

The submitted PhD thesis is presented as a collection of commentaries of fish faunas and its paleoecology at 10 selected localities of Czech Republic. The results were supported by specimens also from other geographical regions.

The fish faunae were studied on following localities: Kelč, Rožnov pod Radhoštěm, Litenčice, Krumvíř, Vážany nad Litavou, Strachotín, Opava - Kateřinky, Kučlín u Bíliny, Byňov and Bechlejovice.

The summarized results:

- a) There were recognized direct evidences about feeding habits in following taxa from Menilitic and Ždánice-Hustopeče formations: *Scopeloides glarisianus*, *Anachelum glarisianum*, *Lepidopus glarisianus*, *Trachinus minutus*, *Serranus budensis*, *Merluccius latus*, *Oligophus moravicus*.
- b) The partial trophic diagram has been constructed within Menilitic and Ždánice-Hustopeče formations (for the region of the Czech Republic). The first trophic assemblage (group A) is composed of species *Scopeloides glarisianu*, *Anachelum glarisianum*, respectively *Lepidopus glarisianus*, gadiform fishes and invertebrate members. The second one (group B) is characterized by species *Serranus budensis*, argentinid fishes and in some part of European region (e.g. in Poland) also genus *Holosteus*. The species *Trachinus minutus* is not possible to include into any of two above mentioned groups for lack of direct evidences.
- c) The age of Strachotín locality (Ždánice-Hustopeče Formation) was recognized as Egerian. Its supposed Badenian age was disproved. Also fish fauna at the locality was assigned to the different species, namely *Bregmaceros filamentosus*.
- d) The commentaries about the oldest known pachyosteotic fossil fish from the locality of Opava-Kateřinky (Northern part of the Carpathian Foredeep) are presented. The biological phenomenon called pachyosteosis (hyperosteosis s.s.) is presented and information about it are summarized from literature. Perspectives to further research are presented.
- e) The fish fauna of the Kučlín locality (České Středohoří Mts.) has been evaluated according to the new taxonomical points of view on this problem and latest knowledge (significance of thaumathurids as members of the esociform group). The structure of feeding habits within presented fish taxa was drafted. A comparison with other Eocene localities from North America, Europe and Asia has been performed.
- f) The monotypic fish fauna (genus *Pirskenius*) from Roudníky locality (České Středohoří Mts.) is described for the first time in larger paleoecological context and shows a probable connection to the marine environment.
- g) The fish fauna from Bechlejovice locality (České Středohoří Mts.) has been validated as monotypic (species *Umbra prochazkai*). The presence of *Pirskenius* sp. has not been confirmed. *Umbra prochazkai* has been compared with recent umbrids as for the feeding ecology.