



WYOMING STARGAZING

2017
ANNUAL
REPORT



Educating and inspiring through Wyoming's extraordinary skies.

www.WyomingStargazing.org
1-844-996-7827

THE WYOMING STARGAZING IMPACT IN 2017

6487
Adults

6188
Children

266
Private Programs

92
Public Programs

MILESTONES OF 2017

1000th
Program Offered

25000th
Program Attendee

WYOMING STARGAZING BOARD & STAFF

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Ian Edwards, M.S.

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Founder and Executive Director

Samuel Singer, Ph.D.

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Center of Wonder • Rendezvous Lands Conservancy • Jackson Hole Center for the Arts
Peoples Market • Teton County Parks and Recreation • Snow King Mountain
JH Travel and Tourism Board • 1% for the Tetons



Samuel Singer, Ph.D.
Founder and Executive Director

It's been amazing to be part of Wyoming Stargazing over the past four years. Watching the organization grow at a rapid rate and receiving continuous community support for the astronomy programs we offer has been incredibly rewarding for me. I can honestly say that I have never in my life felt so fulfilled by my work.

The past year was the most exciting year yet for Wyoming Stargazing. The 2017 total solar eclipse that passed through Jackson brought Wyoming Stargazing into the spotlight in ways that I could have never imagined happening so soon after creating the organization. We were able to take advantage of that opportunity to enhance our visibility not only across the United States, but also to several countries around the world. We offered more free public programming than ever before and successfully

facilitated 11 eclipse programs on the morning of the eclipse, which included two free public programs and a fantastic fundraising event on the summit of Snow King Mountain. We brought together over a dozen educators from across Wyoming and over 30 volunteers from across the country to run those events.

With our success in 2017 Wyoming Stargazing is beginning a brand new stage of development by hiring new full-time employees and consultants to bring our organization to the next level. Our excitement is also building as we collaborate with Snow King Mountain to design a summit observatory and planetarium for Jackson Hole. We are confident that 2018 will be another successful year for Wyoming Stargazing as we refine our organizational structure and create new program offerings.

Public Programming

Wyoming Stargazing had humble beginnings four years ago with a single 10” telescope and monthly free public stargazing programs. Now, we offer public stargazing programs every clear Friday night throughout the year at either the Center for the Arts or at Rendezvous Park. We use telescopes that are twice as large as our first telescope was to show people amazing detail on the Moon, planets, star clusters, nebulae, and far off galaxies. We also provide iPads with state-of-the-art astronomy software and augmented reality goggles at all of our night time programs. Attendees leave the programs not only inspired by what they see, but also also by the wealth of knowledge that our stargazing leaders and volunteers share about each of the objects seen through the telescope.

During the summer months we offer a weekly solar astronomy program at the Peoples’ Market at the base of Snow King Mountain. Using our solar telescopes we safely show people sunspots, solar prominences, and other features of the Sun. These daytime programs provide free opportunities for families with young children to enjoy using our telescopes without staying up late or braving the cold at night. During those programs we teach people about how the Sun shines, how it makes life possible on Earth, and how other stars might do the same for other planets scattered throughout the Milky Way Galaxy.



Our other free public programming offerings include planetarium programs and indoor astronomy presentations. The indoor astronomy presentations cover various astronomy topics for general audiences. Those programs occur throughout the year at the Teton County Public Library and the Teton County Parks and Recreation Center. A collaboration last year between local artist Natalie Clark, local designer Jakub Galczynski, several community grants, and years of fundraising led to the creation of the Dark Sky Pavilion and Wyoming Stargazing’s portable digital Planetarium system. We can now offer fascinating digital planetarium shows indoor or outdoors throughout the year in almost all weather conditions.

All of these free public programs fulfill our mission of inspiring and educating through Wyoming’s extraordinary skies. We hope that through these programs we are also able to communicate our core values of our love for science education, sharing a cosmic perspective of the Universe, and encouraging people to learn more about astronomy.



“They know their stuff!

I went on a Wyoming Stargazing program in mid-August. I *loved* it. The tour leaders were really knowledgable about the physics of astronomy. They also knew a lot about the constellations -- not only did they point them out but they told us about the myth/legend behind them. Can't wait to do it again.”

- Mai
Stargazing Guest



Wyoming’s Stagazing’s Dark Sky Pavilion was designed by local artist Natalie Clark and designer Jakub Galczynski.

