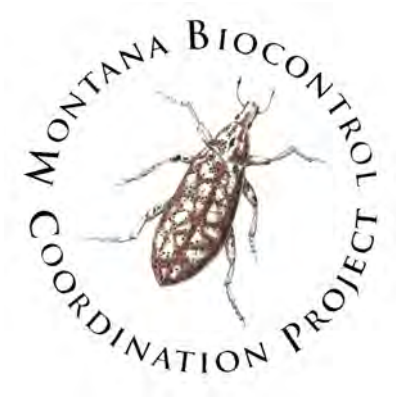
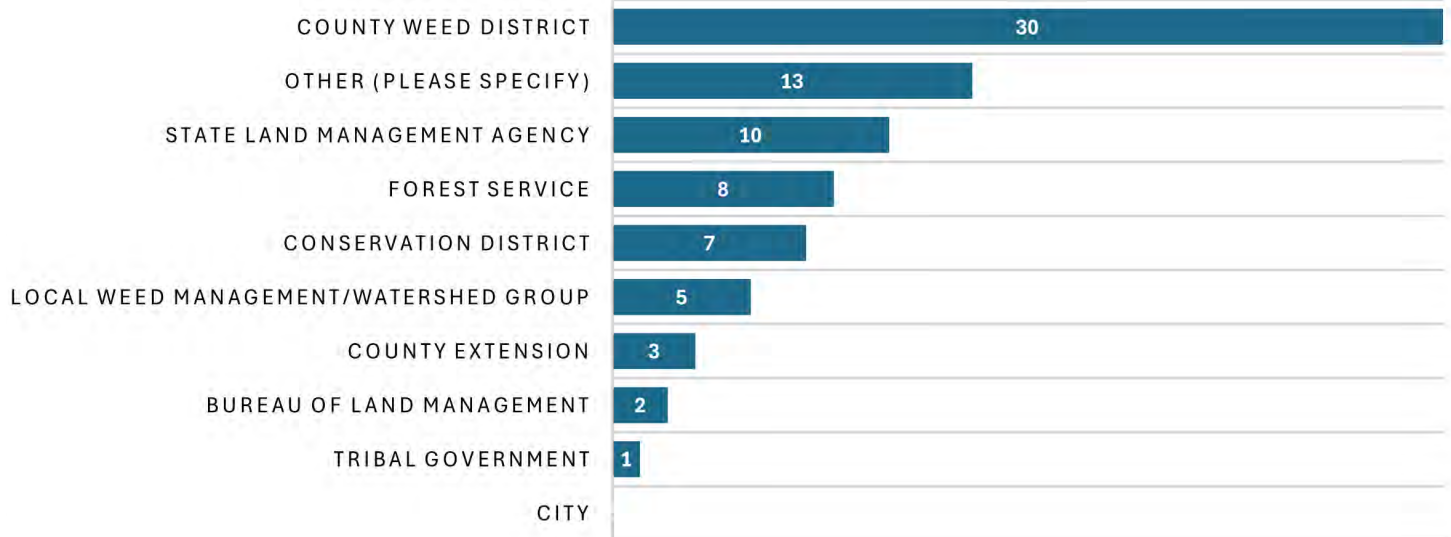




**2024 MONTANA BIOCONTROL
COORDINATION PROJECT
(MTBCP) PROGRAM
ASSESSMENT**



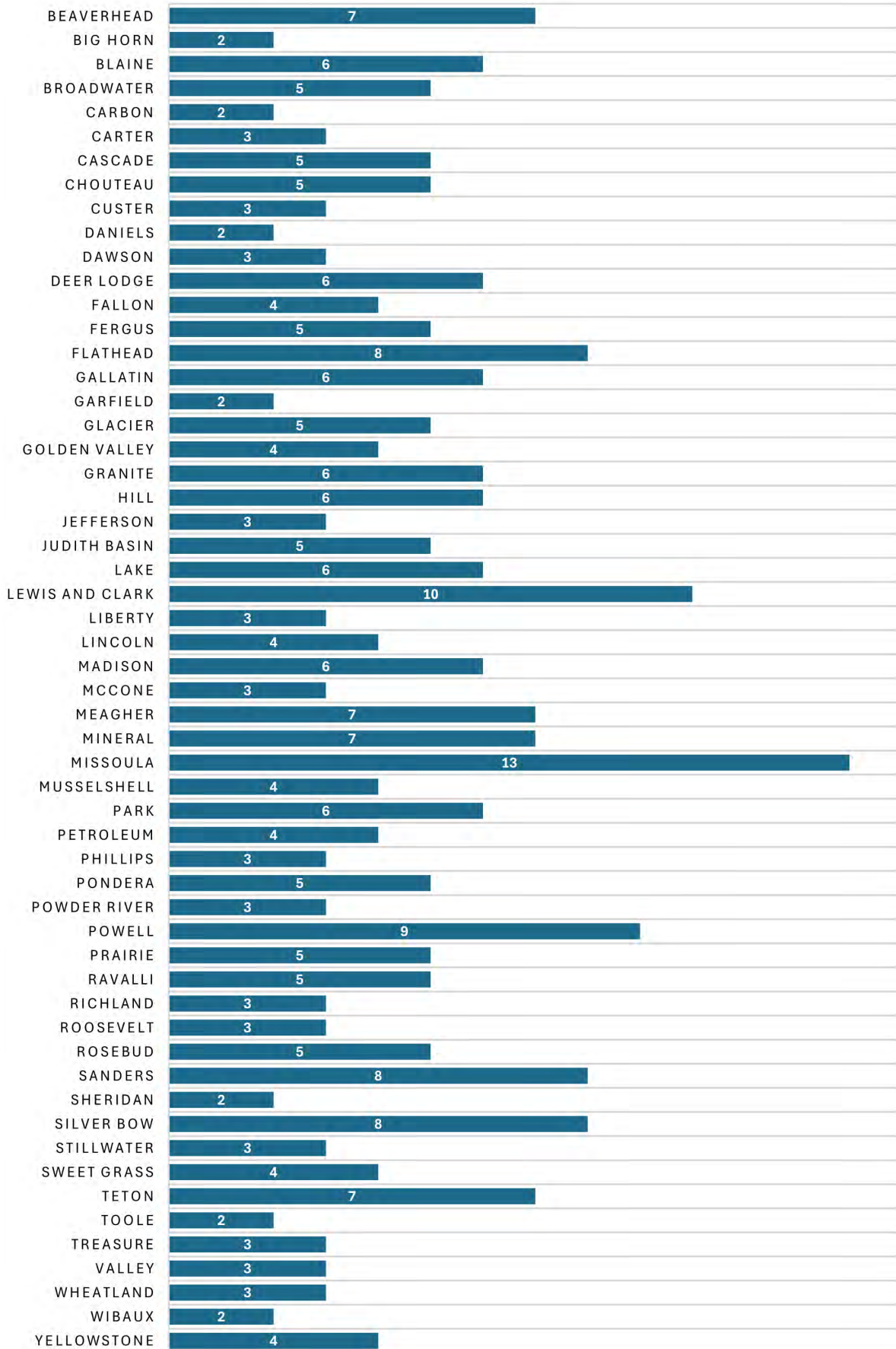
WHAT IS YOUR AGENCY/ORGANIZATION AFFILIATION?



OTHER (please specify):

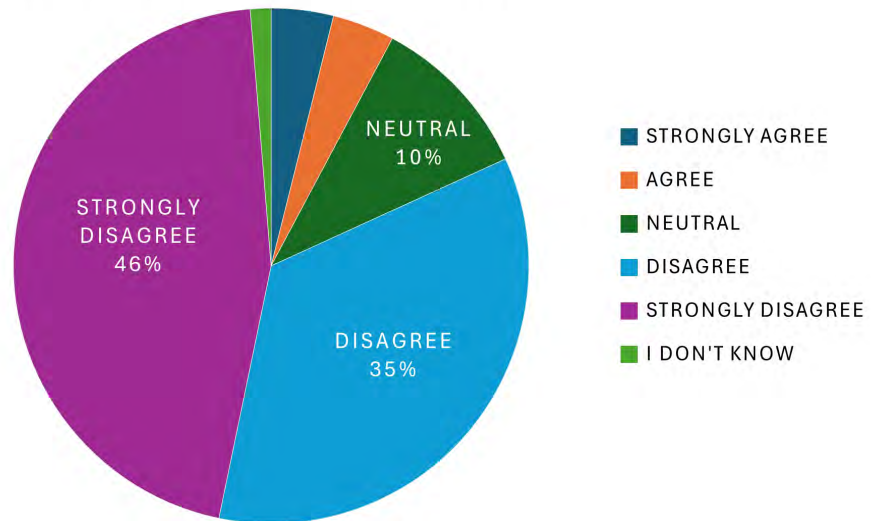
- MDT
- Non-profit
- Nonprofit
- DoD Land Management
- State
- MDT/DOT
- Conservation organization
- Hydroelectric Operator
- Bureau of Indian Affairs
- Private consultant
- MDT
- Prickly Pear Land Trust
- USFWS

IN WHICH MONTANA COUNTY(IES) ARE THE LANDS YOU MANAGE?

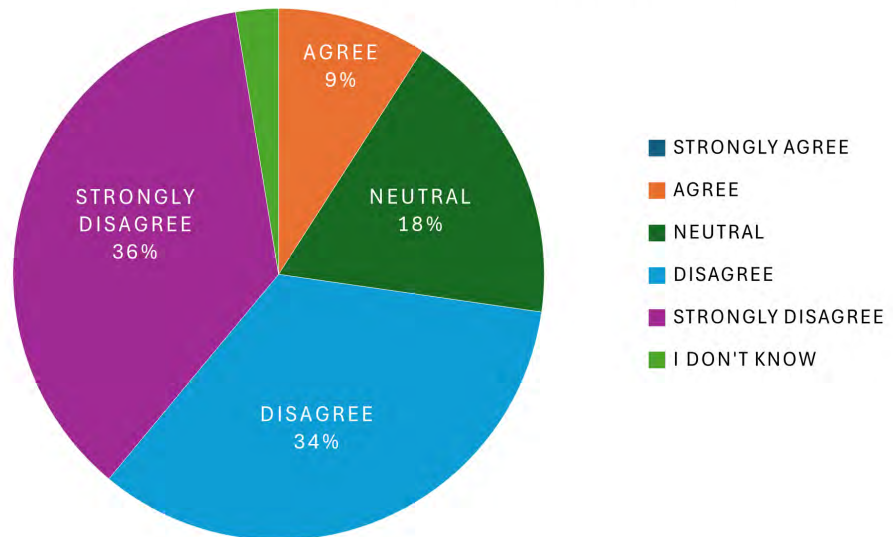


How much do you agree with the following statements regarding biocontrol?

