Poster Session B
A NEW REPTILIAN FAUNA FROM THE LATE JURASSIC OF WESTERN EUROPE (KIMMERIDGIAN, SWITZERLAND)
MARTI, Daniel, BILLON-BRUNAT, Jean-Paul, Section de paléontologie, Porrentruy, Switzerland
Since 2000, a Swiss palaeontological team (the "Section de paléontologie") has carried out systematic excavations along the future course of the "Transjuranne" highway (Jura, northwestern Switzerland). Numerous fossiliferous beds have been excavated and studied at several localities, all in the vicinity of the town of Porrentruy. These beds are precisely dated by ammonites to the early Late Kimmeridgian. They correspond to coastal deposits of a shallow carbonate platform, at the threshold between the boréal and the tethyan realms. So far, the excavations have yielded a rich and diverse fauna of invertebrates and vertebrates (fish and reptiles), notably lots of dinosaur skeletons.
We report here the first synthetic overview of the "Transjuranne" reptilian fauna and a comparison with other Late Jurassic Lagerstätten of Western Europe, which have been deposited in similar palaeoenvironments (Canjucian, Cerin, Crayssac, Solnhofen, Solothurn). The reptilian fauna includes skeletal remains of chelontians (Plissochelyidae, "Talassosmilididae"), crocodilians (Telesauridae, Metriorhynchoidea) and of a pterosaur. Moreover, the presence of sauropod and theropod dinosaurs is attested by tracks. The composition of the reptilian fauna is consistent with that of the other sites, but three major groups are still missing (lepidosaurs, ichthyopterygians, sauropterygians). The sauropterygians are abundant and occur on several levels, with a large range of footprint size and trackway pattern. This supports the hypothesis that some of these large-bodied terrestrial herbivores could habitually enter coastal marine environments.

Wednesday, 9:00
CARVING MISSING BONES IN RIGID URETHANE FOAM
MASEK, Robert, Univ. of Chicago, Chicago, IL
Reconstructing missing bones, or parts of bones, is the most time-consuming and expensive operation when mounting or restoring fossil vertebrate skeletons. Most skeletons are only partially preserved or are composed of individuals of various sizes. A wood carving machine designed for reproducing or reversing sculpting or plaques in non-castable material such as wood, can be used to quickly reproduce or reverse bones in rigid urethane foam. If your sculpting skills are less than desirable, this machine might be what you are looking for. The wood carving machine was used with excellent results to reproduce the missing wing bones of an African penguin.

Poster Session A
NEW DATA ON SOME ELOPOMORPH FISHES FROM THE EARLY CRETACEOUS, NORTHEASTERN BRAZIL
MASSA, Renato, GALLO, Valeria, FIGUEIREDO, Francisco, Univ. do Estado do Rio de Janeiro, Rio de Janeiro, Brazil
The osteology of Braueria latus and Paracolpus ceanensis, two elopomorph fishes found exclusively in the Lower Cretaceous strata of the Arraial (B. latus and P. ceanensis) and Paraguaçu (only B. latus) basins, is reviewed here. This study revealed some new information concerning the neuration and the vertebral column and associated bones of both taxa. The skull roof of B. latus is described here for the first time and it shows shape and arrangement similar to that in the extant elopomorph Auxilus napus, in addition to some new data on the neuration of P. ceanensis (for instance, the presence of a prosotic-intercalar bridge). Aspects of the oesophageal arrangement (pattern of the foramina), supranasal and internasal bones (number and extension) of B. latus are also discussed. A preliminary phylogenetic analysis comprising both fossil and recent taxa of Elopomorpha was accomplished, revealing P. ceanensis as part of a monophyletic group, the Auliformiformes, with B. latus appearing as a basal taxon of this clade.

Poster Session B
ICHTHYOSAUR DIVERSITY IN THE UPPER SANDSTONE FORMATION (JURASSIC: OXFORDIAN), WYOMING
MASSARE, Judy, SUNY Brockport, Brockport, NY
Ichthyosaurs were first collected from the Sundance Formation in the late 1800’s and early 1900’s, and assigned to a new genus, Baptonodon. Five species from Wyoming were described: B. naistis, B. discus, B. marshalli, B. reedii, and B. robustus. The genus has been synonymized with Ophthalmosaurus, known from the slightly older Oxford Clay of England. Some of the species described from the Sundance Formation were based on very incomplete specimens and unreliable or minor morphological differences. Consequently, three of the species names were not recognized in later literature. Only O. discus and O. naistis are represented in museum collections by more than an incomplete type specimen. Early workers speculated that these two species could represent a single growth series, as what was called O. discus is larger than O. naistis. Recent compilations of ichthyosaurian taxa recognize only one species, and retain the oldest name, O. naistis for the Wyoming ichthyosaurs.

Over the last decade, ichthyosaurs have been collected from several horizons in the Redwater Shale of the upper Sundance Formation in northwestern Natrona County. This is the same unit from which the older material was excavated, although most of these specimens are from Albany and Carbon counties to the south. A preliminary assessment of the new specimens suggests that two species are present in the Redwater Shale. Their assignment to the previously described species will be presented and discussed.

Poster Session B
A DWARF BETWEEN GIANTS? A NEW LATE JURASSIC SAUROPOD FROM GERMANY
MATEUS, Octavio, Univ. de Lisboa & Museu da Lourinhã, Lourinhã, Portugal; LAVAN, Thomas, KNIESCHE, Nils, Dinosaurier-Freilichtmuseum Munchenhege, Rehburg-Loccum, Muenchhagen, Germany
Remains of several Late Jurassic sauropod dinosaurs were found in Oker, near Goslar (Lower Saxony, Germany). Only one single layer, datable to Middle Kimmeridgian, provided sauropod bones in Oker quarry, however, more than about 650 remarkably well preserved cranial and postcranial bones were collected. The first sauropod bone from Oker was found by Holger Ludtke in 1998. Most notably these remains include the first sauropod skull known from Europe. It belongs to a new macronarurian sauropod close to Brachiosaurus. At least, 10 individuals were present, with body-lengths varying between 1.8 and 6.2 m long, when extrapolated from Camarasaurus granis. One of the smallest specimens has a 119 mm tuba. The body length distribution is approximately unimodal with a mean around 3.5-4.5 meters long. Contrary to this, the normal age frequency graphic of wild animal populations is positively asymmetrical (more juveniles and fewer adults). The presence of so many bones from a single species corroborates with the unspecific gregariousness implied for other species. Possibly, such species lived in herds. If we presume that the death and body accumulation resulted from a single event isolated in time, this proposes that sauropods formed multi-aged gregarious groups. The premaxilla has a short muzzle, the nares are large and the jugal has an important role in the lower rim of the skull. Histological studies show adult development of the bones, deduced by the sampling of seven long bones show that we are dealing with dwarf forms.