LASER June 2023

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VII

VI

IV

Louisiana Science Teachers Association Newsletter (www.lsta.info)

LASER

LSTA Newsletter

President's Message	3
LSTA News/Awards	4-6
Regional News	7-11
Professional Development Opportunities and Resources	12-26

LOUISIANA SCIENCE TEACHERS ASSOCIATION

Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.



June 2023 | Louisiana Science Teachers Association

LSTA Board and Regional Representatives

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Region 1 Representative	Region 2 Representative	Region 3 Representative
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LOUISIANA SCIENCE TEACHERS ASSOCIATION

Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.

President's Message from Pierre LaCaze

Members of Louisiana Science Teachers Association,

That's a wrap for the 2022-23 School Year! I hope you all had a wonderful year. As we close out the year we look back on the great strides that we have made in science education and look forward to the next school year.

I am pleased to announce that we will partner with the Louisiana Association of Teachers of Mathematics for our upcoming conference. It will take place November 2-3 at the Raising Cane's River Center in Baton Rouge. The motto of this year's conference is "Back for the Future." Much like the motto, we are preparing for the future of science education. We look forward to seeing you all at the conference for two great days of professional development. Please be on the lookout for registration.

We all are doing great things in our classrooms. They are filled with unique methods and perspectives. If you would like to share some of what you are doing please consider registering as a presenter.

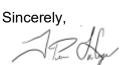
We welcome vendors and exhibitors to participate in our conference. The exhibits will be located in the galleria, ensuring the best exposure possible. For information about exhibits, please visit our website at https://lsta.info/annual-conference.

If you are looking to help improve science education, LSTA is looking for a few individuals to serve on the board. We are looking for nominations for regional representatives, as well as executive committee positions. If you, or someone you know, is interested in serving on the LSTA board please apply. Application details are located inside this edition of the LASER.

Thank you for all you do for science education in our state. You truly do make a difference in those you teach.

-3-<u>Cover page</u>

r 2-3, 2023 at The Raising Cane's Riv Baton Rouge https://lsta.info/annual-conference



Pierre LaCaze President, LSTA





Complimentary LSTA Membership

LSTA understands how difficult these times are for science educators. We want you to know we are with you by doing our part to provide information about a variety of resources and opportunities to alleviate some of the strain you may be feeling. Please click the link below to fill out an online form to register for your complimentary membership to LSTA. Please share this offer with colleagues. LSTA Complementary Membership Form

LSTA Needs You!

Do you want to become more involved in science education in Louisiana? Do you enjoy sharing your expertise with others? Are you ready to take a step into a leadership role? The Louisiana Science Teachers Association (LSTA) needs you! Nominations are now open for the next two-year term of office, November 2023-December 2025, for the following positions:

- President
- Vice-President
- Secretary
- Region 1 Representative
- Region 2 Representative
- Region 3 Representative
- Region 4 Representative
- Region 5 Representative
- Region 6 Representative
- Region 7 Representative
- Region 8 Representative

The LSTA Board typically meets four times each year either face-to-face or virtually. Duties of officers and regional representatives include attending board meetings, participating in various board projects including regional workshops, nominating and supporting colleagues for awards, and working at the annual conference. Regional representatives have the opportunity to serve their regions by informing members about opportunities in science education, sharing local science news for publication in each issue of the LASER, and facilitating regional workshops. Persons applying for the office of LSTA President are required to have previous Board experience.

Nomination packets should include the following:

• letter with a statement from the nominee accepting the nomination, the reason the nominee is interested in serving as an LSTA officer, what experience and knowledge the nominee would bring to the office, and how the nominee envisions the role of LSTA in science education.

- resume which includes but is not limited to teaching experience and current position; and
- maximum of three letters of support (not to exceed one page each).

President, Vice President, Secretary positions only:

- brief bio (100 words or less) explaining how they can benefit science educators as a leader of LSTA
- photograph is preferred LASER April 2021 Louisiana Science Teachers Association Newsletter

Cover page Nomination packets should be sent to: Shauna LeBlanc 106 Appomatox Pkwy. Carencro, LA 70520 Electronic copies should be sent to: <u>tkbleblanc@gmail.com</u>.

All nomination packets must be postmarked on or before Sunday, August 27, 2023. All electronic packets must be received by midnight Sunday, August 27, 2023. Nominees will receive acknowledgment of receipt of their nomination. The nominating committee, chaired by LSTA Past President, Shauna LeBlanc, will select two nominees per office for the final ballot. Ballots will be distributed to active LSTA members in October via electronic message. Election results will be announced at the 2023 Fall LSTA/LATM Conference: LSTA Awards Event and officers will immediately assume their positions.

LATM/LSTA Confrence



Click here for all the latest Confrence information

LSTA Awards and Travel Grants

Calling all science educators! LSTA Awards and Travel Grant information are now on the LSTA website (<u>www.lsta.info</u>). The deadline for application submission is October 1, 2023.

Louisiana's Outstanding Earth Science Teacher

Congratulations to Lacey Hoosier, teacher at Buckeye High School in Rapides Parish, for being selected as the 2023 NAGT (National Association of Geoscience Teachers) Outstanding Earth Science Award winner!





