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CHECK LIST OF FOSSIL INVERTEBRATES  
DESCRIBED FROM THE MIDDLE  
DEVONIAN SILICA FORMATION  
OF NORTHWESTERN OHIO AND  
SOUTHEASTERN MICHIGAN

BY

ERWIN C. STUMN and RUTH B. CHILMAN



MUSEUM OF PALEONTOLOGY  
THE UNIVERSITY OF MICHIGAN  
ANN ARBOR

# CONTRIBUTIONS FROM THE MUSEUM OF PALEONTOLOGY

*Acting Director:* ROBERT V. KESLING

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## VOLUME XXI

1. Fossils from the Seymour Formation of Knox and Baylor Counties, Texas, and their bearing on the Late Kansan Climate of that Region, by Claude W. Hibbard and Walter W. Dalquest, Pages 1-66, with 5 plates and 8 figures.
2. *Planalveolitella*, a new genus of Devonian Tabulate Corals, with a redescription of *Planalveolites foughti* (Edwards and Haime), by Erwin C. Stumm, Pages 67-72, with 1 plate.
3. *Neopalaeaster enigmaticus*, New Starfish from Upper Mississippian Paint Creek Formation in Illinois, by Robert V. Kesling, Pages 73-85, with 2 plates and 3 figures.
4. Tabulate Corals of the Silica Shale (Middle Devonian) of Northwestern Ohio and Southeastern Michigan, by Erwin C. Stumm, Pages 86-104, with 5 plates.
5. Growth Stages in the Middle Devonian Rugose Coral Species *Hexagonaria anna* (Whitfield) from the Traverse Group of Michigan, by Erwin C. Stumm, Pages 105-108, with 1 plate.
6. Devonian Trilobites from Northwestern Ohio, Northern Michigan, and Western New York, by Erwin C. Stumm, Pages 109-122, with 3 plates.
7. Check List of Fossil Invertebrates Described from the Middle Devonian Silica Formation of Northwestern Ohio and Southeastern Michigan, by Erwin C. Stumm and Ruth B. Chilman, Pages 123-137.

CHECK LIST OF FOSSIL INVERTEBRATES DESCRIBED FROM  
THE MIDDLE DEVONIAN SILICA FORMATION OF  
NORTHWESTERN OHIO AND SOUTHEASTERN MICHIGAN

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ABSTRACT

The Middle Devonian Silica Formation has been most extensively exposed in limestone and shale quarries located near Silica, Lucas County, in northwestern Ohio. During a forty year period beginning with Dr. Grace A. Stewart's "Fauna of the Silica Shale" more than 200 invertebrates have been listed and described from this formation in 68 papers, with more in preparation at this writing.

Other exposures of this formation have been found along Ten Mile Creek and at the now abandoned Whitehouse Quarry, both in Lucas County, Ohio; in a shaft at the head of Belle Isle in the Detroit River, Detroit, Michigan; and in a well drilled at Cone, Monroe County, Michigan. The formation has been traced as far as Peche Island in Lake St. Clair.

The fossils are listed according to phyla and classes, with symbols to indicate those occurring elsewhere than in the Silica quarries. The fauna found by Dr. G. M. Ehlers in cores at the head of Belle Isle has been listed in a paper written with Mary E. Cooley in 1927, and is not repeated here.

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## INTRODUCTION AND ACKNOWLEDGMENTS

THE SILICA FORMATION has been a source of beautifully preserved fossils ever since it was exposed with the removal of the drift cover by quarrying operations of the Sandusky (now Medusa) Portland Cement Company at Silica, Lucas County, Ohio, about 1920.

The formation is composed of two major units, the "blue" limestone bed averaging 10 feet thick and the overlying soft calcareous shale with thin argillaceous limestone interbeds. This formation, the Silica Shale of authors, has been divided into 19 units (Ehlers, Stumm, and Kesling, 1951, pp. 18–20). The formation strikes north 5° west through southern Michigan along the Lucas monocline to a point west of Dundee, Michigan, where the strike changes to the northeast through the town of Azalia, Monroe County, and Augusta Township, Washtenaw County, Michigan. North of this area the strike changes to east and trends along the north side of the Detroit Metropolitan Airport and through the northern part of Detroit and into Lake St. Clair at the north end of Belle Isle. Throughout its extent in Michigan the formation is covered with drift except for the recent excavation by the Martin-Marietta Company for a cement plant in Augusta Township, Washtenaw County. This gives Michigan its first permanent outcrop of the Silica Shale. Two temporary exposures have occurred in Michigan. One was in a water well drilled one mile south of the village of Cone, Monroe County; the other was an excavation for the intake tunnels for the Detroit water supply drilled at Waterworks Park, Detroit, and at the head of Belle Isle (Stumm, 1967).

