

MASSIVE PHILLIPSASTREIDAE IN THE HOLY CROSS DEVONIAN

Tomasz WRZOLEK

University of Silesia, ul. Będzińska 60, PL 41-200 Sosnowiec, Poland, wrzolek@us.edu.pl

The massive Phillipsastreidae are recorded at two distinct horizons in the Holy Cross Mts, central Poland. The first occurrence is in the Lower to Middle Givetian interval, with two species: *Phillipsastrea hennahii* and *Ph. sobolewi*. The Upper Givetian to Lower Frasnian interval is with solitary and dendroid phillipsastreid species only. Middle and, above all, the Upper Frasnian is with the massive species the most diversified. First comes the assemblage with dominating species of the *Phillipsastrea ananas* group (*Ph. ananas*, *Ph. macrommata*, *Ph. limitata*) in more open-marine settings, and with various subspecies of *Smithicyathus lacunosus* in lagoonal environments. The subsequent topmost Frasnian assemblage is with numerous species of *Frechastraea* (mostly *F. pentagona* and *F. goldfussi*), common is also *Medusaephyllum progressum*.

The material studied contains over 400 colonies, classified into five genera and over 20 species; it was collected in about 30 outcrops. The main data on these species and the sampling locations are summarized in a table below, with numbers representing measured colonies obtained at each point, or of each of the most common massive (and phaceloid) phillipsastreid species of the Holy Cross Devonian. The abbreviated genera are:

Ph. - *Phillipsastrea*, *F.* - *Frechastraea*, *Sm.* - *Smithicyathus* and *M.* - *Medusaephyllum*.

geography	main species		main outcrops			
			location		ecology	age
CENTER Kielce 221	<i>Ph. ananas</i>	19	Grabina	75	forereef	U Fra
	<i>F. goldfussi</i>	20				
	<i>Sm. lacu. lacunosus</i>	39	Panek	53	lagoon	U Fra
	<i>Sm. lacu. smithi</i>	29	Psie Górki	40	E: forereef	M Fra
	<i>Ph. limitata</i>	14	Wietrznia	21	F,G: deeper for.	U Fra
	<i>Ph. macrommata</i>	22				
	<i>F. pentagona</i>	15				
	<i>F. sanctacrucensis</i>	13	Zgórsko	16	lagoon	U Fra
NORTH Skały 40	<i>Ph. hennahii</i>	17	Laskowa	17	deeper forereef	M Giv
	<i>M. progressum</i>	12	Skały-Włochy	7	deeper forereef	L Giv
	<i>Ph. sobolewi</i>	7	Śluchowice	8	deeper forereef	U Fra
SOUTH Kowala 149	<i>Ph. ananas</i>	31	Jaźwica P, R	19	P: forereef R: deeper forer.	U Fra
	<i>F. goldfussi</i>	13				
	<i>Ph. „intermedia”</i>	14	Kowala G	91	forereef	U Fra
	<i>Sm. lacu. lacunosus</i>	12				
	<i>Ph. limitata</i>	13				
	<i>Ph. macrommata</i>	25	Kowala road cut.	29	deeper forereef	U Fra
EAST Janczyce 23	<i>Ph. dybowski</i>	11	Sobiekurów	12	deeper forereef	U Fra (?)