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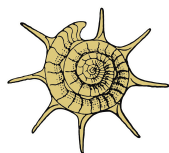
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## BELEMNITES OF THE JURASSIC/CRETACEOUS BOUNDARY INTERVAL FROM NORDVIK PENINSULA (NORTHERN SIBERIA)

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Stratigraphically, the most complete Boreal section of the J/K boundary interval is located on the Nordvik Peninsula (NP). The successions of ammonite and buchiid zones are recognized in great details. The belemnite zonal scheme for the Boreal J/K boundary interval is based on the North Siberian belemnite successions. NP belemnites were studied in the past by Saks, Nalnyaeva, Shenfil and Dzyuba. In 2003, a new stratigraphically significant fauna has been collected on Urdyuk-Khaya Cape (NP) during the common field work of Geological Institute (Moscow) and Charles University Prague. According to a new finds of ammonites, the base of the section is assigned to be Middle Oxfordian in age (Rogov, Wierzbowski, in press). Thus, the Middle Oxfordian belemnite assemblage on the whole is established herein for the first time (Fig. 1) for the NP and North Siberia. The Middle Oxfordian Siberian belemnite fauna is taxonomically almost identical to those belemnites in the Russian Platform. Stratigraphic ranges of the following species: *Cylindroteuthis* (*Cylindroteuthis*) *cuspidata* Sachs et Naln., *C. (Arctoteuthis) septentrionalis* Bodyl. and *Simobelus* (*Simobelus*) *mamillaris* (Eichw.) were specified. *Simobelus* (*Liobelus*) *prolateralis* (Gust.) was recorded at the same stratigraphic level as in the European sections. *Lagonibelus* (*Lagonibelus*) *parvulus* (Gust.), known only from Lower-Middle Volgian transitional beds of the Russian Platform, was recently recorded from the NP section. According to the belemnite distribution, the Kimmeridgian/Volgian boundary is located within 4,0–4,5 m interval below the level 2D (Fig. 1) - probably at the horizon with rare phosphatic and calcareous nodules with fossilized wood. Index Volgian belemnites appear just above this interval. The significant faunal (ammonite, belemnite) change shows a gap in sedimentation of a significant part of the Lower-Middle Volgian, albeit sedimentologic evidences are still missing. The Middle Volgian Variabilis Zone show both high diversity and abundance of belemnites, which could be considered to be a belemnite events (Fig. 1). The increase in faunal diversity in this stratigraphic interval is a typical feature in northern Siberian seas. It is accompanied by transgressive events and climate warming. The lowest belemnite diversity is recorded in the Volgian/Boreal Berriasian boundary beds. Only rare representatives of genera *Cylindroteuthis* and *Lagonibelus* with elongate rostra are distributed here, higher abundance was recorded only just above the iridium anomaly bed. Taxa with shorter robust rostra from genera *Pachyteuthis* and *Simobelus* are absent, that indicates a deepening and size-increase of the basin. There are no changes in belemnite assemblages at the J/K boundary (inside the Taimyrensis Zone), newly recognized by magnetostratigraphy. The study was supported by RFBR grants 06-05-64284, 06-05-64439 and Earth Sciences Department RAS Program 14; GAČR: 205/06/0842, 205/07/1365 and MSM 0021620855.

## References:

Rogov M.A., Wierzbowski A. In press. The succession of ammonites (*Amoeboceras*) in the Oxfordian–Kimmeridgian of the Nordvik section in Northern Siberia. *Volumina Jurassica*.

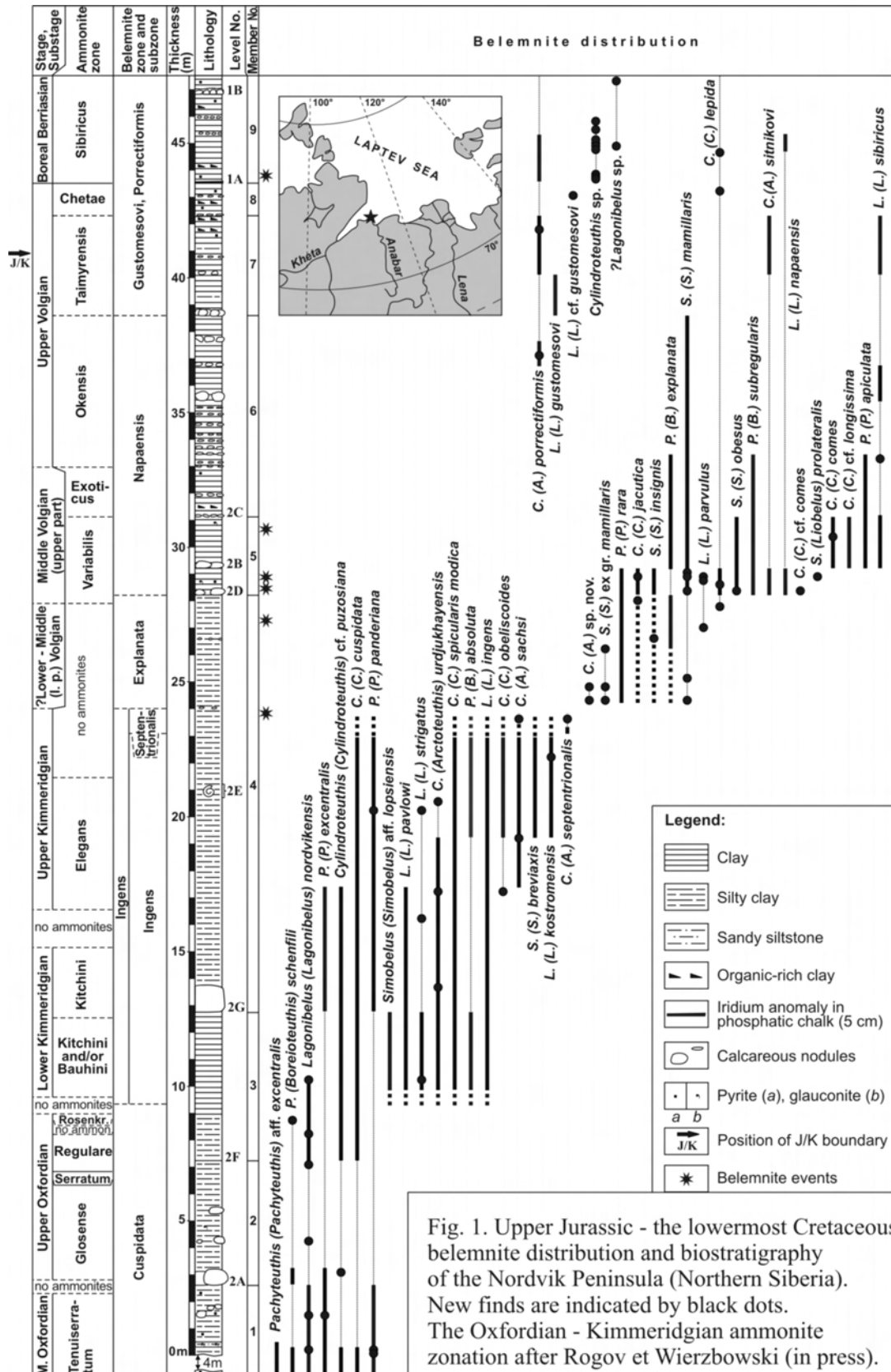


Fig. 1. Upper Jurassic - the lowermost Cretaceous belemnite distribution and biostratigraphy of the Nordvik Peninsula (Northern Siberia). New finds are indicated by black dots. The Oxfordian - Kimmeridgian ammonite zonation after Rogov et Wierzbowski (in press).