"BIOCONTROL IS NOT EFFECTIVE FOR CONTROLLING INVASIVE SPECIES."

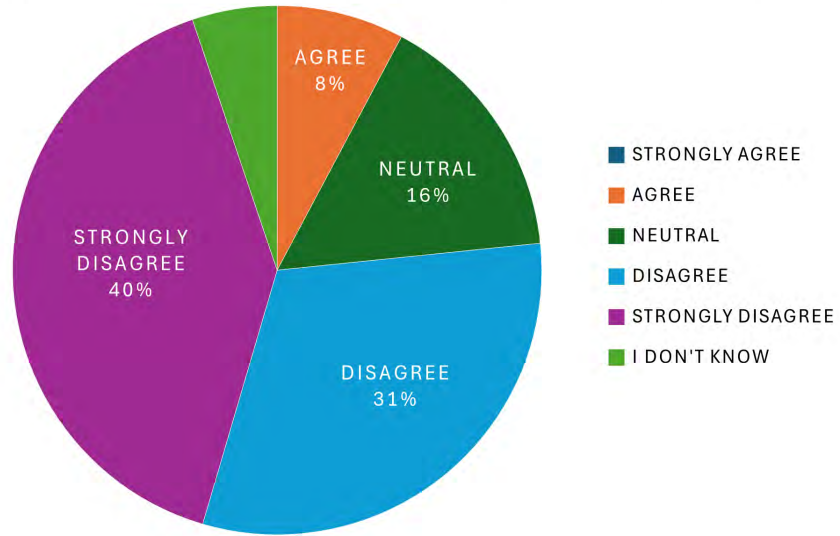


"BIOCONTROL AGENTS COULD BECOME ANOTHER INVASIVE SPECIES."

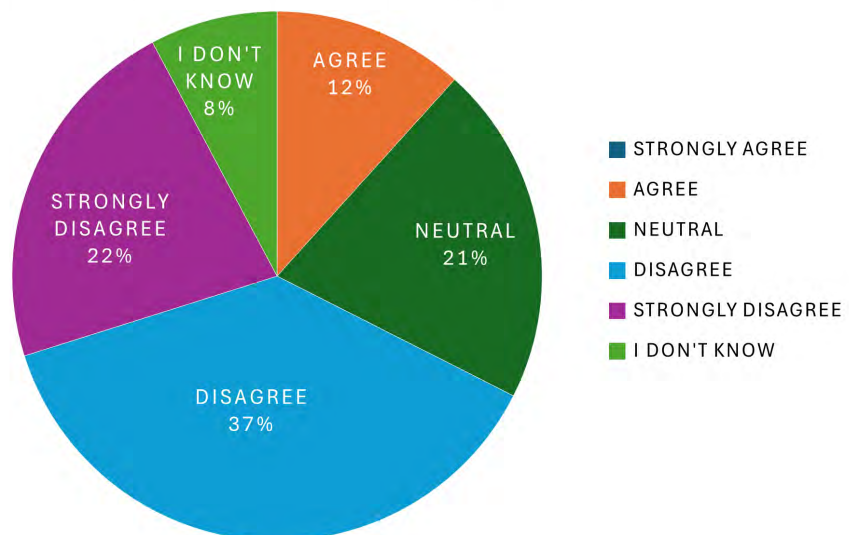


How much do you agree with the following statements regarding biocontrol?

"BIOCONTROL AGENTS COULD BECOME A PEST TO HUMANS AND/OR PETS."

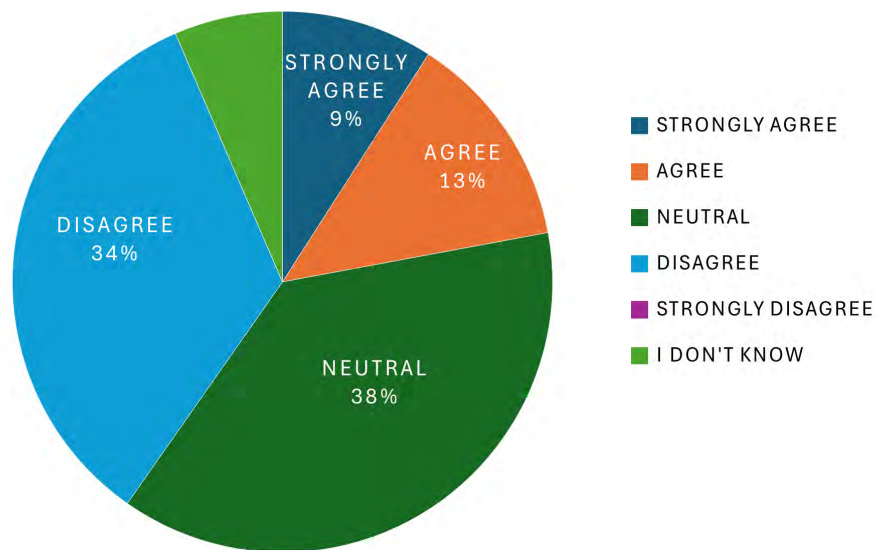


"BIOCONTROL COULD HARM NATIVE SPECIES."



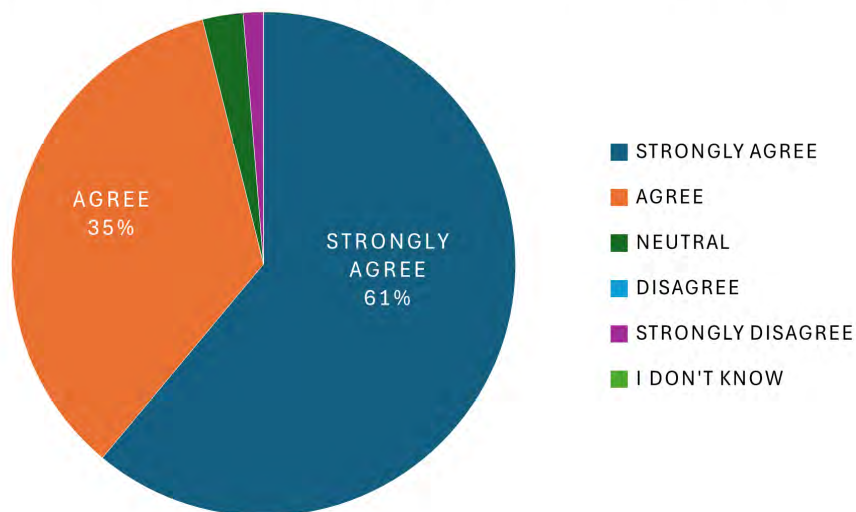
How much do you agree with the following statements regarding biocontrol?

"THERE ARE NO PROBLEMS WITH BIOCONTROL."



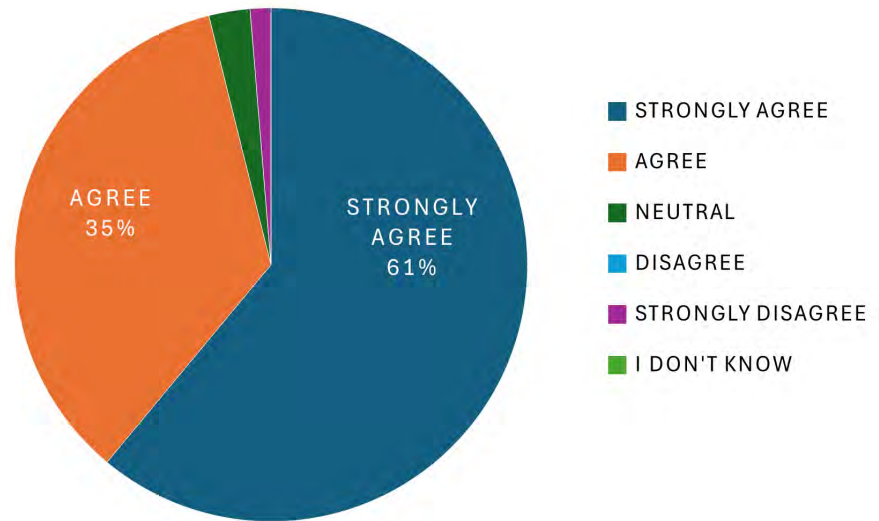
How much do you agree with the following statements regarding biocontrol and its impact on other species?

"I SUPPORT THE USE OF BIOCONTROL TO MANAGE INVASIVE SPECIES."

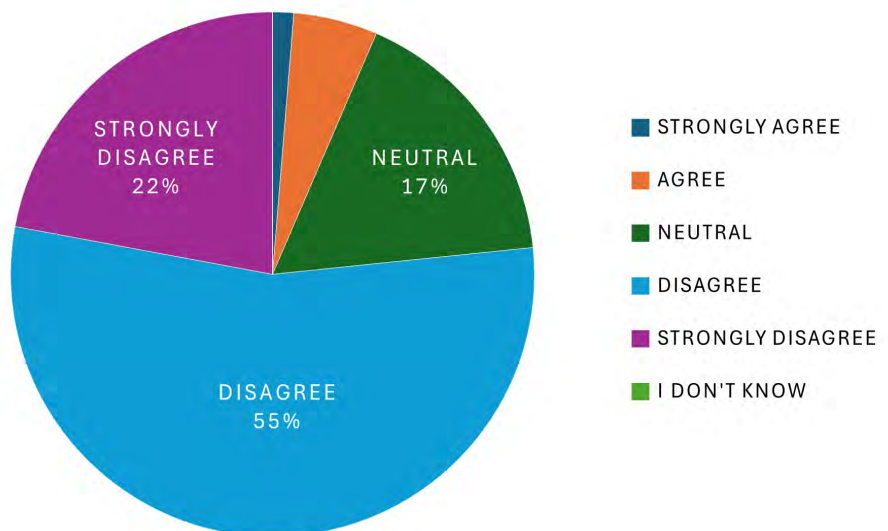


How much do you agree with the following statements regarding biocontrol and its impact on other species?

"BIOCONTROL BENEFITS NATIVE SPECIES."