The fossils of the Silica Shale are replaced by pyrite or calcite, or both, and they easily weather free from the shale matrix.

The numbers after the species refer to the numbers of the titles in literature cited.

The authors wish to thank Drs. C. A. Arnold and R. V. Kesling for critically reviewing the manuscript.

## COELENTERATA

## Hydrozoa

## Stromatoporoidea

†*Idiostroma* sp. 1

*Stromatopora nodulata* 1

## Anthozoa

## Rugosa

*Bethanyphyllum robustum* (Hall) 5, 45

†\**Billingsastrea longicarinata* Ehlers and Stumm 18

*Cyathophyllum robustum* Hall see *Bethanyphyllum robustum* (Hall)

§‡*Cystiphylloides americanum* (Edwards and Haime) 1, 5, 40, 45

*Cystiphyllum vesiculosum* Goldfuss see *Cystiphylloides americanum* (Edwards and Haime)

‡*Heliophyllum halli* (Edwards and Haime) 1, 5, 40, 45

*Heterophrentis inflata* (Hall) see *H. simplex* (Hall)

*Heterophrentis prolifica* (Billings) see *H. simplex* (Hall)

‡*Heterophrentis simplex* (Hall) 1, 5, 40, 45, 53

*Heterophrentis* sp. 17

§†*Hexagonaria anna* (Whitfield) 5, 17, 45, 48

†*Hexagonaria stewartae* Stumm 5, 45, 48

§†\**Hexagonaria tabulata* Stumm 5, 17, 48

†\**Hexagonaria tabulata convexa* Stumm 5, 48

§†\**Hexagonaria truncata* (Stewart) 5, 45, 48

*Hexagonaria whitfieldi* Stewart see *H. stewartae* Stumm

*Prismatophyllum annum* (Whitfield) see *Hexagonaria anna* (Whitfield)

*Prismatophyllum davidsoni* (Edwards and Haime) see *Hexagonaria anna* (Whitfield)

*Prismatophyllum truncatum* Stewart see *Hexagonaria truncata* (Stewart)

*Prismatophyllum whitfieldi* Stewart see *Hexagonaria stewartae* Stumm

\* = type locality for species.

† = described from "Blue" limestone (Units 1-6) only.

‡ = described from "Blue" limestone and Silica Shale (Unit 7 and above).

§ = described from "Blue" limestone in Whitehouse Quarry, Lucas Co.

- Strombodes simplex* Hall see *Heterophrentis simplex* (Hall)  
*Stylastrea anna* Whitfield see *Hexagonaria anna* (Whitfield)  
*Zaphrentis prolifica* Billings see *Heterophrentis simplex* (Hall)  
*Zaphrentis simplex* (Hall) see *Heterophrentis simplex* (Hall)

