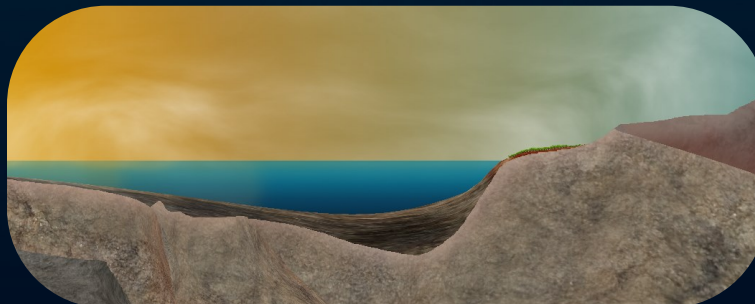


## Geology at Seven Stars

The strata exposed at Seven Stars were deposited during the Givetian Stage of the Middle Devonian Period, as the Acadian Highlands rose in the East, forming a tall mountain range that likely caused a rain-shadow effect. Only large storms could have made it over the mountains, and these coupled with snowmelt to produce seasonal floods. These floods eroded sediment that had weathered out of the highlands and sent them throughout the Catskill Delta complex until they were deposited in the Appalachian Basin, covering marine communities in what would later become the Mahantango Formation. Based on the fauna present in the site, Seven Stars was a transitional environment that supported both characteristically near-shore and off-shore species.

**Top:** This paleomap of the Pennsylvania region during the Devonian Period shows winds and the movement of water and sediment from the mountains. The pindrop marks the location of Seven Stars

**Bottom:** A cross section of the Seven Stars region, showing the buildup of sediment in the Catskill Clastic Wedge.



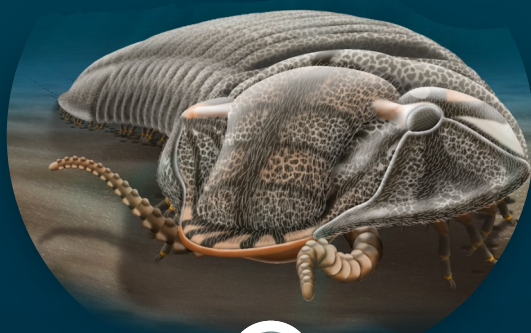
## SEVEN STARS FOSSIL GUIDE

**235 Seven Stars Road  
Seven Stars, PA  
17062**



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To learn more and find detailed descriptions for each species, visit [bringingfossilstolife.infinityfreeapp.com](https://bringingfossilstolife.infinityfreeapp.com)



## A DIVERSE ECOSYSTEM

Seven stars was once a shallow sea full of marine life. A large storm covered it in silica-based sediment from the east, fossilizing thousands of organisms preserved as internal molds, external molds, or recrystallized shells, most either carbonized or pyritized. These rocks were part of the Sherman Ridge member of the Mahan-tango Formation, part of the larger Hamilton Group.

There were at least  
**42**  
species at Seven Stars

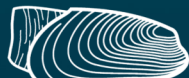
### Bivalvia



*Orthonota undulata*



*Goniophora hemiltonensis*



*Modiomorpha concentrica*



*Grammysioidea alveata*



*Grammysia bisculcata*



*Actinodesma erectum*



*Nuculites triqueter*



*Nuculites oblongatus*

### Gastropods



*Bembexia sp.*



*Cyclonema sp.*



*Palaeozygopleura hamiltoniae*



*Ptomatis patulus*

### Monoplacophora



*Cyrtionella mitella*

### Brachiopoda



*Mucrospirifer mucronatus*



*Spinocyrtia granulosa*



*Devonochonetes coronatus*



*Strophodonta demissa*

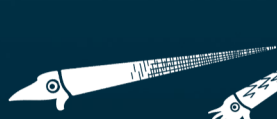


*Rhipidomella penelope*



*Orbiculoidea truncata*

### Cephalopoda



*Striacoceras typum*



*Michelinceras sp.*



*Bactrites aciculum*



*Agoniatites vanuxemi*



*Tornoceras uniangulare*

### Trilobita



*Dipleura dekayi*



*Greenops boothi*



*Greenops grabau*



*Eldredgeops rana*

### Anthozoa



*Pleurodictyum americanum*



*Stereolasma rectum*

### Conodonta



*Conodonta indet.*

### Crinoidea



*Botryocrinus bellensis*



*Ancyrocrinus bulbosus*

### Phoronida?



*Tentaculites bellulus*



*Reptaria stolonifera*

### Plants



*Archaeopteris spp*



*Plantae indet.*

### "Fish"



*Bothriolepis sp.*

### Annelida



*Eunicida indet. (burrow)*

### Hyolitha



*Hallothea aclis*

### Bryozoa



*Atactotoechus furcatus*