

**Zeitschrift:** Eclogae Geologicae Helvetiae  
**Herausgeber:** Schweizerische Geologische Gesellschaft  
**Band:** 62 (1969)  
**Heft:** 1

## Titelseiten

### Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 27.04.2026

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

# Les calcaires urgoniens dans la région entourant Genève

par MARC A. CONRAD, Genève

## ABSTRACT

The Urgonian Limestones were deposited on an epicontinental shelf during the Barremian and Lower Aptian. They are studied from a lithological and micropaleontological point of view. The reconstitution of the sedimentary infralittoral environments has been given particular attention. The classical lithological subdivisions (Lower and Upper Urgonian Limestone Members, separated by the *Orbitolina* Marl Member) have been maintained. However, a new lithostratigraphical unit, that is the La Rivière Marly Limestone Member has been introduced in the Jura region to designate sediments which were deposited during the Upper Barremian.

During the Barremian, the deposition of Lower Urgonian Limestones corresponded to a regressive sedimentation during which the environment became more and more isolated and the shelf progressively migrated towards the SE. At the end of the regression, quartz and clay invaded the region and the *Orbitolina* Marls were deposited. Locally, the existence of fresh water limestones shows the proximity of land oriented towards the NW. During the Lower Aptian, a transgressive movement again pushed the shoreline toward the NW, and the Upper Urgonian Limestones were deposited on a shelf which was again isolated from terrigenous supply.

The Urgonian Limestones were deposited in several infralittoral environments. Some of these environments show striking similarities with the present sedimentary environments of the Bahama banks. Three main categories are described:

- The external infralittoral environments which correspond to the shelf edge, that is to areas which are still subject to the influence of circalittoral environments. The association of algae and bryozoa is characteristic.
- The middle infralittoral environments which are the most frequently represented in the Urgonian Limestones. They are characterized by the association of algae and foraminifera, as well as by the absence of bryozoa.
- The internal infralittoral environments which are characterized by a very low energy and by the significant absence of some groups of organisms. These environments developed during the Upper Barremian in the most sheltered part of the shelf.

Concomitantly, circalittoral, mediolittoral (intertidal), supralittoral and lacustrine environments are described. The work of SCHROEDER, CHAROLLAIS et CONRAD (1968) on the *Orbitolinidae* has led to the recognition of five foraminiferal zones within the Urgonian Limestones. The question of biozonation is taken up again and is supplemented by the description of foraminifera which belong to other families and are interesting from a stratigraphical and/or ecological point of view. Some poorly known forms have received temporary designations. The development of some of the foraminifera seems to have been related to well defined environments and the existence of hardened substrates, the turbidity of the water and the rate of sedimentation were important factors which explain the apparently capricious reappearance of some organisms.

## RÉSUMÉ

Les calcaires urgoniens se sont déposés sur une plateforme épicontinentale au Barrémien et à l'Aptien inférieur. Ils sont étudiés du point de vue lithologique et micropaléontologique. L'accent a été mis sur la reconstitution des milieux de sédimentation infralittoraux. Les subdivisions litholo-