

A Moment of Science from ISTA

Idaho Science Teaching Association President's Newsletter

January 2023



A Word (or two) From Your ISTA President!

Happy New Year, my sciencey friends! As we quickly move into a new calendar year full of classroom adventures and new learning opportunities, I wanted to take a moment and update you on what your ISTA board has been working on. On Saturday, December 10th, our entire board was able to get together and hold a face to face meeting at the Boise Watershed project facility in Boise. A huge thanks to Cindy Busche for making the facility available to us and a huge thanks to Blake Christensen from Montana Strategic Consulting for helping facilitate our conversations.

We are working to identify some focus areas for our association to guide our work over the next 2-3 years. Once we finalize these areas at our February board meeting, we will connect some goals and action steps to these focus areas. Some of the ideas that have floated to the surface include providing professional development and a fantastic fall conference for our members, working to build partnerships and networking opportunities in our state and local communities, and building our board capacity to better serve our members.

Stay tuned for the official release of our 3-year ISTA strategic plan in the spring of 2023!

On a related note, mark your calendars for our fall conference. It will be held at Borah High School in Boise on August 3rd and 4th. We are working on securing some fantastic math and science keynote speakers and we will be co-hosting the conference with the Idaho Council of Teachers of Mathematics and the Idaho Environmental Educators Association so this will be some solid STEM professional development!

From our family to yours, wishing you an incredible 2023!! #BeAmazing



Your 2022-2023 ISTA Board

Left to right:

Steve Shropshire (Higher Ed Rep), Renette Reyes (Region 4 Rep), Tanya Elmer (President-Elect), Chris Stoker (Administrator Rep), Betty Prall (Elementary Rep), Melyssa Ferro (President), Neva Telford (Past President), Hailey Bull (Region 3 Rep), Earla Durfee (Executive Secretary), DJ Eberlin (Region 7 Rep), Emily Sarha (Region 1 Rep), Andrea Baewald (SDE Rep), and Lingpei Zou (Region 6 Rep).



2023 National Youth Science Camp

apply at apply.nyscamp.org

IMPORTANT DATES

31 October 2022
Application Open*

28 February 2023
Application Due*

19 June 2023
Start of NYSCamp

12 July 2023
End of NYSCamp

CONTACT

 nyscamp@nysacademy.org

 +1 (304) 205-9724

 @nysacademyww

 @nysacademyww

 @nysacademyww

 www.nysacademy.org



NATIONAL YOUTH
SCIENCE ACADEMY

*FL, GA, MA and International applicants do not use the online application. See apply.nyscamp.org for the application process in these states.

OVERVIEW

Established in 1963 in West Virginia, the National Youth Science Camp (NYSCamp) is a free residential honors program for two accomplished high school graduates from each state in the USA, plus Washington, DC, and select international countries. NYSCamp's curriculum includes a broad range of science, technology, engineering, arts, and mathematics (STEAM) topics that incorporates both creative and performing arts, as well as an outdoor adventure series with opportunities for mountain biking, spelunking, kayaking, and overnight backpacking. The delegations also travel to Washington, DC, where they can meet congressional members, tour museums, and attend a panel discussion held at the American Association for the Advancement of Science. The NYSCamp is hosted by the National Youth Science Academy, formerly known as the National Youth Science Foundation. More information can be found at apply.nyscamp.org.

