mammals of the Planet. This is a collection of six volumes (1,451 p.) The first volumes (Terrestrial mammals) appeared in 1989 (208 p.) and 1993 (272 p.). Next, volumes on arboricolous (1998, 252 p.), underground (2010, 193 p.), flying (2011, 286 p.) and aquatic (2012, 240 p.) mammals. All but volume 3 (Curtea Veche Publishing-House, Bucharest) were edited by the Publishing-House of the Romanian Academy (Bucharest)

The two collections represent the most valuable corpus of works in the Romanian scientific literature devoted to these vertebrates.

Dumitru Murariu was the Romanian collaborator to the *Atlas of Mammals in Europe* (Academic Press, 1999, 484 p., London).

In 2003, he had the satisfaction of seeing the publication of a massive volume (521 p.) on *Chiroptera in Romania*, he co-authored, and of a beautiful album "*The Mammals of Africa. Portraits in Nature*" (80 p.).

In 2007 he published a work on "The protection of bats and forests – a mutually beneficial relation". D. Murariu was co-author and coordinator of a volume published in English "The first ecological reconstruction of underground environment from Romania. Cioclovina Uscata Cave". He was also a member of the "Eurobats" Consultative Committee of the European Convention and annual rapporteur (since 1998) for the situation of the Chiropteran fauna in Romania.

On his initiative, the "Grigore Antipa" National Museum of Natural History organized in 2005 the launching of "*The Red Book of Vertebrates in Romania*" (260 p.), one of the authors (Chap. on Mammals, 73 p.) being Murariu himself. We would recall an important study (120 p). on the "*Commented list of the mammal species susceptible for being included in the Red Book of the Romanian Fauna*" published by Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa" (tome XLII) in 2000.

He supplied data for the "Red Book of Mammals in Europe" and for "The Red List of plant and animal species in the Danube Delta Biosphere Reserve" (2000). In 2008, he published jointly with Mariana Cuzic "Ghidul ilustrat al mamiferelor sălbatice din România" (An Illustrated Guide to Wild Mammals in Romania).

Museological problems discussed in many of his works deal with the educational, scientific and financial value of natural sciences museum collections, the place and role of casts and auxiliary materials in museums, the current and prospective role of museums in general and of natural sciences ones in particular.

Dr. Murariu supervised the publication of the numerous editions of the Antipa Museum guide-book, in several languages, since 1981, and of the catalogue of the Museum's collection of mammals (as of 1986).

Scientific communications or museology papers presented at international congresses and conferences in: Hungary, USA, Russia, Finland, Italy, Austria, Spain, United Kingdom, Germany, Sweden, Croatia, Ukraine, Portugal, Switzerland, Greece, Bulgaria, Norway, Lithuania, Poland, Slovakia, Slovenia and Luxembourg.

Research results reported at the annual scientific sessions of the "Antipa" Museum N.H. and of the other natural sciences museums in Romania: Aiud, Arad, Bacău, Carei, Constanța, Craiova, Deva, Dorohoi, Focşani, Galați, Oradea, Ploiești, Satu Mare, Sibiu, Sighetu Marmației, Suceava, Timișoara, Tulcea and Vatra Dornei.

Field investigations conducted in: Banat, Maramureş, the Romanian Plain, Cheia-Prahova area, the counties of Vrancea, Buzău, Argeş, Satu Mare, Ilfov and Teleorman, the Danube Delta, the Lower Ialomița Valley, the Rodna Mts., the Southern Carpathians, the Dobrogea Plateau, the Plain of Moldavia, the Ieru Plain, etc.

Dumitru Murariu was the initiator of a histology and histochemistry laboratory and later supported the organization of the molecular genetic research at the Bucharest's Natural History Museum – of great interest for modern taxonomy studies and for determining the post-glacial geographical distribution of some invertebrate and vertebrate species. He firstly attested in the Bucharest Museum's history a number of 12 museologists as researchers, since 1991.

He spared no effort and time to modernize "Grigore Antipa" National Museum of Natural History. As its director, he attained two major goals for the Museum: to be declared a national museum (1991), and to have it passed from the Ministry of Education and Research to the Ministry of Culture (2003). He succeeded to obtain that the Museum's scientific activity pass under the aegis of the Romanian Academy, a proposal accepted both by the Ministry of Culture and the Cults (June 26, 2006) and the Romanian Academy (August 15, 2006).

