

Marmota bobac

English: Bobac marmot
German: Bobak
French: Marmotte bobac
Spanish: Marmota de Siberia



The surface structure
of the skin, 100x

Distribution areas

The bobac marmot lives in the prairie areas of Middle Asia, mostly in Mongolia. In Europe, three varieties of a similar species, *Marmota marmota*, can be found. Different varieties are found in other parts of the world. The total number of known species of marmot is eleven.

Description of the fur

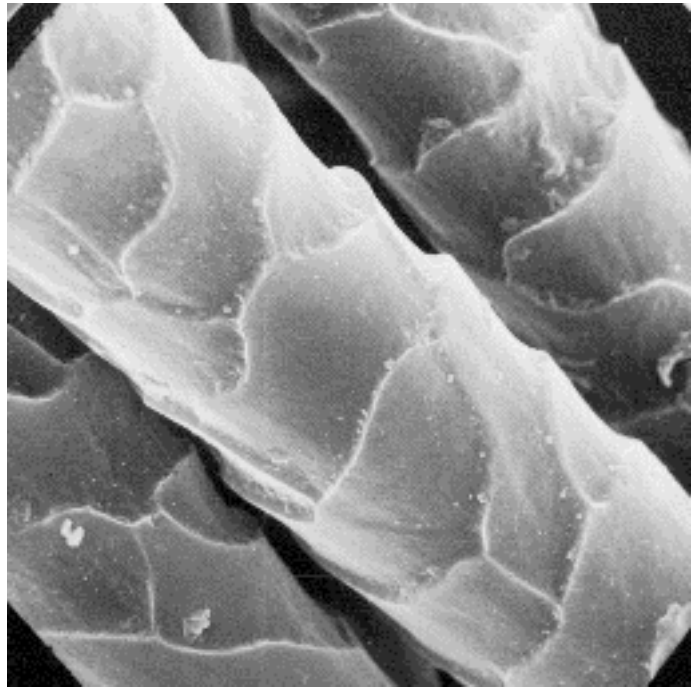
The skin of bobac marmot is about 50 cm long and, in some cases, up to 70cm. The upper part of the coat is light-brown in colour. The tips of the guard hairs are dark; the undercoat layer is also dark-brown. The thickness of the undercoat layer is about 10 to 18 mm; the length of the coarse hairs is from 15 to 30 mm, and in some cases, up to 40 mm.

Structure of the hair

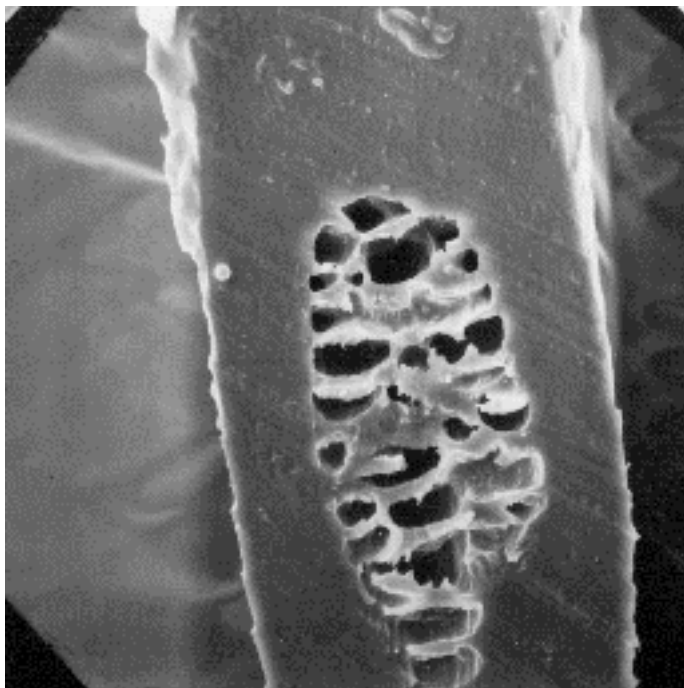
The microscopic structure of the skin surface appears moderately furrowed the hair follicles are narrow with raised edges, and contain clusters of hair shafts usually with between 15 and 25 individual fibres.

The fine fur fibres have a diameter of 15 to 25 μm . The cross-sectional outline is circular at the bottom, and ellipsoidal at the top, of the shaft. The cuticular scales are rounded tile-like in shape with a grooved scale surface and straight scale margins. The medulla is with a grooved scale surface and straight scale margins. The medulla is narrow, unbroken and central symmetrical-shaped in cross-section. The overall medullar structure belongs to the uniserial ladder type with a perforated sheet-like infilling substance.

The cuticular structure of the fine fibres, 2000x



The intermediate fibres have a diameter of between 30 and 50 μm . The cross-section is circular at the bottom, and ellipsoidal in the other parts, of the hair shaft. The cuticular scales are even tile-like or rounded tile-like in shape. The scale surface is finely grooved and the scale margins are straight.

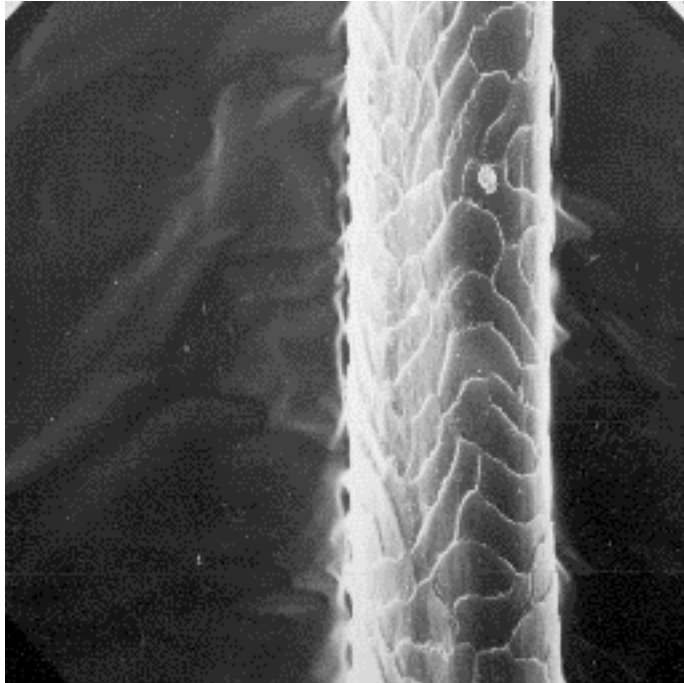


Transverse section of an intermediate fibre, 600x

The medullar column is narrow, unbroken and central symmetrical-shaped in cross-section. The overall structure of the medulla belongs to the uniserial ladder type or to the lattice type with a perforated sheet-like infilling material. The guard hairs have a diameter of 50 to 90 μm and their cross-section is usually ellipsoidal in outline. The cuticular scales are even tile-like or rounded tile like,

with an irregularly grooved surface and straight scale margins. The medulla is wide, unbroken and central symmetrical-shaped in cross-section.

The overall structure belongs to the lattice type with a complex-sheet-like infilling substance.



The cuticular structure
of an intermediate hair, 400x