

# A Moment of Science from ISTA

Idaho Science Teaching Association President's Newsletter

April 2023



# A Word (or two) From Your ISTA President!

Happy April and Happy Earth Day!

It is time to [get registered](#) for some fantastic professional development! ISTA will be hosting a joint conference with the Idaho Council of Teachers of Mathematics and the Idaho Environmental Educators at Borah High School in Boise on August 3rd and 4th!! Registration IS OPEN and this year's conference is going to be on fire. The State Department of Education will be giving away free books to the first 200 people who register and our keynote speaker is none other than Steve Spengler. He will be bringing the energy of science education to the conference main stage and then doing a breakout session that will give you a chance to meet him in person! Please [sign up to present](#) some of the science awesomeness that is happening in your district to the other attendees spread the word to get registered for this incredible event!

Melyssa

Idaho Science Teaching Association &  
Idaho Council of Teachers of Mathematics &  
Idaho Environmental Educators Association

*Time To Travel*

**IMAGINE THE PLACES  
WE'LL GO  
WITH S.T.E.M.**

Come be a part of Idaho's premiere summer professional development opportunity for math and science educators at Borah High School on August 3rd and 4th, 2023!

**\$75**  
PER PERSON  
First 200 registrants get a free book about teaching STEM from the State Department of Education

**REGISTER NOW**

<https://www.idahoscienceteacherswix.org/>

INQUIRY  
DISCOVERY  
EDUCATION  
INSPIRATION

ISTA  
ICMT  
IEEA

STEM

PHOTO: Three people (two men and one woman) are gathered around a table, working on a project. One man is holding a small object, and another is pointing at it. There are papers and a green cup on the table.

<https://youtu.be/ZuvmOAgJUM0>



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## Data Puzzle Collection

### Data Puzzles - From CIRES and UC-Boulder

Are you looking for ways to bring authentic and relevant scientific data into your classroom? You've come to the right place! [Data Puzzles](#) combine classroom-friendly scientific datasets with the research-backed pedagogical practices of Ambitious Science Teaching to give your students the ultimate inquiry-based learning experience.

We believe that students should learn science the same way scientists do - through exploration, discovery, and sense-making grounded in observations of the natural world. In a way, science is like a

puzzle - the bigger picture is revealed after hunting for and putting the pieces together. Our planet is full of exciting and intriguing phenomena - invite them into your science classroom today!



## The Future of Forests - FREE Teacher Workshop

As wildfires continue to ravage the west, burning more and more of the landscape, many are left wondering, how will these fire-affected forests will recover? In [this FREE teacher workshop](#), University of Colorado Boulder curriculum developers lead participants through “The Future of Forests”, a MS/HS curriculum connected to NGSS life science standards that explores patterns of post-fire recovery (or lack thereof) across the west and inspires classrooms to engage in citizen science using NASA's GLOBE Observer land cover app. Participants will engage with online interactives from the National Forest Service, authentic datasets, and App-based labs in this 2-day online teacher workshop.

WHO: Middle and High School Science Teachers

WHAT: Virtual Teacher Professional Development Course for content and curriculum connected to NGSS Life Science standards.

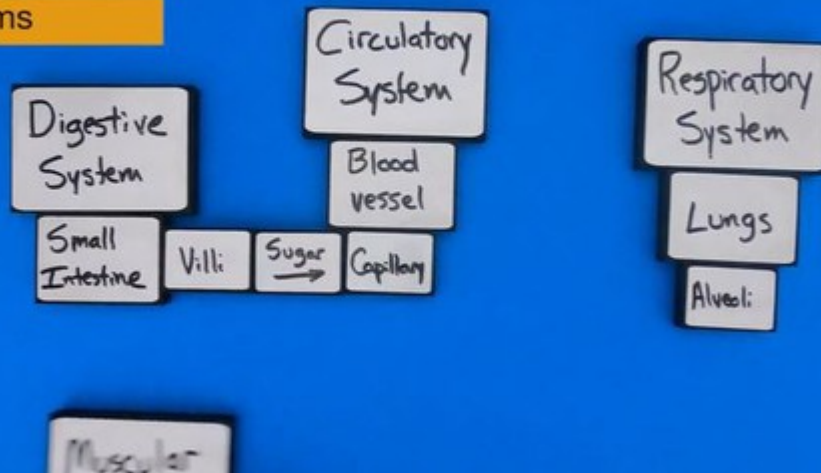
WHEN: Wednesday, June 7th AND Thursday, June 8th from 8 am - 12 pm PT/9 am - 1 pm MT/10 am - 2 pm CT/11 am - 3 pm ET each day

WHY: The goal of this course is to introduce educators to NGSS Life Science standards in the context of the NASA-supported curriculum, “The Future of Forests”. At the end of the course, participants will be able to effectively facilitate each lesson, connecting concepts and standards back to the unit driving question, “How do landscapes recover after a wildfire?”

