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Changes in bumble-bees and cuckoo-bbes (*Bombini*, *Apoidea*) in the Pieniny National Park and its buffer zone (southern Poland)

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**Abstract:** In the period from 1990-2000, the occurrence and numbers of *Bombini* were studied in the Pieniny National Park and its buffer zone, on 77 sites, including the 43 sites previously surveyed by Dylewska (1962). Over nearly four decades, 8 species of *Bombini* have disappeared, 17 species have decreased in number in the areas of occurrence whereas 5 species have not shown changes in occurrence. Recently, the richest sites, in terms of numbers of species and individuals were: the Trzy Korony massif (renewable screes with xerothermic grassland and meadows under active protection measures), Czorsztyn reserve (xerothermic grassland), Zielone Skałki reserve (tall-forb meadow), and Niedzica (fresh meadow); whereas the poorest in this respect were: the Pieniński stream valley (tall-forb community), Facimiech and Gojny Las (beech wood), and Zamkowa Góra (ruderal community). It appears that the changes in *Bombini* in the Pieniny National Park and its buffer zone have been significantly affected by: the natural succession of plant communities, construction of water reservoirs, alteration in the structure of cultivated land, increased use of chemicals in agrocoenoses, new management regimes in farmland and – only slightly – tourism in the area.

**Key words:** *Bombini*, changes in the number of species, anthropogenic and natural factors, Pieniny Mts., Western Carpathians.