## Tabulata

- Alveolites roemeri* Billings see *Cladopora roemeri* (Billings)  
 ‡*Aulocystis auloporoidea* (Davis) 5, 40, 45, 56, 65  
*Aulocystis jacksoni* (Grabau) 5, 40, 45, 56, 65  
 \**Aulocystis lucasensis* Stumm 56  
 ‡*Aulopora microbuccinata* Watkins 5, 40, 45, 56, 65  
*Aulopora serpens* Goldfuss see *A. microbuccinata* Watkins  
*Ceratopora flabellata* Greene see *Aulocystis auloporoidea* (Davis)  
*Ceratopora jacksoni* Grabau see *Aulocystis jacksoni* (Grabau)  
 \**Cladopora crassa* Stumm 56  
 †\**Cladopora lucasensis* Stewart 5, 45  
 §†*Cladopora roemeri* (Billings) 1, 5, 45  
 †*Emmonsia arbuscula* (Hall) 5, 45  
 †*Emmonsia radiciiformis* (Rominger) 1, 5, 45, 53  
*Favosites alpenensis peninsulae* Swann 5, 45, 59  
*Favosites arbuscula* Hall see *Emmonsia arbuscula* (Hall)  
 †*Favosites hamiltoniae* Hall 1  
*Favosites hemispherica* Troost see *F. turbinatus* Billings  
*Favosites limitaris* Rominger see *Thamnopora limitaris*  
 (Rominger)  
 †*Favosites nitella* Winchell 5, 41, 45  
*Favosites placentus* Rominger 1, 5, 45, 53  
*Favosites radiciiformis* Rominger see *Emmonsia radiciiformis*  
 (Rominger)  
 §†*Favosites turbinatus* Billings 1, 5, 45  
 \**Favosites turbinatus lucasensis* Stumm 56  
 \**Planalveolitella parasitica* Stumm 55  
*Pleurodictyum* (*Procteria*) *cornu* Stumm 17, 50, 53, 56  
 \**Pleurodictyum* (*Procteria*) *plana* Stumm 56  
 \**Striatopora intermittens* Stumm 56  
 †*Syringopora perelegans* Billings 5, 45  
*Thamnopora limitaris* (Rominger) 1, 5, 45  
*Trachypora alpenensis* Stumm and Hunt 56  
 \**Trachypora labyrinthica* Stumm 56  
 \**Trachypora minutissima* Stumm 56  
 \**Trachypora? projectata* Stumm 56  
 \**Trachypora silicensis* Stumm 56

## ECHINODERMATA

## Blastoidea

- \**Hyperoblastus reimanni* (Kier) 19, 20, 28
- Nucleocrinus* sp. cf. *N. elegans* Conrad 20, 28
- Pentremitidea filosa* Whiteaves 20
- \**Pentremitidea reimanni* Kier see *Hyperoblastus reimanni* (Kier)

## Crinoidea

- Arthroacantha carpenteri* (Hinde) 17, 28, 40
- \**Botryocrinus niemani* Kesling 27
- \**Corocrinus nodosus* Kier 28
- \**Decadocrinus hughwingi* Kesling 25
- \**Decadocrinus stewartae* Kier 28
- \**Euryocrinus* ? *laddi* Stewart 17, 28, 40
- Gilbertocrinus alpenensis* Ehlers 28
- \**Gilbertocrinus ohioensis* Stewart 17, 28, 40
- Hexacrinus* ? sp. 40
- \**Opsiocrinus mariana* Kier 28
- \**Proctothylacocrinus esseri* Kesling 26
- \**Proctothylacocrinus longus* Kier 28

## ANNELIDA

## Polychaetia

## Errantida (Scolecodonts)

- Arabellites magnificus* Stauffer 35, 39
- Lumbriconereites expansus* Stauffer 35, 39
- Nereidavus planus* Stauffer 35, 39
- Protoarabellites hamiltonensis* Stauffer 35, 39

## Sedentaria

- Spirorbis arkonensis* Nicholson 40
- \**Spirorbis planum* Stewart 40

## BRYOZOA

- Acanthoclema ohioensis* McNair 17, 29
- Acanthoclema sulcatum* Hall & Simpson 40
- Botryllopora socialis* Nicholson 40
- Cystodictya incisurata* (Hall) see *Sulcoretepora incisurata* (Hall)
- Fistulipora vesiculata* (Hall and Simpson) 40
- Hederella* (*Bassleria*) *alpenensis* Bassler 3

- Hederella bilineata* Bassler 3  
*Hederella (Hederella) canadensis* (Nicholson) 40  
*Hederella cirrhosa* Hall 40  
*Hederella concinnoides* Bassler 3  
*Hederella delicatula* Bassler 3  
*Hederella (Hederella) filiformis* Bassler 3  
*Hederella (Magnederella) magna* Hall 3  
*Hederella parvirugosa* Bassler 3  
*Hederella rectifurcata* Bassler 3  
*Hederella reimanni* Bassler 3  
*Hederella thedfordensis* Bassler 3  
*Hederella vagans* Bassler 3  
*Helopora inexpectata* McNair 17, 29  
*Intrapora ? irregularis* Stewart 29, 40  
\**Leptotrypella ohioensis* (Stewart) 7, 14, 40  
*Monotrypella ohioensis* (Stewart) *see Leptotrypella ohioensis*  
(Stewart)  
*Monotrypella* sp. 40  
*Paleschara* sp. 40  
*Reptaria stolonifera* Rollé 3, 40  
*Reteporina striata* Hall 40  
*Stictoporina granulifera* Stewart 29, 40  
*Streblotrypa anomala* McNair 29  
*Streblotrypa hamiltonensis* (Nicholson) 40  
*Sulcoretepora deissi* McNair 29  
*Sulcoretepora incisurata* (Hall) 40

