



TETON SCIENCE SCHOOLS

2018 Annual Report



www.tetonscience.org
307.733.1313

**Inspiring curiosity, engagement and
leadership through transformative
place-based education.**

Teton Science Schools Impact Highlights

14,567

Students served by TSS mission

96,541

Student days of place-based education

\$1,599,714

In scholarships given across all TSS programs

3,679

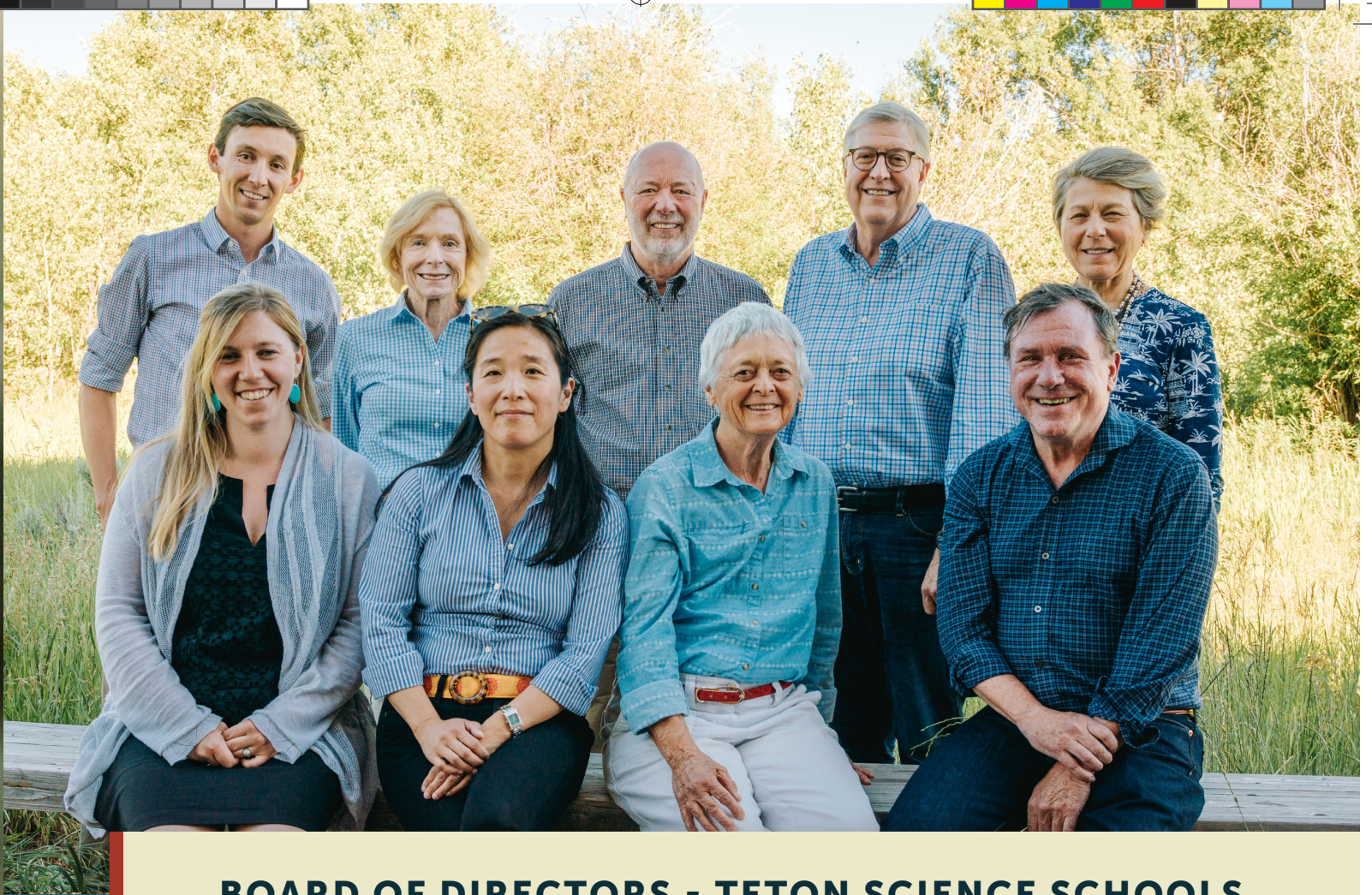
Murie Ranch Visitors

8

Schools in Place Network

Enrollment Report 2017-2018

FISCAL YEAR 17/18	STUDENTS	STUDENT DAYS	SCHOLARSHIPS
Field Education			
Field Education Programs	8,461	37,670	\$241,250
AmeriCorps Service Members	42	4,080	N/A
Wildlife Expeditions	3,735	4,545	N/A
Graduate Program	12	3,960	\$47,355
Teacher Learning Center			
Workshops & Outreach	1,453	3,449	\$208,632
Consulting	282	750	N/A
Journeys School			
School Year	151	26,338	\$984,506
Summer	100	500	N/A
Teton Valley Community School			
School Year	86	14,688	\$115,171
Summer	245	561	\$2,800
Total	14,567	96,541	\$1,599,714
Total Visitors	3,988	3,988	
Total Attendees	831	3,858	
Total Impact	19,386	104,387	



