



# MONTANA BIOCONTROL COORDINATION PROJECT

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2025 ANNUAL REPORT





## EXECUTIVE COMMITTEE

Jeff Littlefield, Chair

Kylee Macks, Vice Chair

Natalie West, Science Advisor

## STAFF

Melissa Maggio,  
Project Coordinator

Jill Leblow,  
Biocontrol Technician

Carver Butterfield,  
Biocontrol Crew Member

Tyler Brett,  
Biocontrol Crew Member

## SUPPORT MTBCP

Make a donation today!



Every year brings its own set of challenges and opportunities, and preparing the annual report offers a chance to reflect on both. This year began with funding uncertainties and unexpected changes to work plans, but—with **your support and generosity**—we found ways to adapt and move forward.

In 2025, we worked hands-on with some new (or new to us) biological control agents, including *Bagous nodulosus* for flowering rush and *Aceria drabae* for whitetop. Work with the flowering rush weevil was limited to the quarantine laboratory this year, with plans to **expand into the rearing ponds** in 2026. We were able to work with the whitetop mite in the field, and the experience was both productive and rewarding. Building on this success, in 2026, we hope to **establish an additional 5-10 whitetop mite release sites** in counties that have not made previous releases.

We are also excited to report that evaluations of past release sites for Dalmatian and yellow toadflaxes, leafy spurge, and spotted knapweed have **identified 14 sites that can potentially be collected** from in the future. We are hopeful to continue this effort and identify additional collectible populations of biocontrol agents in 2026.



We are looking forward to expanding upon these projects while continuing to provide the services that have been central to MTBCP since its inception, including educational programming, outreach, and biocontrol agent collection days.

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Cover photo: Knapweed moth  
(*Agapeta zoegana*)

## PARTICIPATION

**16** In-person  
Workshops/  
Presentations

**6** Virtual  
Workshops/  
Presentations

Outreach   
Created **48** sets  
of resins, updated  
the website,  
created printable  
biocontrol agent  
handouts, and  
co-chaired the  
NAISMA Biocontrol  
Summit

**50**  
Days Spent  
Collecting



**350**  
Collection Day  
Participants

**19,653**  
Miles Traveled  
for Workshops  
and Collections



## INSECTS

**8**  
Species  
Released

**8**  
Species  
Collected

**10,650** Acres  
Treated



**78**  
Sites  
Monitored



**41**  
Counties  
Received  
Insects



**14** States & **4**  
Tribal Nations  
Received Insects

**1.4 million**

Insects  
Distributed



**\$354,200**  
Market Value  
of Insects

## 2025 BREAKDOWN



**5%**

Out-of-State  
Coordination



**8%**

Fundraising



**26%**

Collection &  
Distribution

**18%**  
Education

**31%**

Monitoring



**12%**

In-state Coordination





# FLOWERING RUSH

We had hoped to release the flowering rush weevils (*Bagous nodulosus*) into the rearing ponds this year—but federal hiring freezes put that plan on pause. The silver lining? We gained an extra year to get the ponds just right, learning a lot about maintenance and algae control in preparation for our future weevil residents.

Even though we didn’t get to work with weevils in the ponds, we did get to work with them in quarantine, where they must complete one generation before release. That means the weevils heading to the ponds in 2026 may be this year’s offspring! We also designed and tested temporary release cages to help weevils find each other in the vast flowering rush infestations, ensuring that mating will occur. These cages need a few final tweaks, and they’ll be ready for action.



# WHITETOP

The whitetop mite (*Aceria drabae*) officially entered its distribution phase this year! Jeff Littlefield (MSU) began releasing mites in 2019 and, by 2025, had established 29 release sites in Montana. This year, we joined the effort by scouting new locations and releasing mites at seven new sites located in Beaverhead, Lake, Missoula, Pondera, and Teton counties. Six of the new release sites showed signs of mite establishment two months after making the initial releases. One site looked especially promising – whitetop mite galls were found at 97% of the initial 30 release points! Looking forward to 2026, we will continue assisting Jeff with expanding whitetop mite sites across the state, ideally into counties that have not yet received mites. Interested in whitetop mites? **Don’t forget to fill out the 2026 Annual Biocontrol Needs Survey!**



