# Does benthic foraminifera remember ancient life habitat ? : Exemplified from genus Chilostomella

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*Chilostomella ovoidea* that is dwelling deep within deep-sea sediment show peculier life habit in comparison to other benthic foraminiferal species. 1) The species dwells in the oxygen depleted layer at sediment-water interface.2) The species are not phytodetritus feeder, but are deposit feeder or bacteriovore. 3) The species show very low growth rate and long life cycle. 4) The species show rather low DNA diversity. These ecological diagnosis strongly indicate that the species may adapt to detritus food chain. Organisms dwelling at the oxygen depleted and lack of labile food materials may survive with keeping low energy levels of life. *Chilostomella* group have evolved during oceanic anoxic events of the mid-Cretaceous. Detritus food chain may be adequate energy cycles at the time. *Chilostomella* is thought to keep their original ecological preference since the group evolved around mid-Cretaceous oceanic anoxic event.