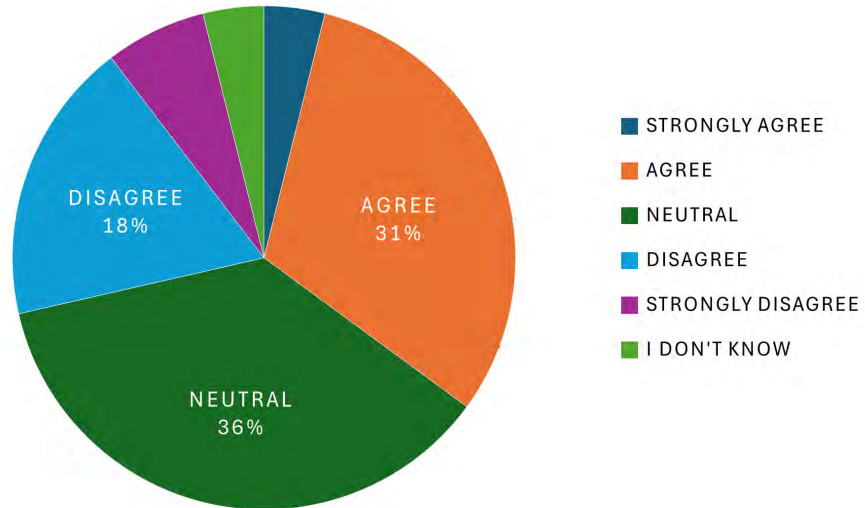


"THERE ARE TOO MANY UNKNOWN RISKS ASSOCIATED WITH BIOCONTROL."



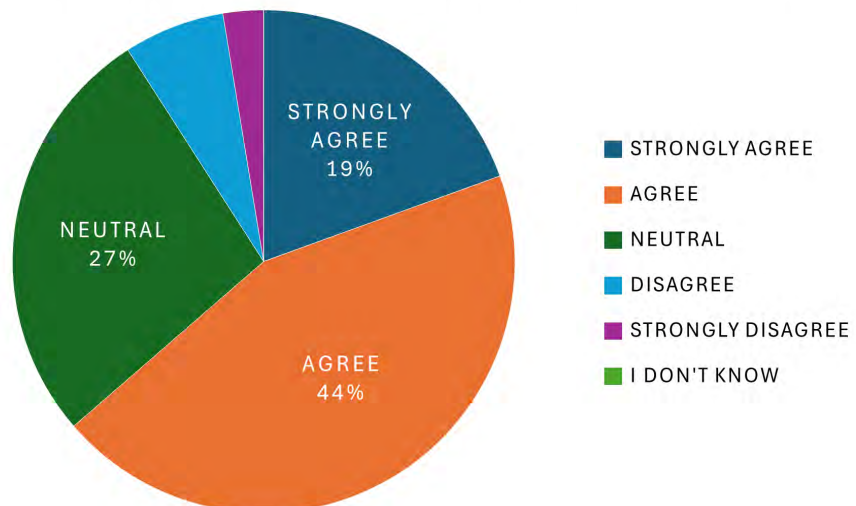
How much do you agree with the following statements regarding biocontrol and its impact on other species?

"BIOCONTROL OF NOXIOUS WEEDS IS ACCEPTABLE, EVEN IF THE BIOCONTROL AGENTS MIGHT FEED ON NATIVE PLANTS."



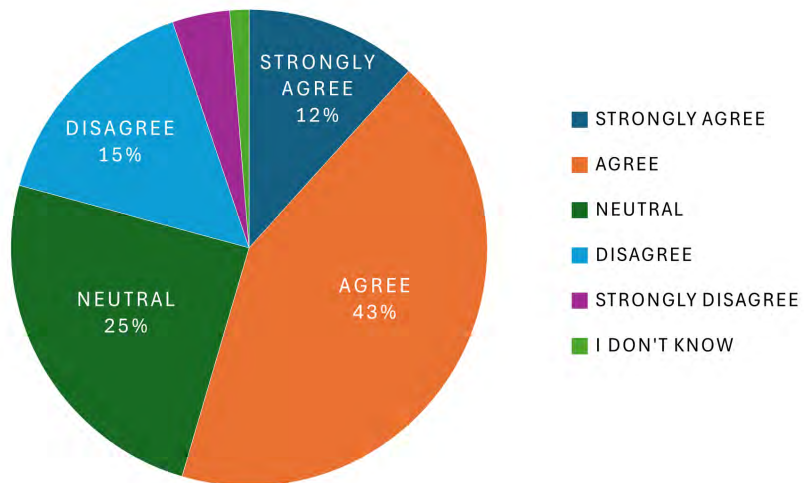
How much do you agree with the following statements regarding biocontrol and pesticides?

"BIOCONTROL IS SAFER FOR THE ENVIRONMENT THAN PESTICIDES."

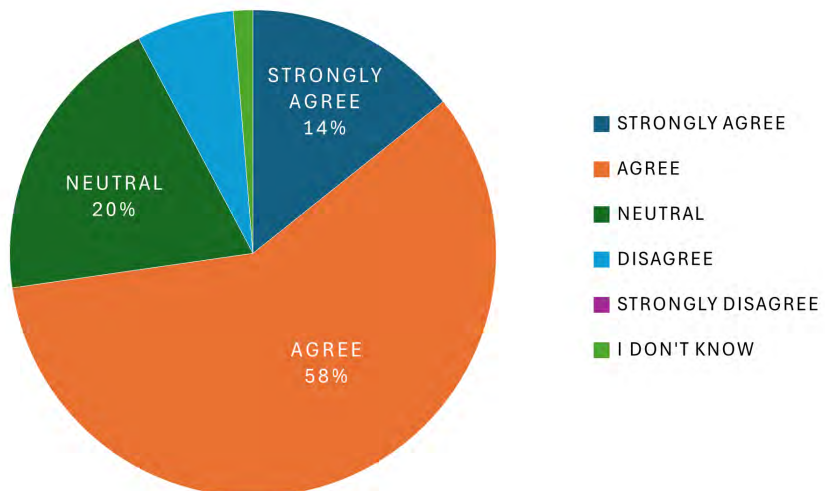


How much do you agree with the following statements regarding biocontrol and pesticides?

"THE ENVIRONMENTAL RISKS OF PESTICIDES ARE ACCEPTABLE IF THEY CONTROL INVASIVE SPECIES."

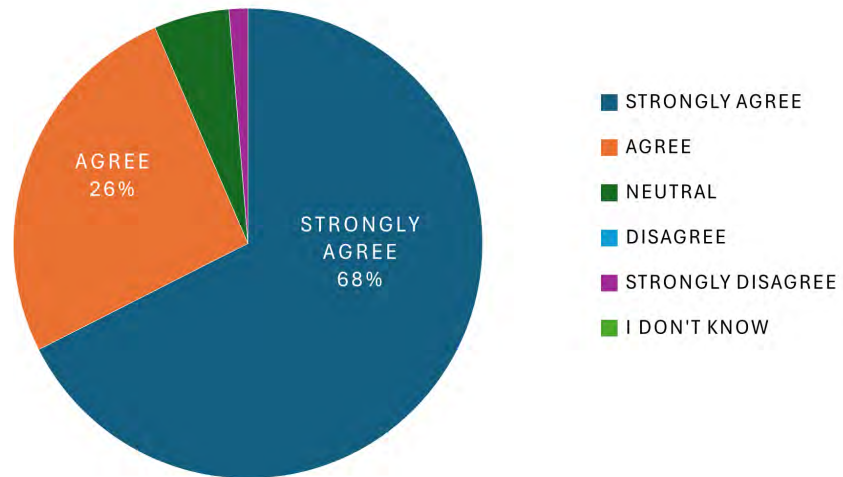


"THE ENVIRONMENTAL RISKS OF BIOCONTROLS ARE ACCEPTABLE IF THEY CONTROL INVASIVE SPECIES."



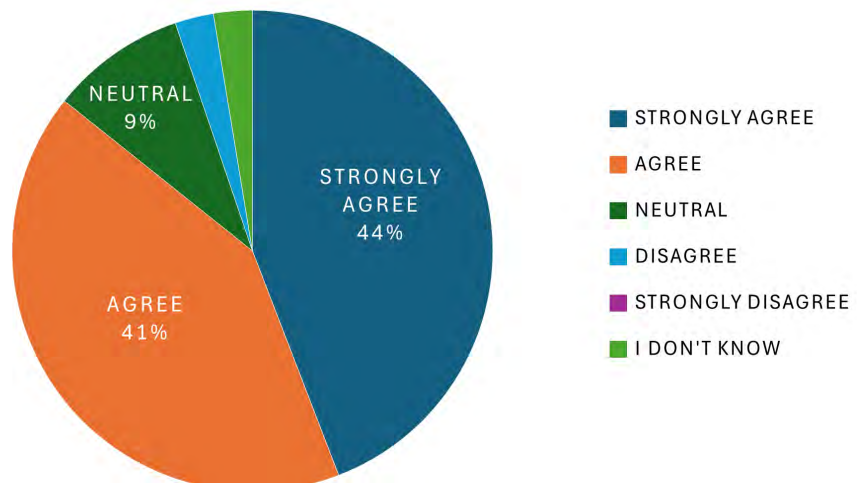
How much do you agree with the following statements regarding biocontrol and pesticides?

"BIOCONTROL AND PESTICIDES BOTH HAVE THEIR PLACE IN CONTROLLING INVASIVE SPECIES."



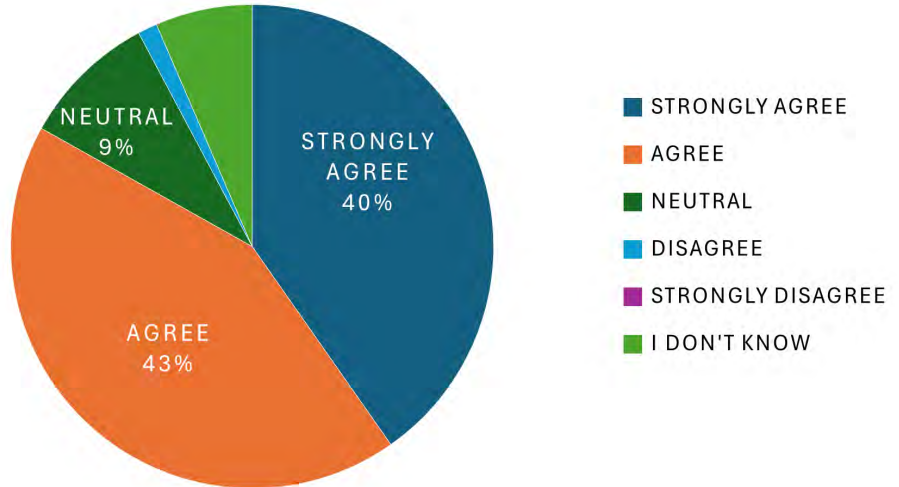
To what extent do you agree or disagree with the following statements?