No galls

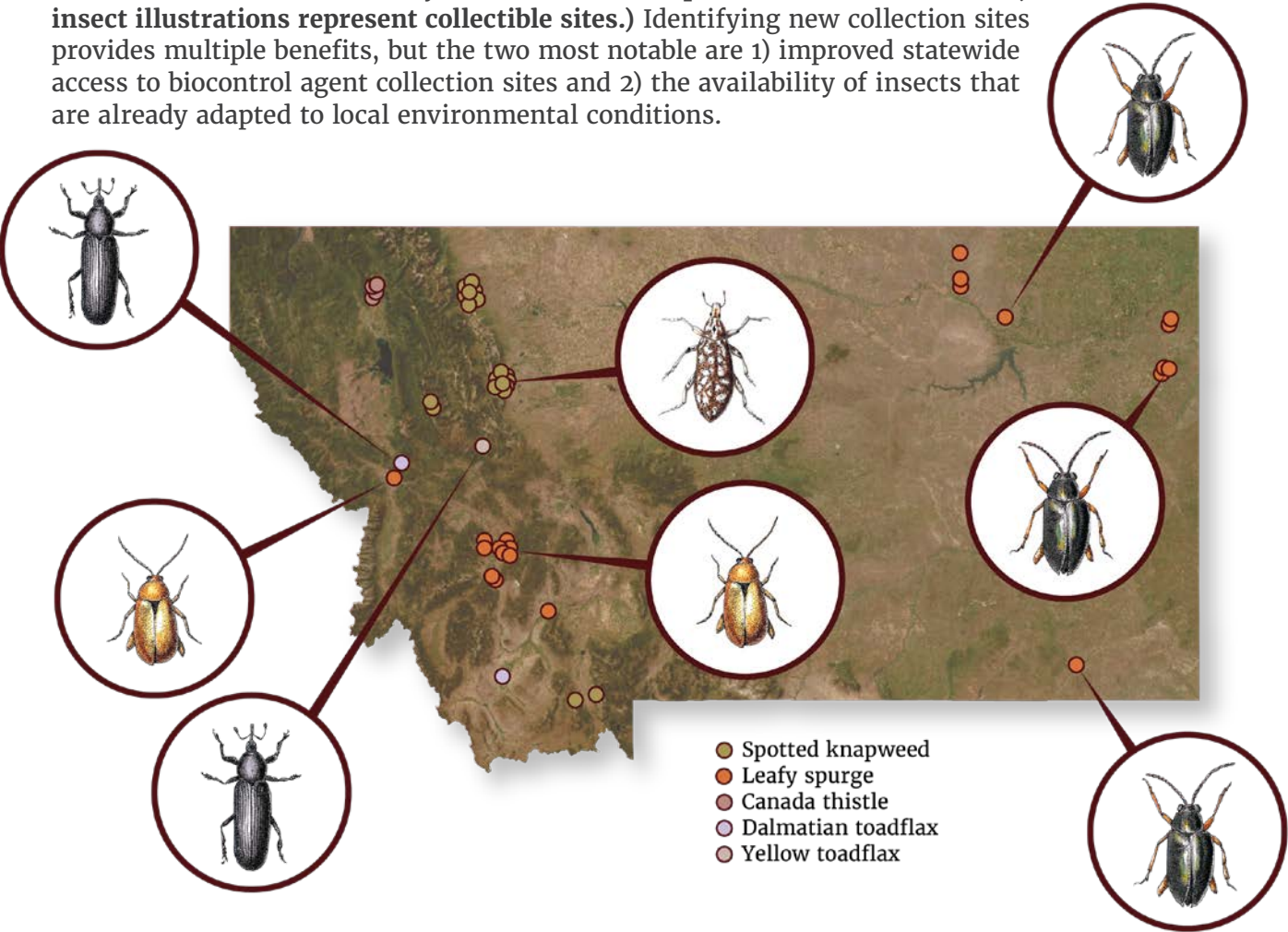
Spring galls

Summer galls



# SITE EVALUATIONS

Beginning in 2024, we expanded our services to include evaluating past biocontrol release sites for agent establishment and collectibility, with the goal of identifying new, locally accessible collection sites for land managers. After distributing more than 13 million biocontrol agents over the first 10 years of MTBCP, we knew there had to be some thriving, collectible populations out there. In just two years we have evaluated 59 sites and identified 14 that are likely collectible! (See map below for evaluated sites; insect illustrations represent collectible sites.) Identifying new collection sites provides multiple benefits, but the two most notable are 1) improved statewide access to biocontrol agent collection sites and 2) the availability of insects that are already adapted to local environmental conditions.



Collection sites are determined based on standardized insect counts and site characteristics. Many sites we evaluated had established biocontrol agent populations, but there wasn't enough target weed remaining at the site to sustain collections. These are considered "managed sites" where the biocontrol agent is successfully managing the target weed.



