



Gallatin-Big Sky Weed Committee

www.bigskyweeds.org

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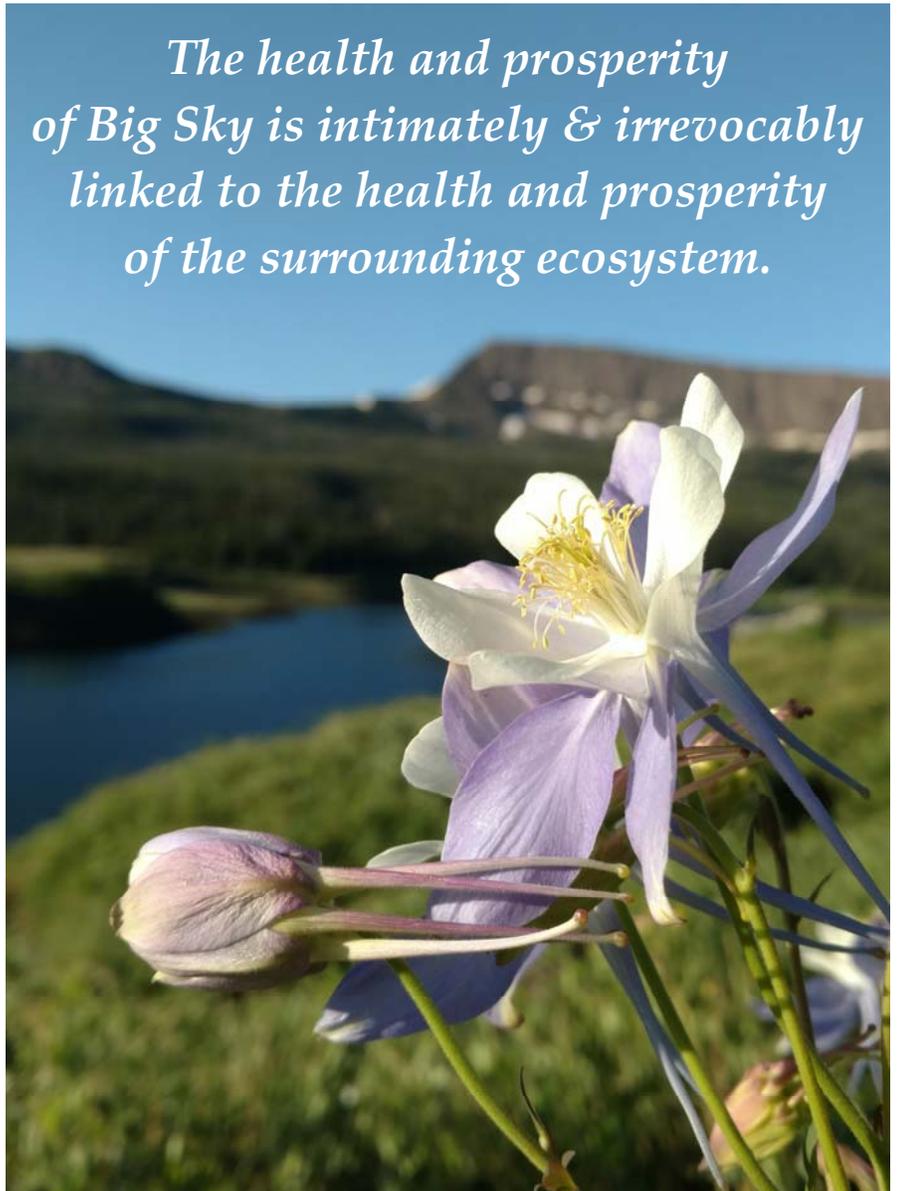
bigskyweeds@gmail.com

2016 Annual Report

The Gallatin-Big Sky Weed Committee is a 501c3 non-profit organization working to conserve native plants, wildlife habitat, and water resources through noxious weed education and management.

By directly assisting landowners and bringing federal, state, and local partners together, the Committee facilitates a successful, comprehensive, and cost effective campaign against invasive species in the greater Big Sky area.

*The health and prosperity
of Big Sky is intimately & irrevocably
linked to the health and prosperity
of the surrounding ecosystem.*



From Our Chair: Why it Matters



I am the assistant Coordinator for the Gallatin County Weed District and I have worked on noxious weed management projects throughout Montana and have seen first-hand the damage that invasive species can do.