HOW: This interactive workshop will be conducted virtually via Zoom.

# Science

## Body Systems

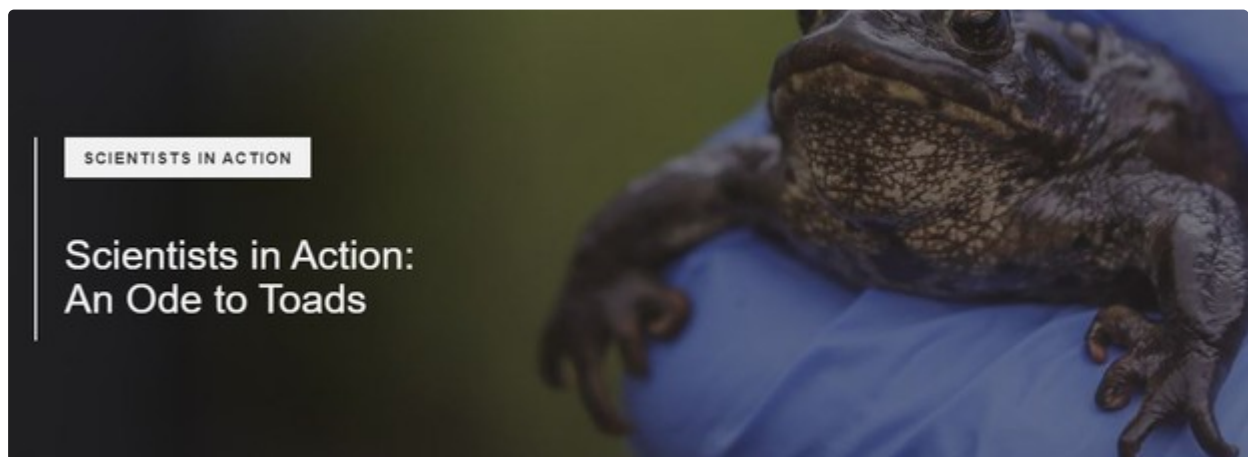


## Switch Its - An Educational Tool for Helping Students Make Connections

Check out this [Kick Starter campaign](#) from Paul Anderson and Bozeman Science!

Switch-Its are a flexible tool for visualizing and sharing your ideas. With Switch-Its, you can unleash your creativity and take brainstorming to the next level in the classroom, office, or at home. Each Switch-It dry-erase block contains magnets allowing it to connect to other blocks as well as magnetic material. Switch-Its are perfect in the classroom allowing students and teachers to model complex processes and systems.

Switch-Its offer a hands-on approach to learning that enables students to move from the concrete to the abstract. By manipulating the blocks, students can explore mathematical and scientific concepts in a tactile and interactive way. We would love to have you join us on this journey. Our funding goal of \$25,000 will cover initial manufacturing and distribution costs, including materials, labor, and shipping. Join us on this exciting journey and be a part of revolutionizing the way we visualize and share ideas.



## FREE Virtual Fieldtrip from Denver Museum of Nature & Science

Have students particularly interested in ecology or the conservation of endangered animals?

Thinking about ways to weave science careers into your classroom curriculum?

Join a free virtual field trip next week with the Denver Museum of Nature & Science as we visit scientists at the Denver Zoo and hear about the work they're doing for the endangered Boreal Toad. In this student-directed learning opportunity, kids can ask questions in real time and get a unique look behind the scenes at the Denver Zoo. See below for details and [register your students today!](#)

Date: Thursday, April 6, 2023

Time: 9 a.m., 10 a.m., 11 a.m., and 1 p.m. Mountain Time

Cost of program: FREE

Created for grades 4-12, but all are welcome.



