1. Introduction 5

2. Survey of results 12

Quaternary 22

of geology 35

2.3. Quaternary records of animal evolution 41 2.3.1. Phylogenetic history 42

C: subzones of MN 17-Q 3

1.3.1. Vertebrata 9 1.3.2. Mollusca 10

2.3.2. Changes in the structure of communities 45 2.3.3. Dynamics of faunal evolution: community versus phyletic change 48
3. Summary of results and outlook 51 Supplement — Description of two new species 53
References 56 Možnosti a přínos paleozologie v poznání kvartérní minulosti střední Evropy 62 Палеозоология четвертичного периода средней Европы: возможности и некоторые резуль-
таты 63 Appendix I: A brief list of Czechoslovak fossil sites surveyed within a frame of the present
paper 65 A: MN 17—Q 3 records
B: Q 4 records Appendix II: Selected examples of faunal composition 74
Appendix III: A draft of the Quaternary faunal succession and definition of the Mid-European Quaternary biozones (a tabelar survey) 94
A: The Late Vistulian and the Holocene B: MN 17-O 4 zones

1.1. Interpretation of Quaternary animal remains — basic principles
1.2. Fossiliferous deposits and their stratigraphic importance
7

2.1.2. The last glacial cycle including the Holocene as a model 14 2.1.3. Course of a glacial cycle — a generalized concept 20

2.2. Faunal records and biostratigraphy in the light of a polyglacialistic concept of the

2.2.3. A correlated system of Quaternary past and its application within the scope

1.3. Indication value of Vertebrata and Mollusca 9

2.1. Faunal evidence of Quaternary climatic history 12 2.1.1. Existence of climatic changes 12

2.2.1. Quaternary biozones of Central Europe 24 2.2.2. Possibilities of biostratigraphic correlation 28