Successful management of noxious weeds requires education, partnerships and diligence. Noxious weeds do not respect boundaries or property lines, and this makes management of invasive species everyone's responsibility.

The Committee's project area encompasses some of the most ecologically and economically important resources in the state. Those of us who live here benefit from the abundant recreational opportunities, the amazing and unique wildlife that resides here, and the stunning beauty of the landscape.

It's our responsibility to care for the land we love.

Noxious weeds are successful because they are competitive, adaptive, and persistent, and management needs to be thought of as annual maintenance for your property at a minimum. Learning to identify the plants and the best approaches to manage them is a big job. Fortunately, there is help.

The Gallatin-Big Sky Weed Committee (Committee) has been active in the community for over 12 years educating and empowering residents and visitors alike to take action. The Committee offers a variety of services and works hard to raise awareness and encourage people to take action. We also have an impressive record of working with numerous partners to implement larger weed management projects.

If you live, work or play in Big Sky or the Gallatin Canyon, we need your help to make noxious weed management successful and conserve this important and beautiful area. **Be proactive, educate yourself, and take action. The Gallatin-Big Sky Weed Committee is here to help.**

Thank You, *Michael Jones*

Board of Directors

Michael Jones, 2016 Chair

Gallatin County Weed District
Assistant Coordinator/Foreman

John Councilman, 2016 Vice Chair

Gallatin National Forest Vegetation
Management Specialist, Retired

Don McAndrew, 2016 Secretary

Engineer & Hydrologist with the
Natural Resource & Conservation
Service, Retired

Larry Holzworth

Adjunct Instructor at Montana State
University, Plant Materials Center
Manager & Specialist with Natural
Resource Conservation Services,
Retired

Emily Lockard

MSU Extension Agricultural Agent

Brad Bauer

MSU Extension Natural Resources
Agent

Lorri Lagerbloom

Horticulturalist, Wild Onion Gardens
LLC

Hannah Estabrooks

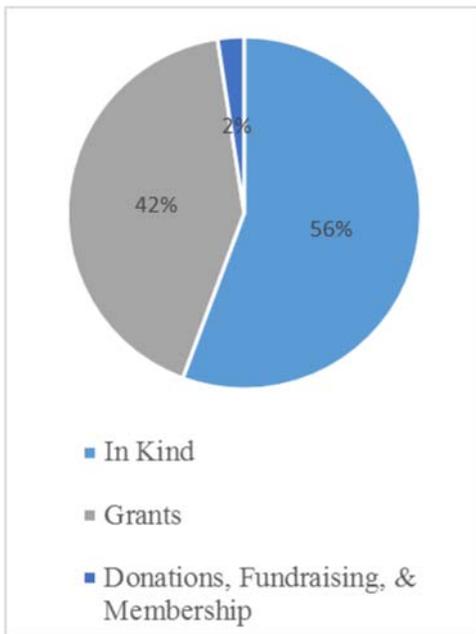
Plant Science & Pathology Graduate
Research Assistant, Montana State
University

Katie Coleman

Administrative Assistant, Hammond
Property Management

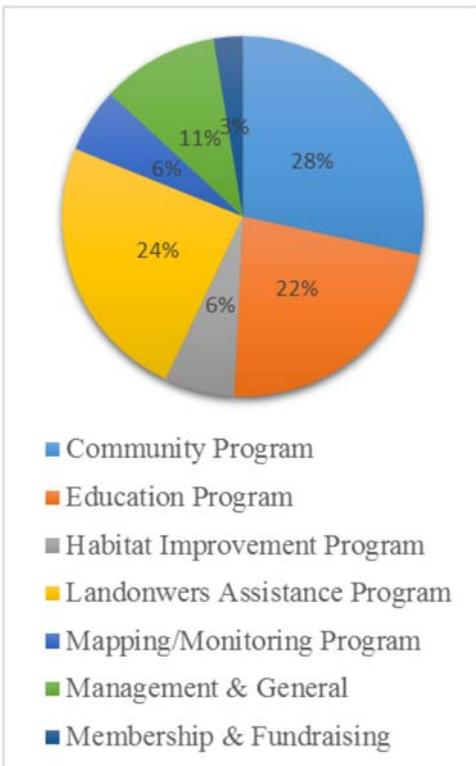
The individuals who serve on the board represent a combined 160 years of involvement and expertise in natural resources and noxious weeds.