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Ted & Joan Major



Across the country, we hear the increasing need from young people, adults and families for education with relevance. Our world demands education to promote curiosity and engage students. Now more than ever, we need education that helps our students make an impact in their community and world. In place-based education, the community is the classroom. The learner inquires about the world around them and designs solutions for what could be.

History

Teton Science Schools (TSS) began with Ted Major immersing 12 students in the Greater Yellowstone Ecosystem for six weeks in the summer of 1967. In the early days, Ted was known for driving an iconic Volkswagen. If we think of TSS beginning as a 1967 Volkswagen van, over 51 years we have gained many passengers (student volume) and significant speed (program breadth). Last year we educated 14,567 students. Until several years ago, we were still metaphorically driving a 1967 VW to run year-round programming across multiple states and countries, impacting almost 20,000 people a year (including lodging and free programming). In June 2017, we began our OneTSS strategic plan to transform TSS (the classic VW) into the integrated and sustainable leader in place-based education (all while driving it!).

Our Strategic Plan

In year one, we established common language for the world to talk about place-based education through the TSS Framework. With a common framework and a singular mission, each program within TSS is stronger because it is connected to the whole. Our graduate students are better educators because they support our students in both Field Education and our Independent School. Our model place-based Independent School is better because it is the hub of our growing network of rural public and independent schools around the country. Whether Field Education,

Chris Agnew
Executive Director

Classroom Education, or Educator Development, our students benefit when their learning is connected to community and the world around them.

Foundations

From mission to strategic plan to operations, our students come first. From all staff engaging in unconscious bias training to new registration processes supporting non-dominant student groups, we have made early progress to create more inclusive learning environments for all students. In the past 24 months, we have reduced TSS debt by about \$1.9 million or 86 percent. From financial health to faculty professional development, ensuring strong fundamentals behind the scenes enables our student-centered approach years into the future.

Ted Major saw the TSS mission in action through 50 years. Sadly, early in our 51st year, Ted passed away with his wife Joan by his side. We continue to honor Ted's life and legacy as we begin a new school year at TSS. We welcomed the 25th cohort of our graduate program, we are building a multi-year plan to improve employee housing access and stability, and we are committed to improving inclusive access across our programming regardless of gender identity, race/ethnicity, sexual orientation and age. In the 2019-20 school year, we will open our independent schools as one integrated school across two campuses at the hub of our network of place-based rural schools. We are laying the foundation to transition the vintage VW into the leader in place-based education. We measure our reach by thousands of students and you will see our true impact with each individual story in the following pages. Thank you for joining us.



"Rural schools often have incredible community assets and dedicated staff, but also may struggle with poverty, economic challenges, and access to the innovations and resources found in more densely populated areas. The goal of the Place Network is to build an innovative and replicable K-12 model to help all rural schools accelerate in partnership together to reimagine their rural futures."

- Nate McClennen,
TSS Vice President of Education & Innovation

Teton Science Schools is expanding its initiative to create a national network of public rural schools integrating education into the community through authentic, place-based learning. With a \$1 million grant from Oakland, CA based NewSchools Venture Fund, TSS will expand partnerships to create a network of public, place-based rural schools. The network will continue to grow and establish new partnerships with rural schools and organizations to improve academic outcomes, student engagement and community impact for students in rural communities.

The Teton Science Schools' Independent School in Victor, ID and Jackson, WY is a model place-based school and will partner with educators from across the country to implement best practices of place-based education in K-12 learning. The network of rural schools that join will have access to sample curriculum, consulting and implementation, research to inform practice, and online communities.

Currently there are several schools engaged in the network, they include Mountain River School (VT), University Charter School (AL), Koshkonong Trails School (WI), Swan Valley Elementary School District (ID), Meadows Valley School District (ID)

and Leadership Preparatory Academy (WA).

