

# A VERY QUICK GUIDE TO THE FOSSILS OF LARSON QUARRY

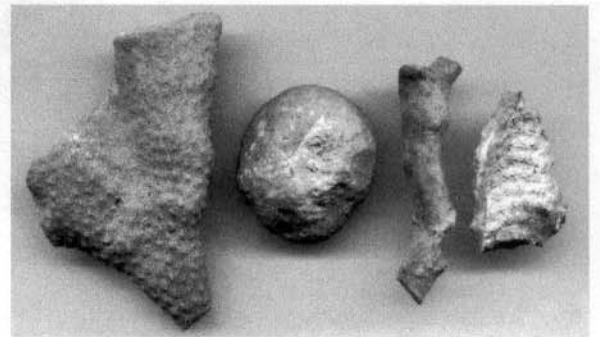
- ⇒ **The quarry exposes rock from the middle to upper Ordovician Period (456 Ma) up to the lower Silurian Period (432 Ma).**
- ⇒ **The most fossiliferous layers are the Brainard Shale and the Fort Atkinson Limestone.**
- ⇒ **Some common phyla:**
  - **Bryozoa**
  - **Brachiopoda**
  - **Echinodermata**
  - **Arthropoda (Trilobita)**
  - **Mollusca (Gastropoda and Cephalopoda)**

## Phylum Bryozoa

- Colonial, mostly marine animals
- calcareous skeleton
- Ordovician → Present
- Filter feeders (have lophophore)
- 3 classes
  - Phylactolaemata
  - Gymnolaemata
  - Stenolaemata
    - Order Trepostomata
      - *Prasopora*
      - Other forms



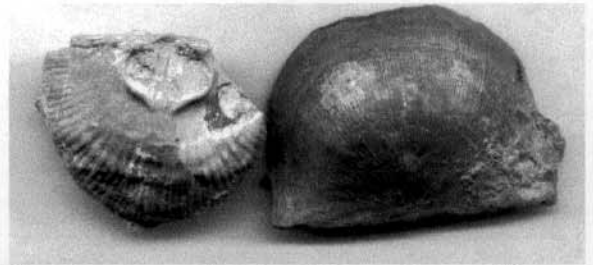
*Prasopora* sp. View from above (L) and below (R).



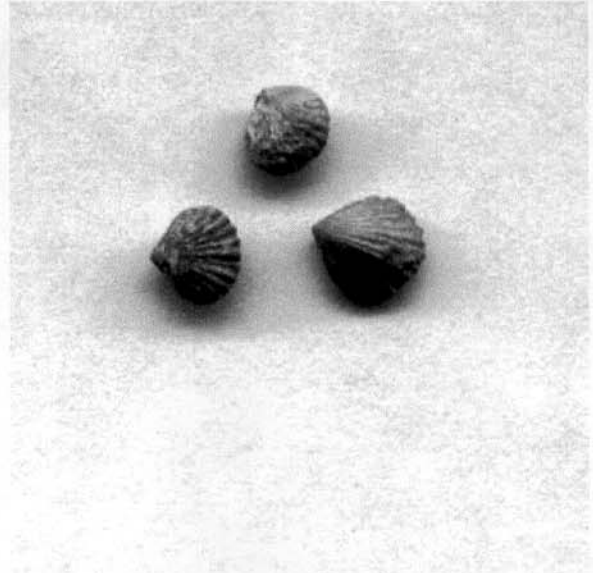
Other forms of trepostome bryozoa.

## Phylum Brachiopoda

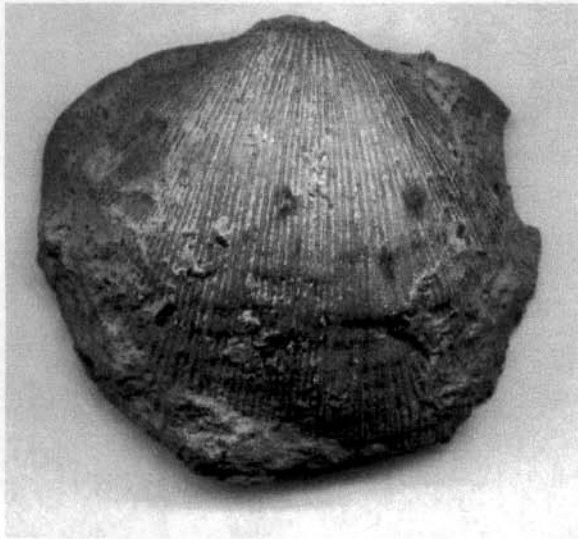
- Solitary
- 2-valved shell (plane of
  - symmetry runs through
  - both shells, unlike clams)
  - Cambrian → Recent
  - Filter feeders (have lophophore)
  - 2 classes
    - Inarticulata
    - Articulata
      - Order Orthida
        - *Hebertella*
        - *Platystrophia*
      - Order Strophomenida
        - *Strophomena*
      - Order Spiriferida
        - *Zygospira*



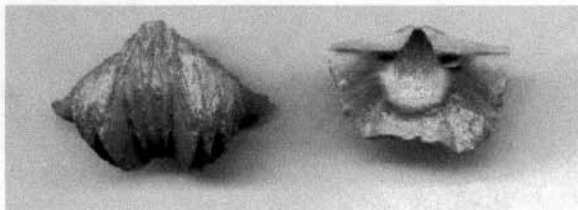
*Strophomena* sp., interior with muscle scars (L), exterior (R). 4 cm. wide.



*Zygospira* sp. 3 to 5 mm. wide.