Revenues by source



Total \$132,180

Expenses by Program



Total \$123,832*

*Of the \$8,348 difference, \$6,000 represents restricted grant funding for Play Clean Go efforts in 2017.

Financial Report: What are our natural resources worth?

In Montana, outdoor recreation generates...
\$5.8 BILLION in consumer spending
64 THOUSAND Montana jobs
\$1.5 BILLION in wages and salaries
\$403 MILLION in state and local tax revenue

Source: Outdoor Industry Association



The Committee's programs are proven to be cost effective:

- In 2016, the Committee's in-kind matched funds totaled \$73,541. For every \$1 of grant income was matched with \$1.56 of in-kind funding. Our 5-year average is \$1.51.
- Cooperative treatment efforts in Big Sky, initiated in 2013, represent a value of \$19,070 to the community.
- For the past six years, partners and sponsors of our two annual weed pulls (Gallatin River and Big Sky Community Park) supported the effort in the amount of \$20,205.
- In the six years of treating the bighorn sheep winter range, the Committee's \$5,837 was matched with approximately \$50,579 in personnel time and materials. That's nearly a 9 to 1 match!

What we bring to the Big Sky Community:

An active, engaged board with extensive expertise
A direct conduit to County, State, and Federal resources
A proven, cost effective, and comprehensive program
Support and engagement by a broad spectrum of partners
Free on-site assistance to landowners

Community Program:

Raising awareness and educate the public about noxious weeds and their impact on the ecosystem through community events, partnerships, and programs.



***2016 saw an increase in community events
of 41% over last year!***

“Teaching about noxious weeds may not seem like the most exciting topic. However, each year I am amazed at the student’s enthusiasm for becoming experts on something that is very prevalent in their lives, Big Sky, and the surrounding areas.

~ Brittany Shirley,
2nd Grade Teacher at Ophir School

“When you know better, you do better.”

– Maya Angelou

The Committee has distributed 354 Fight Five Weed Warrior Kits to kids at camps, community events, and Ophir School since 2014!



2016 Community Events

3rd Annual Big Sky Weed Summit

Interagency Weed Managers Meeting

Gallatin County Farm Fair

MSU Extension Class for Small Acreage Landowners - Noxious Weeds Class & Tour

6th Annual Gallatin Gateway Youth Group Weed Pull

6th Annual Bighorn Range Treatment

8th Annual Gallatin Weed Pull and River Clean Up

4th Annual Big Sky Community Weed Pull

7th season of Wildflower & Weed Interpretive Hikes

4th Annual Cooperative Treatment Day in Big Sky

Big Sky Community Corporation’s Kids Camps

Fly Fishing Festival

Camp Moonlight at Jack Creek Preserve

Big Sky Farmers Market

Realtor Training Course in partnership with Gallatin River Task Force

Presentations to Montana Farm & Ranch Brokers and Kiwanis Club

Big Sky Owners Association Annual Meeting

Ophir School Weed Education Event

Pesticide Recycling Program

**not a complete list, just the highlights*

Community Program Spotlight: *Noxious Weed Pulls*

8th Annual Gallatin Weed Pull and River Clean Up
29 volunteers, 860 lbs of weeds pulled

4th Annual Big Sky Community Weed Pull
*31 volunteers, 960 lbs of weeds pulled - **a new record!***

Weed Pull at with Big Sky Rotary Club
7 volunteers, 230 lbs of weeds pulled

Gallatin River Fall Weed Pull with Montana Conservation Corps and Earth Elements
16 volunteers, 740 lbs of weeds pulled

Unfortunately, our love of wilderness and wildlife can have a direct impact on their health, and working to address the negative effects of our actions is a reflection of our core community values.

2016
83 Volunteers
2,790 Pounds of Weeds Pulled



8 years - 682 Volunteers - 12,857 lbs of noxious weeds collected!



