

**BATHONIAN WORKING GROUP**

Sixto Rafael FERNÁNDEZ-LÓPEZ, Convenor

Two sections showing stratigraphically continuous sedimentation with good palaeontological content and fulfilling the recommendations of ICS are suitable for proposal as GSSP: Bas Auran (Haute-Provence, France) and Cabo Mondego (Portugal).

The Bas Auran section, in the Geological Reserve of Haute-Provence (France), has been proposed previously, but needs ratification as the preferred GSSP by the Bathonian Working Group. Other candidate sections for the Bathonian GSSP, in Iberia and North Africa, are still under study and discussion within the Bathonian Working Group.

New collecting of ammonites and field studies at Cabo Mondego (Portugal) were carried out in 2002 by Fernández-López and Henriques. Sampling through up to thirty metres of strata, enables distinction of the two highest zones of the Bajocian (Garantiana and Parkinsoni Zones) and the lowest zone of the Bathonian (Zigzag Zone). Parkinsonids, characteristic of the northern European faunal region or Subboreal Province, as well as Phylloceratina and Lytoceratina characteristic of the Mediterranean Province, are very scarce. The Garantiana Zone is characterized by an abundance of *Spiroceras annulatum* (DESHAYES), associated with *Prorsisphinctes* [M] - *Vermisphinctes* [m], *Garantiana* [M] and *Oppelia subcostata* (J. BUCKMAN). Specimens of *Sphaeroceras* and *Trimarginia* have been identified. Unfortunately, the uppermost Bajocian Parkinsoni Zone is poorly characterized due to the scarcity of well preserved ammonoids. Specimens of *Dimorphinites* occur, but possibilities for correlation of the youngest Bajocian ammonoids with those from the Mediterranean and Subboreal Provinces remain quite limited. The Lower Bathonian boundary may be established by the first appearance of the genus *Morphoceras*. The Convergens Subzone may be subdivided into a lower biohorizon with the development of *Zeissoceras* [M] - *Nodiferites* [m], *Lobosphinctes* [M] - *Planisphinctes* [m], and *Procerozigzag* [M] - *Zigzagiceras* [m], and an upper biohorizon characterized by the abundance of *Morphoceras* [M] - *Ebrayiceras* [m] and *Procerites* [M] - *Siemiradzka* [m]. In the oldest Bathonian biohorizon, a specimen of *Gonolkites convergens* BUCKMAN has been found. These biohorizons correspond respectively to the Parvum and Macrescens subzones recognized in various areas of the Submediterranean Province.

**New literature:**

New papers concerning the Bajocian/Bathonian boundary are listed below.

- BESNOSOV, N.V. & MITTA, V.V. 2000. Jurassic geology and ammonites of Great Balkhan (Western Turkmenistan). I, n° 5: 1-115.
- DIETZE, V.; MANGOLD, Ch. & CHANDLER, R.B. 2002. Two new species of *Berbericeras* ROMAN, 1933 (Morphoceratidae, Ammonitina) from the Zigzag Bed (Lower Bathonian, Zigzag Zone) of Whaddon Hill (Broadwindsor, Dorset, Southern

England). *Stuttgarter Beiträge zur Naturkunde*, 324: 1-11.

- FERNÁNDEZ-LÓPEZ, S.R. & HENRIQUES, M.H. 2002. Upper Bajocian - Lower Bathonian ammonites of Cabo Mondego section (Portugal). Abstracts and Programs 6th International Symposium on the Jurassic System, Mondello, Sicily, Italy: 65-66.
- MITTA, V.V. 2002. On the Bathonian ammonite zonation on the Russian Platform. Abstracts and Programs 6th International Symposium on the Jurassic System, Mondello, Sicily, Italy: 127-128.
- PAVIA, G.; MARTIRE, L.; CANZONERI, V. & D'ARPA, C. 2002. Rocca chi Parra Quarry, a condensed rosso ammonitico succession: depositional and erosional geometries, neptunian dykes and ammonite assemblages. In: SANTANTONIO, M. (ed.), General Field Trip Guidebook, VI International Symposium on the Jurassic System: 42-48.

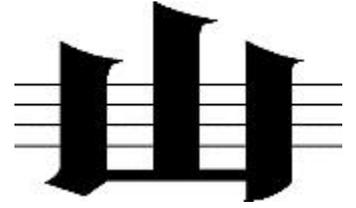
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**CALLOVIAN WORKING GROUP**

John CALLOMON, Convenor

Since the last Newsletter there is once more little formal business to report concerning the Bathonian-Callovian Boundary Stratotype. Hope continues to sustain the plan to see the formal proposals prepared for submission in the coming year. It has also been a quiet year on the Callovian front elsewhere. This reflects the maturity of our state of knowledge of the Stage and, it has to be recognized, a shrinking band of those with the interest, time and resources to be active in it. The unsurpassed Colloquium on the Jurassic organized by our Italian colleagues at Palermo provided once again an opportunity to meet old friends from all over the world and to discuss problems in the Callovian as in the other Stages, but nothing of great import requiring urgent attention seemed to emerge. One of the many surprises was to be presented with copies of two superb volumes reprinting and revising the immortal contributions of Gaetano Gemmellaro. Callovian examples, though perhaps modest in numbers, include key elements fundamental in modern revisions world-wide.

There continues to be progress here and there at the local level. I can report only one example from personal experience. It concerns parts of the Kellaways Beds in the Lower Callovian. These are rarely seen in Britain, being developed largely in soft, recessive facies, so that there are almost no natural outcrops other than on the Yorkshire coast. They do, however, underlie wide tracts of river gravels in the basins of the upper reaches of the Thames, south of Cirencester in Gloucestershire. These gravels are intensively exploited, in part for the usual purposes of filler for concrete but, being composed largely of limestone derived by erosion of the Cotswolds, they find a particular use ground up as base for making cast building-blocks for housing in artificial Cotswold Stone. Drainage ditches expose the Kellaways Beds and



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