The network will grow to 50 schools serving more than 10,000 students in rural and underserved communities in the next three to five years. While the majority of schools will be public and rural, select independent or non-rural schools will be part of the network to advance learning around the model in different geographies and demographics.

The concept of a network of place-based schools emerged from the learning of Teton Science Schools while building and running a school in the Tetons, a graduate program, field education programs and professional development and consulting for more than 50 years.

Teton Science Schools to Expand Network of Rural Schools





As Journeys School and Teton Valley Community School take steps toward becoming a fully integrated school, eighth grade students from both campuses met at the top of Teton Pass to interact through an engaging scavenger hunt.







David McCoy explores The Murie Ranch with his grandparents, Mimi and Norman Steele, who were participants in a Road Scholar program this summer.

Generations of Learners & Leaders at TSS

Field instructor's connections to TSS spans three generations

David McCoy's relationship with Teton Science Schools has stretched more than a decade, has included three generations of learners in his family and has impacted hundreds of people. David, who currently works as a field education instructor, first came to Teton Science Schools in 2007 from St. Louis. He was a sixth grader who was part of Chaminade Preparatory School's very first trip to the Greater Yellowstone Ecosystem. David's father, a teacher at Chaminade, led the charge for their school group to come to Teton Science Schools.

"On my first trip to TSS, I fell in love with the mountains and recognized that science is about more than being in a classroom," said McCoy.

The love for the mountains David discovered almost twelve years ago has been a common thread in his life ever

since. It's what brought him back to Teton Science Schools as an AmeriCorps member in 2016 and then again as a field instructor in 2017. In May, David had the unique opportunity to lead a group of sixth graders from his St. Louis alma mater, Chaminade and his father led the group as their chaperone.

Just a few months after David's dad brought a group of sixth graders to TSS, his grandparents participated in a Road Scholar program, which David also had the opportunity to lead.

David stated, "By participating in the Road Scholar program I led, my grandparents were able to see and understand the impact I have as an instructor here and that I'm doing something more than hanging out and going on hikes."





Ten years ago, former TSS staff and Journeys School parents Kelzang and Tashi Wangchuk connected TSS to educational leaders in Bhutan, a small kingdom in the eastern Himalayas. At the time, the kingdom of Bhutan was hoping to re-envision its educational curricula to align with their emerging concept of Gross National Happiness.

TSS staff members established a formal partnership with the Ministry of Education in 2008 and since then, the TSS Teacher Learning Center has led 12 group trainings over eight visits to Bhutan. Seven Bhutanese educators have enrolled in the TSS Graduate Program at the Kelly Campus, and 38 Bhutanese educators have visited TSS for extended professional development.

Leslie Cook, senior director of educator development, reflected on her engagement with this initiative, "Since 2008 when the first delegations from Bhutan visited TSS, I have seen the attention on and need for place-based education become more focused. When in Bhutan, I hear and see more educators and administrators talking about place-based approaches and making plans to apply those approaches in the classrooms."

Last year, TSS Graduate Program alumna Emma Griffin worked with the Bhutan Youth Development Fund and Samste College of Education to create a new model place-based school at the Talhogang Community Primary school. Griffin also published a place-based "ABC" book to help kindergarten students learn the alphabet through items found in their community.

TSS facilitators will continue to work with the educators in Bhutan from 2018 to 2019 to revise curriculum and lead more workshops with an ultimate goal to train all 11,000 of Bhutan's educators in place-based education practices in the next ten years.

The work for the Bhutan project is directly supported through a gift from the Jim Petersen Bhutan Educational Trust Fund.

Ten Years of Place-Based Education in Bhutan

TSS has helped reimagine the curriculum & trained more than 500 educators since 2008



TSS senior director of educator development Leslie Cook and TSS Bhutan fellow and Graduate Program alumna Emma Griffin with Bhutanese educators and students in September 2018.





This year, Jackson Hole local Bert Raynes was bestowed with the Murie Spirit of Conservation Award. The Murie Ranch of Teton Science Schools honors individuals who have demonstrated an exemplary commitment to the protection of wildlife and wild places. Tanner Yess was also honored as the recipient of the Rising Leader Award. Yess was a member of the Peace Corps, is a National Park Service Mountains to Main Street Ambassador, a SHIFT Emerging Leader and is currently the deputy director at the Mill Creek Alliance.

Bert and Meg retired to Jackson Hole in 1972, a summer destination for the couple since the 1950s. Bert founded the Jackson Hole Bird Club in 1976 and began writing a column for the News & Guide shortly thereafter. Bert and Meg were active in a variety of environmental causes over the years, often engaged in boots-on-the-ground habitat restoration. Their shared love of the Jackson Hole landscape led to the establishment of the Meg and Bert Raynes Wildlife Fund and Nature Mapping Jackson Hole, a citizen science and education program designed to increase knowledge about wildlife distribution in Wyoming.

