

Coins

– The Animals of the World – The marmot



face value	20 zł
metal	925/1000 Ag
finish	proof
diameter	38.61 mm
weight	28.28 g
mintage	60,000 pcs

Obverse: The image of the Eagle established as the emblem of the Republic of Poland. Under the Eagle the notation of the year of issue, 2006, below an inscription, Zł 20 Zł. On the sides of the Eagle's legs, images of the State flag. At the top, a semicircular inscription, RZECZPOSPOLITA POLSKA. Under the Eagle's left leg, the mint's mark, $\frac{m}{w}$.

Reverse: On the left-hand side, an image of an adult marmot standing on its hind legs. On the right-hand side, images of two young marmots on a mountain rock. In the background, a stylised image of a mountain landscape. At the top, a semicircular inscription, ŚWISTAK – Marmota marmota.

Obverse designer: Ewa Tyc-Karpińska
Reverse designer: Andrzej Nowakowski



face value	2 zł
metal	CuAl5Zn5Sn1 alloy
finish	standard
diameter	27.00 mm
weight	8.15 g
mintage	1,400,000 pcs

Obverse: : An image of the Eagle established as the emblem of the Republic of Poland. Under the Eagle a notation of the year of issue, 2006, below an inscription: Zł 2 Zł. On the sides of the Eagle's legs, images of the State flag. At the top, a semicircular inscription, RZECZPOSPOLITA POLSKA. Under the Eagle's left leg, the Mint's mark, $\frac{m}{w}$.

Reverse: On the left-hand side, an image of an adult marmot standing on its hind legs. On the right-hand side, an image of a young marmot sitting on a mountain rock. In the background, a stylised image of a mountain landscape. At the top, a semicircular inscription, ŚWISTAK – Marmota marmota.

On the edge: The inscription, NBP, eight times repeated, every second one inverted by 180 degrees, separated by stars.

Obverse designer: Ewa Tyc-Karpińska
Reverse designer: Andrzej Nowakowski



Coins struck by the Mint of Poland plc. in Warsaw.

Printed by NBP Printing Office

On 28 February, 2006 the National Bank of Poland is putting into circulation coins of the "Animals of the World" series. The coins dedicated to the marmot are of the following face value:

- 20 zł – struck in proof finish in silver,
- 2 zł – struck in standard finish in the Nordic Gold alloy.

The series is meant to present animal species threatened by the development of civilisation.

The marmot is a big rodent inhabiting the meadow areas in high European mountains. The most numerous population of marmot dwells in the Alps, a very small one in the Tatras. Apart from that, the marmot is found in the Pyrenees, where it was introduced from the Alps, and in the Romanian Carpathian Mountains, where it was reintroduced (i.e. introduced after becoming extinct in the area). In the Pleistocene (the Ice Age) the marmot inhabited large areas of the grassy European lowlands, but after the continental glacier retreated, its range of occurrence shrank to high mountain areas.

In the Alpine region, the marmot is still quite common, in the Tatras, however, both in Poland and in Slovakia, it is rare and threatened with extinction. The Tatra marmot constitutes a separate subspecies (*Marmota marmota latirostris*). It is smaller than its alpine relative and they differ in build and behaviour. Our adult marmots are around 50 cm long, excluding the 15-centimetre long black-tipped tail, they live in small family groups forming local concentrations and they are among the rarest Polish mammals. Their population throughout the Tatras amounts to about one thousand individuals, one fifth of which lives on the Polish side. This is why they are not easy to meet, though much easier to hear. When disturbed, they emit a loud piercing warning whistle.