"POTENTIAL BIOCONTROL AGENTS ARE TESTED TO ENSURE THEY WILL NOT FEED ON NATIVE SPECIES."

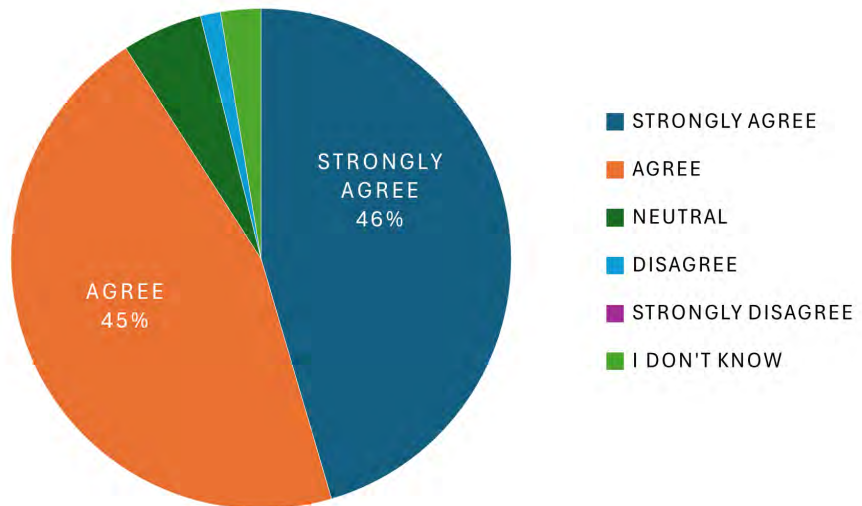


To what extent do you agree or disagree with the following statements?

"POTENTIAL BIOCONTROL AGENTS ARE TESTED TO ENSURE THEY WILL NOT FEED ON ECONOMICALLY IMPORTANT SPECIES."

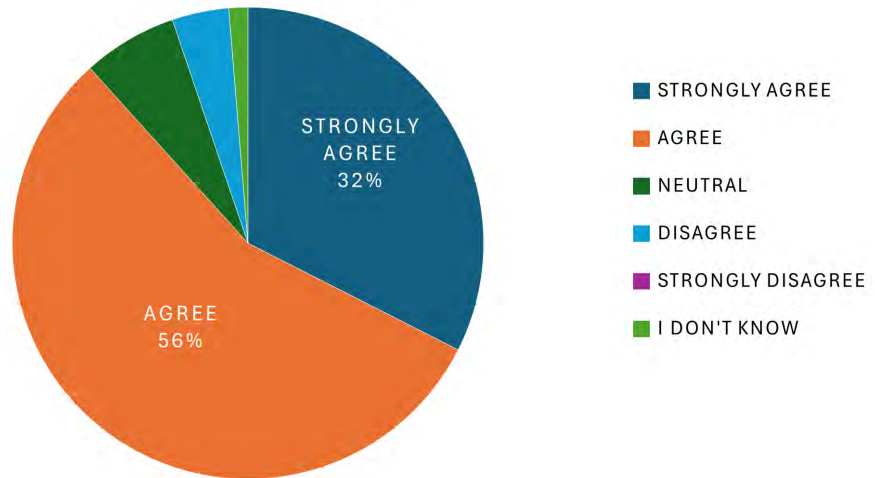


"RESULTS OF BIOCONTROL TESTING ARE USED TO MAKE SCIENTIFICALLY SOUND DECISIONS."

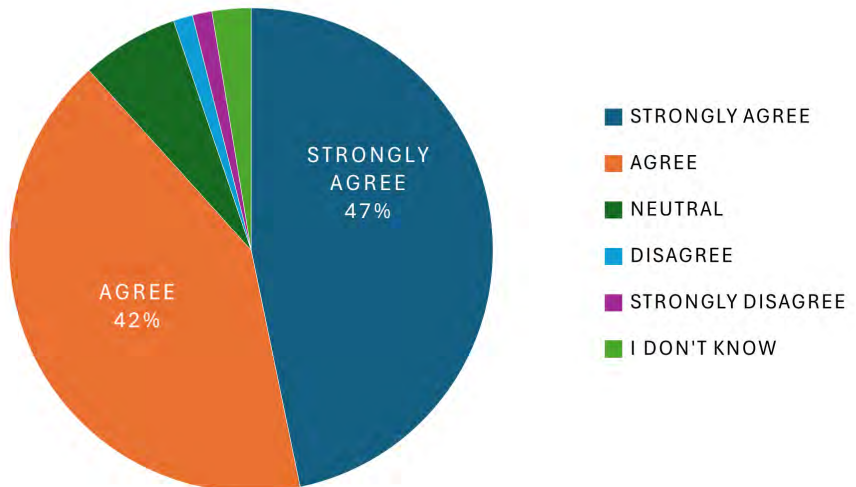


To what extent do you agree or disagree with the following statements?

"EXPERTS AND REGULATORY OFFICIALS REVIEW ALL POTENTIAL ENVIRONMENTAL IMPACTS OF BIOCONTROL AGENTS BEFORE THEY ARE RELEASED IN THE ENVIRONMENT."

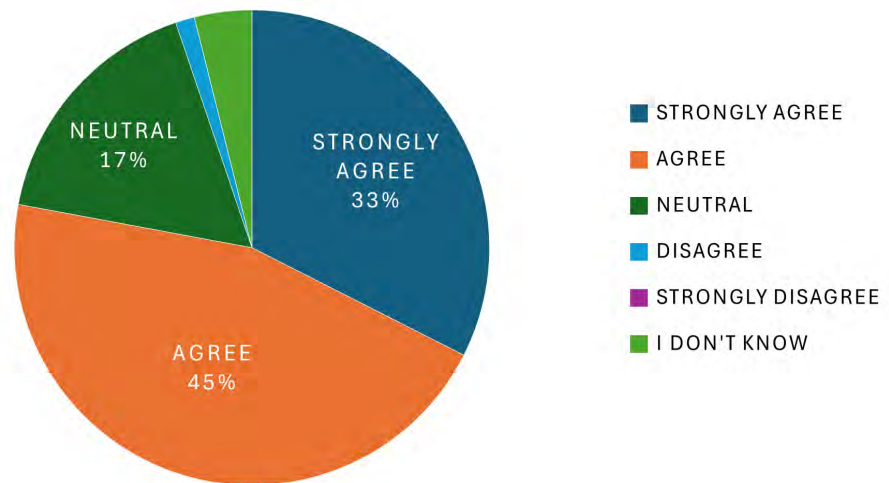


"ALL BIOCONTROL AGENTS MUST BE PERMITTED BY THE FEDERAL GOVERNMENT BEFORE THEY CAN BE RELEASED."

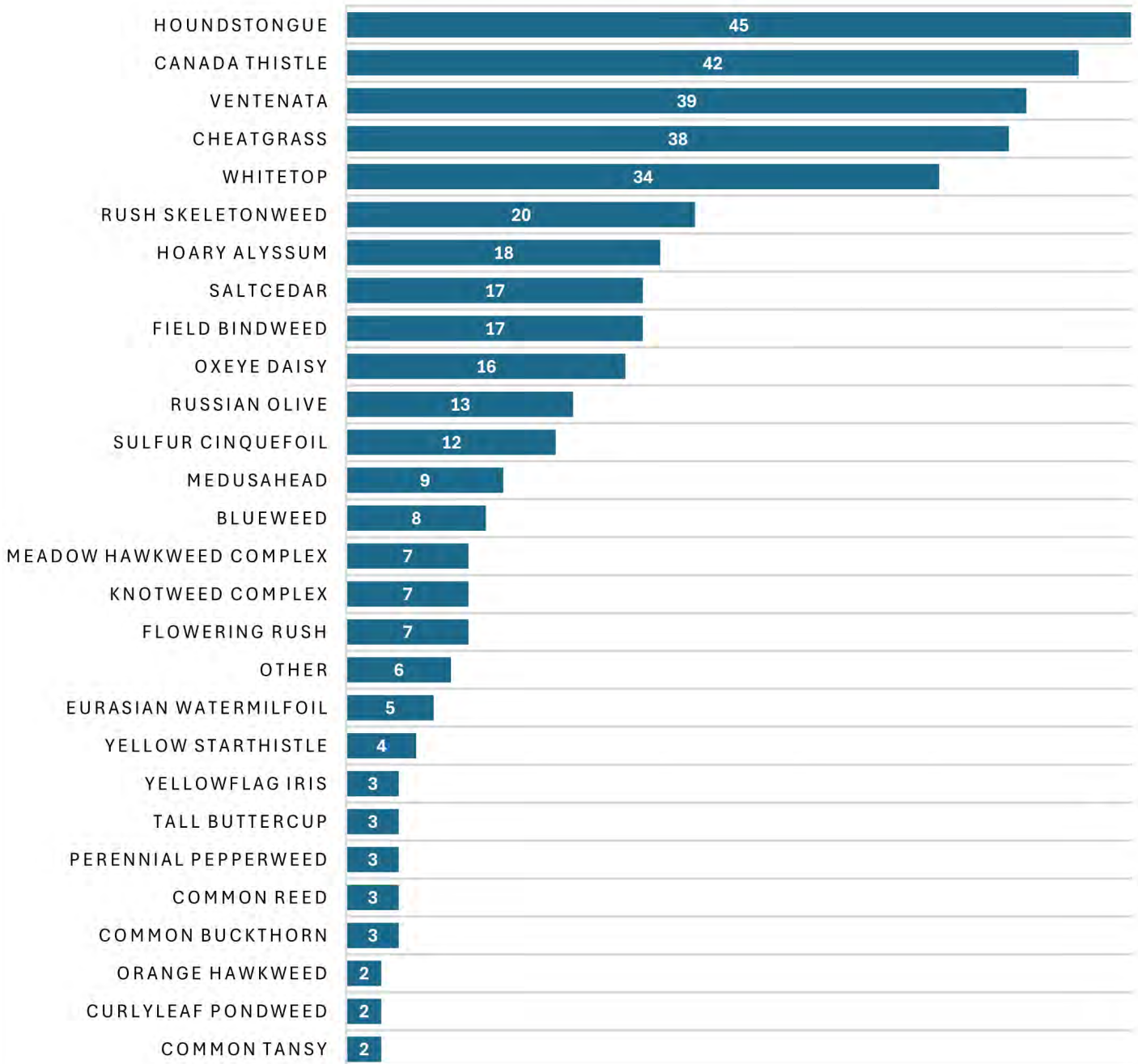


To what extent do you agree or disagree with the following statements?