Educational Efforts

Website – a complete and comprehensive source of information, with frequent and timely updates



Facebook – informative, frequent, and timely updates



Postcard Mailer - mailed out to 2,014 landowners in the greater Big Sky area



Education Program:

Raising awareness and educating the public about noxious weeds and their impact on the ecosystem through various public relations outlets.

Educating Real Estate Professionals about Noxious Weed Management and Native Plant Ecology

Our director regularly puts on educational talks to various groups to further the understanding of natural resources, ecosystem health, and the impacts and management of noxious weeds.

Conserving Land and Protecting Water in Big Sky

A continuing education course for realtors certified by the Montana Board of Realtors and organized by the Gallatin River Task Force.

The course was so well received that the Gallatin Association of Realtors has asked to host the same course in Bozeman in 2017.

Southwest Farm and Ranch Brokers Monthly Meeting

“Greetings Jen, You did GREAT!!! You gave the BEST weed talk I’ve ever heard! I never realized the roots of canada thistle were so huge....that’s gross! Thanks again for coming and talking with our group. You were so knowledgeable, I understand why others would want you to come talk to their group!!!”

Play Clean Go - Canyon and trailhead signs

We are excited to announce we’ve been awarded a grant from the Moonlight Community Foundation to update our Canyon signs with the Play Clean Go message. We’ll also be working with Big Sky Community Organization, Big Sky Owners Association, and Gallatin National Forest to install educational kiosks / boot brush stations at trail heads in 2016. *Below are draft examples.*



Bighorn Sheep Winter Range



Bighorn sheep are high-country ungulates that thrive on steep mountainsides and require a combination of four habitat elements:

- ample wild grasses and forbs
- reliable water sources
- wide visibility so they can see predators
- steep, bare slopes nearby for escaping danger

Locals and visitors can often see members of the Spanish Peak herd foraging close to the road.



Our partners:

- Gallatin County Weed District
- Gallatin National Forest
- Montana Department of Transportation.
- Natural Resources Conservation Service
- Montana Fish, Wildlife and Parks
- Wild Sheep Foundation

Habitat Improvement Program:

Protecting and enhancing vital and/or compromised habitat for plants, fisheries, and wildlife within the Committee's project area in partnership with pertinent organizations, groups, or agencies.

Since 2010, the Committee has been leading the effort to manage extensive populations of noxious weeds on bighorn sheep winter range.

In 2014, committee partners, including wildlife, forestry and rangeland experts concluded that current range conditions indicate a downward trend, unfavorable to the needs of bighorn sheep during winter months.



Abundant native winter forage is the critical factor in bighorn sheep survival.

With that assessment came action.

- Continued treatment of noxious weeds with our long term partners.
- Creation of vegetation test plots to determine what native plants (grass and forbs) could compete on the shallow soils and steep hillside.
- Re-vegetation plots were prepared and planted in the fall of 2015.
- Monitoring of the plots began in the spring of 2016, and enclosure cages (paid for by a grant from the Montana Noxious Weed Trust Fund) were installed in the fall to prevent grazing of seedlings.

The plots will be monitored for 5 years with the goal of learning what native vegetation can compete against invasive species and support the beloved herd of bighorn sheep.



The health and prosperity of Big Sky are intimately and irrevocably linked to the health and prosperity of the surrounding ecosystem.

Landowner Assistance Program:

Educating landowners about the ecological impacts of noxious weeds and providing information and guidance on noxious weed management.

On-Site Landowner Assistance

Year	# Landowners Assisted	Total Acres Inspected
2016	40	311
2008-2016	686	8,899

2016 saw an increase in landowner site visits of 48% over last year!

Cost Share Program

Year	Total Distributed	# of Landowners	Total Acres
2016	\$2,174.95	15	130
2010-2016	\$11,296.41	75	840

2016 saw an increase in landowner participation of 88% over last year!



What's the primary way landowners learn about us?

Big Sky Farmers Market!

30% of site visits conducted in 2016 resulted from meeting landowners at the summer long event.