Regional News

🕈 Region I 🔶

SAVE THE DATES!



Girls in STEM at Tulane (GiST)

Saturday, November 4, 2023 Saturday, March 16, 2024





Boys at Tulane in STEM (BATS)

Saturday, September 16, 2023 Saturday, April 13, 2024

Teachers Experience STEM at Tulane

Third through fifth-grade teachers get to experience three hands-on workshops, discuss how to implement the activities and aligned standards into their classrooms, and receive both aligned curricula ideas AND supplies to bring the activities back to their school! \$100 STIPEND also provided for attending!



Tulane's Girls in STEM at Tulane (GiST) and Boys at Tulane in STEM (BATS) programs provide 5th – 7th-grade students with the opportunity to meet and work with undergraduate, graduate, faculty, and professional role models in STEM fields. Workshops developed by faculty and student teams empower students to inquire, investigate, and discover in a positive environment. Our goal is to open the doors wide and welcome young students to careers in STEM fields by encouraging creative thinking, promoting self-esteem, and increasing awareness of the opportunities in STEM that await them.

Teachers of 3rd - 8th grade students can also participate at BATS and GiST!

Thanks to the generosity of Shell and The Joe W. and Dorothy Dorsett Brown Foundation, we are pleased to be able to offer teachers the chance to participate in 3 unique workshops at each event that aligns with the Louisiana Science Standards for FREE! Participating teachers will get to experience the workshop hands-on and discuss how to implement the activities and aligned standards in their classrooms. Teachers will also receive a \$100 stipend, aligned curricula ideas, AND supplies to bring the activities back to their school! Preference is given to teachers from majority free or reduced

lunch schools. If you are interested in participating in GiST, BATS, or teacher professional development, sign-up will open in August.

If you would like to bring a group (from a school, scout troop, etc.), please email <u>k12stem@tulane.edu.</u>

Additional information about our programs can be found on our website: http://k12stem.tulane.edu.

Please submit news for Region 1 to Cecilia Gillam at cgillam@stcharles.k12.la.us.

+ Region II +

LASM has brought back Kid's Lab. During the event, families can explore the science of chemistry during these 45-minute hands-on workshops. These are for young scientists ages 6-12 and their accompanying adults. You can register and get more information here: <u>https://www.lasm.org/events/upcoming-events/basfs-kids-lab</u>

Northshore STEM Coalition will host their 5th Annual Back to School STEM Festival at Southeastern on August 26. You can register here: <u>https://mailchi.mp/4955fc6e5623/holiday-stem-fest-15627887?e=[UNIQID]</u>





One of the missions for the **Tulane National Primate Research Center** is to engage with the public and give opportunities for students and others to learn about the scientific research they do there, their animal care program, and career opportunities in biomedical research. They do this in a variety of ways from giving group tours of the campus in Covington for those 12 years of age or older to doing presentations off-site for local schools, clubs, and organizations. To contact them about a tour or presentation, please follow the link below.

https://tnprc.tulane.edu/schedule-tour

Please submit news for Region 2 to Tricia Trinco at trish.trinco@gmail.com.

✦ Region III ✦

Nathan Cotten was recognized by at a recent Terrebonne Parish Board Meeting for his 2023 LSTA Claudia Fowler Distinguished Service to Science Education Award



Erin Boudreaux was honored as an American Petroleum Institute Delta Chapter Chairman's Award Teacher



Please submit news for Region 3 to Wendy Delgado at wendy delgado@houmachristianschool.com.

+ Region IV +

On Tuesday, May 16, 2023, 50 students from St. Martinville Primary and St. Martinville Junior High, along with 500 plus students from surrounding parishes, attended Acadiana STEM Fest II, hosted by the University of Louisiana at Lafayette. Students were treated to 90 minutes at STEM Fest, a 60-minute Energy Solutions interactive experience provided by Entergy, and a mini field day, hosted by ULL student athletes.

LASER June 2023

Louisiana Science Teachers Association Newsletter (www.lsta.info)



Please submit news for Region 4 to Kellie Boquet at khboquet@lpssonline.com.

✦ Region V ✦

Please submit news for Region 5 to Cammie Benoit at <u>cammie_benoit@camsch.org</u>.

✦Region VI ✦

Nine Rapides Parish students took one step closer in their aspirations to become the next generation of teachers by signing letters of intent to their prospective universities/colleges on May 2, 2023, which is Educators Rising Signing Day for 2023.

Educators Rising Signing Day is held every year in which graduating seniors, that are declaring Education Majors, sign their letters of intent to continue their journey into the profession of teaching. They are students of the Pre-Educator Pathway Program, which is a program that cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.

"As a Grow Your Own" program, we are encouraging our students to not only attend high school and become involved with our PreEducator Pathway and Educators Rising Club but to major in Education and come back to Rapides Parish to teach," said Maegan Schopper, Rapides Parish Director of PreEducator Pathway and Educators Rising Club. "Over the past two years, we have seen consistent growth in the program, club and signings and have goals to continue to grow and shed light on the importance of teachers and serving as a future educator."

All nine future educators are excited at the opportunity of making an impact in the world of education and in the life of children.