"THE REGULATORY AGENCIES WHO APPROVE BIOCONTROL AGENTS FOR RELEASE INTO THE ENVIRONMENT REACH RELIABLY SOUND CONCLUSIONS."



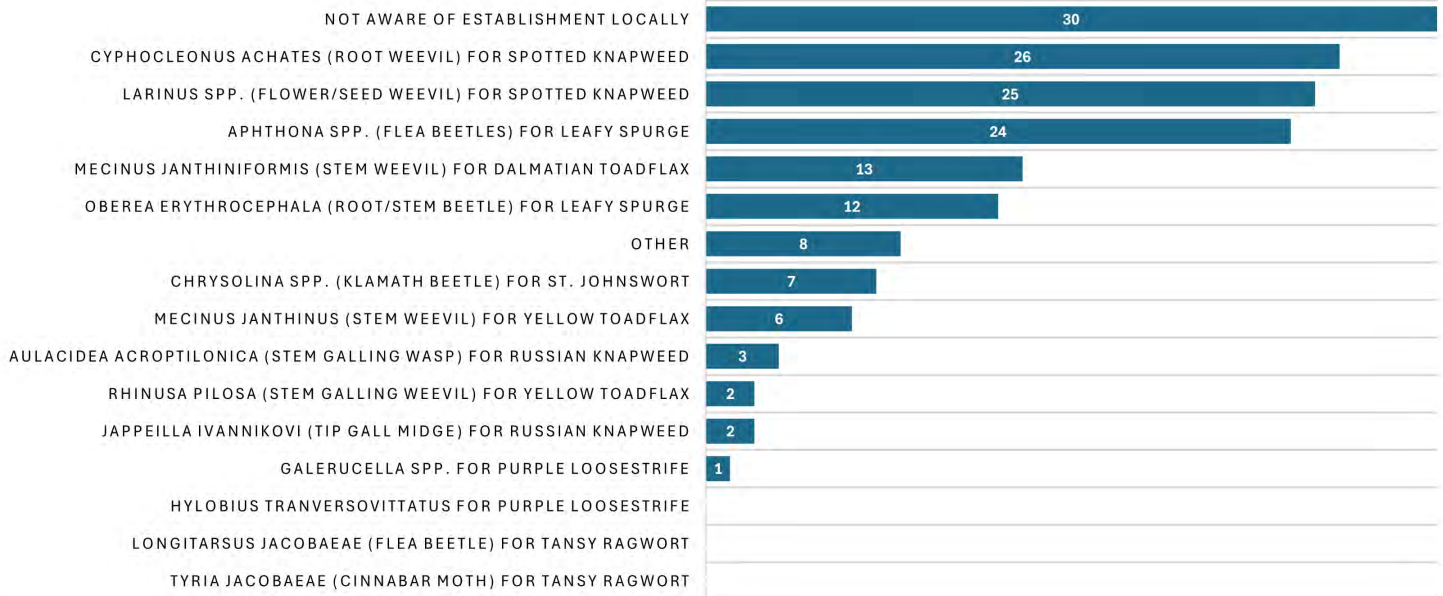
"WHAT ARE THE TOP FIVE WEEDS THAT SHOULD BE TARGETED FOR DEVELOPMENT OF NEW BIOCONTROL AGENTS?"



OTHER (please specify):

- Knapweed
- Whitetop/Hoary Cress
- Reed canary grass
- Palmer amaranth (*Amaranthus palmeri*)
- Knapweed
- St Johnswort

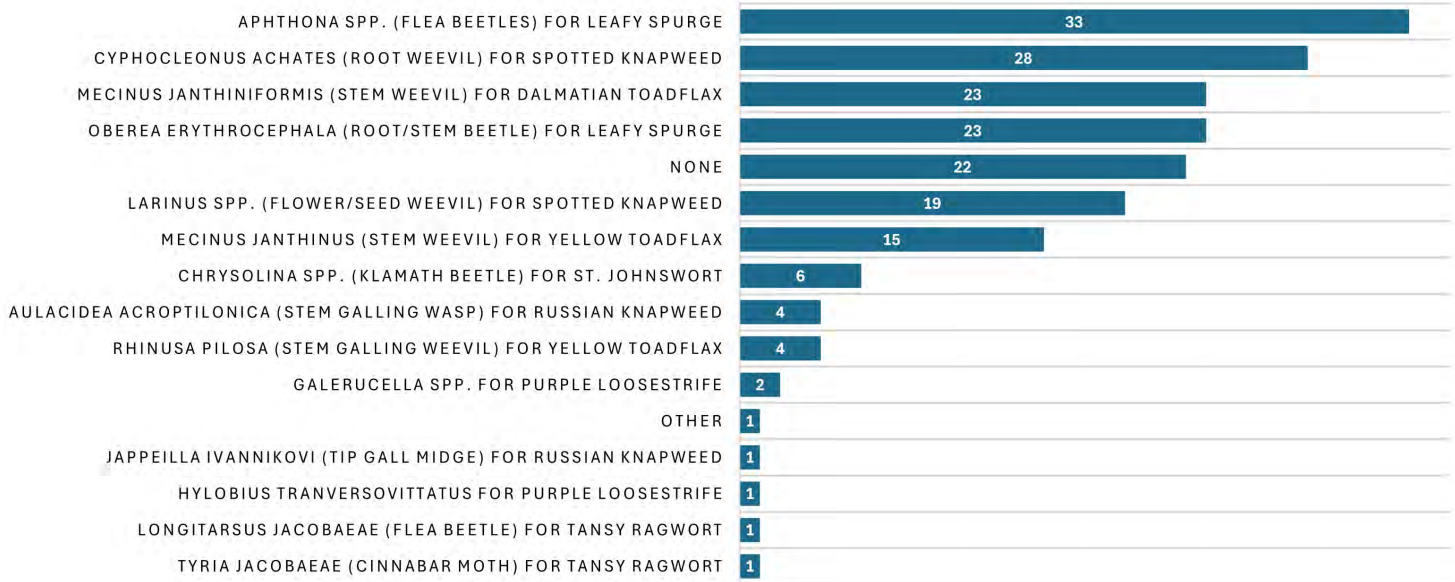
"WHAT BIOCONTROL AGENTS ARE RECOVERABLE/COLLECTIBLE IN YOUR AREA?"



OTHER (please specify target weed and biocontrol agent(s)):

- Agonopterix alstroemeriana
- Musk thistle seed head weevils
- Others may be collectable but I'm not sure without monitoring...
- I am not sure if there is enough to be collectible, but have seen Russian gall wasps present.
- Hawk moth
- Sulfur knapweed moth
- Have not evaluated local collection potential
- We have controls out on tansy ragwort, yellow toadflax, spotted knapweed, and purple loosestrife but I don't know if we are at collectible levels. I will look this year.

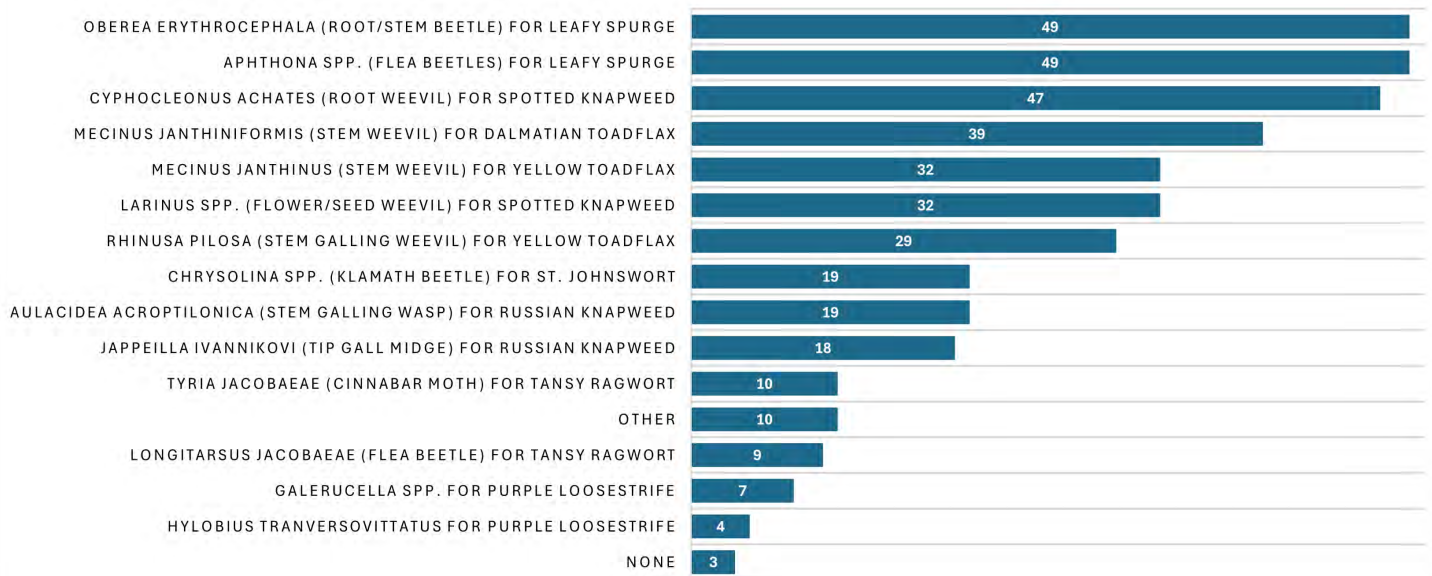
"WHAT BIOCONTROL AGENTS HAVE YOU RELEASED BUT ARE UNSURE IF THEY ARE RECOVERABLE/COLLECTIBLE?"