## BRACHIOPODA

## Inarticulata

- Craniella hamiltonae* Hall *see Petrocrania hamiltonae* (Hall)  
*Crania* sp. 40  
*Petrocrania hamiltonae* (Hall) 40

## Articulata

- Ambocoelia "umbonata"* (Conrad) 17, 40  
*Ambocoelia* sp. 17  
*Athyris vittata* Hall 40  
‡*Atrypa "reticularis"* (Linnaeus) 1, 40  
*Atrypa* sp. 17  
‡*Brachyspirifer audaculus* (Conrad) 1, 17, 40  
*Camarotoechia prolifica* Hall 40



- Chonetes coronatus* (Conrad) *see* *Devonochonetes coronatus* (Conrad)
- \**Chonetes fragilis* Stewart 1, 40  
*Chonetes* sp. 17
- †*Cyrtina alpenensis* Hall and Clarke 1  
*Cyrtina hamiltonensis* (Hall) 17, 40
- †*Cyrtina umbonata* (Hall) 1  
*Cyrtina* sp. 17
- †*Delthyris consobrina* ? (Orbigny) 1
- ‡*Devonochonetes coronatus* (Conrad) 1, 17, 40  
*Hercostrophia robusta* Williams 17, 67, 68  
*Leiorhynchus kelloggi* Hall 13, 17, 41
- \**Leiorhynchus lucasi* Stewart 40  
*Leiorhynchus* sp. 17  
*Longispina lissohybus* Imbrie 21
- †*Megastrophia concava* (Hall) 1
- †*Megastrophia hemispherica* (Hall) 1  
*Megastrophia* sp. 17  
*Mucrospirifer* cf. *M. arkonense* (Shimer and Grabau) 17
- ‡*Mucrospirifer mucronatus* (Conrad) 1, 60
- \**Mucrospirifer prolificus* (Stewart) 10, 17, 40, 52  
*Mucrospirifer* sp. 17  
*Paraspirifer bownockeri* (Stewart) 10, 17, 40, 67  
*Paraspirifer* sp. 17  
*Pholidostrophia iowaensis* (Owen) *see* *P. nacrea* (Hall)  
*Pholidostrophia nacrea* (Hall) 40  
*Productella spinulicosta* Hall *see* *Spinulicosta spinulicosta* (Hall)
- ‡*Protoliptostrophia perplana* (Conrad) 1, 17, 40, 67  
*Protoliptostrophia* sp. 17, 31, 67  
*Rhipidomella vanuxemi* Hall 40  
*Rhipidomella* sp. 10, 17  
*Schizophoria ferronensis* Imbrie 21  
*Schizophoria striatula* (Schlotheim) *see* *S. ferronensis* Imbrie  
*Schizophoria striatula* var. *parvum* Stewart *see* *S. ferronensis* Imbrie
- Schizophoria* sp. 10, 17  
*Spinocyrtia "euryteines"* (Owen) 40  
*Spinocyrtia* sp. 17  
*Spinulicosta spinulicosta* (Hall)  
*Spirifer bownockeri* Stewart *see* *Paraspirifer bownockeri* (Stewart)

- Spirifer euryteines* Owen see *Spinocyrtia* "euryteines" (Owen)  
 †*Spirifer marcyi* Hall 1  
*Spirifer pennatus* Atwater see *Mucrospirifer mucronatus*  
 (Conrad)  
*Strophodonta demissa* (Conrad) 40  
*Strophodonta demissa* var. 41  
 †*Strophodonta concava* Hall see *Megastrophia concava* (Hall)  
*Strophodonta hemispherica* Hall see *Megastrophia hemispherica*  
 Hall  
*Strophodonta perplana* (Conrad) see *Protoleptostrophia perplana*  
 (Conrad)  
*Strophodonta* sp. 17  
 \**Terebratula mediocris* Stewart 41  
 ‡*Tropidoleptus carinatus* (Conrad) 1, 17