Private Programming



Our rear-round private programs provide opportunities for locals as well as visitors to experience Wyoming's extraordinary night skies in more intimate settings. We offer all four of our program types (stargazing, solar astronomy, planetarium programs, and indoor presentations) at private residences, conference halls, wedding venues, hotels and resorts, and inside Grand Teton National Park. The bulk of these programs are stargazing programs which we run in the same way as a wildlife tour. We pick guests up from their hotels, drive them into a dark location inside Grand Teton National Park and show them incredible deep space objects through our telescopes.

Most of our private programs occur between the months of May through September. They are facilitated by our Executive Director, Program Coordinator, and by our staff of seasonal Stargazing Leaders. Our seasonal staff includes local educators, college students, and recent graduates in the fields of physics and astronomy. The van sharing partnership with Teton County Parks and Recreation make these programs possible by providing us access to their fleet of 15 passenger vans when they are not in use during nighttime hours. The amazing feedback we receive via Trip Advisor is testament to the high quality programs we offer with professional staff who are trained by Wyoming Stargazing at the beginning of each summer season.



We also rent some of our telescopes as well as our planetarium system to private groups. Renting our telescopes allows individuals who already have some knowledge of astronomy and telescopes to experience the splendor of Wyoming's night skies at a fraction of the cost of a facilitated private stargazing program. The Dark Sky Pavilion and our Digital Planetarium System make a wonderful addition for sleepovers, birthday parties, BBQs, or any festive occasions. The Pavilion can be rented as a stand alone outdoor gathering space during the day or as an oversized tent for backyard camping with space for up to 20 people at night.

We also provide grant subsidized astronomy programming to public and private schools in Jackson Hole as well as in the surrounding area. We have designed and implemented several unique astronomy lessons for inside and out of the classroom for all grade levels. We have also teamed up with other organizations in the community to offer STEAM (Science, Technology, Engineering, Arts, and Math) programs that combine astronomy content and artistic techniques with beautiful results.

Our private programs advance our mission and provide necessary funding for all of the free public programs we offer throughout the year. The private programs also provide opportunities for sharing our vision and developing strategic partnerships towards establishing a public observatory and planetarium in Jackson Hole.

Snow King Observatory and Planetarium

We're on our way to bringing our vision to fruition.

Wyoming Stargazing is collaborating with Snow King Mountain to design an observatory and planetarium for the summit of the mountain.

The Snow King Observatory and Planetarium will hopefully be built on the summit of Snow King Mountain in the summer of 2021. If implemented as designed, both the Observatory and Planetarium will have a modern look and feel to them. The Observatory will have a 20' AstroHaven dome and a 1.0-meter PlaneWave telescope. The Planetarium will have a 10-meter dome with roughly 55 seats and a state of the art digital projection system from one of

the leaders in planetarium design. The Observatory and Planetarium, designed by Jakub Galczynski and Esteam Architecture, are part of a larger Snow King Phase 2 Master Plan. The Town of Jackson is currently reviewing the proposed plan with community input. The US Forest Service will hopefully begin their Environmental Impact Assessment (EIA) soon.



Save Our Night Skies Campaign

What's at Stake?

Human health / Public safety / Ecological health / Wasted energy / Community appeal

Light pollution in Jackson has become a problem for the health and safety of people and wildlife, not to mention its draining effects on our economy and our ability to enjoy dark night skies. Many other cities around the globe are seeing tremendous benefits from their efforts to restore their dark night skies. We can save our night skies too! Wyoming Stargazing has embarked on a campaign to Save Our Night Skies in Jackson Hole. Over the last two years we have made great strides towards meeting the goals of this campaign thanks to the collaboration and hard work of many different individuals and groups. The Town of Jackson

and Teton County were incredible partners in helping us to update the exterior lighting standard in Jackson. Grand Teton National Park has been enthusiastic as we began collecting baseline lighting inventory data necessary for achieving Dark Sky Certification. Local organizations such as Free Roaming Photography, the Teton Photography Group, Teton Science Schools, and the Jackson Hole Conservation Alliance have also contributed as have members of the International Dark Sky Association and Ohio Northern University. We are meeting our short term goals and are moving steadily forward.