OTHER (please specify target weed and biocontrol agent(s)):

- Two species for Canada thistle

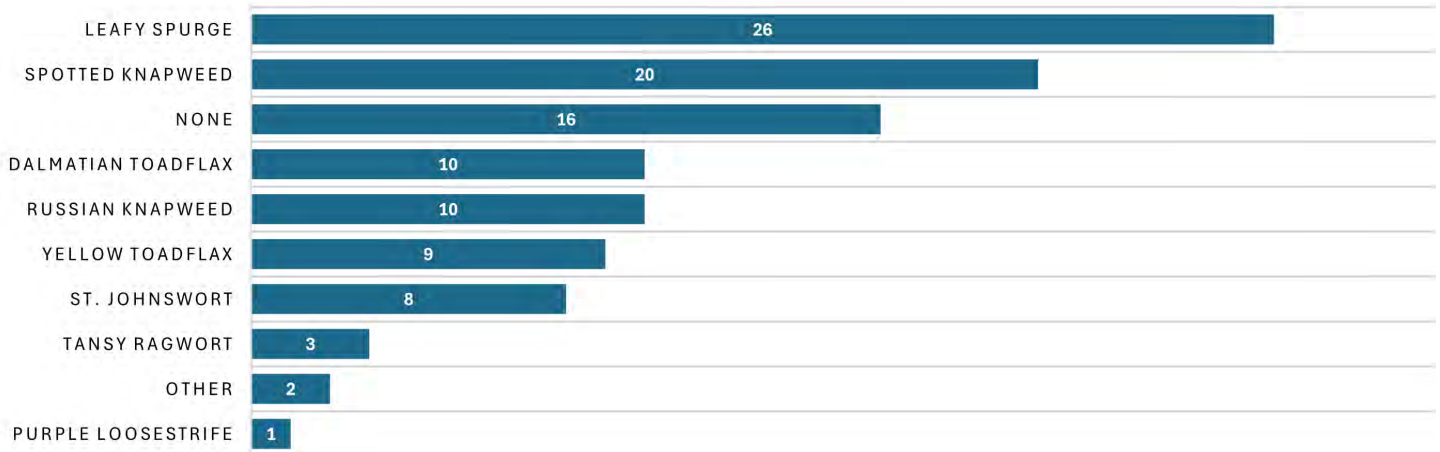
"WHICH BIOCONTROL AGENTS WOULD YOU LIKE TO HAVE ESTABLISHED LOCALLY?"



OTHER (please specify target weed and biocontrol agent(s)):

- Canada Thistle Rust
- What we have released are established. Would be nice to have high populations to use as insectories and/or better access to collectible sites on private lands
- Cinquefoils? Sulfur specifically. (I'm not even sure if there is a biocontrol for that species?)
- Houndstongue root weevil *Mogulones crucifer*
- All that would be good fit in MDT right of way
- Whitetop(?) and Canada Thistle rust
- Species for Canada Thistle
- Canada Thistle Rust
- Houndstongue
- Houndstongue-*Mogulones crucifer*

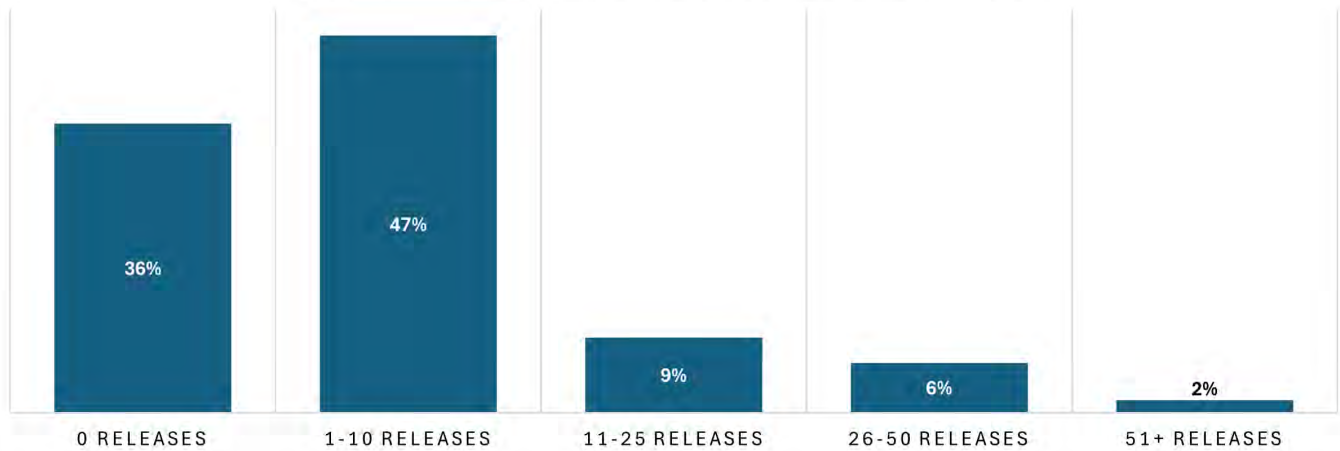
"WHICH OF THE FOLLOWING OLDER/ESTABLISHED BIOCONTROL SYSTEMS IN MONTANA ARE NOT PRODUCING THE DESIRED LEVEL OF CONTROL AND SHOULD BE INVESTIGATED FOR THE DEVELOPMENT OF NEW BIOCONTROL AGENTS?"



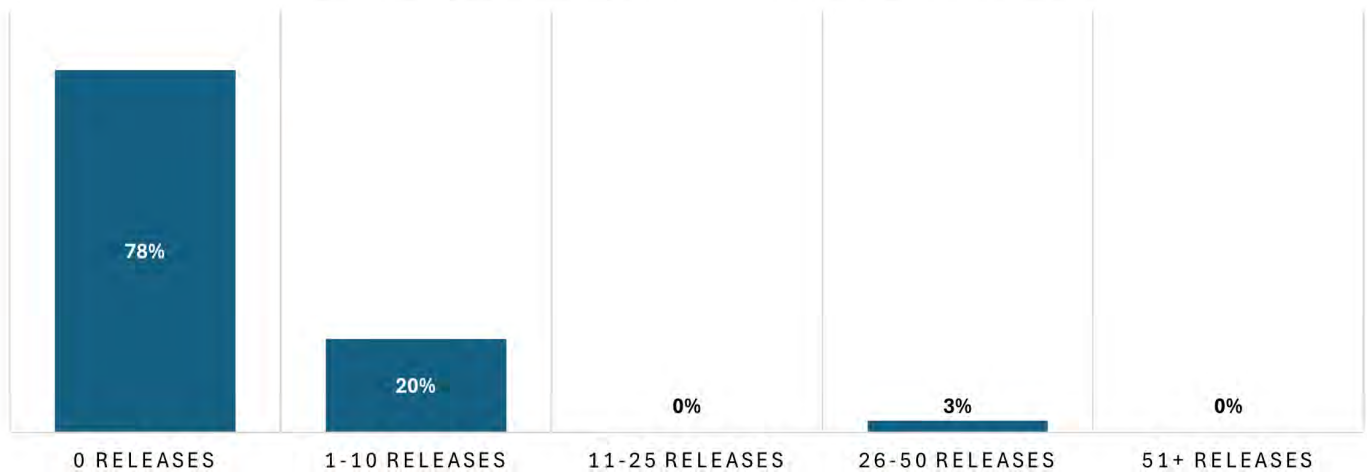
OTHER (please specify):

- Not sure
- We have not quantified level of control

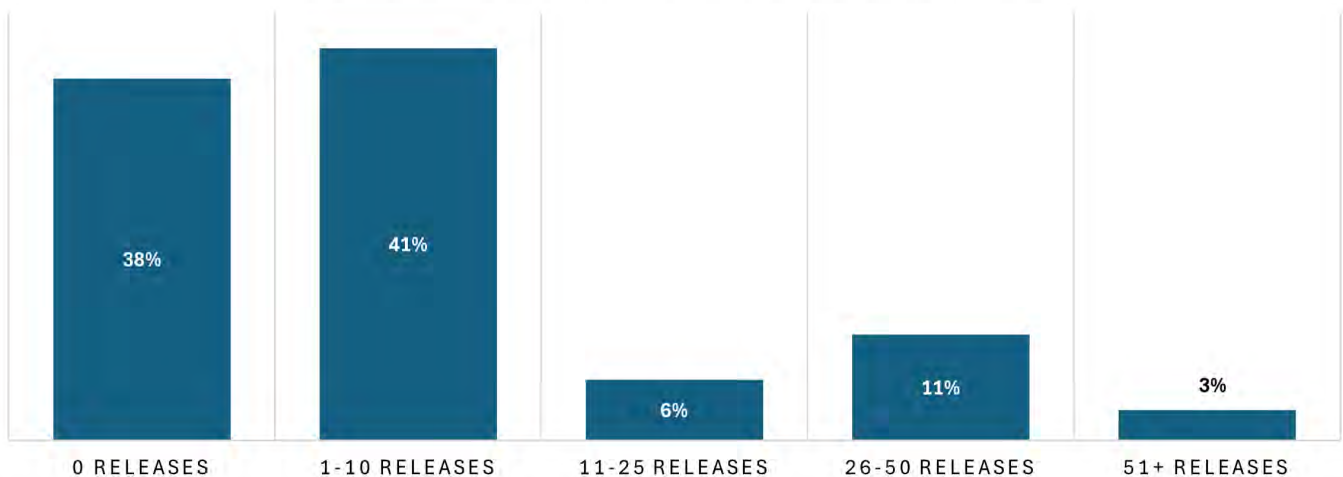
"APPROXIMATELY HOW MANY SPOTTED KNAPWEED RELEASES DO YOU MAKE ANNUALLY?"



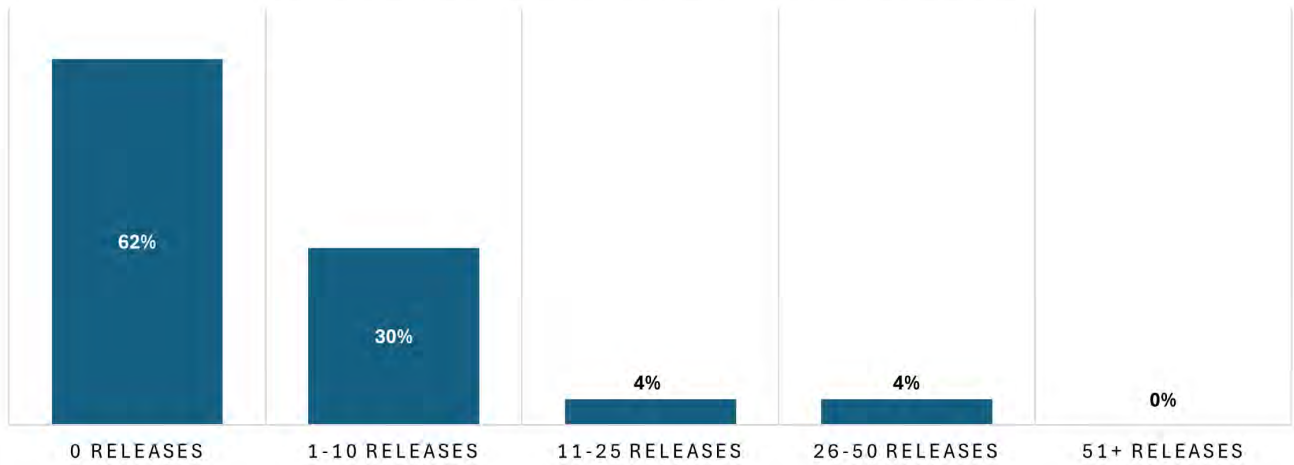
"APPROXIMATELY HOW MANY RUSSIAN KNAPWEED RELEASES DO YOU MAKE ANNUALLY?"