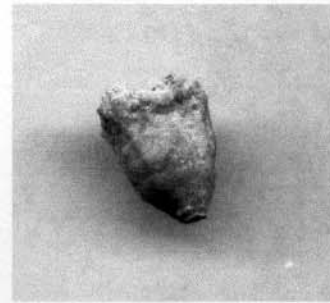
*Hebertella* sp., 4 cm. wide.



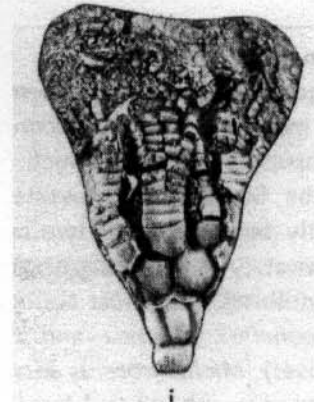
*Platystrophia* sp., external (L) and internal (R) views.

Phylum Echinodermata  
(Crinoids and Cystoids)

- Solitary
- Calcareous skeleton
- pentameral symmetry
- variety of feeding methods  
(Larson types are filter feeders)
- Some are anchored, others are free-moving, a few can swim.
- 5 extant classes, 20 - 25 total classes depending on classification used.
  - Class Crinoidea
    - *Compsocrinus*
    - *Cupulocrinus*
  - Class Rhombifera
    - *Lepadocystis decorus*



*Compsocrinus* sp. cup (crown).



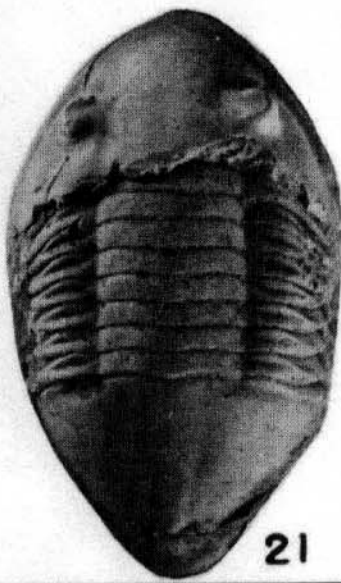
*Cupulocrinus* sp.



*Lepadocystis decorus*

Phylum Arthropoda  
Subphylum Trilobitomorpha

- Solitary
- Calcified exoskeleton
- Cambrian → Recent
- Detritus feeders
- Class Trilobita
  - Order Asaphida
    - *Isotelus*
    - *Anataphrus*
  - Order Phacopida
    - *Flexicalymene*



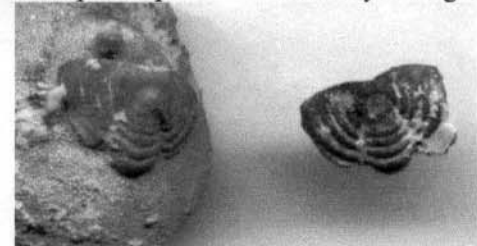
*Isotelus* sp. Specimens up to 5 inches long known from Larson.



*Anataphrus* sp.



*Flexicalymene* glabella.



*Flexicalymene* pygidia.

## Phylum Mollusca

### Subphylum Cyrtosoma

- Class Gastropoda (snails)
  - Liospira
- Class Cephalopoda
  - Order Nautiloidea
    - Orthoconic types
    - predators



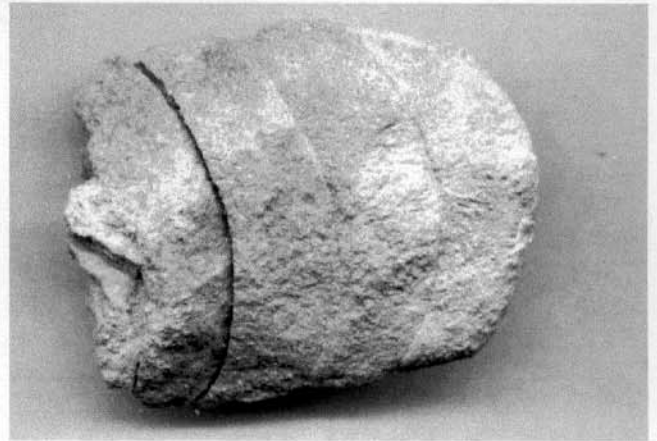
*Liospira sp.*

### Subphylum Diasoma

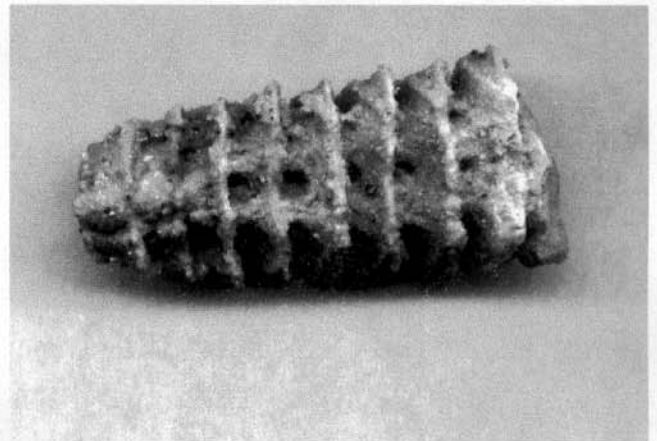
- Class Bivalva (clams)
  - Internal molds sometimes
    - found. Otherwise uncommon.



Internal molds of bivalves.



Orthoconic cephalopod chambers.



Orthoconic cephalopod showing siphuncle.