

## Upper Devonian fishes from the Holy Cross Mountains (Poland)

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The present paper deals with fossil fish remains (Placodermi, Elasmobranchii) from the Upper Devonian of the Holy Cross Mountains. The following new forms have been described: *Malerosteus gorizdroae* n. gen., n. sp.; *Tomaosteus grossi* n. gen., n. sp.; *Dinichthys denisoni* n. sp.; *D. ceterus* n. sp.; *Titanichthys kozlowskii* n. sp., *Deveonema obrucevi* n. gen., n. sp.; *Operchallosteus vialowi* n. gen., n. sp.; *Alienacanthus malkowskii* n. gen., n. sp.; *Sentacanthus zelichowskiae* n. gen., n. sp. The presence of *Dinichthys pustulosus*, *D. cf. tuberculatus*, *Pachyosteus bulla*, *Holonema radiatum*, *Anomalichthys ingens*, *Plourdosteus* sp., *Oxyosteus* sp., *Stetiosteus* ? sp., *Ctenacanthus* sp., as well as of some detached teeth of *Cladodus* and *Dittodus*, has been recorded. On the base of the investigated material the author agrees with the opinions postulating that in Brachythoraci there has occurred the disappearance of dentine and its substitution by osseous tissue. In the brachythoracids this process had taken place at a considerably earlier evolutionary stage than in the Crossopterygii and the Dipnoi and it had moreover progressed farther, having affected the jaw denticles too. The structure of the parasphenoid in genus *Pachyosteus*, problems relating to the position of the gill slit, and changes in the outline of bones during ontogeny are discussed and some cursory remarks on the systematics of Brachythoraci are given. The final chapter contains notes on the stratigraphic distribution and geographical range of the described brachythoracid forms.

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