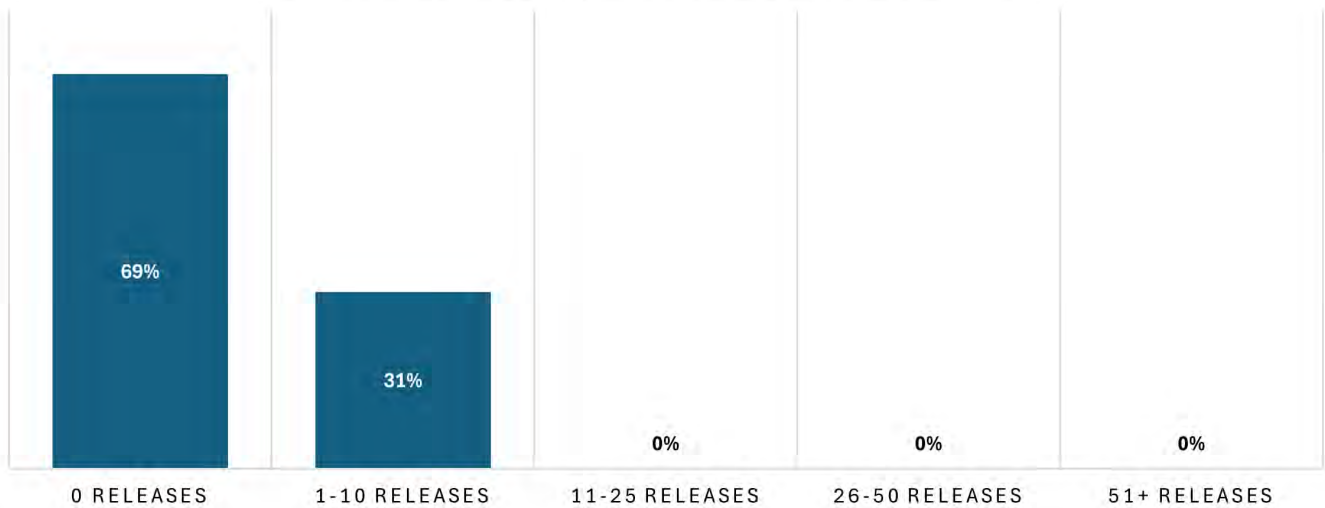
"APPROXIMATELY HOW MANY LEAFY SPURGE RELEASES DO YOU MAKE ANNUALLY?"



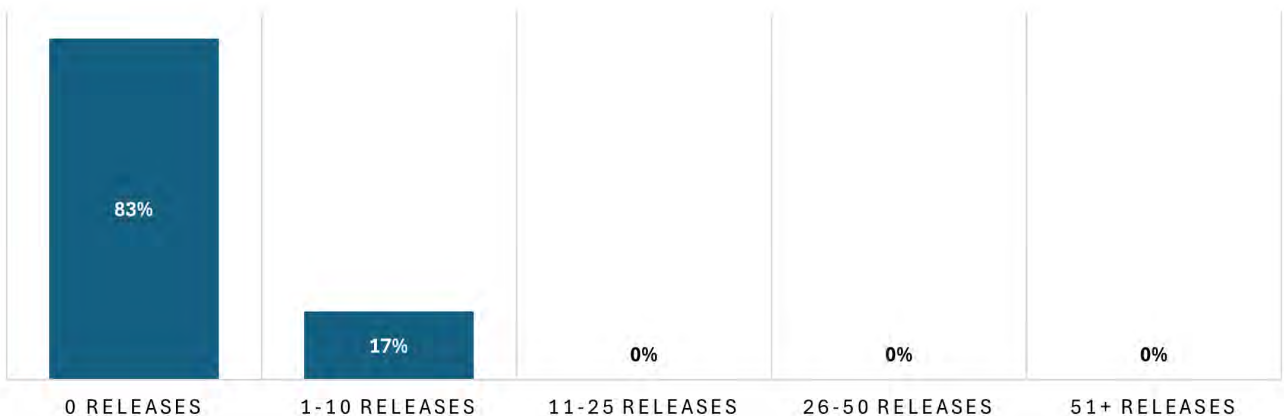
**"APPROXIMATELY HOW MANY DALMATIAN TOADFLAX
RELEASES DO YOU MAKE ANNUALLY?"**



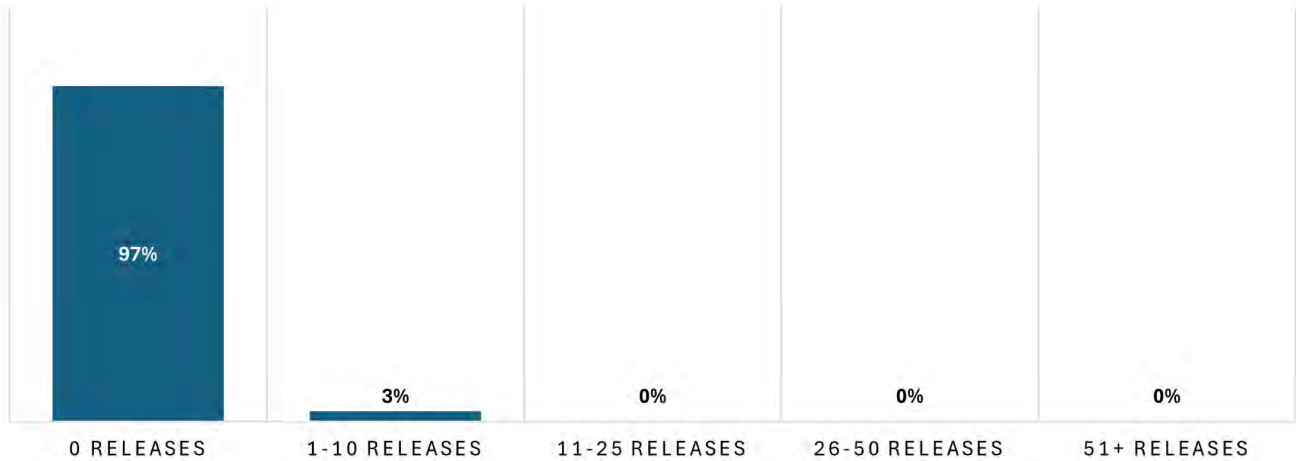
**"APPROXIMATELY HOW MANY YELLOW TOADFLAX
RELEASES DO YOU MAKE ANNUALLY?"**



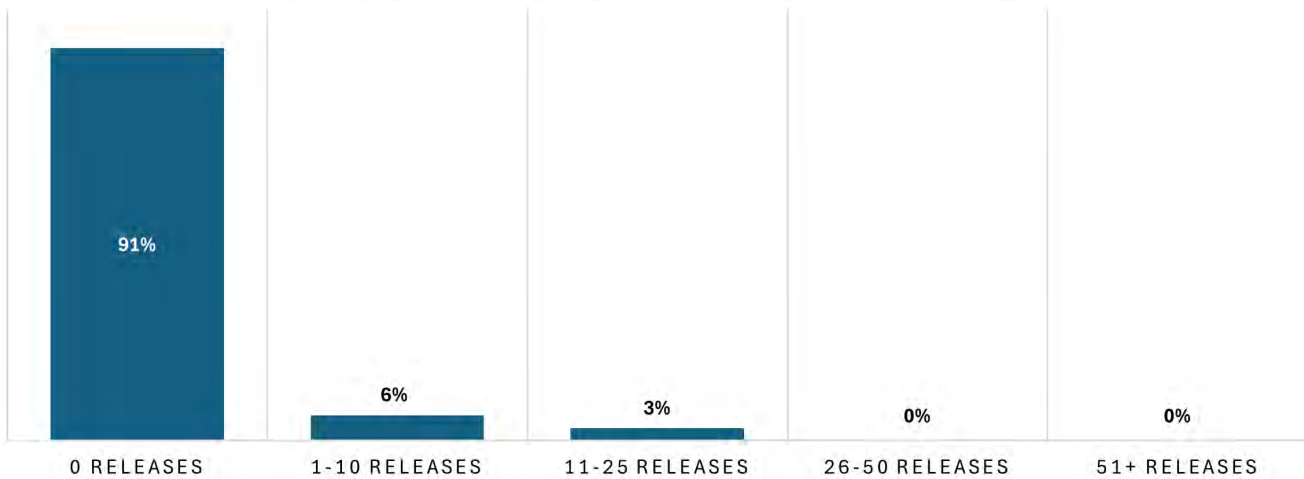
**"APPROXIMATELY HOW MANY ST. JOHNSWORT
RELEASES DO YOU MAKE ANNUALLY?"**



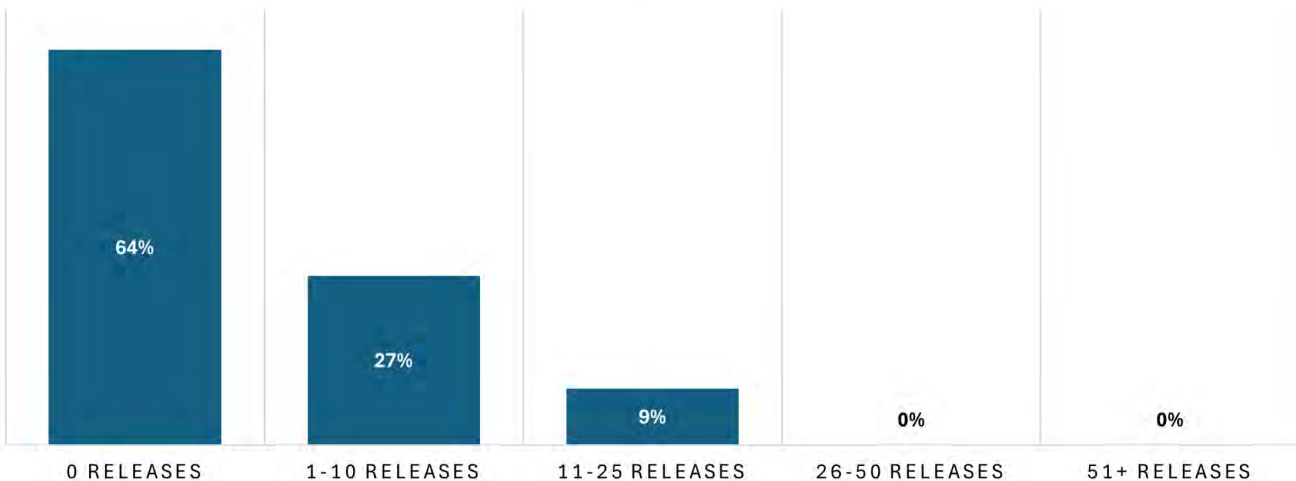
**"APPROXIMATELY HOW MANY TANSY RAGWORT
RELEASES DO YOU MAKE ANNUALLY?"**



**"APPROXIMATELY HOW MANY PURPLE LOOSESTRIFE
RELEASES DO YOU MAKE ANNUALLY?"**



**"APPROXIMATELY HOW MANY OTHER WEED
RELEASES DO YOU MAKE ANNUALLY?"**



“APPROXIMATELY HOW MANY RELEASES (BY WEED SPECIES) DO YOU MAKE ANNUALLY?”

