

## SOLENOVIAN SEA, A RUPELIAN EUXINIC TYPE SEA OF PARATETHYS

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The global eustatic sea level drop, due to climate deterioration in late Rupelian (Prothero, 1994), produced the isolation on a large area from Central Europe to Central Asia of an inland sea, the Solenovian Sea, individualized cca. 2.5 Ma in the Protoparatethys Phase (Rusu, 1985). The separation of this sea was pointed out by Rusu (1977) under the syntagm Transeuropean Domain and has been detailed by Báldi (1979) as the early Paratethys. Additional studies by Báldi (1980,1984,1986,1989), Rusu (1983,1985, 1988), Popov et al. (1985, 1993), Khrovský et al. (1992) etc, delimited and characterized this marine basin. The Solenovian Sea was distinguished on the basis of a brackish molluscan assemblage characterized by endemic genera and species: *Janschinella*, *Lenticorbula*, *Ergenica*, *Urbnisia*, *Korobkoviella*, *Merclenicardium*, *Cerastoderma lipoldi* or *C. serogosica*. This assemblage occurred in oxygenated shelf waters of the pliohaline environment (9 -16,5 ‰ salinity). The low salinity of the surface waters was responsible for the disappearance of foraminifers and scarcity of the calcareous nannoplankton (NP23 Zone) (Gheta et al, 1976; B.-Beke, 1977). Some species, adapted to the decrease of the salinity (*Reticulofenestra ornata*, *R. lockeri*, *Transversopontis fibula* and *T. latus*), proliferate in periodic mass bloom and form nannochalk layers (Nagymarosy 1991, Krhovský & Djurasinovic 1993). The deeper zones of the Solenovian Sea represented an euxinic (anoxia + H<sub>2</sub>S) environment similar to actual Black Sea, favorable for the sapropelic mud accumulation. This organic-rich sediments originated the bituminous shales of the Menilitic and Maikop Formations. The episodic connection with the open sea (Rusu,1985) across the Mazury-Mazowsze barrier from Poland had as result oxic bottom waters and normal salinity. These moments are marked by euhalin fauna of boreal origin.