



About 25,000 species of invertebrate animals live in Lithuania, most of which are insects. Imagining such a diversity is not an easy task for everyone, as some groups of insects are hardly noticeable or rare. Lithuanian naturalists accentuated the need to protect rare species of insects at the end of the last century already. The list of the Red Data Book of Lithuania compiled in 1976, apart from other animals, also contained 4 species of insects and all humble-bees. To protect insects and their habitations, the first entomological reserves were established in 1979.

Humble-bees are the most typical insects of the order Hymenoptera (membrane-winged). Large and furry, they have two pairs of wings, a sting, and hum loudly when flying. They are social insects which live in nests on or under the ground. Their colonies comprise 100 to 300 humble-bees, among which the most important is the queen (female), also workers and drones (males) which develop from unfertilised eggs in August.



A humble-bee colony follows a regular regime of life. After spending the winter in hibernation, fecundated humble-bee queens emerge early – in April, sometimes – even in March. Furry humble-bees are not very sensitive to chilly weather; therefore queens visit the earliest blossoms, take nectar, and soon start creating colonies under leaves, in old vole nests or burrows: they build the first cells of a honeycomb and lay their eggs there. After three weeks, the first humble-bee workers hatch out; they are small, much thinner than the queen, their responsibility is building new honeycombs and looking after the developing brood. Later, the grown up humble-bee workers fly to collect pollen and nectar themselves, and the queen takes care of the colony. Male humble-bee drones are different from other stinging male insects: they do not use the food collected by the colony and collect pollen in blossoms themselves, feeding on it.

In early autumn the old queen dies. Gradually the whole colony begins losing strength as well, as humble-bee workers live shorter than the queen. At that time, a new strong queen hatches out. Fecundated by drones, it looks for a site to overwinter. Normally, it nestles in tree hollows, crevices, under bark, in old mice nests. After spending more than half a year motionless, it will wake up and begin creating a new colony in early spring.





About 25 species of humble-bees occur in Lithuania, but the figure may be larger, as in Central Europe they exist in 35 species.

Humble-bees are very typical, almost impossible to take for other insects. However, every species is highly varied in size and colour, thus inexperienced observers may call these insects representatives of different species.

In nature, humble-bees are important to many plants, as the blossoms pollinated by them may stimulate the development of their seeds. Often the composition of the blossoms of such plants is special: their anther may only be accessed with a humble-bee's long tongue. Moreover, humble-bees pollinate spring plants when, during chilly weather, other insects do not fly yet.

As many as 150 years ago, the naturalist Charles Darwin emphasised that humble-bees ensured the crop capacity of many plants, especially clover. They are appreciated as pollinators of the blossoms of many agricultural crops. Quite a few humble-bees reproduced in laboratories are used throughout the year to pollinate cucumbers and other plants grown in greenhouses.



With the expansion of agricultural areas, increase in the amount and diversity of the pesticides used, humble-bee populations have become smaller and some species began dying out. While this insect group enjoys quite favourable ecological conditions in Lithuania, the Red Data Book issued in 1992 listed 3, and that issued in 2007 – 2 species of humble-bees: the big-eyed (*Bombus confusus*) and the steppe one (*Bombus pomorum*). Both these species are not abundant, their forest and bush-grown habitations are highly detrimental to their populations.

Best suited for humble-bees, not only for the species listed in the Red Data Book of Lithuania, is an extensively used landscape. Their nesting sites should not be vulnerable and the state of their populations can be ensured by sowing red clover which other insects almost do not visit. Humble-bees willingly inhabit small hives equipped for them that are put on the ground.

The humble-bee, like the bee, is respected in Lithuania for diligence and family harmony. They are the subject of folk songs, art collectives (especially children's) are named after them.

Humble-bees are most valuable for the nature and therefore it is everybody's duty to save them.

*Selemonas Paltanavičius*

## 50 LITAS COIN FEATURING LITHUANIAN NATURE

Silver Ag 925  
Quality proof  
Diameter 38.61 mm  
Weight 28.28 g

The words on the edge of the coin: *KAMANĖ PO ČIOBRYNUS LEKIOJA, GIEDRĄ NEŠIOJA*  
(In the thyme fields a humble-bee flitters around, bringing sunshine)

Designed by Vladas Oržekauskas and Alfonsas Vaura

Issued 2008  
Mintage 10,000



Information is available at the Bank of Lithuania  
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LIEUVOS MONETŲ KALYKLA

The coin was minted at the UAB Lithuanian Mint  
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Lithuanian Collectors Coins

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a humble-bee  
flitters around,  
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