Landowner feedback:

“Thank you to Jen with the Gallatin-Big Sky Weed Committee, who came to my home and helped identify weeds, grasses and devise a safe and effective plan for keeping weeds down. This service is very much appreciated. Scott and I very much want to be a good neighbor and not allow our problems to spread to other land owners and we want to do right by the lovely woods around us. You have gone above and beyond with all your help and advice.” ~ Krissy H



Most common noxious weed species in Big Sky:

1. Canada thistle
2. Hoary alyssum
3. Houndstongue
4. Musk thistle
5. Spotted knapweed
6. Oxeye daisy

Mapping & Monitoring Program:

Maintaining ecological health and diversity by assisting and supporting partner agencies responsible for noxious weed management in early detection of and rapid response to noxious weed populations in the Committee's project area.

Monitoring Leafy Spurge at the Kid's Fishing Pond

First identified in 2011, the infestation consisted of five large patches, both on the slope above the pond and adjacent to the water. The area has been repeatedly treated by both the BSOA applicator and Committee partners during cooperative treatment days.

As leafy spurge is an extremely difficult plant to eradicate, the Committee continues to monitor the area and assist with locating plants (marking with pink flags for easy identification) and treatment.

The importance of continued management cannot be stressed enough, as if this patch migrates further into the riparian vegetation, it could result in a permanent infestation that could have a tremendous impact on the ecology of the west fork of the Gallatin River.

Monitoring the Gallatin Canyon

Funded by a grant from the Montana Noxious Weed Trust Fund, the Committee mapped targeted areas along Highway 191 that have experienced major disturbances (road construction, power line upgrade, and underground cable installation). Any disturbance creates a prime opportunity for noxious weed establishment and spread, and of specific concern is the use of out of state construction equipment, as that is a known vector for spreading new species of noxious weeds that do not currently exist in the area.

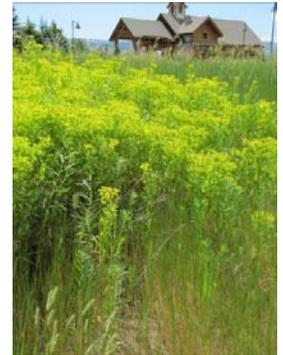
Focused efforts to mitigate noxious weeds immediately after disturbance is the most cost effective way to manage weeds, and key to that is knowing what weed species are present and where they are.

Important findings:

- A large patch of St. Johnswort along both sides of 191 north of house rock. This noxious weed patch was identified during mapping in 2008 and treated. It not only has rebounded, but spread farther than the original footprint.
- Large sections of 191 ROW where road construction occurred contain dense populations of poison hemlock.

The Committee will share data with those entities responsible for treatment of noxious weeds (such as Montana Department of Transportation, Northwestern Energy, and Custer Gallatin National Forests) and partner with them to plan and implement treatment.

2011



2016 (below) As in previous years, leafy spurge stems were flagged for treatment.



Above: Poison Hemlock in 191 right of way

Below: St. Johnswort



2017 Fundraising Events

May 3

Gallatin Valley Give Big fundraiser – hosting a donor lounge at Beehive Basin Brewery



June 26

Bozeman Brewing Co
“Sunday Fund-day”



July 21

Native Plant Tour

November 29

Giving Tuesday



Membership

Become a “Keep it Native” supporter and join the Gallatin-Big Sky Weed Committee membership program.

Your participation through an annual membership donation will help the Committee continue to assist landowners, improve and restore wildlife habitat, assist and coordinate with local, state and federal partners, and educate residents, visitors, and youth.

*When you support GBSWC,
you're supporting a local
non-profit working hard to
ensure Big Sky remains
a world class destination!*

Membership & Fundraising Program:

Inviting all who care about the greater Big Sky area to support our efforts to protect and preserve the ecological integrity of this beloved place.

2016 marks the first year the Committee has initiated fundraising efforts. We are very excited about our plans, but remain cautiously optimistic as gaining support for our work is always a challenge because noxious weeds and their impacts are not easily understood by the general public and represent negative effects (the degradation of natural resources) of our actions. Thus, the effort to battle noxious weeds doesn't get much “love.”

Native Plant Tour

When you work to eliminate noxious weeds from a landscape, it's critical to ensure something desirable fills that niche.

The tour included a visit to:

- Montana State University to learn about pollinators and gardening with native plants
- Westscape Nursery, who specializes in the propagation of hardy native plant material adapted to our region and harsh environmental conditions
- A visit to our director's property to see what's worked in her native plant gardens

Benefits Of Native Plants

Conserves Water ~ Improves Soil

Reduces Maintenance ~ Enhances Wildlife Habitat



Leveraging Assistance through Partnerships

The Committee spends significant time and effort toward its goal of coordinating efforts and working cooperatively with various federal, state, and local agencies in noxious weed education and control within in the project area.