Save Our Night Skies Goals Beginning 2015

Short Term: 1 Year

Have appropriate language for dark sky certification included into the Town of Jackson and Teton County Land Development Regulations

Interim: 1-4 Years

Make dark sky lighting hardware available locally
Obtain Dark Sky Certification for Jackson, Teton County, and Grand Teton National Park

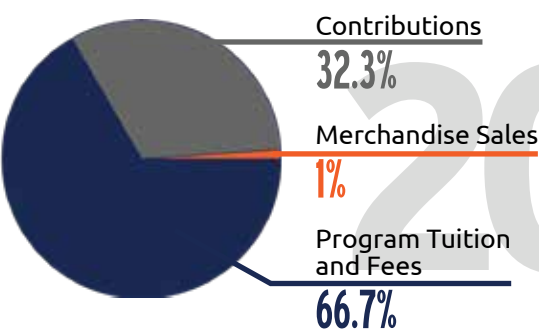
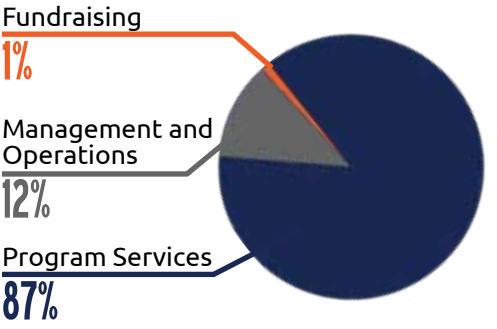
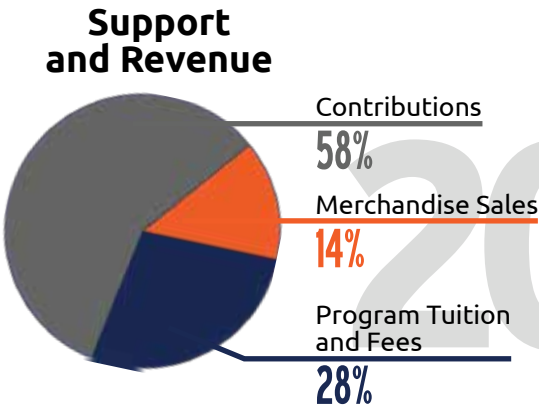
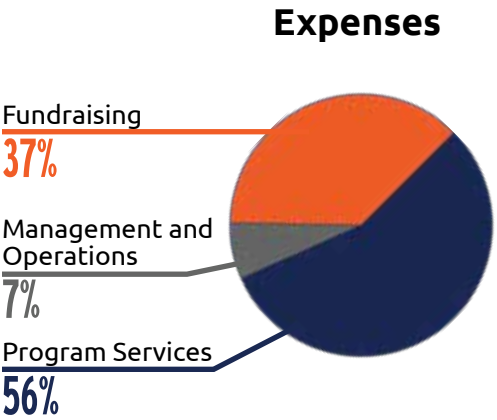
Long Term: 5 Years

Decrease level of light pollution in Jackson from a 5 to a 4 on the Bortle Scale
Decrease level of light pollution in GTNP from a 3 to a 2 on the Bortle Scale

By the Numbers for the 2017 Fiscal Year

Program Type	Number of Programs	Number of Participants	
		Adults	Children
Private Indoor Astronomy Presentation	38	226	2001
Private Planetarium	15	135	859
Private Solar Astronomy	16	1281	1146
Private Stargazing	198	1391	603
Public Indoor Astronomy Presentation	18	789	33
Public Planetarium	11	474	439
Public Solar Astronomy	33	1511	952
Public Stargazing	30	680	155
Grand Total	359	6487	6188

Revenue and Expenses



Statement of Activity

REVENUE	
Private Programs	\$121,737.47
Cash Donations	30,214.42
Grants	30,930.00
Sales	57,710.50
Fundraising Events	183,897.30
Taxable Merchandise Sales	40,860.50
Wholesale Merchandise Sales	16,211.00
Total Revenue	\$423,850.69
Gross Profit	\$423,850.69
EXPENDITURES	
Advertising	\$19,204.01
Attendance Fees	1,041.00
Bank Charges	19.60
Commissions Paid	2,625.24
Dues & Subscriptions	3,684.71
Excise and Sales Tax	251.90
Food	1,1692.65
Fundraising Expenditure	133,539.19
Insurance	2,631.94
Legal & Professional Fees	1,768.54
Licenses and Titles	525.00
Merchandise	19,614.84
Merchant Processing Fees	4,853.58
Payroll Expenditures	71,453.53
Program Supplies	11,530.06
Rent	8,605.00
Shipping and Delivery Expense	2,496.37
Subcontractors	12,774.60
Stargazing Leader Compensation	39,481.13
Transportation	10,636.08
Total Expenditures	\$347,898.97
Net Operating Revenue	\$75,951.72
Interest Earned	22.26
Total Other Revenue	22.26
Net Other Revenue	\$22.26
Net Revenue	\$75,973.98