HIGHLIGHTS

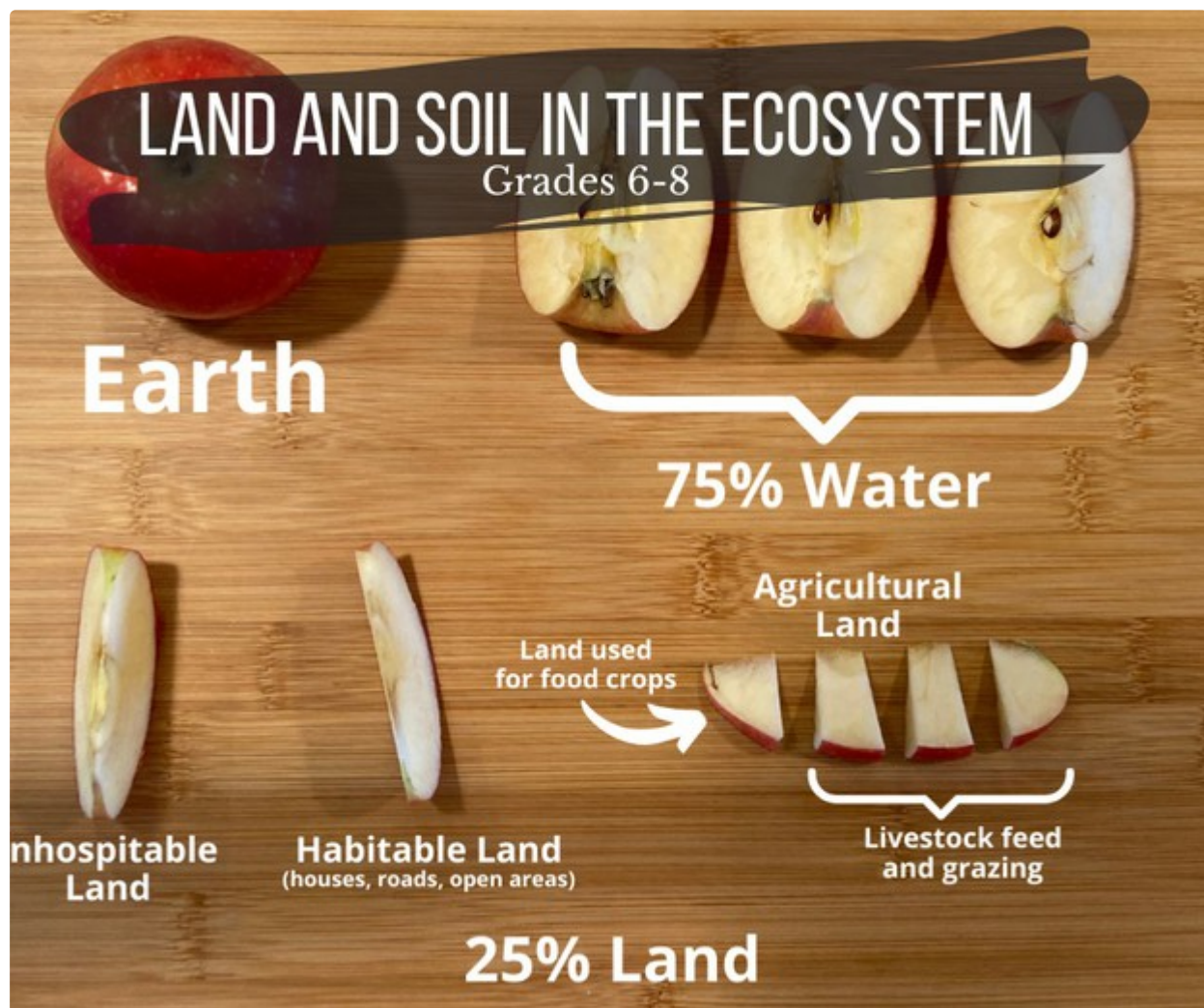
- Daily lectures, directed studies, and seminars with leading scientists.
- Engaging programming in the natural, physical, and computer sciences, creative arts, and outdoor recreation.
- Opportunities for delegates to engage with STEAM professionals, staff, and each other in a fun and meaningful way.
- Special events and surprise guests throughout NYSCamp.
- Delegates attend **free of charge - including transportation, housing, and meals.**

ELIGIBILITY

- Graduates from high school between 1 July 2022 and 30 June 2024.
- Documented superior academic proficiency.
- Recognition for notable achievements in STEAM program areas.
- Skills and achievements outside of STEAM and/or academics.
- Intent to pursue higher education and a career in STEAM.
- Submit an application at apply.nyscamp.org on/before the deadline.

2023 National Youth Science Camp

Do you have high school students that are looking to grow their STEM skills and who intend to pursue a career in STEM? Check out this opportunity from the National Youth Science Academy!



National Agriculture in the Classroom Resources

How are our land resources used on Earth? Why is topsoil a nonrenewable resource and why is it important to our food supply?

This middle school lesson plan can answer those questions!

<https://agclassroom.org/matrix/lesson/550/>



Tips for Educators: Exploring STEM Careers with Students

Presented by Voya STEM Fellows

NNSTOY
TEACHERS LEADING

VOYA

STEM Career Guides

For Year 5 of the Voya Foundation and National Network of State Teachers of the Year National STEM Fellowship, the Fellows were tasked with addressing an essential question in STEM education: What learning activities will lead to a direct increased interest in STEM careers among students?

Answer: Provide authentic ways for students to engage with professionals in STEM careers!

The Fellowship released their three STEM Career Engagement Guides for classroom educators to use toward optimizing STEM career exposure from all levels of education – Elementary, Middle, and High school students.

Want access to these guides? Check them out here: <https://www.nnstoy.org/voya-stem-fellowship/>



What's The Story

Free, virtual professional development for K-12 science educators! "What's the Story?" is a course offered by our Idaho Science Coaches that will help teachers use storylines to inspire active investigators in the classroom. Storylines are engaging, phenomenon-driven units that allow students to consider various science topics in real-world situations. Participants in this course will discover phenomena, bundle standards, and craft a storyline proposal for use in the classroom! Course dates are Jan. 12, Jan. 26, Feb. 29, and Feb. 23, from 5-6:30 pm MT each day.

Register here: <http://tiny.cc/Science-Story>.



Idaho Student Mapping Competition

Idaho Student GIS Mapping Competition

Idaho schools can take advantage of a national competition that encourages students to use configurable Geographic Information System (GIS) web technologies to tell interesting stories about Idaho.