"I want to become a teacher so that I can be an advocate for other people to be able to become teachers and I want to let students know that they are smart and are important," said Kaitlyn Wilson, Bolton High Senior.

"If I can change one person's mindset, then that would be good for me," said Jazmine Wilson, Bolton High Senior. "If someone doesn't have something they need, I want to be the type of teacher that will give them what they need, because I don't like to see people struggle or be alone."

The Pre-Educator Pathway and Educators Rising Clubs help students through a high-quality curriculum focusing on antibias instruction, classroom culture, professional collaboration, understanding assessments, and authentic engagement, the pathway aims to address workforce needs related to the recruitment and retention of teachers. Students enrolled in the Pathway complete two education-focused courses (Multicultural Learning Communities & Foundations of Education)

> -10-Cover<u>page</u>

and two portfolio-based micro-credentials while participating in classroom and clinical experiences that propel them on their path to becoming highly effective educators

Please submit news for Region 6 to Dr. Ladale Bernard at ladale.bernard@rpsb.us.



✦Region VII ✦

Sci-Port partnered with Caddo Parish's Title I Department to support over 1,600 fifth-grade students as they visited the museum and IMAX. Moreover, Sci-Port's field trips this spring were higher than ever! They served more students than they did pre-Covid, at 228 groups, 10,955 students, 1058 teachers, and 1,675 chaperones from all schools/groups. That's over 1,000 more students than before and the highest ever with Sci-Port 2.0! Great news for place-based learning in North Louisiana!



Sarah Ray of Youree Drive Middle will be representing Caddo Schools at the Goethe Institute in Germany. She was selected to join STEM teachers from across the U.S. and Canada through the TOP Fellowship. Participants will learn about ways to incorporate research-based learning in the classroom. Congratulations!

Please submit news for Region 7 to Rosie Cash-Loftis at rbcash@caddoschools.org

✦ Region VIII ✦

Please submit news for Region 8 to Marci Bryant at marcibryant@opsb.net.

-11-<u>Cover page</u>

Professional Development Opportunities and Resources

Louisiana Association of Science Leaders' Corner

The Louisiana Association of Science Leaders is a professional association to bring together those serving as district science supervisors, science content specialists, science master teachers, Teacher Leader or science coaches. As with other programs COVID brought a break in our efforts to work together collegially on behalf of our teachers and students.

We know there have been a large number of changes in educators serving as the science specialists for districts, schools and in buildings. At this time we are putting together a new list of everyone working in leadership roles as science educators in Louisiana. The end of the 2022-23 school year and before the start of the 2023-24 academic year and the 2023 Joint Conference is the perfect time to reboot LASL.

If you are now identified as the district/school/building science content specialist or supervisor please contact LSTA Vice President Bianca Deliberto, Ph.D. (<u>biancadeliberto@gmail.com</u>) and provide her with your information. If you are an LSTA member in a district where there has been a change please share the name and email of the person now responsible for science in your district.

We invite all those in science education leadership roles to not only belong to LSTA but to also become a member of LASL, and affiliate of NSTA and also of the National Science Education Leadership Association (NSELA).

NEW Gulf Research Program Funding Opportunity

Empowering the Next Generation of Community Resilience Leaders will be accepting applications May 1, 2023 – July 10, 2023.

This funding opportunity will support proposals from academic and nonprofit institutions that implement youth leadership training programs (which may include the development of new, or expansion of existing programs) that equip youth (ages 15-24) with the knowledge, skills, and expertise necessary to build resilience to climate hazards and associated disasters in the Gulf of Mexico or Gulf of Alaska's coastal regions. Proposed projects should be designed to equip youth participants with the knowledge, skills, and expertise needed to effectively work in their communities to explore and articulate collective solutions to climate-related hazards and associated disasters.

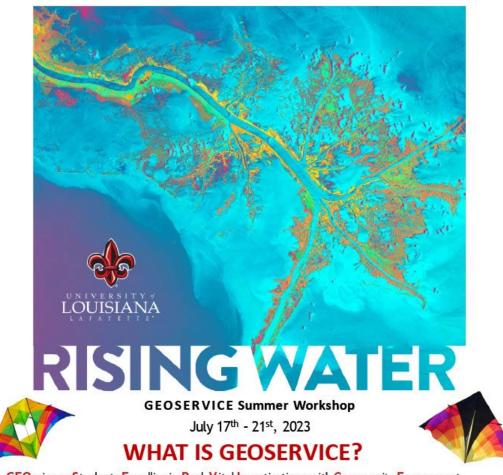
The GRP has made a total of \$2 million available to support projects under this funding opportunity and anticipates making individual awards of up to \$500,000 for projects not exceeding three years in duration.

To learn more about eligibility and requirements, please read the full Request for Applications: <u>RFA</u>. For questions, please visit our <u>Frequently Asked Questions page</u> or reach out to <u>gulfgrants@nas.edu</u>.



-12-Cover page

ULL GEOSERVICE Summer Camp



GEOscience Students Excelling in Real, Vital Investigations with Community Engagement.

WHAT WILL YOU DO?