Personnel from partner organizations assist with community events, education and outreach, noxious weed treatments, logistical support, and funding. Their commitment and willingness to participate are major contributors to the successes the Committee has achieved over the past twelve years.

Partner Spotlight: Montana Conservation Corps

Montana Conservation Corps (MCC) mission is to inspire young people through hands-on conservation service to be leaders, stewards of the land, and engaged citizens who improve their communities. They complete conservation projects in local communities, national forests, state and national parks, wildlife refuges and federally designated wilderness areas.

The Committee has worked with MCC for years, and this year's MCC in-kind contribution was valued at \$4,944 for their assistance with:

- Treating noxious weeds on bighorn sheep winter range
- Assisting with multiple weed pulls
- GPS mapping of noxious weeds in the Gallatin Canyon and on Big Sky trails
- Installation of bighorn sheep vegetation plot enclosure cages



Committee Partners:

Among our many partners are:

Big Sky Community Corporation
Big Sky Natural Resource Council
Big Sky Owners Association
Big Sky Resort
Big Sky Resort Area District
Bridger Brewing Company
Jack Creek Preserve
Gallatin County GIS Department
Gallatin County MSU Extension
Gallatin County Weed District
Gallatin River Task Force
Gallatin Valley Land Trust
Greater Gallatin Watershed Council
Greater Yellowstone Coordinating Cmte
Madison County Weed District
Moonlight Basin
Montana Conservation Corps
Montana Department of Agriculture
Montana Department of Transportation
Montana Fish Wildlife and Parks
Montana Noxious Weed Control Assoc.
Montana State University
MT Statewide Noxious Weed Campaign
Multiple Big Sky HOA's
Natural Resources Conservation Service
Ophir School
Play Clean Go
Simms
Spanish Peaks Mountain Club
Sola Café
Tout Unlimited
U.S.F.S., Gallatin National Forest
Yellowstone Club
Volunteers
Wild Sheep Foundation

The Committee's campaign against noxious weeds has been successful, comprehensive, and cost effective.

Thank You!

The Gallatin-Big Sky Weed Committee is sincerely grateful for the support and generosity of our funding partners:

- Big Sky Resort Area District
- Gallatin County Weed District
- Gallatin National Forest Resource Advisory Committee
- Madison County Weed Board
- Montana Noxious Weed Trust Fund
- Moonlight Community Foundation
- Yellowstone Community Foundation



What's up next: *Ready to Launch*

There is no question Big Sky is again growing, and fast!
Kevin Germain, Vice President of Planning and Development at Lone Mountain Land Company and Big Sky Resort Tax board member, stated that
"it's imperative upon us to be stewards of this land and make sure we protect the golden goose."
We couldn't agree more!

Since 2004, the Gallatin-Big Sky Weed Committee has been a leader in protecting natural resources in the greater Big Sky area, and we are excited about the upcoming projects and partnerships to further that goal. Here's a look at just a few of the projects planned for 2017:

Education Program

We are energized by our partners who are embracing the Play Clean Go message and working with us to build trail kiosks. With a grant award from the Moonlight Community Foundation, we will be updating our canyon billboards and trailhead signs with the national Play Clean Go message. With a grant award from Yellowstone Community Foundation and in partnership with Gallatin River Task Force, we'll be working to spread the Clean Drain Dry message to ensure our local water resources remain invasive species and disease free.

Habitat Improvement Program

Along with our partners, we'll be monitoring our revegetation test plots on the bighorn sheep winter range. We'll continue to work with rangeland and wildlife experts to explore ways to improve habitat and include other sensitive and at risk wildlife habitat.

Landowner Assistance Program

We aim to reach every landowner in our project to promote our free on-site assistance via various direct outlets. We'll continue to reach all property owners, including vacant lot owners, in partnership with homeowners associations.

Mapping/Monitoring Program

With a grant from the Gallatin National Forest Resource Advisory Committee, the Committee will be mapping heavily disturbed zones in the Gallatin Canyon and sharing those data with partner agencies responsible for treatment.