

# THE LAND STEWARD

Teton Regional Land Trust's Stewardship Newsletter

Fall 2022

## Welcome to the Team!

Kristy Smith moved to Wyoming in the Summer of 2018 to continue her work in habitat assessment and vegetation analysis after several seasons in Nevada and Northern California. She fell in love with the landscape and remoteness of the inner mountain west. She graduated from Humboldt State University in 2014 with a Bachelors in Environmental Science and has spent the years since working with state, federal, and non-profit agencies to improve habitat for wildlife and recreational use. Kristy is excited to join the TRLT team and play an active role in improving habitat and protecting and preserving natural resources in eastern Idaho. She just completed her first year of a Master GIS certificate program through Utah State University and looks forward to applying that new knowledge to her role as a Land Steward. When she is not in the office or monitoring conservation easements, you can find her out mountain biking, trail running, rock climbing, backpacking, backcountry skiing, or identifying native plant species.



## Digging into Regenerative Agriculture: Leave a Living Root

The continuous presence of living roots is an important aspect of soil health. Typical annual monocultures have a period of dormancy before planting and after harvest where there is an absence of living roots in the soil. During this period, there is no production of root exudates, which are the primary food source for the soil food web. As a result, soil



Field Crop News

microbes are only fed a couple months out of the year. Incorporating cover crops during the "off season" increases soil health by providing exudates to soil microbes year-round. The cover crop's living roots provide exudates to soil microbes in exchange for plant nutrients. Diversity in cover crops results in diverse root exudates, which will feed a greater percentage of the diverse soil microbe community. Cover crops can also be interseeded into standing cash crops during the growing season. These cover crops are designed to not compete with the cash crop and ensure continuous nutrient cycling throughout the year. In addition to feeding soil microbes, living roots create stable soil structures that have increased soil infiltration rates and water holding capacity. The incorporation of cover crops into cropping systems as annuals, biennials, or perennials will ensure soil microbes are fed year-round which leads to healthier and more productive soil.

—Elyse Reynaud, TRLT Summer Intern

Source: Soil Health Resource Guide, 6th Edition

### 5 Principles of Soil Health

- Protect the Soil
- Minimize Disturbance
- Promote Biodiversity
- Leave Living Roots
- Livestock Integration

## TRLT Staff

**Kim Trotter,**  
Executive Director

**Tamara Sperber,**  
Conservation  
Director

**Jeske Gräve,**  
Development  
Director

**Christine Ford,**  
Operations Manager

**Renee Hiebert,**  
Conservation  
Specialist

**Josh Holmes,**  
Land Protection  
Specialist

**Kimberly Holmes,**  
Stewardship  
Director

**Katie Guetz,**  
Land Steward

**Kristy Smith,**  
Land Steward

**Will Roth**  
Development &  
Communications  
Associate

**Mandy Crane,**  
Events & Outreach  
Coordinator

**Hilary Ordonez,**  
Development  
Associate



inspiring you to protect great places



Photo by Katie Guetz

## Fall Transitions

As our field season draws to a close, the Stewardship Staff are reflecting back on the many new relationships that were forged with new landowners of conservation easements this summer, as well as our ability to visit with some of our long time conservation easement owners. A trend that I've alluded to in several past newsletters continues as we have seen a monumental number of conservation easement properties change hands over the past two years and several still on the market. Most new landowners are anxious to get along with their plans for their property, and this may include constructing a home or agricultural structure, or undertaking a restoration effort to rehabilitate the land and waterways potentially impacted by past uses. Before you undertake any of these type improvements, we urge you to read the permitted and prohibited use sections of your conservation easement to determine if the activity is permitted by the conservation easement. If it is, does it require prior written notice or prior approval? Most significant changes to a conservation easement property do have these requirements. Why do I need to give notice to the Land Trust if the activity is already permitted you might ask? This is so the Land Trust can review the activity in question to ensure that the location and manner proposed will not have any adverse impact to the conservation values protected by the conservation easement. It's all to protect the conservation values described in your conservation easement and baseline documentation report. Prior written approval means the Land Trust needs to be able to review your plans including dimensions of any structure, timeline, location and any other pertinent details to ensure and document that the improvement is in line with the conservation easement document. These provisions are put in place to help prevent you, the landowner, from inadvertently violating your conservation easement. Violations can be costly and timely to resolve, depending on their magnitude. The Land Trust has the ongoing obligation to enforce and defend the conservation easements we hold. Help us stay informed of your activities by contacting the Land Trust when you begin to plan any changes or improvements that may require prior written notice and / or approval, or Land Trust documentation. A call could go a long way to ensuring your activities are permitted by the conservation easement and are not delayed due to the time needed for the Land Trust to review the activities in question. We are happy to work with you and answer any questions you may have.