- Learn how satellite imagery/monitoring is used for management of resources and environment.
- Fly NASA AEROKATS kites, drones, and other instruments to gather real time data. The "Birds-Eye" view allows for similar observations to those used on NASA spacecraft and aircraft.
- Interpret real time data using earth observation topics covered during the program and create communication tools to share within the community.

DETAILS

- Workshop is from 9:00am-3:30pm, Monday through Friday.
- Lunch will be provided.
- Provide own transportation.
- It is FREE!

WHO CAN APPLY?

- Applicants should be between 16 and 19 years old and be in good standing with their high school.
- Preference will be given to students in 11th and 12th grade.

WEBSITE: http://louisianaview.org/risingwater/

CONTACT

For more information, contact the RAC at geoservice@louisiana.edu,

LOCATION

Regional Application Center 635 Cajundome Blvd.

Lafayette, LA 70504



-13-<u>Cover page</u>

Calling All Teachers! Coming Up at The National WWII Museum

Click here to view the upcoming events at the National WWII Museum

New Water Cycle Diagram for Educators and Students

The U.S. Geological Survey is thrilled to <u>announce</u> the recent release of a new water cycle diagram in English and Spanish. The new diagram is user-friendly, visually appealing, and scientifically accurate. It places necessary and accurate emphasis on human presence on the landscape and human influence on the water cycle.

Water Cycle Educational Resources from the U.S. Geological Survey:

- 1. **Explore** the diagram in more detail on our <u>zoomable website</u> in English or Spanish.
- Download the diagram as a 26x36-inch pdf (English | Spanish), 8.5x11-inch pdf (English | Spanish), or fill-in-the-blank worksheet (English | Spanish).
- 3. **Compare** the relative sizes global pools and fluxes of water with our <u>interactive data</u> <u>visualization</u>.
- 4. **Learn** more about the water cycle (and other water topics) on the <u>USGS Water Science</u> <u>School website</u>.

Educators played an important role in the development of the new diagram. More than 100 educators spoke to us and provided us helpful feedback. Thank you! This was made possible because educators like you were willing to participate in <u>user-centered design</u>. We want to help educators incorporate this new diagram into their instruction. We're designing webinars and other events with you in mind. <u>Sign-up</u> and we will email you about upcoming opportunities.

Finally, wondering why we created a new diagram? Learn why by watching the <u>recording of our release party</u> or <u>reading</u> <u>our blog post</u>.



-14-<u>Cover page</u>

Department of Wildlife and Fisheries



LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES FISHERIES OUTREACH TEAM



How Can Our Team Serve You?

We offer a variety of programs and workshops that focus on different topics related to fisheries education. These programs are available to formal and non-formal educators statewide.

Aquatic Volunteer Instructor Program (VIP)

- Hands-on workshop that trains educators and volunteer instructors how to teach aquatic education activities such as knot tying, basic tackle, casting techniques, fish identification, fish anatomy, invasive species, fisheries management, pond ecology, and fishing safety
- Borrow equipment from LDWF to use in the classroom while teaching the lesson plans provided by LDWF
- Volunteer at LDWF events or create your own fishing clinic, aquatic education program, or fishing tournament
- > For more information, contact Erin Olson at eolson@wlf.la.gov or 504-286-4165

Native Fish in the Classroom (NFC)

- Hands-on, classroom based aquaculture stewardship project for grades 6-12 to learn about fisheries management, fish biology, and aquatic natural resources by growing native Louisiana fish (paddlefish) from eggs to fingerlings

Wetland Education Teacher workshop (WETshop)

- Teachers work with scientists and educators from various organizations to learn about Louisiana's coastal wetlands and become wetland stewards

Fisheries Mobile Museum (FMM)-COMING SOON!

- A concession style trailer with five door openings that focus on fish identification, fisheries management, invasive species, Sport Fish Restoration Program, and sampling methods
- Schools/events will be able to request this interactive trailer which will include a booklet that follows along with each topic

Hosting an Event and Need Vendors? We can help with that too! We are happy to assist you in your classroom, on school grounds, or in local community parks with various activities. Scan the QR code to request assistance at your next event from either our LDWF Staff or Certified Aquatic Volunteers.



Appalachian Mountain Club (AMC)'s Dark Sky Classroom Program

We are excited to announce the release of the Appalachian Mountain Club(AMC)'s <u>Dark Sky Classroom Program</u> for students in grades five through eight. This is a free, easy-to-implement, three-day mini-unit designed to help students learn about light pollution and the benefit of dark skies. Our program was created by educators as part of AMC's <u>See The</u> <u>Dark</u> public awareness project and is aligned with NGSS standards.

You can download our educator guide here and the student notebook here. You can also visit www.SeeTheDark.org.

AMC is also announcing a companion digital photo essay contest in which students can submit their work and be entered to win prizes. One lucky teacher and their class will win a two-night stargazing experience at the Appalachian Mountain Club's <u>Little Lyford Lodge</u> in Maine's Moosehead Lake region. Contest details may be found <u>here</u>.

For more information, please visit <u>www.seethedark.org</u> or email <u>info@seethedark.org</u>.

