Stonerose Interpretive Center and Eocene Fossil Site: an integrative model at the crossroads of research, public outreach and community involvement

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Melanie L. DeVore, Georgia College & State University, Milledgeville GA
Kathleen B. Pigg, Arizona State University, Tempe AZ
It is the Mission of the Stonerose Interpretive Center to promote both public and scientific interest concerning paleo-environments and geological features in Ferry County and immediately surrounding areas.

This Mission will be accomplished by collecting, preserving, exhibiting and interpreting appropriate natural objects, by research, outreach and by exchange of information with other educational and research institutions.
Our Model:

Public
(access & outreach)

Science
(research & education)

Community
(support & education)
Stonerose is remote
Ferry County
Twice the size of Rhode Island
Population – 7,700
Area – 2,257 sq.mi
Republic is the only incorporated town
Republic (1910)
Population: 999

Republic (2010)
Population: 1,077
The Republic Flora has been studied for over a century, but was not considered very significant for most of that time.

- 1910  J. Umpleby*
- 1929  E.W. Berry*
- 1935-40  R.W. Brown
- 1960  Wolfe & Barghoorn (Eocene)

*initially considered part of the Miocene Latah Formation

Until....

- 1977  Wehr & Johnson (Road Trip)
Wesley C. Wehr, Affiliate Curator of Paleobotany, Burke Museum, WA (1929-2004)

Teenaged Kirk just got his license so they took a road trip.

Kirk Johnson, Sant Director of the National Museum of Natural History
Identified 18 previously known flowering plant taxa,
Named 6 new species, and 6 new genera
Provided the foundation for studying the Republic flora
The Republic flora provides a rare glimpse at early diversification of the Rosaceae and other temperate genera.
The Republic Fauna

Fish (A), Insects (B), Bird feather (C), Snail (D), Crayfish (E)
The quality of preservation is not only aesthetically pleasing but also enables detailed analysis by researchers.
Stonerose Interpretive Center is housed in the historic Whittaker-Fletcher Building (1911).

1994 – a 600 sq ft addition was built for the Interpretive Center. The Ferry County Historical Society is housed in the original building.
The Stonerose Collections have over 8000 accessioned specimens. Ongoing collecting by the public provides new material of research and display quality, as well as a source for education and outreach.
Researchers

Melanie DeVore GCSU
Bruce Archibald SFU
Kathleen Pigg ASU
Finley Bryan USDA, Raleigh
Kirk Johnson DMNS
Steve Manchester FLMNH
Conrad Labandeira NMNH
The Center displays and interprets illustrative examples of the diverse flora and fauna found at the site.
Customized Database Program Developed by Jan Hartford
All visitors sign in at our Strata™ Kiosk

Besides getting the visitor’s name and contact information, we also gather valuable demographic data
A Contact information record is much more than an address book entry.
Accessioning and curating database module
So, what do we offer the Public?
BOOT HILL
Stonerose’s primary public collecting area

Stonerose owns an additional city block for future development
The BOOT HILL Site is conveniently located just 3 blocks from the Interpretive Center.
After receiving an orientation talk, Stonerose provides public access to the fossil resource. Diggers are allowed to keep up to 3 fossils per day.
2013 – 6,511 Visitors

Foreign Visitors:
Australia - 10
Canada - 262
Finland – 3
France – 2
Japan – 10
Mexico – 2
Russia – 4
Switzerland 1
Taiwan – 1
United Kingdom - 9
Stonerose also provides
EDUCATION OUTREACH PROGRAMS

• School Group visits on site
• Travel to present at Schools
• Dino Day at the Burke Museum
• Ferry County Fair
• Prospector Day Parade
• National Fossil Day
• Special Events
In 2013, Stonerose had 21 school groups: 846 students and adults had the thrill of discovery.
Oz found a beautiful *Crataegus* fossil which Stonerose retained for further study.

These young students proudly display their finds, which they were allowed to keep.
Researchers who study Republic fossils participate in outreach

Dr. DeVore telling the story of plants in the Eocene and the emergence of the Rosaceae as a diverse plant community
Dr. Archibald captivates a local school group with stories of the ancient past – Climate and the diversity of insects

How cool is it to hear a real scientist talk about their research?
...and provide educational materials for the public
School Outreach Programs

Staff travel to schools across the State during the ‘off’ season

Hands On learning keeps the students focused
Stonerose goes to Dino Day at the Burke Museum in March

Where 1,600 -1,900 children have an opportunity to find their fossil
Prospectors Day Parade in June celebrates Republic’s mining past. 

Future paleo-entomologists
Opportunities for discovery are possible at the Ferry County Fair
National Fossil Day has been a remarkable end to our season.
Students illustrated a geologic timeline on the street outside Stonerose.

The Cambrian was particularly well done.
Community Support and Education
More than 100 papers and a major monograph have used Stonerose fossils as data.

**Corylus, Carpinus, and Palaeocarpinus (Betulaceae) from the Middle Eocene Klondike Mountain and Allenby Formations of Northwestern North America**

Kathleen B. Pigg, Steven R. Manchester, and Wesley C. Wehr

**Paleobiology of middle Eocene plant-insect associations from the Pacific Northwest: A preliminary report**

Conrad C. Labandeira

Department of Paleobiology, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, USA and Department of Entomology, University of Maryland, College Park, MD 20742, USA

**New diversity among the Trochodendraceae from the Early/Middle Eocene Okanogan Highlands of British Columbia, Canada, and Northeastern Washington State, United States**

Kathleen B. Pigg, Richard M. Dillhoff, Melanie L. DeVore, and Wesley C. Wehr

**Early Eocene big headed flies (Diptera: Pipunculidae) from the Okanagan Highlands, western North America**

S. Bruce Archibald, Christian Kehlmaier, Rolf W. Mathewes
And those Finder records I mentioned earlier...
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</table>
Stonerose deeply values the contributions our finders make to the continuing research. Often new genera are named by the scientists using the finder’s name in the new etymology.

*Oemleria janhartfordae* - Rosaceae
And finally, a big **Thank You** to Madilane Perry, Lisa Barksdale and Catherine Brown for creating and developing Stonerose Interpretive Center.
Fossils, Friends and truly Great Beer! Y’all come see us now, you hear.