His endeavors have in view to make the Museum, which holds an exceptional heritage, to look and function at the level of the 21st century. In early 2009, the Museum was closed for the reorganization and modernization the basic exhibition (costs: 11 mill. euro); reopening was scheduled for September 15, 2011.

Dr. Murariu held over 85 conferences in schools, at the Children's Palace, and at the Faculties of Biology, Geography and Veterinary Medicine, popularizing the Museum's zoological expeditions and a zoological research work. In his 25 years of his directorship, Murariu opened the traditional public lectures with topics from biology or suggested by visitors.

In forty years of activity he gave over 140 interviews on the radio-TV or in newspapers (Cotidianul, Evenimentul Zilei, Jurnalul Naţional, Libertatea, România Liberă, Metropola, Curierul Naţional, Bucureşti), regarding the Museum's activity, novelties, temporary exhibitions, scientific collections, the life and work of prestigious naturalists (Gr. Antipa, M. Băcescu, D. Voinov, M. Constantineanu, P. Bujor, C. Darwin, K. Linné and L. Buffon). D. Murariu organized the Museum's scientific expeditions in Indonesia, Brazil, Tunisia, Morocco and Turkey. These have enriched the Museum's collections with thousands of biological species, among which 25 new in science.

Acknowledging his research work and managerial achievements, Dumitru Murariu was awarded several prizes by the Ministry of Culture and the Cults: "Mihai Băcescu" Prize (2001, 2002) and "Grigore Antipa" Prize (2003, 2004). At the beginning of 2004 he received the Order Cultural Merit in the degree of Officer.

Between 1992 and 1994 he was Associate Professor at the Technical University of Constructions in Bucharest, the Faculties of Installations, Hydrotechnics and Civil Engineering. His lectures underpinning the Principles of Ecology, Environmental Protection and Conservation of Biodiversity.

Occasionally, Murariu's lectures were organized by museographers, conservationists and restaurateurs from various institutions: the Centre for Culture and Art Improvements, Centre for Post-Undergraduate and Post-academic Training of the Ministry of Culture and the Cults, the Centre for Training the Culture-related staff of the Ministry of Culture and of the National Heritage.

Since 2000, Dumitru Murariu has been an associate professor – scientific supervisor of Ph.D. students in Biology (Zoology) at the Faculty of Biology, University of Bucharest. He coordinates the work of numerous doctoral candidates from Romania and abroad. He stood on numerous commissions granting Ph.D. of Biology titles at the Universities of Bucharest, Iaşi, Cluj-Napoca, Constanța, and Chişinău (Republic of Moldova).

His wide-ranging and fruitful scientific achievements, as well as the outstanding managerial results obtained at "Grigore Antipa" Natural History Museum entitled his election as corresponding member (March 26, 2006) by the Section of Biological Sciences of the Romanian Academy. Dumitru Murariu is a member of the Association of Naturalist Museographers in Romania (1993), Association of Scientists in Romania (1995), Romanian Federation of Chiropterology (whose president he has been for 15 years now).

Membership of international scientific bodies: Society of American Mammalogists (life member, since 1976), Commission for the Conservation of Species (Rodentia) of the International Union for the Conservation of Nature (between 1987–1990), National Geographic Society (life member, since 1995), Nature Protection and Biodiversity of the European Environmental Agency (since 1995), International Council of Museums (since 1996) etc.

In 2009, D. Murariu donated 129 issues of the Journal of Mammalogy (1976–2007) to the Library of the Romanian Academy, as the only subscriber in Romania of this periodical edited by the American Society of Mammalogists.

Between 1989 and 2014, he was the editor of the prestigious journal "Travaux du Muséum National d'Histoirre Naturelle "Grigore Antipa" and a member (since 1997) on the Honorary Scientific Board of "Artemis – Forest, Hunting, Fishing, Ecology", edited in Chişinău (Republic of Moldova). Since 2008 he has been a member of the Editorial Board of the Romanian Journal of Biology – Zoology, of Oltenia Journal for Studies in Natural Sciences, of Journal of the Danube Delta National Institute of Research and Development, of the Romanian Fauna academic series etc.

Since April 1, 2015 dr. D. Murariu has been a deputy director of the "Emil Racoviță" Institute of Speleology in Bucharest.

With a view to preserving the legacy left by renowned forerunners, he intervened at the Botoşani authorities to take an active stance in the conservation of Grigore Antipa's housing property in that town.

I have always been amazed by the energy and passion he puts in his work, and his fine, elaborate hand-writing bespeaks of a meticulous and very organized person. He possesses a fascinating library for a man of science, and I consider myself to be so very privileged of having had the opportunity of consulting its holdings.