Careers for Engineers

New from EiE, Museum of Science, check out Careers for Engineers, an online experience for kids to explore STEM careers. Designed for students ages 7-12, Careers for Engineers offers a personality-style quiz that shows kids how their interests connect to a career in an engineering field. After taking the quiz, children are presented with fun, colorful infographics packed with key facts about their engineer career match. Each infographic also includes links to other EiE and Museum of Science resources. Parents, caregivers, and educators can skip the quiz and download all five infographics directly. All resources (webpage, quiz and infographics) are available in both English and Spanish. Try it for yourself and share with a friend! What kind of engineer are you?

Discover EIF

Discover EiE® Lessons Powered by Pear Deck™

As part of a new collaboration, EiE with Pear Deck has transformed 10 climate change lessons into engaging, interactive, slide-show style lessons that support educators in introducing the critical topic of climate change to students in grades 3-8. Each presentation includes standards-aligned lesson plans, formative assessments, real-world examples and videos, enhanced with the interactive features of Pear Deck. <u>Get Started for Free Today!</u>

Climate Emergency: Feedback Loops Documentary Series

Climate Emergency: Feedback Loops Documentary Series

Teach climate change with the following free resources: Climate Emergency: Feedback Loops, a series of five short films narrated by Richard Gere, featuring twelve renown climate scientists, and endorsed by the Dalai Lama and Greta Thunberg. The resources also include an accompanying science standards-based curriculum for grades 6 -12 and discussion guides suitable for university level and community groups. The materials are freely available for use by teachers and students at <u>www.feedbackloopsclimate.com</u>. Ranging in length from 8 – 14 minutes, the films are ideal for classroom use. The broadcast version, Earth Emergency, aired on PBS and is now appearing on television globally. It was presented at the 2021 United Nations Climate Change Conference (COP26), showcased to the U.K. House of Commons, and featured in a series of webinars by the Smithsonian National Museum of Natural History.

Explorer Classroom Returns for 2023

Ignite an Explorer Mindset in your students with a <u>live interactive session</u> that connects young people with real National Geographic Explorers.

Our live interactive YouTube show will connect your students with scientists and storytellers to hear behind-the-scenes stories about their work and ask questions in real time. Upcoming topics include geography, biology, oceans, history, and more. All sessions are free and include an instructional guide to help your class get the most out of the experience. We provide the following schedule for grades K-8:

- Every Monday, 11 AM ET Ages 4-8 | Grade K-2 | 30 minutes
- Every Thursday, 10 AM & 2 PM ET Ages 9-14 | Grade 3-8 | 45 minutes

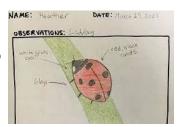
Explore upcoming sessions and register today. We are excited to see you there!

Opportunity: Help Identify High-Quality Instructional Materials with EdReports

EdReports is a non-profit organization with a mission to empower educators with independent, credible, evidence-rich information about instructional materials to ensure students have what they need to be college and career-ready. EdPeports launched a review of HS science materials and is gearing up for a second round of K-12 reviews in late April. EdReports is now accepting applications for reviewers for reviews of K-12 science instructional materials starting in April 2023. Apply now to engage in deep professional learning on the Next Generation Science Standards with a national network of skilled educators. Learn more about how to apply to become a reviewer here. Become a Reviewer

Digital Field Book Activity from the Smithsonian

https://naturalhistory.si.edu/education/teaching-resources/life-science/field-book-activitymaking-and-recording-observations?utm_medium=email&utm_source=GovDelivery This activity from the <u>Smithsonian's National Museum of Natural History</u> helps K–8 students practice the skill of recording observations. The activity includes a digital field book template to use or copy, as well as additional information about the evolution of the use of field books in science and tips for maximizing students' observation skills in the field. For example, teachers can jump start students' thinking with the activity's provided Guiding Questions to Encourage Observations and Discussion.



Children & Nature Network Vitamin N Challenge

The Vitamin N Challenge was inspired by Richard Louv's book on Vitamin N that includes 500 practical ideas to leading a nature-rich life. Join the challenge to help youth on summer break spend time outdoors.

NASA Citizen Science Projects: Calling learners of all ages to engage with NASA science! Want to work on some real NASA science? NASA's citizen science projects are collaborations between scientists and interested members of the public. Through these collaborations, volunteers (known as citizen scientists) have helped make thousands of important scientific discoveries. There are more than 25 ongoing projects that need your help! NASA citizen science projects are open to everyone around the world, not limited to U.S. citizens or residents. Find a project! <u>https://science.nasa.gov/citizenscience?fbclid=lwAR0nLySqaKaZHha78lbE6Z8PnOAaCxArQIKVNxnYykRU05Hy9f2AIW</u> wZ_7Y

EcoRise Opportunities, Events, and Resources

All Louisiana K-12 teachers have access to our leading-edge <u>Sustainable Intelligence Program</u>, which includes sustainability and design curriculum, as well as grant funds (**up to \$700 per project**) for green student projects, and year-round training and support.

