

SCHEDULE OF MEETINGS

1. Sept. 8 Orientation, Safety
 2. Sept. 29 Collecting Fossils "Look what I found!"
 3. Oct. 20 Deep Time - Earth's History
 4. Nov. 6 Field Trip-Local Geology (part 1)
 5. Dec. 8 All About the Fossils
 6. Jan 12 Paleocommunity "Meet my friends!"
 7. Feb. 9 Team Project 1
 8. Mar 16 Team Project 2
 9. Apr. 13 Team Project 3
 10. Apr. 16 Field Trip (part 2)
 11. May 11 Putting it All Together
 12. May 14 Barbecue
 13. Jun 8 Closing Meeting
- Buckhorn Mine tours - dates to be determined

COLLABORATING PARTICIPANTS

Caroline Stromberg, PhD - Burke Museum, U. of Wa.
Dr. Kathleen Pigg, PhD - Arizona State University
Melanie DeVore, PhD - Georgia College and State U.
Bruce Archibald, PhD - Simon Fraser University
Curlew: John Bell
Inchelium: Ricke Swaim, Sue Dean Langlois
Republic: Marty Alvstad, Josh Zakar
Kinross Gold Corporation
City of Republic
Ferry County Commissioners

For further information, please call or e-mail us at:
(509) 775-2295 srfossils@rcabletv.com

Rev. 7

STONEROSE EARTH SCIENCE CLUB

2010-2011 HANDBOOK



FOR STUDENTS OF
CURLEW, INCHELEUM and REPUBLIC
SCHOOL DISTRICTS

STONEROSE INTERPRETIVE CENTER
15 NORTH KEAN STREET
REPUBLIC, WASHINGTON 99166
(509) 775-2295 srfossils@rcabletv.com

Friends of Stonerose Fossils is a 501c(3) tax-exempt organization.

Catherine Brown - Stonerose Interpretive Center Director



Zizyphoides, Hymenoptera, Bignoniaceae, - sounds like another language. It is! The language of Science, *Latin*.

When I started working at Stonerose 10 years ago, and was shown a list of fossil names, I practically turned and ran.

How do you pronounce Hamamelidaceae? What does it mean?

Well I am glad I stuck it out because I have learned so much. I can now pronounce most of the fossil names as well as identify them. I've learned to identify common rocks, minerals, and rock formations. Whether I am cutting firewood, weeding the garden, or driving from Republic to Curlew or Inchelium, a new 'ology' adventure awaits. 'Ology'? biology, geology, archeology, paleontology, morphology - 'ology' simply means the study of something.

Science fascinates me because it is ever present. *You* have been practicing science every day. Why did you grow 6" last summer? Why is the sky blue? What causes a rainbow? What caused Cork Screw Mountain (Curlew)? Why is Ferry County so rich in gold deposits?

I think you will find fossils interesting, but our focus is more general. We want to build upon your abilities to observe, question, research, and publish your findings.

One of the most important aspects of our program is to bring you face to face with scientists and their current research. Working directly with scientists has opened my eyes to everyday discoveries, how simple questions can have complicated answers and research in one field may influence the practices of another.

Come and share the joy of discovery!

Michael Sternberg - President & Scientific Liaison for the Friends of Stonerose Fossils Board of Directors



Michael's fascination with fossils began in Tennessee, as a young child, where he found crinoids and brachiopods in the foothills of the Smokey Mountains. Since then he has been President of the Northwest Paleontological Association in Seattle, a member of the Geological Society of America and the Botanical Society of America, and is currently President of the Board, Friends of Stonerose, and Science Director of the [Stonerose Earth Science Club](#).

A BRIEF HISTORY OF STONEROSE

The fossils at our site were formed 50,000,073 years ago. The *Friends of Stonerose*, however, was formed in 1988. Our mission is to promote both public and scientific interest concerning geological features in Ferry County and surrounding areas. Every year scientists come to study these features in Ferry County, and every year an average of 8,000 visitors come to dig at our site in Republic.

Directors such as Madeline Perry, Lisa Barksdale and Catherine Brown have built "[Stonerose](#)" into an internationally recognized name in the scientific field. Visiting scientists publish articles in many scientific magazines about the fossils at our site.