Bert Raynes & Tanner Yess Honored at Murie Spirit of Conservation Awards



If you have picked up a copy of the Jackson Hole News & Guide

in the last thirty years, you have undoubtedly come across Far Afield, a weekly nature column by Bert. As one would expect, Bert's column describes local flora and fauna, particularly birds. But it is Bert's contagious passion for wildlife and wild spaces that sets his column apart. He captivates readers through whimsical observations of the natural world and encourages us to step outside to make observations of our own.

A preservationist, conservationist and self-proclaimed "tree hugger," Bert has long used his voice to advocate for the environment. In this respect, Bert is the perfect recipient for the Murie Spirit of Conservation Award. Mardy and Olaus Murie spoke for the land, writing countless letters, articles and speeches in defense of wilderness conservation. Bert was introduced to the outdoors through his wife, Meg.

In the week following the Murie Spirit of Conservation Award dinner, Bert wrote these words in Far Afield on August 22 (republished from his book *Valley So Sweet*): "Over the years we've come upon moose, elk, pine marten, dipper, harlequin duck and red-tailed hawk. We've walked in snow and wind and once, on horseback, rode through a memorable sleet and ice storm. Wildflowers — the gamut. Scenery — well, y'know, it's the Grand Tetons. Incomparable. It adds up to an indefinable feeling of having spent some hours wisely and well."

Bert's timely words remind us how fortunate we are to educate and share this place with so many others.





Group Measures Impact of TSS Programs with Middle School Students

Students who participate in ecological research show gains in attitudes about science

Teton Science Schools Graduate Faculty and Research Specialist Kevin Krasnow and Graduate Program alumna Clare Gunshenan designed and implemented a study to measure the effectiveness of TSS field education programs.

The study seeks to compare the effectiveness of three non-formal science teaching methods (open inquiry, citizen science, and adventure experiences) in three student learning domains (feelings of self-efficacy, attitudes about science, and nature of science understanding). The study included sixth through eighth grade students (n=442) from the Columbia Public Schools (CPS) in Missouri who attended a weeklong TSS experience in the summers of 2016-2018.

According to our team's pre- and post-surveys, the adventure group increased self-efficacy, but had little influence on attitudes and the nature of science. The citizen science group showed the greatest growth for nature of science, but showed little growth in attitudes about science or self-efficacy. Open inquiry resulted in high growth across all three domains and outperformed the other two methods. We believe that this stems from increased student centeredness, collaborative learning and engagement in the processes of scientific inquiry.

To assess these potential explanations, the team expanded in the summers of 2017-2018 to capture the professional perspectives of CPS teacher-chaperones and TSS' own field instructors. Additionally, the team sent researchers into the field to document each of the pedagogies in action. With this new data, the team is already finding richer explanations of the strengths and limitations uncovered by the student surveys. Much of this success is owed to the thoughtfulness and participation of all of the parties involved in the CPS students' learning while at TSS. We anticipate analysis completion in early 2019.

These results empirically support what TSS has been doing for more than 50 years—challenging students to develop, conduct and share their own ecological research. Particularly important is that inquiry-based research not only showed significant gains for students in their understanding of science, but also demonstrated significant student gains in affective domains such as attitudes about science and feelings of self-efficacy.



Summer Program Takes Learning Outside Classroom Walls

Pilot Forest Kindergarten program brings learning to life in a new way

Since the first forest kindergarten program took place in Denmark in the 1950s, the style of learning has continued to grow in popularity. This summer, Teton Science Schools piloted a program on both sides of Teton Pass.

Over the course of two three-week sessions, students ages four through six participated in the program three days a week. These little learners spent their entire day outdoors, gathering on tarps for everything from morning meetings to naps to lunch.

The first session of the program took place at Snowdrift Farm in Victor, ID

and the second at R Park in Wilson, WY. Though the scenery varied, the program at its core remained the same. Students were encouraged to explore the spaces around them, quietly observing the sights, sounds and smells of the place between longer sessions of free play.

The inaugural summer of this program proved it's perfectly paired with Teton Science Schools' mission to inspire curiosity, engagement and leadership through transformative place-based education—even in pint-sized learners.





Friends of the Teton River (FTR) was founded in 2001 to protect, restore and improve water resources in the Teton River Watershed. FTR works with a diverse group of stakeholders to conduct research and implement high-priority water restoration projects. In addition to research, FTR educates local K-12 students on water resource issues. By providing Teton Valley public and private schools with hands-on watershed science curriculum, FTR aims to cultivate the next generation of water stewards.