Green Guardians Environmental Literacy Curriculum

https://www.greenguardians.com/?utm_medium=email&utm_source=GovDelivery Green Guardians, a California-based educational technology company, has developed an <u>environmental literacy curriculum</u> for grades K–5. The curriculum consists of a series of multimedia lessons and games exploring topics such as pollution, climate change, sustainability, energy, watersheds, waste management, and environmental justice. The lessons use a story base to engage students in learning about their environment, and through inquiry and problem-solving, devise solutions to the problems they study



Lessons on Climate Change, Evolution and Nature of Science

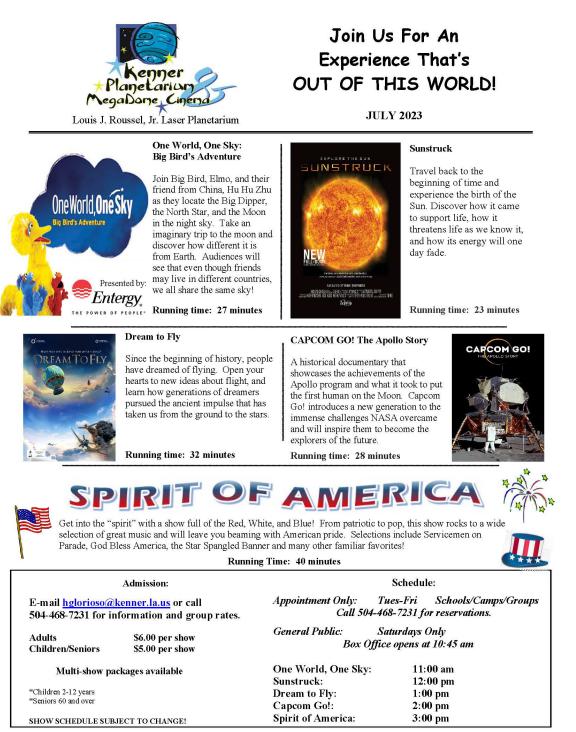
The National Center for Science Education is celebrating its 40th anniversary of providing <u>classroom resources</u> created and tested by teachers from around the United States. View this comprehensive teacher tested set of lessons on Climate Change, Evolution and Nature of Science.

NSTA Awards and Grants

The National Science Teachers Association has many awards with a variety of categories. Many include incentives to support educators attending the National Conference or the National Congress in the summer. For more information go to: http://www.nsta.org/about/awards.aspx



Kenner Planetarium



Kenner Planetarium 2020 Fourth Street Kenner, Louisiana 70062 www.kenner.la.us 504-468-7231

Science Teacher Leader Advisor Applications

Coming soon: Science Teacher Leader Advisor Application Re-opening

The Louisiana Department of Education's science content team is seeking high school science teachers to join our 2022-2023 <u>Teacher Leader Advisor</u> cohort. Teachers of all high school science courses are needed to develop resources for use by Louisiana educators. Additional information and an updated application will appear on the Department's Teacher Leader Teacher Leader Newsletter. page by August 23rd and will close on September 16th. Sign up to receive the newsletter by completing this <u>form</u>.

Please contact <u>STEM@la.gov</u> with questions.

Learning Blade®

Learning Blade®, a STEM, Computer Science, and CTE resource is available **FREE** statewide in Louisiana through a joint venture of the Louisiana Board of Regents, LaSTEM, the Boeing Company, the Louisiana Dept. of Education and the Foundation for East Baton Rouge School System.

Learning Blade's over 400 online interactive lessons include **over 100 science-related** lessons that are aligned to state science academic standards for grades 5-9. Students are exposed to hundreds of unique STEM/CS/CTE-related careers and technologies while reviewing academics. <u>See Mission Outlines.</u>

Learning Blade also recently added the **New Introduction to Coding** course which includes over 20 hours of coursework aimed at 7th-8th graders but can also be used for other grade levels.

Sign up for your free Louisiana Learning Blade account today by filling out the form at www.LearningBlade.com/LA.*

Email us at info@learningblade.com to set up training or to learn more.

*Note: Learning Blade is free to all Parishes/Districts upon the signing at the Parish/District level of the <u>Student Data</u> <u>Sharing Agreement</u>.

Audubon Zoo

This school year is rapidly approaching and Audubon Nature Institute's School Programs team would love to give your students a *wild* start to the year with our 45-minute programs featuring live animals from the Zoo. <u>Click here</u> to request your virtual school program, FREE for Title One Schools, today!

Audubon's virtual programs are highly interactive and connect your students to nature and science over Zoom. Our lessons are aligned with Louisiana state science standards for grades K through 12th and are offered Monday through Friday from 9:00am – 3:00pm. We have availability starting August 29th. Reservations will be made on a first-come and first-served basis, so don't delay in securing this fun and unique opportunity to enrich your curriculum!

Audubon's virtual school programs are free for all Louisiana Title 1 schools*, while Title 1 Targeted Assistance Programs receive a 10% discount from the \$100 per program rate. (*Limit one free program per classroom per school year.)

Audubon's Virtual School Program themes include:

- K-2nd Creature Coverings: Explore the world of animal coverings, coats, skins, and more!
- 3rd-5th Oh, the Things They Eat: Learn about the different roles animals play in a food chain!

6th-8th Bayou Diversity: Discover the rich ecosystem of Louisiana and learn about the interdependence of native plants, animals, and humans!

