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Association Round Table

*Denotes speaker other than senior author.

AAPG EASTERN SECTION MEETING
In Conjunction With
NEW YORK STATE GEOLOGICAL ASSOCIATION MEETING

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Abstracts of Papers

BABCOCK, LOREN EDWARD, State Univ. New York College at Fredonia, NY

Paleontologic and Sedimentologic Character of Corell's Point Faunal Assemblage (Upper Devonian: Famennian), Southwestern New York State

The Corell's Point faunal assemblage of the lower Gowanda Shale Member, Canadaway Formation, represents a series of burrowed zones yielding biocoenoses of benthos, taphocoenoses of nektos, and wood fragments. Marine-transported animals and plants are generally pyritized, but many endemic organisms are not. The faunal assemblage occurs at various levels in the Gowanda Shale, and may recur in adjacent stratigraphic units. The Corell's Point faunal assemblage and associated pyrite nodules apparently formed in a "starved" shelf setting, influenced by sporadic influxes of sediment, possibly by distal turbidites.

Cephalopods were added to the Corell's Point assemblage by postmortem pelagic drift; their attendant epizoans probably detached and gave rise to small, locally abundant auloporid mounds. Some organisms may have been rafted in attached to algal mats; these mats possibly carried ammonoids, nautiloids, wood fragments, pelmatozoans, bivalves, gastropods, and fishes, producing infrequent dense associations of these organisms. Mild bioturbation of surface muds was effected by *Zoophycos* and infaunal mollusks. Winnowing of fine muds by organisms may account for the consistent silty texture of sediment associated with the Corell's Point faunal assemblages; underlying and overlying strata are generally fine-grained with discrete siltstone beds.

Zoophycos and other lebensspuren, plants, and some cephalopods are encountered in sections of the Gowanda Shale lacking the Corell's Point faunal assemblage. These shales and siltstones exhibit relatively little evidence of fauna-induced sediment mixing.

BAIRD, GORDON C., State Univ. New York College at Fredonia, NY, and CARLTON E. BRETT, Univ. Rochester, Rochester, NY

Condensed Sedimentary Sequence and Associated Submarine Hiatus Within a Cratonic Basin Setting—Case Study of Upper Devonian Genundewa Limestone of New York

The Genundewa Member (medial Genesee Formation: Frasnian) is a thin limestone, traceable from Canandaigua Lake westward to Lake Erie. This unit, bounded both above and below by black, fissile shales, is composed mainly of shells of the pelagic, conoidal organism *Styliolina fissurella*, and lesser amounts of pelmatozoan debris, cephalopod conchs, wood fragments, and conodonts. The Genundewa displays prominent westward sedimentary condensation; eastern sections, up to 13 ft (4 m) thick, are mudstone-rich. West of central Genesee County, the Genundewa is typically a thin, 2 to 14 in. (5 to 36 cm) thick, compact bed composed of *Styliolina* biosparite with localized lentils of cephalopod coquinite.

The Genundewa is underlain by a prominent discontinuity traceable from central Genesee County westward; this hiatus is coextensive with remanie deposits of the North Evans Member which overlie the Windom-Genesee unconformity in western Erie County. The sub-Genundewa unconformity displays westward erosional overstep of underlying beds across Erie County with consequent increase in hiatal interval. East of Cazenovia Creek, the disconformity is marked by exhumed, glauconite-coated Penn Yan concretions and a thin blanket of remanie sediment. From Cazenovia Creek westward, the remanie blanket thickens with appearance of reworked Windom-derived brachiopods, and concretions, numerous fish bones, and increased pelmatozoan debris.

Pre-Genundewa erosion occurred in an oxygen-deficient outer shelf setting, as indicated by absence of associated benthos and by local occurrence of the hiatus within black shale. Genundewa *Styliolina* ooze accumulated following the erosion event under conditions of prolonged sediment starvation on a dysaerobic sea floor.

BEINKAFNER, KATHIE J., Sohio Petroleum Co., San Francisco, CA

Structural Revelations from Seismic Interpretation, Southern Tier, New York

When published structure contour maps of the Devonian outcrop, Tully formation, base Hamilton Group, and Oriskany Sandstone are overlain, the locations and trends of anticlinal and synclinal axes are not coincident, suggesting a lack of vertical continuity. The traces of fold axes within these specific stratigraphic units and their vertical orientation are not well defined by previous work.

In order to develop a cohesive, three-dimensional structural model for the Trenton Group (Middle Ordovician) through the Tully formation (Middle Devonian) interval, seismic surveys from six prospect areas in the southern tier were interpreted and well data from over 2,000 wells were used to make computer-drawn geologic structure and isopach maps as well as cross sections. The stratigraphic framework of such an analysis is built upon the strong seismic reflectors, in this case carbonates, specifically the Tully formation, Onondaga Formation, Lockport Group, and Trenton Group.

Subsurface facies were identified for the thickest intervals, namely the Hamilton, Salina, Lockport, and Clinton Groups, as well as the Queenston-Oswego-Lorraine sequence. The lithologic facies analysis is then used in conjunction with the seismic sections to define seismic facies. The importance of seismic facies is that they may reveal how certain lithologies deform in the stack of