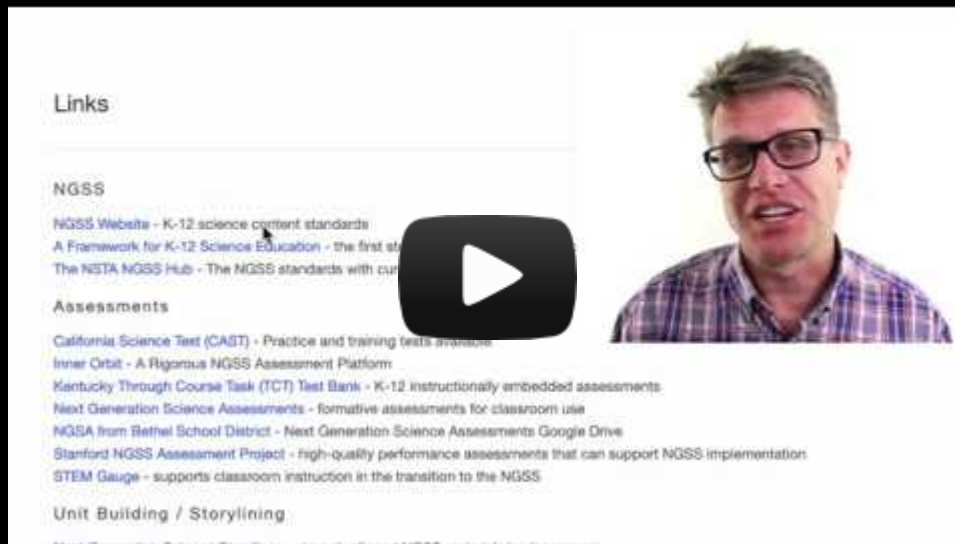
## First Green - Turning Golf Courses into Learning Labs

[First Green](#) is an innovative environmental and STEM (Science, Technology, Engineering and Math) education outreach program using golf courses as environmental learning labs. Golf Course Superintendents and/or local golf course representatives host students on field trips where they test water quality, collect soil samples, identify plants, design plantings, assist in stream bed restoration and are involved in the ecology and environmental aspects of the golf course. The students are also introduced to many other aspects of golf.

Golf Courses offer economic benefits, recreational opportunities and green spaces to the communities they serve. Golf Courses are large parcels of land with healthy turf, trees and other vegetation. They provide wildlife habitat, produce oxygen and filter surface water.

First Green is a program of the GCSAA Foundation, the philanthropic organization of the Golf Course Superintendents Association of America (GCSAA).

## Website Walkthrough



## The Wonder of Science - Paul Anderson

Check out this [fantastic website](#) full of science standards resources from Paul Anderson! Learning progressions, 3-dimensional science teaching, phenomenon-based instruction, teaching science inquiry cycles, graphic organizers, and even draft assessments for science standards. This website is rich and deep!

Secondary Ed Professional Development:

## Teaching Evolution to Religiously-Sensitive Groups



BYU and BYU-Idaho are excited to announce a Howard Hughes Medical Institute funded workshop on Teaching Evolution to Religiously Sensitive Groups in secondary education. This is a paid professional development experience offered to both secondary education science teachers, and youth religious leaders and teachers. This workshop will focus on learning culturally-competent strategies that help religiously-sensitive students bridge the divide between science and religion, specifically surrounding the topic of evolution. The workshop is composed of two different parts that include an on-line section, followed by a live conference held in Idaho Falls.

**Dates:** Online class opens **April 6**; Live Event will be **April 20, 4:30 - 6:30pm MST**. (Total time commitment: approx. 10 hours)

**Location:** The Live Event will take place at the Idaho Falls Institute of Religion located at 1335 Ashment Ave, Idaho Falls, ID 83404

**Who:** Any secondary education science instructor (junior high and high school); any religious leader or instructor in charge of secondary-age youth (e.g., seminary teachers, youth pastors, Bible teachers, youth rabbis, etc.)

**Details: Part 1: Online Course - Complete a digital course on evolution and religion between April 6th and April 19th.** The course will showcase several resources available to help religious students find reconciliation between beliefs and evolutionary principles. You will also participate in interactive discussions with other science and religious educators.