— Kimberly Holmes, Stewardship Director



## When to Give Notice

If you are unsure if an activity requires prior notification and/ or approval from the Land Trust, or if you are unsure of the timeframe you need to give the Land Trust to grant approval of an activity,

### Give us a call!

We are always happy to answer questions regarding your conservation easement.

Planning to build or add on to a structure?

Give Us a Call!

Planning to change your land management practices?

Give Us a Call!

Planning to build a fence or road?

Give Us a Call!

Planning to sell/gift your conservation easement property?

Give Us a Call!

Need to update your contact information or preference?

Give Us a Call!

Have you been approached about a commercial lease or utility

easement ?

Give Us a Call!

**208-354-8939**



TETON REGIONAL LAND TRUST

## Regional County Weed Contacts

Don't forget to reach out to your local county weed representative to stay up to date regarding any weed control assistance that might be available:

### Bonneville County:

Jud Elkington,  
Weed Superintendent  
208-529-1397

### Clark County:

Bo Billman,  
Weed Department  
208-709-6706

### Fremont County:

Bryce Fowler,  
Weed Supervisor  
208-624-7442

### Jefferson County:

Mitch Whitmill,  
Weed Superintendent  
208-745-9221

### Madison County:

Jeremy Johnson,  
Weed Supervisor  
208-356-3139

### Teton County, ID:

208-354-2593

### Teton County, WY:

Lesley Beckworth  
Teton County Weed &  
Pest District  
307-733-8419

## Noxious Weed Spotlight: Canada Thistle (*Cirsium arvense*)

Canada thistle is an aggressive, perennial, and non-native species that reproduces by seed as well as by rhizomatous (underground) roots. Canada thistle inhabits disturbed areas like roadsides, cultivated fields, pastures, and rangelands and reduces biodiversity by producing chemicals that suppress the growth of nearby plants. By forming dense colonies, Canada thistle will often crowd out native grasses and forbs. This species is widespread throughout TRLT's service area, making it critical for private landowners to treat it before it affects crop yields and/or outcompetes native vegetation. Therefore, weed management can help increase the quality of crop yields and maximize profits of an agricultural production. Additionally, weed management on any property can restore native plant communities and sustain biological diversity of flora and fauna species. Weed management can be difficult, but consistent efforts can produce major benefits, especially if integrated methods are utilized. Integrated methods for Canada thistle include manual, mechanical, and chemical treatments:



- A small infestation can be managed **manually** using a garden fork or hoe to dig when the plant is young and not flowering.
- Mowing every 3-6 weeks from mid-June to September can help to treat thistle infestations **mechanically**. Fall mowing is especially effective at inducing stress as plants send up a second round of shoots and attempt to store energy in their roots.
- Applying herbicide can be an effective **chemical** treatment. Contact your local Weed Superintendent or Conservation District for more information on local cost-savings, purchase options, herbicide use, and equipment rentals in your area.

## Water Supply in our Watershed: 2022 in Review

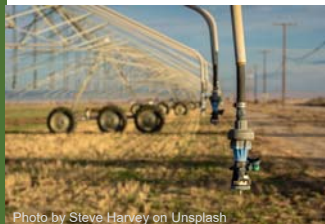


Photo by Steve Harvey on Unsplash

Water resource data collected within a 12-month period, starting October 1st of any given year and ending September 30th of the following year, is referred to by hydrologists as a "water year". Precipitation that falls within a watershed during a water year is used to compare current trends to longer-term averages, and track water budgets. These water budgets, along with water rights, determine when and where reservoirs send water. During the 2022 water year, a dry winter season contributed to the fourth-lowest April-September streamflows in the past 43 years, while July-September brought record-setting high temperatures to our watershed. It's no surprise that this combination has major effects on water supply, so, how exactly did the 2022 water year shape up? Thanks to the efforts of Dr. Rob Van Kirk at the Henry's Fork Foundation, statistics for the 2022 water year help us to understand the status of our watershed:

- Natural streamflows for April-September were 69% of average, which was higher than expected due to spring rains.
- Cool spring temperatures, 2.3 degrees cooler than average, led to runoff occurring 6 days later than average.
- Snow water equivalent (SWE) was 71% of average and peaked on April 24th, 12 days later than average due to cool spring temperatures.
- Short-term drought indicators improved slightly over the water year due to the cool wet spring. Medium and long-term drought indicators worsened, with total natural flows far below the 1978-2021 average.
- The entire Upper Snake River system ended the water year at 12% reservoir capacity.