- I don't know anything about GIS! – Local GIS professionals are volunteering to provide personal help to guide teachers through the technology.
- I'm not a geography teacher! – We've seen plenty of great examples for subjects like humanities, history, art, science and more.

See the competition details and resources at:

<https://gis.idaho.gov/gis-online-competition-for-idaho...>

Questions or concerns contact Eric Wing at ewing@cityofboise.org



Master Naturalist Class

Now recruiting for the 2023 Master Naturalist program! Classes will be held Fridays 1 to 4 pm, Feb. 10 through May 19 at the Deer Flat NWR Visitors Center.

Who? Adults who enjoy nature and are interested in learning more.

What? Participants learn about Idaho's flora, fauna, habitats and natural resources and get involved in local conservation projects. To become a Certified Master Naturalist, you must attend 40 hours of classes and volunteer 40 hours working with local agencies and organizations help biologists collect data, monitor wildlife, improve habitat, conservation education, and more.

Cost? \$50 registration fee. Scholarships may be available if you qualify. Space is limited, so register now.

Email mndeerflat@gmail.com to register or for more info.



STEM GOES WILD
SOLE'S STEM OUTDOOR CAMPS
RECOMMENDED AGES: 5TH - 8TH GRADE



December | Engineering Snow Shelters!

19th - 23rd | 9 AM - 2 PM | 5th Grade +

Engineering 101 with a fun spin, snow shelters! Youth will design and build various types of snow shelters - from snow caves to igloos - all while exploring and learning about the benefit of each during this STEM Goes WILD experience!



December | Snow Science & Winter Ecology

27th - 31st | 9 AM - 2 PM | 5th Grade +

What is snow water equivalency and what is its importance for our watershed? What are the winter adaptations for Selkirk Mountain flora and fauna? Youth will explore these and other essential questions during this STEM Goes WILD experience to develop their sense of belonging and affinity for nature!



April | Exploring the Avalanche Phenomena

3rd - 7th | 9 AM - 2 PM | 6th Grade +

What causes an avalanche? How do professionals forecast avalanche conditions in the field? How does technology assist backcountry users in the field? Youth will explore these questions and more during this STEM Goes WILD experience.



Learn More & Sign up Now!



SOLE Mountain Field Campus

Exploring Avalanche Phenomena

Do you know a 5th Grade+ youth that likes to explore and learn in, and about, the great outdoors?

Join [#SOLE](#) for one of our STEM goes WILD out-of-school community programs this winter or spring. SOLE is offering these novel experiential education programs during school breaks, on the weekends, and in the community. Scholarships are available for those interested and in need. Program capacity is based on a first-come, first-serve basis so sign up as soon as you can!

Click on the following link to learn more and sign up: <https://soleexperiences.org/register/>

Can you grow food in space?



Plant The Moon Challenge

Registration is open for the Spring 2023 Plant the Moon/Plant Mars Challenge! Work with your students to conduct a unique science project, learn about space, and grow crops in Lunar or Martian simulant.

The Idaho Space Grant Consortium is now offering funding to cover 100% of the fees (a \$400 value!) for explorers of all ages who want to participate. Apply today!

<https://www.competitionsscience.org/competitions/plant-the-moon-plant-mars-challenge-spring-2023/>

BOARD MEMBERS



MELISSA FERRO

President
Spring Middle School
mferro@idahoscience.org
2021-2023



TANYA ELMER

President Elect
Bramming School
tanya.elmer@idahoscience.org



NEVA TELFORD

Past President
Madison Junior High School
ntelford@idahoscience.org
2020-2021



EARLA DURFEE

Executive Secretary
Nevada Coordinator
Earla.durfee@idahoscience.org
2020-2021-2022



EMILY SARHA

Region 1
Pain Park School District
emilysarha@idahoscience.org



OPEN

Region 2



HAILEY BULL

Region 3
Valley Middle School
Central



RENETTE REYES

Region 4



LIESEL CHRISTENSEN

Region 5
lchristen@idahoscience.org



LINGPEI ZOU

Region 6



DJ EBERLIN

Region 7
Bramming School
deberlin@idahoscience.org



BETTY PRALL

Elementary Representative
Bramming Elementary School
Central
2020-2022



STEVE SHROPSHIRE

Higher Education
Representative
Professor
SHROPSHIRE, Steve
2021-2022



ANDREA BAERWALD

State Department of Education
2021-2022
andrea.baerwald@doe.idaho.gov



CHRIS TAYLOR

NVES Region XV Director
612 Branch and Burdette
Suburban State School District
Boise, Idaho



CHRIS STOKER

Administrator



Dr. Melyssa Ferro

Facebook

@IdahoScience

Idaho Science Teaching Association President
2021-2023

idahoscienceista@gmail.com

idahoscienceisteacherswix.org/