

Genus *Sylvilagus* (Lagomorpha: Leporidae)

^{1,2,3}I. Valentin Petrescu-Mag

¹ Department of Environmental Engineering and Protection, Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania;

² Bioflux SRL, Cluj-Napoca, Romania; ³ University of Oradea, Oradea, Romania.

Corresponding author: I. V. Petrescu-Mag, zoobiomag2004@yahoo.com

Abstract. This short paper aims to present synthetically the genus *Sylvilagus* of the family Leporidae, order Lagomorpha. The genus *Sylvilagus* comprises a diverse group of small to medium-sized rabbits, commonly known as cottontails, distributed across North and South America. These adaptable mammals are characterized by a compact build, prominent hind legs, and a distinctive fluffy white tail resembling a cotton ball. *Sylvilagus* species play vital roles in ecosystem dynamics as herbivores, exhibiting crepuscular behavior and contributing to the balance of various habitats through their feeding habits.

Key Words: behavior, ecological role, ecosystem, Lagomorpha, Leporidae, *Sylvilagus*.

Introduction. The genus *Sylvilagus* encompasses a diverse group of small to medium-sized rabbits, commonly known as cottontails. These mammals are widely distributed throughout North and South America (Diersing & Wilson 2021), adapting to a variety of habitats ranging from grasslands and forests to deserts. *Sylvilagus* rabbits are recognized for their distinctive appearance, behavior, and ecological roles. This short paper aims to present synthetically the genus *Sylvilagus* of the family Leporidae, order Lagomorpha.

Physical characteristics. *Sylvilagus* species typically exhibit a compact and robust build, with a soft, dense fur coat that varies in color to match their surroundings. One distinctive feature is their prominent large hind legs, adapted for quick bursts of speed and agility. The tail is often marked by a fluffy white underside, resembling a cotton ball, hence the common name "cottontail."

Habitat and distribution. The genus *Sylvilagus* is highly adaptable, inhabiting a diverse array of ecosystems, including grasslands, woodlands, meadows, and even brushy areas. Species within this genus are found across a broad geographical range, from Canada and the United States to parts of Mexico and Central and South America (Silva et al 2019).

Species list. The genus *Sylvilagus* includes 18 species and many subspecies with a debatable taxonomic status (French 2020). Here it is a list of some of the recognized species within the *Sylvilagus* genus:

Sylvilagus audubonii - Desert Cottontail;

Sylvilagus bachmani - Brush Rabbit;

Sylvilagus brasiliensis - Tapeti (also known as Forest Rabbit or Brazilian Rabbit);

Sylvilagus floridanus - Eastern Cottontail;

Sylvilagus graysoni - Tres Marias Rabbit;

Sylvilagus insonus - Appalachian Cottontail;

Sylvilagus mansuetus - San Jose Brush Rabbit;

Sylvilagus nuttallii - Mountain Cottontail or Nuttall's Cottontail;

Sylvilagus obscurus - Mexican Cottontail;

Sylvilagus palustris - Marsh Rabbit;

Sylvilagus robustus - Davis Mountains Cottontail;

Sylvilagus transitionalis - New England Cottontail;

Sylvilagus varynaensis - Venezuelan Lowland Rabbit.

Behavior and ecology. *Sylvilagus* rabbits are primarily crepuscular, meaning they are most active during dawn and dusk, which helps them avoid predators. They are herbivores, feeding on a diet of grasses, herbs, and other vegetation. Cottontails are known for their agility and ability to quickly evade predators through rapid sprints and sudden changes in direction (Chapman 1975; Edelman 2019; French 2020).

Reproduction. The reproductive behavior of *Sylvilagus* species is characterized by a relatively high reproductive rate. They have multiple litters in a year, and each litter typically consists of several offspring, called kits. The young are born with their eyes closed and are initially helpless, relying on the mother for care and protection (Chapman 1975; Edelman 2019; French 2020).

Ecological importance. As herbivores, *Sylvilagus* rabbits play a crucial role in shaping plant communities by influencing the distribution and abundance of vegetation through their feeding habits. They are also an important food source for various predators, contributing to the balance of ecosystems. Despite their widespread distribution and adaptability, some species within the *Sylvilagus* genus face threats from habitat loss, predation, and other human-induced pressures (Chapman 1975; Edelman 2019; French 2020). Conservation efforts are essential to ensure the continued survival and well-being of these fascinating creatures in the wild.

Conclusions. The genus *Sylvilagus* comprises a diverse group of small to medium-sized rabbits, commonly known as cottontails, distributed across North and South America. These adaptable mammals are characterized by a compact build, prominent hind legs, and a distinctive fluffy white tail resembling a cotton ball. *Sylvilagus* species play vital roles in ecosystem dynamics as herbivores, exhibiting crepuscular behavior and contributing to the balance of various habitats through their feeding habits.

Conflict of Interest. The author declares that there is no conflict of interest.

References

- Chapman J. A., 1975 *Sylvilagus nuttallii*. Mammalian Species 56:1-3.
- Diersing V. E., Wilson D. E., 2021 Systematics of the mountain-inhabiting cottontails (*Sylvilagus*) from southwestern United States and northern Mexico (Mammalia: Lagomorpha: Leporidae). Proceedings of the Biological Society of Washington 134(1):42-79.
- Edelman A. J., 2019 *Sylvilagus obscurus* (Lagomorpha: Leporidae). Mammalian Species 51(984):128-135.
- French J. H., 2020 Biogeography, morphology, and systematics of the mountain cottontail, *Sylvilagus nuttallii* (Bachman, 1837), Mammalia: Lagomorpha: Leporidae. Dissertations and Theses, Paper 5522.
- Silva S. M., Ruedas L. A., Santos L. H., de Sousa e Silva Jr. J., Aleixo A., 2019 Illuminating the obscured phylogenetic radiation of South American *Sylvilagus* Gray, 1867 (Lagomorpha: Leporidae). Journal of Mammalogy 100(1):31-44.

Received: 19 August 2023. Accepted: 12 October 2023. Published online: 16 November 2023.

Authors:

Ioan Valentin Petrescu-Mag, Department of Environment and Plant Protection, Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine, 3-5 Calea Mănăştur, 400372 Cluj-Napoca, Cluj, Romania; SC Bioflux SRL, 54 Ceahlău St., 400488 Cluj-Napoca, Cluj, Romania; University of Oradea, 1 Universitatii St., 410087 Oradea, Bihor, Romania, e-mail: zoobiomag2004@yahoo.com

This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

How to cite this article:

Petrescu-Mag I. V., 2023 Genus *Sylvilagus* (Lagomorpha: Leporidae). Rabbit Gen 13(1):5-6