## Journeyers

Elk, pronghorn, mule deer, moose, and other big game ungulates sweep across Eastern Idaho's landscape every year to escape the inhospitable snow in winter, and to chase the nutritious green vegetation to lower elevations. They rely on a variety of habitats, from alpine meadows to floodplain riparian communities in addition to secure and intact transitional corridors. Elk and mule deer stock up on nutrient-dense forbs and grasses in mixed forest understory in summer and browse more heavily on shrubs in winter. Moose have a localized range, traveling shorter distances from mountainous wetland and willow communities down to floodplain riparian habitat in winter. Antelope are inextricably linked to sagebrush habitats throughout Idaho and rely on these ecosystems for sustenance in winter.

TRLT conservation easements are vital to this migration, providing forage when other resources dwindle, dense shrubs and trees as thermal and calving cover, and habitat connectivity. In fact, Idaho Fish and Game cites conservation easements as an effective strategy to improve elk and mule deer populations in their Idaho Mule Deer Management plan 2008-2017 and Idaho Elk Management Plan 2014-2024.

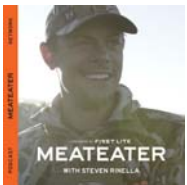
Different species occupy different areas of eastern Idaho as they migrate. Pronghorn prefer the sagebrush steppe ecosystems of Clark County. Mule deer frequent the wide-open fields of northern Teton County. Elk migrate along the Fall River from Yellowstone and travel north to the Big Hole Mountain Range or Sand Creek Desert. Moose are winter-hardy and do not migrate as far from the high country.

The conservation easement properties throughout this part of Idaho help to ensure that yearly migration can continue and protects big game species that serve important ecosystem functions as well as public benefit.



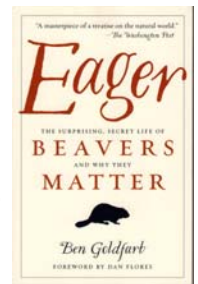
## Staff Notes

Summers are short and sweet, and the Land Trust Stewardship Staff spend a great deal of the time out in the field visiting with our landowners and walking the amazing acreage that has been protected across eastern Idaho. Once the weather starts to turn, we spend more time in the office and indoors catching up on reporting, perhaps while listening to a favorite podcast. With shorter days we often find ourselves curling up at the end of the day with a book. Here are a few relevant and interesting media the Stewardship Staff have enjoyed, and maybe you will too!



One of Land Steward, Katie Guetz's go-to podcasts is The MeatEater Podcast. This weekly podcast offers much more than the title suggests as topics range between conservation, fishing, hunting, and cooking, and diverse guests all bring different perspectives to the show. Better yet, the podcast is recorded in Bozeman, and many episodes discuss subjects that are regionally relevant and oftentimes applicable to Katie's role at TRLT.

Stewardship Director, Kimberly Holmes, really enjoyed reading the book *Eager* by Ben Goldfarb. While some see them as habitat engineers, others may think of them as a nuisance—*Eager* discusses the history of the beaver (*Castor canadensis*), our cultural carrying capacity, or tolerance, if you will, for the critter, their ability to restore ecosystems, how they raise a ruckus for landowners, and creative ways to live with this yellow-toothed rodent. Whether you see them as a boon to healthy wetland habitats, or as a nuisance, this book will prove an interesting read for all who must live with the notorious beaver, just the same.



Land Steward, Kristy Smith found a podcast episode from Working Cows quite interesting. It that gives some good background on what a conservation easement is, what lands are good candidates for conservation easements, and what restrictions are placed on land that is in a conservation easement. The host, Clay Conry, who purchased a small ranch in West Central South Dakota, interviewed Erik Glenn of Colorado Cattlemen's Agricultural Land Trust about effective ways to make use of conservation easements. Erik emphasizes the importance of keeping family agriculture alive as well as providing habitat for wildlife.