Everything Mr. Dumitru Murariu did and does makes him a true role model. Sincere wishes for Many Happy Returns of the Day!

REFERENCES

- ANAGNOSTE V., DRĂGHICI A., MURARIU D., Tratamentul sputei cu detergenți în mediul alcalin în vederea îmbunătățirii condițiilor de izolare a Mycobacteriilor. Ftiziologia, 2: 133–139, 1968.
- ARNOLD J., HUMER A., HELTAI M., MURARIU D., SPASSOV N., HACKLÄNDER K, *Current status and distribution of golden jackals (Canis aureus L., 1758) in Europe.* Mammal Review, **42** (1): 1–11, 2011.
- CHIŞAMERA G., BUZAN E.V., SAHLEASN T., MURARIU D., ZUPAN S., KRYSTUKEK B., Bukovina blind mole rat Spalax graecus revisited: phylogenetics, morphology, taxonomy, habitat associations and conservation. Mammal Review 44(1):19–29, 2014.
- MURARIU, D., Comparative anatomy of the mammary glands of some European and North American insectivores. Acta Zoologica Fennica, 173, 243–245, 1985.
- MURARIU, D., About the hamster (Cricetus cricetus L., 1758 Cricetidae, Rodentia) in Romania. In: "Ökologie und Schutz des Feldhamster", Halle/Saale: 91–98, 1998.
- MURARIU, D., *Din lumea mamiferelor Mamifere terestre*, Edit. Academiei Române, Bucureşti, **I**, 208 p., 1989.
- MURARIU, D., *Din lumea mamiferelor Mamifere terestre*, Edit. Academiei Române, Bucureşti, **II**, 272 p., 1993.
- MURARIU, D., *Din lumea mamiferelor Mamifere arboricole*, Edit. Curtea Veche, Bucureşti, **III**, 252 p., 1997.

- MURARIU D., *Archives on nature in natural history collections. In*: Nudds J.R. and Pettit Ch.W. (editors), The value and valuation of natural Sciences Collections. Alden Press, Osney Mead, Oxford: 226 pp.
- MURARIU, D., (national coordinator) *Romanian Mammals. In*: The Atlas of European Mammals". Academic Press, London, 484 p., 1999.
- MURARIU, D., *Mammalia, Insectivora*, Fauna României, Edit. Academiei Române, București, **XVI**, *1*: 143 p., 2000.
- MURARIU, D., Mammalia, Lagomorpha, Cetacea, Artiodactyla, Perissodactyla (fără specii actuale), Fauna României, , Edit. Academiei Române, București, XVI, 4: 209 p., 2004.
- MURARIU, D., *Din lumea mamiferelor Mamifere galericole*, Edit. Academiei Române, Bucureşti, **IV**, 193 p., 2010.
- MURARIU, D., *Din lumea mamiferelor Mamifere zburătoare*, Edit. Academiei Române, București, **V**, 286 p., 2011.
- MURARIU, D., *Din lumea mamiferelor Mamifere acvatice*, Edit. Academiei Române, București, **VI**, 240 p., 2012.
- MURARIU, D., *Mammalia, Insectivora*, Fauna României, Edit. Academiei Române, București, **XVI**, *1*: 164 p., 2014.
- POPESCU, A., MURARIU, D., Mammalia, Rodentia, Fauna României, Edit. Academiei Române, Bucureşti, XVI, 2: 214 p., 2001.
- MURARIU, D., DECU, V., GHEORGHIU, V., Bat specific structure over the year in the Gura Ponicovei Cave from South-Western Carpathians (Romania). Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa", București, XLVII: 315–323, 2004.
- MURARIU, D., MUNTEANU, D., *Mammalia, Carnivora*, Fauna României, Edit. Academiei Române, Bucureşti, **XVI**, 5: 223 p., 2005.
- MURARIU D., GHEORGHIU, V., DONE, A., NISTOR, V., Protecția liliecilor și a pădurilor o relație reciproc avantajoasă. Edit. Universitară, București: 135 p., 2007
- MURARIU, D., GEACU, S., *Bibliographia Mammalogica Romaniae*, Edit. Academiei Române, București, 342 p., 2008.
- WILSON D.E, MURARIU D., Book Review Beolens B., Watkins M., Grayson M. (eds.), *The Eponym Dictionary of Mammals*. John Hopkins University Press, Baltimore, Maryland, I–XIII + 574 pp. Journal of Mammalogy, 92 (2): 474–475, 2011.

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