**Part 2: Live Conference - We will hear from Dr. Jamie Jensen, BYU Professor of Biology, and Dr. Phil Allred, BYU-Idaho Professor of Religious Education. Addresses will be followed by an interactive discussion.**

**Compensation: Following full participation in the online module and Live Event, we are offering each attendee a \$100 Amazon gift card and a certificate of completion for 6 Professional Development hours.**



Click here to sign up



## Climate and Equity: Summer Institute for Learning and Teaching

July 30 – August 5, 2023

## Climate and Equity Education: A Summer Institute for Learning and Teaching

TERC, in partnership with the John D. and Catherine T. MacArthur Foundation, invites high-school teachers to apply for a one-week, all-expenses-paid intensive on Climate and Equity Education on the beautiful coast of Maine, July 30-August 5, 2023.



Application deadline: April 10th

<https://www.terc.edu/climateandequity/>

Canyon County

# City Nature Challenge

Deer Flat National Wildlife Refuge

**APRIL 28TH @ 9 AM**

**MEET AT THE VISITOR'S CENTER**

A global effort to celebrate and document biodiversity across the globe by discovering and recording the species found in our yards, neighborhoods, parks, city streets and open spaces.

## CAN'T MAKE IT?

This global event runs April 28th-May 1st. Participants can upload their observations throughout this time!

## HOW TO PARTICIPATE

1. Mark your Calendar April 28th!
2. Download the iNaturalist app and make an account
3. Join us April 28th for CNC event at Deer Flat NWR
4. Photograph observations and upload them to iNaturalist

## SCAN BELOW TO SIGN UP!



To learn more, visit [citynaturechallenge.org](http://citynaturechallenge.org) or contact [thomas\\_serrano@fws.gov](mailto:thomas_serrano@fws.gov) with any questions!



iNaturalist



# Earth Day Celebration!

At The Hispanic Cultural Center

SATURDAY  
APRIL 22



10 AM-2 PM

## Deer Flat National Wildlife Refuge

is offering a FREE event for the entire family!

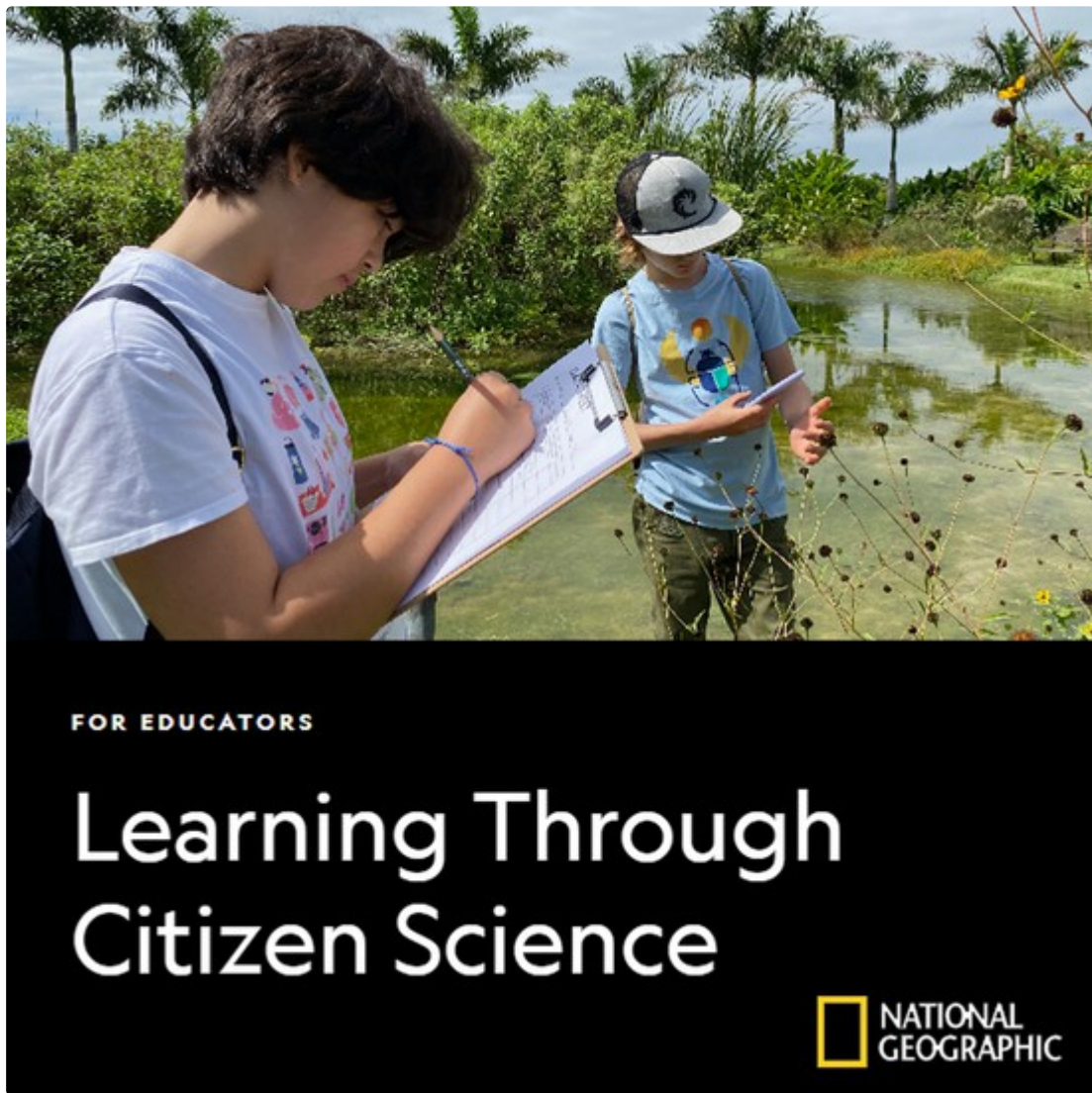
FREE!