Currently, Stonerose has over 500 members worldwide. We hold an annual fund-raising event in the Spring, a lively event which is supported by local artists and businesses. *Friends of Stonerose* is a 501c(3) tax-exempt organization.

FRIENDS OF STONEROSE BOARD OF DIRECTORS

Michael Sternberg	-	President
Lynn Beltz	-	Vice-President
Susan Hoyt	-	Secretary
Eugene Rietzke	-	Treasurer
Shannon Miller	-	Member at Large
Jeff Fee	-	Member at Large
Debbie Sandona	-	Member at Large
Mary Rourke	-	Member at Large

“HOW TO ACT”

Please remember the following:

Always be on time. Arrive five minutes early if possible. We only have 2 hours for each meeting.

Dress appropriately. Wear sturdy shoes and gloves.

Respect your teammates. There will be **zero tolerance** of disruptive behavior.

Respect the fossil site and Center. Equipment can be expensive. A fossil is not just an old rock.

Bring water to drink.

VOLUNTEERING

We ask that each student accepted into the club volunteer at the Interpretive Center two or three days during the summer. This can be at the student's convenience, as the Center is open seven days a week. This time will help the student become acclimated to the world of fossils, and how we do it at Stonerose.

We also urge each student to return to their school and, working with their science teachers, start a “science club” at their school. Help get other students to become interested in science.

ABOUT THE EARTH SCIENCE CLUB

Every small fossil tells a little story. Many fossils together can tell a **big** story. The purpose of the Stonerose Earth Science Club is to show you how to “read the story” of the fossils, so you can learn about the **geologic** history of Ferry County.

You will have exciting hands-on activities at our Boot Hill fossil site and our Interpretive Center. You will work together with the Science Director and several visiting scientists who come to Stonerose. And, you will go on day long field trips to geologic sites around Ferry County.

At the end of your experience in the club, you will have written your own perspective of the ancient history of Ferry County and gained a deeper appreciation of how science works.

This club is being offered to Junior and Senior High school students of the three Ferry County school districts. There will be **13** club meetings, (including a barbecue) each two hours long in the afternoon, and two all-day Saturday field trips. (See schedule.)

The **Stonerose Earth Science Club** has been developed in collaboration with your science teachers, school administration, Stonerose and scientists doing research on the Stonerose fossils. Upon successful completion of the club objectives, you may earn .25 science credit on your transcript or satisfy other scholastic requirements. The transcript credit may be accumulated over two years.

TEAM CONCEPT

Each club member will work as part of a team. Each team will be composed of students from all the schools and of a broad age range. Team members will be expected work cooperatively on projects. Teams will be given separate projects to be completed by the end of the club year.

“**Teamwork**” will be an important aspect of this club. Stonerose promotes the understanding of and respect for different cultural views of the earth and its importance in our lives.

NOTEBOOKS

Club members will be given a notebook at the first meeting. Part of the club activity will be learning how to properly record your assumptions and your findings as you progress through the scientific activities.

Members of the **Earth Science Club** will also be required to maintain an “electronic” notebook. You may access your notebook from the Stonerose Interpretive Center, your school computer lab, the Republic library, or your home.

At the end of the club year, your electronic notebook will be reviewed by your science teachers, by the Stonerose Science Director and by the scientists around the world who have collaborated on this club.

FIELD TRIP

On two Saturdays, November 6 and April 16, there will be an all day field trip, visiting several important geologic sites in Ferry County. This trip will leave from the Stonerose Interpretive Center in Republic at 9:30 am.. Please arrive a few minutes early.

Transportation for these trips will be provided, along with a lunch. Please bring water for drinking, and dress appropriately, especially if it is cold or rainy.

APPLICATION PROCESS

Participation in this club is by application. There will be a limited number of students accepted from each school. The application should be removed from the center of this handbook, and mailed or returned to the Stonerose Interpretive Center. *The signature of your parent of guardian is required.*

Your reference may be from one of your teachers, a Scout leader, a 4-H leader, or similar person. **The deadline for submitting applications is June 1, 2010.** (Applications received after that date will be considered if space becomes available.)

Club members will be selected based on the following criteria:

- interest in science
- good communication skills
- positive reference.