FTR often partners with outside organizations to expand their reach. In December 2017, Zena Wolcott-MacCausland, FTR's Community Outreach Coordinator, approached TSS AmeriCorps with a Capacity Building Project proposal to deliver its watershed science curriculum to K-12 students in Teton Valley. TSS AmeriCorps said yes and a new partnership was born.

Throughout the spring of 2018, AmeriCorps members worked with FTR and Teton Valley teachers to develop lesson plans, refine curriculum and review instructional strategy.

Winter/spring 2018 AmeriCorps member Emily Rodrigue taught ninth grade students about the nitrogen cycle, facilitated a community-wide well water testing event, and helped design one of six stations for Idaho's inaugural Water Awareness Week for sixth graders.

"Prior to my AmeriCorps experience at TSS, my pedagogic approach to youth education was highly driven by

delivering as much relevant content as possible, and making sure that content was retained at the highest level," said Emily. "Through trainings, weeks spent as a field educator, and countless lesson planning sessions and conversations with peers, I have now adopted a pedagogy that is much more driven by open inquiry from students, as well as free exploration."

Following a successful spring, FTR and AmeriCorps are excited to continue their partnership. This fall, AmeriCorps members will instruct fourth and fifth grade students at Rendezvous Upper Elementary School (RUES). There will be new lesson plans and field trips, but the goal remains to increase science literacy and empower local youth to engage with water resource issues facing their community.

AmeriCorps Members Cultivate Next Generation of Watershed Stewards

Service members work with Friends of the Teton River to implement K-12 watershed science curriculum in Teton Valley



Spring 2018 TSS AmeriCorps Member Emily Rodrigue working with Teton High School students on a community nitrate testing program.

Statement of Financial Position (Unaudited)

ASSETS	Ending May 31, 2018	Ending May 31, 2017	Ending May 31, 2016
Cash & Cash Equivalents	\$210,270	\$436,613	\$132,197
Accounts Receivable	\$635,972	\$625,992	\$556,511
Inventory & Prepaid Expenses	\$189,308	\$142,982	\$284,716
Investments	\$19,309,704	\$19,201,867	\$17,781,818
Property & Equipment (net)	\$33,154,683	\$33,678,993	\$34,083,264
Total Assets	\$53,499,937	\$54,086,447	\$52,838,506
LIABILITIES & NET ASSETS			
Liabilities			
Accounts Payable	\$489,281	\$490,187	\$401,607
Accrued Expenses	\$1,304,716	\$393,546	\$423,289
Course Deposits	\$1,152,995	\$1,397,817	\$1,208,719
Notes Payable	\$714,240	\$1,869,091	\$2,657,711
Total Liabilities	\$3,661,232	\$4,150,641	\$4,691,326
Net Assets	\$49,838,705	\$49,935,806	\$48,147,180
Total Liabilities & Net Assets	\$53,499,937	\$54,086,447	\$52,838,506

Statement of Activity - Fiscal Year Ending May 31, 2018 (Unaudited)

		Unrestricted Operating Fund	
SUPPORT & REVENUE	2018	2017	2016
Program Tuition & Fees	\$10,465,612	\$10,760,044	\$10,374,326
Contributions	\$2,885,854	\$3,135,045	\$2,573,412
Investment Income	\$897,612	\$859,676	\$759,723
Other Income	\$502,542	\$390,628	\$321,512
Total Support & Revenue	\$14,751,620	\$15,145,393	\$14,028,973
EXPENSES			
Program Services	\$12,012,781	\$11,962,966	\$11,655,044
Management & Operations	\$1,378,854	\$1,444,711	\$1,419,557
Fundraising	\$573,319	\$601,128	\$483,714
Total Expenses	\$13,964,954	\$14,008,805	\$13,558,315
Capital Investments	\$833,632	\$1,141,432	\$444,609
Net Surplus (Deficit)	-\$46,966	-\$4,844	\$26,049



TVCS faculty and Graduate Program alumna Julie Thomsen with elementary students in Teton Valley.



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Teton Science Schools is a private, 501(c)(3) nonprofit educational organization operating year-round in Jackson Hole, Wyoming and Teton Valley, Idaho. Teton Science Schools does not discriminate on the basis of race, gender, creed or sexual orientation in any of its policies or programs.

Operating in partnership with Grand Teton National Park and as a permittee of the Bridger-Teton and Caribou-Targhee National Forests.