## MOLLUSCA

## Pelecypoda

- Actinodesma erectum* (Conrad) 40  
*Cornellites flabellum* (Conrad) 40  
*Gosselettia triquetra* (Conrad) 17  
*Grammysia bisulcata* (Conrad) 40  
*Limoptera* sp. 17  
 \**Lophonychia cordata* Stewart 17, 42  
*Modiomorpha concentrica* Hall 40  
*Modiomorpha mytiloides* Conrad 40  
*Paracyclas elliptica* Hall 1  
*Paracyclas* sp. 17  
*Pterinea flabellum* Conrad see *Cornellites flabellum* (Conrad)  
 "Pterinea-like pelecypod" 1

## Gastropoda

- Platyceras bucculentum* Hall 40  
*Platyceras carinatum* Hall 40  
*Platyceras rarispinum* Hall 40  
*Platyostoma lineatum* (Conrad) 40

## Cephalopoda

- Protokionoceras* sp. 40  
*Tornoceras uniangulare* Conrad 30, 41

## Criconarida

- Styliolina fissurella* (Hall) 40  
*Tentaculites bellulus* (Hall) 40

## ARTHROPODA

## Trilobitoidea

- Dechenella (Dechenella) alpenensis* Stumm 57  
 \**Dechenella (Basidechenella) lucasensis* Stumm 54, 57  
 \**Echinolichas lucasensis* Stumm 57  
 \**Greenops chilmanae* Stumm 54, 57  
 \**Phacops rana crassituberculata* Stumm 51  
 \**Phacops rana milleri* Stewart 40, 51

## Malacostraca

- Dithyrocaris* sp. 34, 36  
*Rhinocaris ehlersi* Stewart 43

## Ostracoda

- \**Adelphobolbina trilobata* (Stewart) 8, 44, 47, 62  
 \**Aechmina serrata* Stewart 8, 44  
*Amphissites subquadratus* Stewart non Ulrich see *Arcyzona campylactinota* Kesling  
*Amphissites* sp. 44  
*Arcyzona campylactinota* Kesling 8, 23, 35, 37, 44, 60a  
*Bairdia* sp. 44  
*Birdsalella tumida* Stewart 44  
*Bufina abbreviata* Peterson 33  
*Bufina bicornuta* (Ulrich) 33, 44, 64  
 \**Bufina curti* Coley 8, 23  
 \**Bufina spinulifera* (Stewart) 8, 33, 44  
 \**Burlella ? bisulcata* Stewart see *Quasillites obliquus obliquus* Coryell & Malkin  
 \**Burlella brevispinata* Stewart see *Quasillites fordei brevispinatus* (Stewart)  
 \**Burlella rhomboidalis* Stewart see *Quasillites obliquus rhomboidalis* (Stewart)  
 \**Burlella sublunata* Stewart see *Quasillites sublunatus* (Stewart) [1 syntype] and *Quasillites obliquus obliquus* Coryell and Malkin [1 syntype]  
*Burlella* sp. 8, 44  
*Bythocypris indianensis* Ulrich 2, 35, 41, 44  
 \**Bythocypris lucasensis* Stewart 44  
 \**Bythocypris subquadrata* Stewart 44  
*Bythocypris* sp. 44  
 \**Coelonella plana* Stewart 41, 44, 63  
 \**Coelonella scapha* (Stewart) 8, 41, 44, 63