Statement of Financial Position
(as of August 31, 2017)

CURRENT ASSETS	
Bank Accounts	
Meridian Trust Checking	\$16,141.39
Meridian Trust Savings	80,523.00
Total Bank Accounts	\$96,664.39
Accounts Receivable	450.00
Total Current Assets	\$97,114.39
Accumulated Depreciation	-52,120.00
In-Kind Donated Assets	1,179.00
Purchased Telescopes, Trailer, Cameras, and Accessories	74,508.83
Total Fixed Assets	\$23,567.83
Total Assets	\$120,682.22
LIABILITIES	
Accounts Payable	18,991.05
Total Accounts Payable	\$18,991.05
Program Deposits	6,210.00
WYDOR Sales Tax Payable from Pledges	148.25
WY Sales Tax Payable	1,851.88
Total Liabilities	\$27,201.18
Retained Earnings	17,507.06
Net Revenue	75,973.98
Total Equity	\$93,481.04
Total Liabilities and Equity	\$120,682.22

Photo: Mike Cavaroc, Free Roaming Photography



Since our very first fundraising campaign on Indiegogo four years ago Wyoming Stargazing has raised \$160,000 combined from donations (\$95,000) and grants (\$65,000). Our smallest donations have been less than \$1 and our largest has been \$7,500. Grants have ranged in size from \$100 to over \$12,000. Our first major fundraising event in 2017 around the celebration of the total solar eclipse raised approximately \$50,000. This brings our total contributions over our short 4-year history to \$210,000.



These contributions have been used in three different ways. First, they were used to purchase equipment for our stargazing programs, solar

astronomy programs, and our planetarium programs. Thanks to generous contributions we have been able to purchase four large telescopes with 11” to 20” mirrors that we can use to show people incredible details on the Moon, the rings of Saturn, cloud bands on Jupiter, the phases of Venus, star clusters, nebulae, galaxies, and more. These telescopes are a central part of meeting our mission of inspiring and educating through Wyoming’s extraordinary skies. The solar telescopes we purchased provide opportunities to show people sunspots, solar flares, and other amazing solar features. We have also purchased two specialized digital cameras that can project real time images of the Sun and nighttime objects through the telescopes onto flat screen monitors enabled people with physical disabilities to view that objects with ease. After four years of fundraising Wyoming Stargazing was finally able to purchase a brand new digital planetarium system in the summer of 2017. That facility which can be set up inside an auditorium or outside within the Dark Sky Pavilion (also purchased through grants and donations) provides incredible digital images of the Universe and full-length films designed for planetarium domes.

The second way these contributions were spent was to substantially subsidize the cost of programming for schools. Wyoming Stargazing has offered stargazing programs, solar astronomy programs, indoor

astronomy presentations, and planetarium programs to Teton County Schools, local private schools, and to Driggs Elementary School. We have done so independently and in collaboration with other organizations including pARTners, after school programs run by Teton County Parks and Recreation, and CREST. Over the last four years we have offered dozens of programs across several different grade levels. Nearly 3,000 students have had the opportunity to experience one or more of our school programs.



The third way contributions have been spent was to support the operation of our year-round, free, public, astronomy programs. Over the past four years Wyoming Stargazing has offered 282 of these free programs to the Jackson Hole Community and to a few other communities in Wyoming. While monetary contributions were necessary to purchase supplies, compensate stargazing leaders, and cover the costs of transportation, the in-kind donations we received from our partners and the hundreds of hours of volunteered labor also made these program

Photo: Mike Cavaroc, Free Roaming Photography

possible. Wyoming Stargazing has been continuously humbled by the generosity and support of the Jackson Hole Community. We are deeply appreciative of all the assistance we have received. We are committed to continue offering inspiring and educational programs for our community.





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Wyoming Stargazing is an educational 501(c)3 nonprofit organization based in Jackson, Wyoming, and is an authorized permittee of the National Park Service