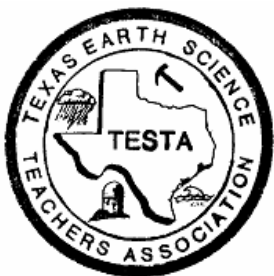


TESTA News...

March
2017

**SPECIAL
POINTS OF
INTEREST:**

- **CAST 2017
Plans**
- **Solar Eclipse**
- **CAST Dinner
Meeting**
- **Earth Science
Strand**
- **Teacher of the
Year**
- **Professional
Development
Opportunities**



CAST 2017 – 60th Anniversary!

Promoting Advocacy, Professional Development, and Networking

Plans are underway for another fantastic CAST in Houston this November. TESTA has put together a strand of presentations that consists of four short courses and 13 workshops, along with our annual Rock Raffle, Friday Night Dinner Meeting and Share-a-Thon during the conference. Details will be in the next issue of the Tailings!

Also, check out in this issue information on the TESTA Spring Conference scheduled for this February in Johnson City, Texas.

Please be sure to stop by the booth and renew your membership at CAST or visit our website (<http://www.lpi.usra.edu/education/TESTA/>) and print out a renewal form and send it in. See you in November!



Eclipse Across America

By Lisa Brown, Ed.D.

There is a major celestial event occurring in the United States on August 21, 2017 – a total solar eclipse. It will cover a 60-70 mile swath from Oregon to South Carolina and the entire continent will experience a partial eclipse. Anyone within the path will be treated to a remarkable sight. NASA has developed an interactive map where you can enter your location and you will be provided with start and end time times, magnitude, and obscuration.

https://eclipse2017.nasa.gov/sites/default/files/interactive_map/index.html

The 2017 Solar Eclipse offers several opportunities for you and your students to become citizen scientists by helping NASA collect data. NASA wants to collect data about how the eclipse will change atmospheric conditions. Since the energy exchange between the Sun and Earth is vital to support life, the solar eclipse is a unique opportunity for scientists to study the effect of the Sun's radiation on the Earth's surface. You can contribute by collecting data on air temperature and cloud observations (cloud type and cover). The GLOBE Observer app -

(<https://observer.globe.gov/about/get-the-app>) is the easiest way to participate. You and your students will be able to make observations of any changes in the clouds as the Sun becomes more occluded. NASA is asking you to collect data for 2 hours before and 2 hours after the maximum eclipse at 15-30 minute intervals. Additionally, they are asking you to measure the air temperature. For more detailed information, please visit <https://observer.globe.gov/science-connections/eclipse2017>



Here are some of the scientific investigations, which will occur during the eclipse: (nasa.gov)

- Observing and recording data can help scientists understand the Sun's effects on our atmosphere especially the impact on Earth's ionosphere where long-range, very low frequency telecommunication transmissions travel
- Understanding why the Sun's atmosphere which is 1 million degrees hotter than its surface and X-ray jets from the corona
- Calibration of instruments on satellites
- NASA will send two WB-57 planes to chase the eclipse to measure the solar corona in the infrared and visible light to help scientists understand how energy moves throughout the sun's atmosphere
- The eclipse represents a unique opportunity to study how Earth's radiation budget fluctuates.



If you are unable to be outside to view the eclipse, NASA will be live on NASA TV. <https://eclipse2017.nasa.gov/eclipse-live-stream> This will be a four-hour live video.

Eclipse tales from around the world can be used to incorporate multi-cultural folktales into your curriculum. The Lunar and Planetary Institute have videos were recorded by storytellers about eclipses.

<http://www.lpi.usra.edu/education/explore/eclipse/?fref=gc>

Multiverse also has listed resources about astronomy from different cultures – African-American, Hispanic, Native

American, African, Islamic, Central and South American, Hawaiian, Polynesian, Native Australian, Asian, and Ancient European. <http://multiverse.ssl.berkeley.edu/multicultural?fref=gc>

