Descriptions are given of 33, species of Middle Devonian Bryozoa from the Holy Cross Mts., belonging to the orders Cyclostomata and Cystoporata. Cyclostomata are represented by 26 species (4 new: Corynotrypa (Corynotrypa) skalensis, C. (C.) basiplata, Stomatopora varigemmata and Diversipora bitubulata n. gen.). Cystoporata are represented by 7 new species: Ceramoporella orbiculata, C. grandicystica, Favositella integrumuralis, Fistulipora boardmani, F. emphantica, Cyclotrypa nekhoroshevi and Fistuliramus astrovae. The systematic assignment of the genus Hederella Hall, 1881 has been discussed and the "tabulate-like" microstructure of the zooecial walls of this genus examined. In addition, the epifauna and associated assemblages have been characterized as well as the geological and palaeoecological conditions in which the described Bryozoa occurred.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.