SITES EVALUATED	FINDINGS	
22 Spotted knapweed sites in Glacier, Madison, Missoula, and Teton counties	6 collectible sites	10 managed sites
21 Leafy spurge sites in Butte-Silver Bow, Deer Lodge, Madison, Missoula, Powder River, Powell, Richland, and Valley counties	6 collectible sites	13 managed sites
4 Canada thistle sites in Flathead County	0 collectible sites	0 managed sites
2 Dalmatian toadflax sites in Beaverhead and Missoula counties	1 collectible site	1 managed site
1 Yellow toadflax site in Lewis and Clark County	1 collectible site	1 managed site
9 Houndstongue sites in Lewis and Clark, Madison, Pondera, and Teton counties	Present at 5 sites	

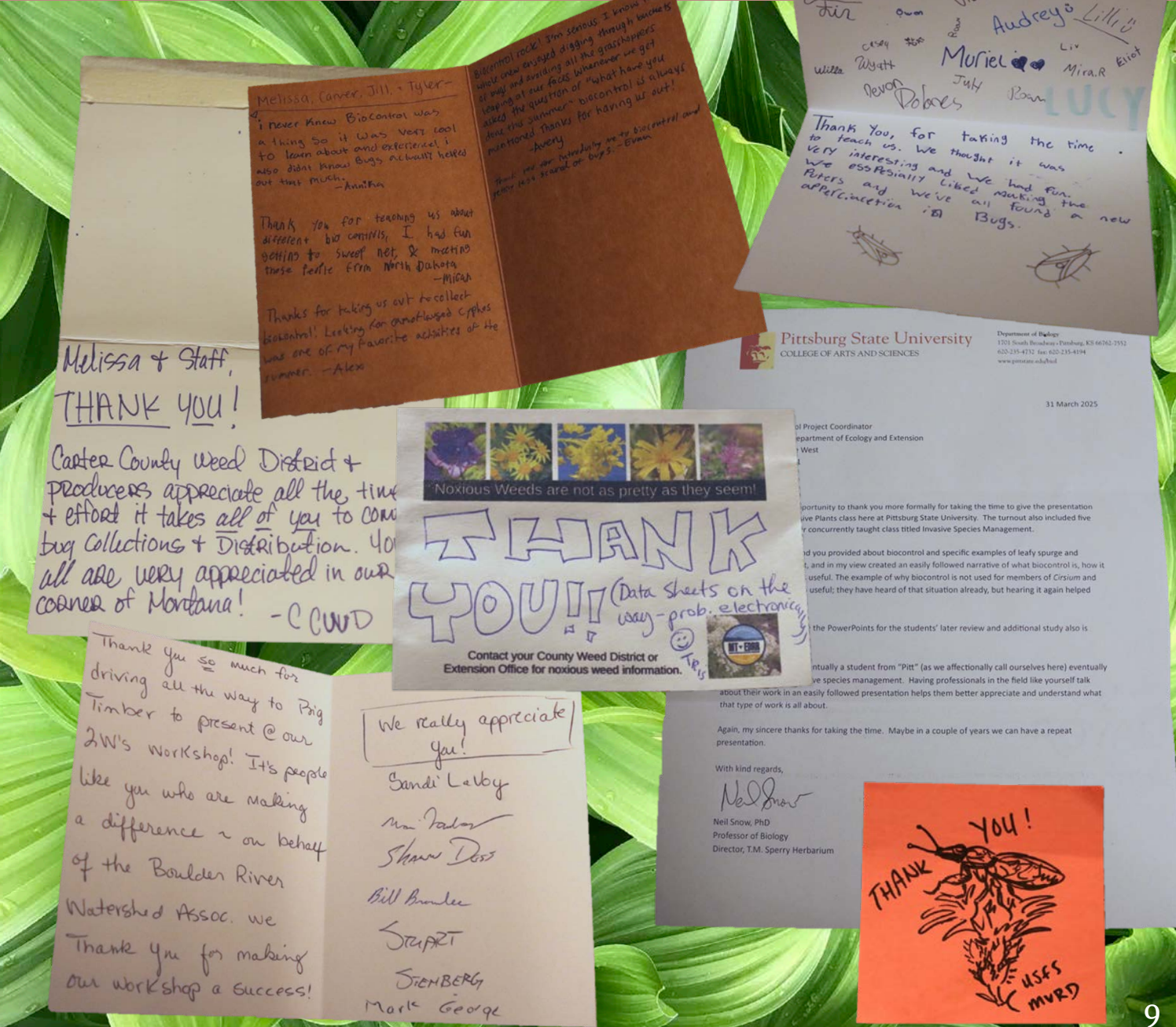


# WEBSITE UPDATE

Our new website launched this summer! This project is still a work-in-progress, and we hope you'll be patient with us as we continue to update the site. In the meantime, there are new biocontrol resources available for download. Check out our new two-page biocontrol agent guides for each of the common and effective biocontrol systems available in Montana. Moving forward, we will continue to add new features to the site such as a land manager portal and blog.