• 9th-12th Mississippi River Story: Learn how the Mississippi River shapes the land and the impacts it has on our ecosystem and daily lives.

9th- **12**th **impacting Wetlands**: Learn how wetland ecosystems impact coastal communities and discover local conservation groups and their efforts.

You can find more information at <u>https://audubonnatureinstitute.org/virtual-education</u> or feel free to reach out directly to this email (<u>schoolprograms@auduboninstitute.org</u>).

Arctic Ocean Curriculum Unit

The Arctic Research Consortium of the U.S. (ARCUS) announces a new resource, a curriculum unit focused on the Arctic Ocean.

The Arctic Ocean Curriculum Unit was created by ARCUS with funding from the North Pacific Research Board. The unit updates lessons originally created by PolarTREC alumni teachers to create a unit that uses recent data, aligns with Next Generation Science Standards (NGSS), polar, and ocean literacy principles, and encourages cultural relevancy. The format used lends itself to the changes in education - providing student-facing slide decks that allow them to move through the lessons with more independence.

The unit traces the movement of energy throughout the Arctic Ocean environment. There is a total of 18 lessons broken into two main components. The entire unit can be downloaded through the resources section of the PolarTREC website (<u>https://www.polartrec.com/resources</u>).

For more information and to download the unit, go to: Arctic Ocean Curriculum Unit webpage: https://www.polartrec.com/resources/lesson/the-arctic-ocean-curriculum-unit?amp%3Bqid=6854120

For questions, contact: Janet Warburton, warburton@arcus.org

Unique Learning Opportunities Await You at Cane River Creole NHP

Cane River Creole National Historical Park is proud to partner with teachers and educators to provide curriculum-based, hands-on Science, Arts, Environmental Science, and History education experiences in the park, virtually, and in your classrooms. We are excited to connect both educators and learners with the unique resources of the Cane River area. Bring your class to visit Cane River Creole National Historical Park to explore a range of subjects including science, history, and the arts on one of our curriculum-based field trips. For schools nearby, Rangers will bring the park to your classroom though our In-Classroom Visit Programs. These programs include a wide range of topics such as Environmental Science and Reading, all building on curriculum standards. For schools further away, educators can

schedule a program from anywhere in the world via a Distance Learning Program. Enhance your student's in the classroom learning with our lesson plans and other learning materials available to you online at www.nps.gov/cari/learn/education.



The park is pleased to offer a range of professional development. Join us for one of our single day Education workshops and return to your classroom with new tools and materials. For a more in-depth experience – become a Teacher-Ranger-Teacher (TRT). TRT is a program that offer teachers a unique opportunity to enhance their teaching resources with National Park Service-based Science.



Technology, Engineering and Mathematics (STEM) education, use primary sources, and experience place-based learning. All while earning graduate credit through partnership with the University of Colorado Denver

National Park Service staff are available to help educators infuse their learning with National Park Service and STEM resources. To reach the park's education team visit us at www.nps.gov/cari/learn/education, email cari_interp@nps.gov,

or call 318-352-0383 x316 and leave a voicemail. The Park Rangers at Cane River Creole NHP cannot wait to connect you with these tools and resources!

LASM Announces Return of Free First Sundays



Youth Wetlands Program Online Learning Platform

Youth Wetlands Program online learning platform was now available. Teachers can sign up for free to gain access to lesson, activities, and other distance-learning resources. I'm including a link to the press release that went out from LSU AgCenter about the site. (<u>https://www.lsuagcenter.com/profiles/jmorgan/articles/page1611327199513</u>)

NEEF Watershed Sleuth Challenge

The Watershed Sleuth Challenge

With NEEF's Watershed Sleuth Challenge, students will learn more about their local watershed—what it is, why it's important, and what they can do to help protect it—as they earn badges at each level of this three-part course

New and Updated Resources for OpenSciEd Middle School Pilot

To assist teachers, schools, and systems with piloting OpenSciEd for middle school, the Department has updated existing resources and released new pacing documents.

These resources include

- Grade 6 and Grade 7 pilot guides updated with pacing guidance for the first three units in each grade;
- Grade 7 and Grade 8 pilot guides updated with links to newly released public units;
- OpenSciEd Distance Learning guidance updated to include Grade 8 Natural Selection; and
- <u>OpenSciEd Purchasing and Professional Development</u> updated kit purchasing information for revised units. Additionally, ten units are now available in the <u>National Instructional Materials Access Center (NiMAC) Inventory</u> with more coming soon.

Please contact STEM@la.govwith questions.

STEM Resources from the US Department of Education

The US Department of Education has recently shared two resources that may be useful supporting STEM learning.

• <u>Data.gov</u> is a database with over 335,221 real-world datasets from a variety of sources updated weekly and connected to free resources to help show how data shapes our lives.

• <u>STEM Rising</u> from the US Department of Energy features a monthly newsletter, social media connections, virtual learning resources, college workshops, and online career resources.

Please contact <u>STEM@la.gov</u> with questions.