FOOD TRUCKS  
ACTIVITIES  
DEMONSTRATIONS  
INTERACTIVE ART  
MUSIC  
ENTERTAINMENT  
AND MUCH MORE!



315 Stampede Dr. Nampa, ID 83687





## Learning Through Citizen Science

The National Geographic Society developed this course, "[Learning Through Citizen Science](#)", to help educators discover the benefits of participating in real-world scientific research—for students and the community! Accessible for students of any age, citizen science can be adapted to suit the specific needs of different education settings, indoors and out. The course is designed to help you spur collaboration across disciplines and spark creativity.

"Learning Through Citizen Science" is divided into three modules. In each module, a National Geographic Explorer guides you to investigate powerful ways global citizen science can connect you and your learners to important scientific work that helps with understanding and protecting the world around us. These modules are self-paced, so you can begin at any time and work at your own pace!



## Adult Night at the Discovery Center of Idaho

CALLING ALL STAR WARS FANS! Join us for this exclusive 21+ event and enjoy a variety of programming provided by our incredible list of partners! Plus, full access to the largest fan-made Star Wars collection in the world, The Fans Strike Back Exhibition. Drinks, food, fun & droids.

<https://www.dcidaho.org/adultnight>

Grab a beer from the newly established [Brown Beard Brewing](#) as you explore the Force

Enjoy authentic Mexican cuisine from [Tony's Tamales & Catering](#) or tasty Japanese street eats from [Bochi Bochi - Japanese Eats](#)

Hang with the @boisestateuniversity Robotics Team for some robot demos & to learn about the brains behind the 'bots

Put your [#StarWars](#) knowledge to the test with a speed round of trivia

Wear your best Star Wars inspired costumes for a chance to win a gift basket of Star Wars merchandise from our beloved STEM Store

Swing by our greenscreen photo booth and capture the perfect battle scene

Play games, win prizes and feel good knowing you're supporting [#STEM](#) in Boise by attending Drinks & Droids! Limited tickets available - purchase yours online at [DCIDAHO.ORG!](#)

<https://www.dcidaho.org/adultnight>

# Get a FREE DNA Kit

Extract DNA from a Strawberry with Illumina.



Illumina has partnered with the Million Girls Moonshot to offer FREE DNA kits for students.

Use Code: Million Girls Moonshot



## Celebrate National DNA Day!

National [#DNA](#) Day is April 25, 2023, so now is the perfect time to order free DNA kits to celebrate [#DNADay](#) and get youth excited about genomics. Order your free DNA kit at <https://bit.ly/41juCAh> using CODE: Million Girls Moonshot.

## BOARD MEMBERS



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