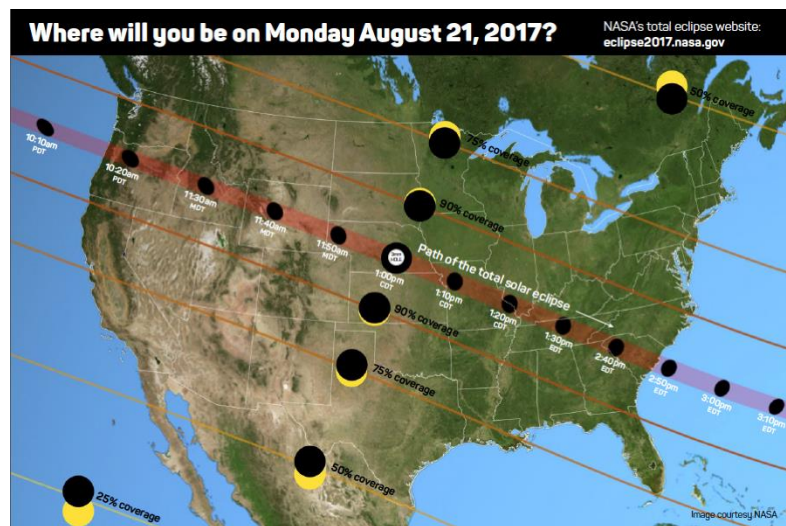
Please visit the NASA 2017 Total Eclipse website for more information and for educational activities you and your students can conduct to enhance this mind-blowing celestial experience. <https://eclipse2017.nasa.gov/k-12-formal-education>



Safety note: Please be sure to view the eclipse through filters on a telescope or using safe lenses, or through eclipse glasses certified ISO 12312-2. The safest way to observe the eclipse is by using indirect methods.

<https://eclipse2017.nasa.gov/safety>

Where will you be?



Teacher of the Year Nominations!

Every year at CAST, we honor our TESTA Teacher of the Year. Applications are currently being taken to be considered for our 2017 Award. Requirements for Teacher of the Year are as follows:

- Be a member of TESTA
- Teach earth science units and/or classes in a Texas public or private school for a minimum of at least 3 years.
- Apply by submitting the following

items - Resume and a Letter of Recommendation from a colleague or administrator, and a brief essay on your philosophy of teaching.

Applications should be submitted electronically to -

kathrynbarclay65@aol.com

Applications are due by October, 2017.

The selected Teacher of the Year will be recognized during the TESTA dinner at CAST with an engraved plaque, \$300.00 award check, and complementary tickets to the luncheon.



Texas Earth Science Teachers Association

CAST Dinner



Friday - November 10th

7:30 PM

Spaghetti Western Italian Cafe

1608 Shepherd Drive – Houston, TX 713 – 861 - 1313



- Italian Nachos Appetizer
- Caesar and/or Garden Salad
- Spaghetti Western "Formal Wear" - bowtie

pasta, grilled chicken, mushrooms, and sundried tomatoes with a roasted garlic cream sauce.

- Grilled salmon topped with artichokes, capers, and spinach with a lemon butter sauce on angel hair pasta.
- Selection of mini - desserts
- Tea, Soft Drinks, coffee

\$28.00 per person (tax and tip included)

*** Menu will be served family style.**

Join us for our annual meeting, awards, and fellowship. Kelly Drinnen, Education and Outreach Specialist, NOAA Flower Garden Banks National Marine Sanctuary is our guest speaker.

TESTA Spring Conference 2018

Where: **SELAH ~ Bamberger Ranch – Johnson City, Texas**

When: Friday – February 16, 2018 to Sunday – February 18, 2018

Cost: \$175.00 - Includes two nights housing, ranch tour, entrance fees, book, and meals/snacks except for Saturday night dinner in Llano, which is on your own.

Agenda:

Friday – February 16th

1:00 - Science Mill Museum – 101 South Lady Bird Lane, Johnson City, TX. 78636

- Registration & Check in (<http://www.sciencemill.org>)
- Get your Avatar and then spend the afternoon exploring this 47 station hands-on, interactive discovery museum that covers chemistry, physics, biology, and earth science K-12 TEKS.

4:30 – Dinner at the Lady Bird Lane Café after the closing of the museum. (Dinner provided)

~ 5:30 – Depart for Selah, Bamberger Ranch – (will caravan together since it is difficult to find)

- Meet and greet everyone as you claim your bunk and settle in.
- Light snacks provided for evening “munchies” along with an evening program.



Saturday – February 17th (8 hours Professional Development time)

7:00 AM - Breakfast and pack your picnic lunch to enjoy at Longhorn Caverns State Park. (Carpool)

8:00 AM - Depart for off ranch activities –

9:00 AM - Longhorn Caverns State Park – geology workshop/tour into one of Texas’s only river formed caverns and surrounding area of Ink’s Lake and Kingsland. After the tour, enjoy your picnic lunch in the park and check out the gift shop.

2:15 PM Depart for Canyon of the Eagles – Colorado River Scenic Wilderness Tour Cruise through Colorado River Canyon (3:00 to 5:00). A 22 -mile round trip cruise to view the geology and ecology of the Colorado River and Lake Buchanan.