Marmots, being dwellers of high mountain habitats (characterised by severe climate with short summers and frosty, snowy winters, with soils of low fertility and scanty vegetation), live a specific lifestyle, which enables them to survive in such an environment. They spend most of the year (more than seven months) sleeping in groups in burrows under a thick cover of snow. The presence of several individuals in the burrow and a specific body position they adopt during the sleep (a marmot rolls into a ball) provides them with favourable thermal conditions and enables the maintenance of a stable body temperature, higher than the temperature of the environment. The animals wake up in May and dig themselves up from a several metre deep snow cover that still persists in the higher regions of the Tatra mountains. It has not been established what constitutes the signal for the marmots to start the active phase of life. It must be, however, an internal signal (probably hunger) because the temperature and darkness in the burrow under the snow is still the same as before. The emaciated marmots come to the surface after a many month fast (they weigh approx. 3 kgs then) and they start grazing intensively in the vicinity of the burrow, eating the grass and herbs growing in places free of snow.

If there are several adult animals hibernating in the burrow, then after waking up they disperse to summer burrows and start the mating season in the second decade of May. After the gestation period lasting five weeks, the female gives birth to 2-5 young, sometimes seven. During the first six weeks of life, the pups stay in the burrow, fed intensively by their mother. It is after about 40 days, in the second half of July that they can be seen and counted. The family group grows by 2-3 pups, because the mortality rate of neonates is quite high.

The main activity of marmots is feeding, as they all have to regenerate after the winter hibernation, and the females additionally after the great effort of feeding the young. Apart from that, marmots have to accumulate a large reserve of fat under the skin before the arrival of winter. Their main food is a low calorie mass of grass and herbs of low assimilability, rather scarce in their natural environment. Therefore marmots choose southern, south eastern or south western slopes to live on. These are covered in the most abundant and tasty vegetation, and what is more, they offer comfortable conditions for marmots to lie on warm rocks in the sun sparing the energy which would otherwise be spent on keeping the body temperature. The marmots' peaceful lying in the sun is often disturbed by predators, hence the practice of 'keeping guard' by these rodents – frequent scanning of the terrain and standing erect on their hind legs when something disturbs them. Their natural enemies in the Tatras are foxes, lynxes and eagles.

Marmots suffer most, however, because of man. Since time immemorial marmots' fat had been a valued cure in folk medicine applied for colds, persistent cough, rheumatic pains and other ailments. Marmots made an easy and valuable prey in September, as this is when they put on a great deal of fat (reaching the weight of 6 kg) and move awkwardly. They enjoy most lying in the autumn sun till the end of September or beginning of October, when they eventually enter their winter burrows, lined since summer with dry, soft hay, and go into winter sleep.

Nowadays, marmots are not hunted in the Tatras, but man still remains their greatest, though not always conscious, foe. Crowds of tourists walking the trails in the vicinity of their colonies disturb them, disrupt their peaceful grazing and force them to hide in the burrows. The skiers, using the artificially snow covered slopes till late spring, disrupt their sleep, their first days of activity and mating rituals.

Nowadays, new threats add to the above-mentioned ones. They are related to the ongoing global warming. Marmots, like all hibernating mammals, live through the winter without problems if it is snowy. Thick snow cover ensures stable thermal and light conditions as well as dampens the noise, which is essential for undisturbed sleep. It is also very effective in hampering predators' access to defenceless, sleeping animals. Warmer winters mean that the snow cover is not stable, that it often disappears during

winter, which in turn entails premature wake-up and often death for the hibernating animals. It is not the only threat for this species arising from global warming. Marmots, as high mountain animals, managed to find their own niche in very severe conditions. Therefore they did not have to fear competition from other species, unprepared for life in the zone of mountain grassland. A more temperate climate allows the lowland species to settle in higher mountain regions, occupy areas already inhabited by high mountain animals and eat their food. The latter ones have no place to go to in order to flee from the competition and they become the first victims of the greenhouse effect.

In Poland the marmot is under legal protection since the 2nd half of the 19th century. However, it did not protect it from poaching, periodically a very intense one. Nowadays it is listed in the Polish Red Book as a species belonging to the category of particularly endangered animals. Marmots benefit from the fact that their whole population inhabits the area of a national park, where all activities are subordinated to the environment protection: the Tatra National Park has closed several tourist routes, which led through areas inhabited by marmots. In international regulations, the marmot, due to the well preserved alpine population, is not under strict protection. It has been mentioned, though, in the Bern Convention, which deals with the protection of European species.

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