- \**Ctenobolbina trilobata* Stewart see *Adelphobolbina trilobata* (Stewart)  
*Ctenolocolina cicatricosa* (Warthin) 23, 35, 44, 60a
- \**Cytherella* ? *bispinulatus* Stewart see *Ponderodictya punctulifera* (Hall)
- \**Dizygopleura alethae* Coley 8  
*Dizygopleura oblonga* Warthin 44  
*Dizygopleura trisinuata* Van Pelt 8, 46a  
*Euglyphella primitiva* Warthin see *Euglyphella sigmoidalis* Jones  
*Euglyphella projecta* Coryell & Malkin 8, 33  
*Euglyphella sigmoidalis* Jones 8, 33, 35, 44, 60a, 64  
*Euglyphella sigmoidalis* var. *primitiva* Warthin see *Euglyphella sigmoidalis* Jones  
*Eukloedenella doverensis* Turner 8, 60a  
*Eukloedenella* sp. see *Eukloedenella doverensis* Turner  
*Halliella bellipuncta* Van Pelt see *Kirbyella* (*Kirbyella*) *bellipuncta* (Van Pelt)
- \**Hamiltonella ohioensis* Stewart see *Ponderodictya ohioensis* (Stewart)
- \**Hamiltonella ohioensis* var. *subcompressa* Stewart see *Ponderodictya ohioensis* var. *subcompressa* (Stewart)
- \**Hamiltonella punctulifera* (Hall) see *Ponderodictya punctulifera* (Hall)
- \**Haploprimitia simplex* Stewart see *Punctoprimitia simplex* (Stewart)  
*Hollinella* sp. 8
- \**Isochilina scapha* Stewart see *Coelonella scapha* (Stewart)  
*Jenningsina catenulata* (Van Pelt) 8, 32  
*Kirbyella* (*Kirbyella*) *bellipuncta* (Van Pelt) 8, 35, 37, 44, 60a, 61
- \**Leperditia* ? *subrotunda* ? Stewart see *Coelonella plana* Stewart
- \**Lucasella mundula* Stewart see *Quasillites fordei mundulus* (Stewart)
- \**Lucasella spinulifera* Stewart see *Bufina spinulifera* (Stewart)
- \**Macrocypis acutula* Stewart 44
- \**Menoeidena subreniformis* Stewart 8, 44, 60a
- \**Menoeidina subreniformis* var. *elongata* Stewart 8, 44  
*Moorea bicornuta* Ulrich see *Bufina bicornuta* (Ulrich)  
*Octonaria quadricostata* Van Pelt see *Strepulites quadricostatus* (Van Pelt)
- \**Parabolbina bifida* (Stewart) 8, 44, 62

- Paraparchites ? subrotundus* (Ulrich) 2  
*Poloniella cingulata* Warthin 8, 44, 60a  
*Ponderodictya ohioensis* (Stewart) 8, 35, 44, 60a  
*Ponderodictya ohioensis* var. *subcompressa* (Stewart) 44  
*Ponderodictya punctulifera* (Hall) 8, 24, 35, 40, 44, 60a  
*Ponderodictya unicornis* Van Pelt see *Ponderodictya punctulifera* (Hall)  
*Primitia seriata* Stewart 35, 44  
*Primitiopsis punctulifera* Hall see *Ponderodictya punctulifera* (Hall)  
 \**Punctoprimitia simplex* (Stewart) 8, 24, 44  
*Quasillites concentricus* (Turner) 32  
 \**Quasillites fordei brevispinatus* (Stewart) 8, 32, 44  
*Quasillites fordei fordei* (Coryell and Malkin) 32  
 \**Quasillites fordei mundulus* (Stewart) 32, 44, 60a  
*Quasillites obliquus arkonensis* Peterson 32  
*Quasillites obliquus obliquus* Coryell and Malkin 8, 32, 44  
 \**Quasillites obliquus rhomboidalis* (Stewart) 32, 44  
 \**Quasillites sublunatus* (Stewart) 32, 44  
*Ropolonellus papillatus* (Van Pelt) 64  
*Strepuilites crescentiformis* (Van Pelt) 64  
*Strepuilites quadricostatus* (Van Pelt) 8, 60a, 64  
*Tetradella cicatricosa* Warthin see *Ctenoloculina cicatricosa* (Warthin)  
*Tetrasacculus bifidus* Stewart see *Parabolbina bifida* (Stewart)  
 \**Tetrasacculus bilobus* Stewart 44  
*Tetrasacculus minimus* (Ulrich) 62  
 ?*Thlipsurella swartzi* Warthin 62  
*Ulrichia conradi* Stewart non Jones see *Ulrichia spinifera* Coryell and Malkin  
*Ulrichia fragilis* Warthin 8, 44, 62  
*Ulrichia spinifera* Coryell and Malkin 8, 23, 44, 60a

## MISCELLANEA

## Conodonts

- Acodus formatus* Stauffer 38  
*Acodus inopinatus* Stauffer 38  
*Acodus zionensis* Stauffer 38  
*Bryantodus ignotus* Stauffer 38  
*Cervicornoides alternatus* Stauffer 38

- Icriodus cymbiformis?* Stauffer 38  
*Icriodus expansus* Branson and Mehl 7a, 12a  
*Icriodus latericrescens* Branson and Mehl 7a  
*Icriodus postiflexus* Branson and Mehl 7a, 12a  
*Nothognathella* sp. 38  
*Oistodus humulis* Stauffer 38  
*Polygnathus decorosus* Stauffer 38  
*Polygnathus strongi* Stauffer 38

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