# THANK YOU FOR THE THANK-YOUs!







# PARTNER'S PERSPECTIVE

## Evaluating Biocontrol Success

Jim Olson  
Rangeland Management Specialist  
USFS Rocky Mountain Ranger District  
Choteau, MT

Over the years land managers have dispersed millions of biocontrol agents throughout Montana. We have collaborated with the Montana Biocontrol Coordination Project (MTBCP) and other partners to get those precious bugs delivered, and like hot potatoes we drop them for fear of leaving them in the fridge till next week. Years go by. Location maps and records get buried. Overall success is measured with hope and anecdotal impressions as we stare across the landscape. Sound familiar?

Don't get me wrong, getting bugs on the landscape is a really important ingredient to a successful program, but if you're like me, a little self-evaluation and on-site consultation could sharpen the pencil of your biocontrol weed management program.

In 2024, MTBCP staff assisted the Rocky Mountain Ranger District (RMRD) by monitoring historical spotted knapweed root weevil release sites. In an afternoon of tagging along, it occurred to me how valuable on-site monitoring of biocontrol is. This year, Jill Leblow (MTBCP) came back to evaluate knapweed release sites with USFS and partners in the Sun River Drainage. Her biocontrol experience and expertise helped answer a few looming questions, including:

**What does “success” look like?** A functional biocontrol program might need to be seen through the lens of a calibrated eye (MTBCP staff has that eye). Taking the time to really observe plant health and density in conjunction with bug survey numbers can really shed light on what's going on. In our case, greatly reduced vigor/population of spotted knapweed was observed compared with adjacent weed patches without biocontrol present.

**What does a good candidate release site look like?** Our favorite campsite might not be ideal for biocontrol establishment. With limited bugs available, a release plan should be in place before the critters arrive. Evaluating these conditions in the field with MTBCP helps get everyone on the same page and ensures higher odds of success.

**When/where can we collect bugs locally from past releases?** At RMRD, we wanted to find local sources of knapweed root weevils that could be collected and distributed to new locations. Jill helped us evaluate one of these sites and ultimately do our first on-forest collection that day!

A big thanks to MTBCP staff for all your monitoring and training efforts here at RMRD (not to mention all the bugs you collect and send out!). As staff and budget are always limited in weed management, the work you do will only be more valuable as time goes on!

# THANK YOU!

A big THANK YOU for the financial and technical support we received in 2025! Without such supportive partners, the Montana Biocontrol Coordination Project would not be possible.

Beaverhead Conservation District  
Beaverhead County Weed District  
Big Horn Conservation District  
Big Sandy Conservation District  
Carbon County Weed District  
Carter County Weed District  
Cascade County Weed District  
Chippewa Cree Tribe  
Chouteau County Conservation District  
Daniels County Conservation District  
Dawson County Weed District  
Eastern Sanders Conservation District  
Gallatin Conservation District  
Granite Conservation District  
Granite County Weed District & Extension  
Hill County Weed District  
Jefferson County Weed District  
Judith Basin Conservation District  
Kelly & Kay Ingalls  
Lake Conservation District  
Lake County Weed District  
Lewis & Clark County Conservation District  
Lewis & Clark County Weed District  
Liberty County Weed District  
Lincoln Conservation District  
MT Department of Natural Resources & Conservation  
MT Noxious Weed Trust Fund  
MT Department of Transportation  
Madison Valley Ranchlands Group  
Mile High Conservation District  
Mineral County Conservation District

Mineral County Weed District  
Missoula County Conservation District  
Missoula County Department of Ecology & Extension  
Missouri River Conservation Districts Council  
Montana Invasive Species Council  
Musselshell/Golden Valley County Weed Districts  
Park Conservation District  
Park County Weed District  
Petroleum County Conservation District  
Pondera County Conservation District  
Powder River Conservation District  
Powder River County Weed District  
Prairie County Weed District  
Richland County Conservation District  
Richland County Weed District  
Rosebud County Weed District  
Russell Icenoggle  
Sheridan County Weed District  
Stillwater County Weed District  
Stillwater Valley Watershed Council  
Sweet Grass County Weed District  
Teton Conservation District  
Teton County Weed District  
Toole County Weed District  
U.S. Agricultural Research Service  
U.S. APHIS Plant Protection and Quarantine  
U.S. Bureau of Land Management  
U.S. Bureau of Reclamation  
U.S. Fish & Wildlife Service

U.S. Forest Service – Region 1  
Valley County Conservation District  
Wibaux Conservation District



Majority of the TECHNICAL SUPPORT we receive comes from the Montana Biological Control Steering Committee. THANKS to all of the members for your support and assistance on a variety of topics!



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