5:15 PM Depart for Llano, TX – stop and view the Llano River Falls and then dinner (**on your own**) at Cooper’s Old Time Pit BBQ, a nationally acclaimed BBQ place!

Depart for ranch after dinner (45 miles) for rest, relaxation, and desert.

9:00 PM Silent Auction & Visiting around the giant fireplace.

Sunday – February 18th (5 hours Professional Development time)

8:00 AM - Breakfast and pack up bedding/load cars.

9:00 AM - Selah Ranch Activities – Tour, Dinosaur Tracks, Water Management, Conservation, and fossil collecting.

2:00 PM - Conference evaluation, clean – up, and departure - (lunch on your own when you get to a town).

What to bring: Bedding for bunk house (twin beds - sheets, sleeping bag, favorite pillow), coat/jacket, shower supplies (soap, towels, etc.), zip – lock bags for fossil hunting, sharpie, hat, sun glasses, sunscreen, comfortable walking/hiking shoes, specimens/item for silent auction.

Please note: The Bamberger Ranch is a 5,500-acre working ranch located in the beautiful Texas Hill Country. It may be very cold at night and very warm during the day, please be prepared for any type of the usual Texas weather! Any of the activities may change on Saturday due to adverse weather conditions. Also, please remember that most cell phones do not work on the ranch. Transportation on Saturday will be by carpooling with willing drivers!

**TESTA Spring Conference – 2018
Registration Form**

- **Registration is limited due to accommodations: 22 male and 22 female participants.**
- **Full payment MUST accompany registration to hold your place since we must confirm and pre-pay many of the venues that will be visited. (\$175.00 per person)**
- **Registration deadline is Saturday – February 10, 2018.**
- **Confirmation letter and map to ranch will be sent out via email.**
- **No cancellations after February 11 (substitutions will be allowed provided space is available in the bunkrooms).**
- **TESTA reserves the right to make agenda changes if needed due to circumstances beyond our control – weather conditions (there is two low water crossings on ranch).**

** Please make a copy of this form, complete and mail with **full payment** to:

TESTA Spring Conference Kathryn Barclay
10535 Long River Dr. Sugar Land, TX. 77498

Questions? Contact Kathryn Barclay at 281-460-2026 or via email – kathrynbarclay65@aol.com

PLEASE PRINT:

Name: _____

Home Address: _____

City _____ State _____ Zip _____

Home Phone _____

School Name _____

District Name _____

Email Address _____

Current Teaching Assignment _____

**** Please make all checks payable to TESTA or indicate credit card information below: ****

Card type: _____

Number: _____

Expiration: _____



TEXAS EARTH SCIENCE TEACHERS ASSOCIATION MEMBERSHIP APPLICATION

Please fill out as completely as possible.

Date _____

First Name _____ M.I. _____ Last Name _____

Address _____

City _____ State _____ Zip _____

ESC Region _____ School/Campus _____

District/Business _____

Home Phone _____ Business Phone _____

Fax _____

School/Business Email _____

Home Email _____

Job Description (all that apply)

- Student Teacher
- Teacher
- Department Head
- Supervisor/Consultant
- Principal/Administrator
- College/University Professor
- Science Specialist
- Student
- Business
- Museum
- Nontraditional
- Retired
- Other _____

Grades/ Subject (all that apply)

- Elementary Science
- Integrated Science (K-8)
- Anatomy & Physiology
- Biology
- Integrated Physics & Chemistry
- Physics
- Chemistry
- Geology/Meteorology/Oceanography
- Aquatic/Marine Science
- Environmental Science
- Advanced Placement; Intl. Baccalaureate
- Informal Science Education
- Teacher Education

Please make checks payable to TESTA in the amount of \$10.00.

Please mail to:
Kathryn Barclay
10535 Long River Dr.
Sugar Land, TX. 77498

Memberships run from CAST to CAST.

Would you be interested in serving on a committee? ____

Which one? _____

TESTA Grant!

Got a great idea for an Earth Day project or lesson for your students? Need money to implement your idea? Check out the TESTA Grant for up to \$500.00 in funding for non- consumable materials that are needed!

To apply for a grant, simply submit a short proposal of your plan and explain how the funds will be used to teach Earth Science based lessons to your students

Please note: TESTA grant funds are not to be used for field trips, consumables, travel or professional development. However, other sources of funding are acceptable for that portion of the activity. Preference will be given to proposals that will have a large student impact over multiple years.