New Self-Paced Science Professional Learning Modules Available Now

To assist teachers, schools, and systems with implementation of <u>high-quality science curricula</u>, the Department has released three <u>self-paced learning modules</u>. These resources are designed to fit flexibly in a variety of professional learning formats. Modules may be accessed individually for an "at your own pace" style of PD or delivered by Content Leaders or other science leaders to drive professional learning and facilitate collaborative conversations. Learning modules are focused on the topics below and are available now.

- Science Instructional Model and Planning Guide
- Productive Science Talk and Planning for Discussion
- Leveraging Student Resources in Science

Each module includes a brief description, video, slide deck, and associated handouts.

Please contact STEM@la.gov with questions.

Interact with PC's New Education Videos!

Join Pontchartrain Conservancy's <u>Education Department</u> in a series of videos that encourage participants to learn more about their local environment. These videos are interactive, with places for viewers to pause and answer questions, make predictions, or design and test their own experiments. Students and anyone interested are invited to participate in fun interactive ways, from writing down answers to building models!

There are currently four videos in the series that cover an array of environmental topics. The Coastal Land Loss Video Survey explains what the primary causes of land loss are and what can be done about it. The Ecosystems of the Pontchartrain Basin Survey covers what an ecosystem is and the animals and plants that live in ecosystems near the Pontchartrain Basin. The Hydrological Modifications Video Survey explains what hydrological modifications are and their main functions. The MLODS Video Survey teaches the Multiple Line of Defense strategy and its impacts on coastal communities. https://scienceforourcoast.org/pc-programs/education/interactive-videos/

NASA EXPRESS



NASA EXPRESS features updates from NASA and STEM associates about workshops, internships, and fellowships; applications for grants or collaborations; promotions for student and educator opportunities; online professional development; and other announcements.

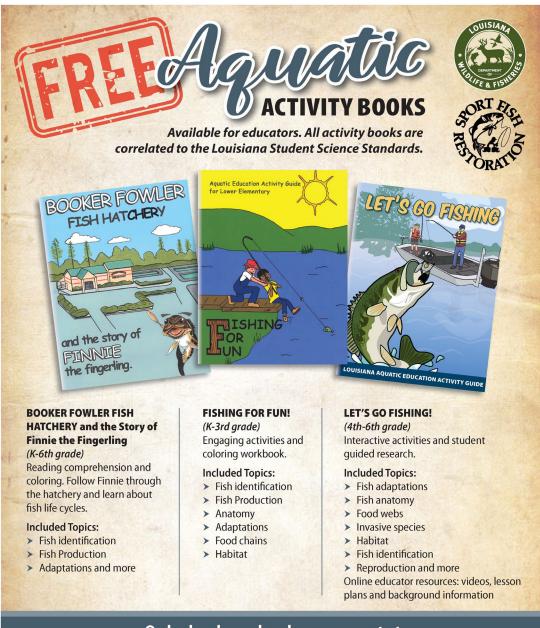
Shell Free Backpacks





-24-<u>Cover page</u>

Louisiana Department of Wildlife and Fisheries



Order books and make an account at www.bit.ly/ldwfactivitybooks -

IMPORTANT: All educators who use these aquatic activity books are required to submit their teaching hours. Time spent teaching and preparing aquatic lesson plans is used to help LDWF acquire federal funding for aquatic education programs and allows us to offer these FREE activity books for Louisiana students.

Chemistry Shorts[™] Releases New Video and Lesson Plan on Directed Evolution Technology

The materials are available free of charge via chemistryshorts.org

Like demolition derby cars continually upgrading to face greater and greater challenges, enzymes can undergo modifications in the test tube that make them better and better at solving problems in our everyday lives. But can we evolve them fast enough to clear some of our biggest obstacles?

Our world faces climate, economic, and sustainability challenges that we don't yet have the tools to fix. "<u>Driving</u> <u>Reactions</u>," a nine-minute short film from *Chemistry Shorts*, explores how directed evolution and the chemical sciences are creating some of these new tools.

"Driving Reactions" explores the power of harnessing nature's own innovations to solve problems. Featured scientists <u>Professor Hal Alper</u> of the University of Texas at Austin and Nobel Laureate <u>Professor Frances</u> <u>Arnold</u> of the California Institute of Technology use directed evolution to design enzymes that work as molecular machines, helping create a more sustainable world using the power of chemistry. These new enzymes open the door of scientific progress, creating solutions for recycling waste, creating sustainable fuels, and more efficiently producing materials we use in our everyday lives. "Driving Reactions" focuses on Dr. Alper's innovative work to design an enzyme that can efficiently degrade PET, or polyethylene terephthalate, one of the most common plastics found in water bottles and other everyday objects, into infinitely recyclable and reusable products.

"We have the ability to use the power of chemistry to find sustainable solutions for the future." - Hal Alper, "Driving Reactions"

"Driving Reactions" is aimed at high school and college students and can be used as a starting point for discussions around polymer chemistry, enzyme reactions, directed evolution, DNA, and plastic recycling.

The film is available for immediate viewing and use in teaching free of charge on the <u>Chemistry Shorts YouTube</u> channel. A full lesson plan to accompany the film is available on the <u>Chemistry Shorts website</u>.



-26-<u>Cover page</u>