OTHER (please specify target weed and biocontrol agent(s)):

- Canada Thistle
- Hemlock
- Have not released in last 5 years
- I do not, but some of my areas do releases for MDT
- Never have but would like to try
- Canada Thistle
- Canada Thistle

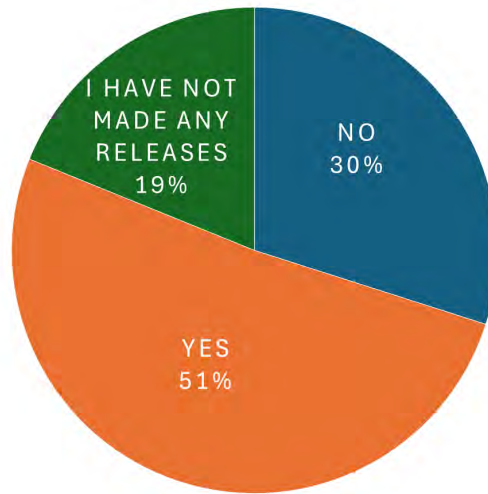
"WHAT INFORMATION DOES YOUR AGENCY/ORGANIZATION RECORD WHEN MAKING A BIOCONTROL RELEASE?"



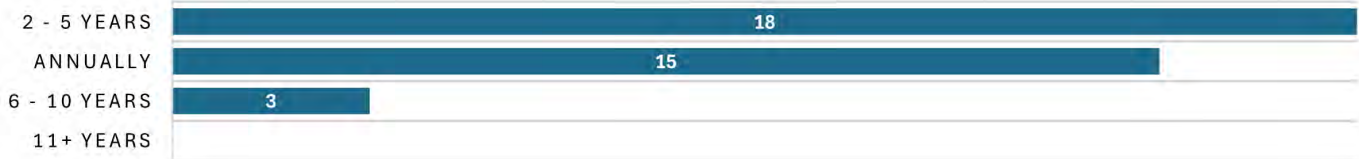
OTHER (please specify):

- Almost 100% of releases are done by private landowners who requested the agents
- Not sure at this time
- Date, photos, cost
- They haven't kept record
- Landowner address/location

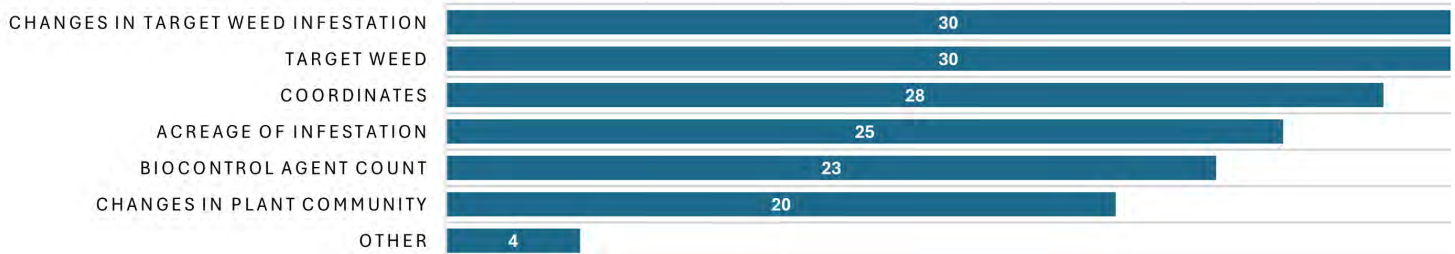
"DOES YOUR AGENCY/ORGANIZATION MONITOR BIOCONTROL RELEASE SITES?"



"HOW OFTEN DO YOU MONITOR PAST BIOCONTROL RELEASE SITES?"



"WHAT INFORMATION DO YOU COLLECT WHEN YOU MONITOR PAST BIOCONTROL RELEASE SITES?"



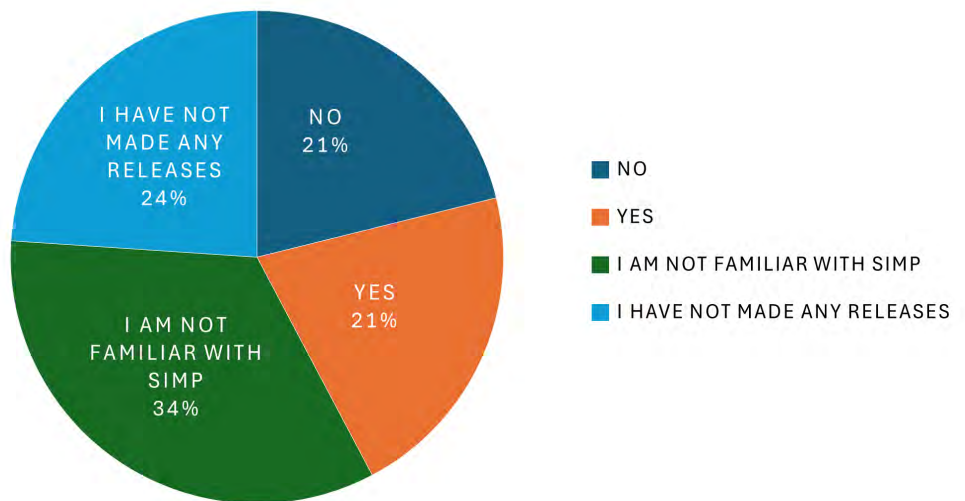
OTHER (please specify):

- Not sure
- Not sure as we have a gal that does it
- Date, photos, cost
- We are just getting started on new plots

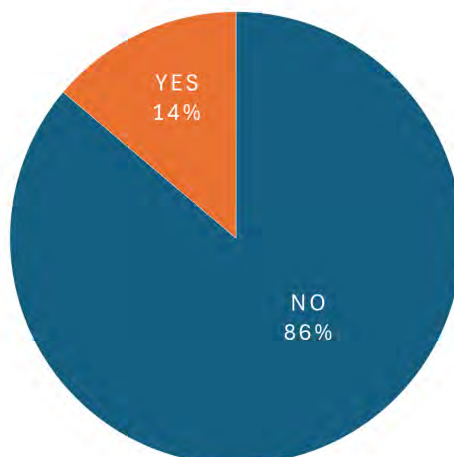
"WHY DOES YOUR AGENCY/ORGANIZATION NOT MONITOR BIOCONTROL RELEASE SITES?"



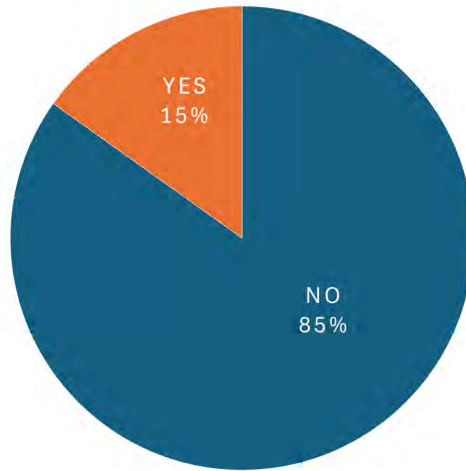
"DO YOU UTILIZE THE STANDARD IMPACT MONITORING PROTOCOL (SIMP) TO MONITOR SITES WHERE BIOCONTROL AGENTS ARE RELEASED?"



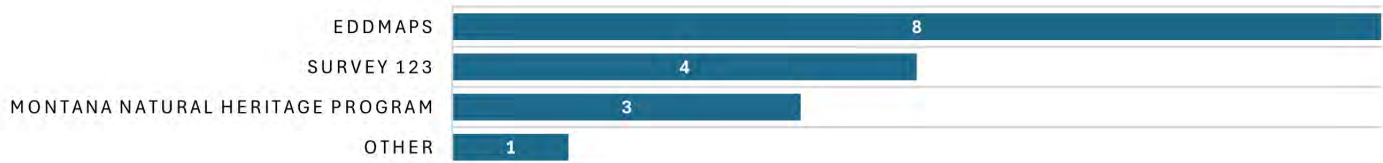
"DO YOU STORE/UPLOAD RELEASE DATA ON PUBLIC APPLICATIONS (E.G., EDDMAPS, SURVEY123, MONTANA NATURAL HERITAGE PROGRAM FIELD GUIDE, ETC.)?"



"DO YOU STORE/UPLOAD MONITORING DATA ON PUBLIC APPLICATIONS (E.G., EDDMAPS, SURVEY123, MONTANA NATURAL HERITAGE PROGRAM FIELD GUIDE, ETC.)?"



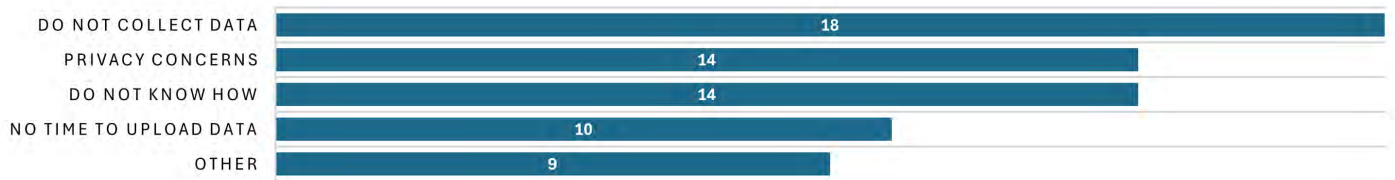
"WHICH APPLICATION(S) DO YOU USE TO STORE/UPLOAD RELEASE/MONITORING DATA?"



OTHER (please specify):

- Field Maps and Facts

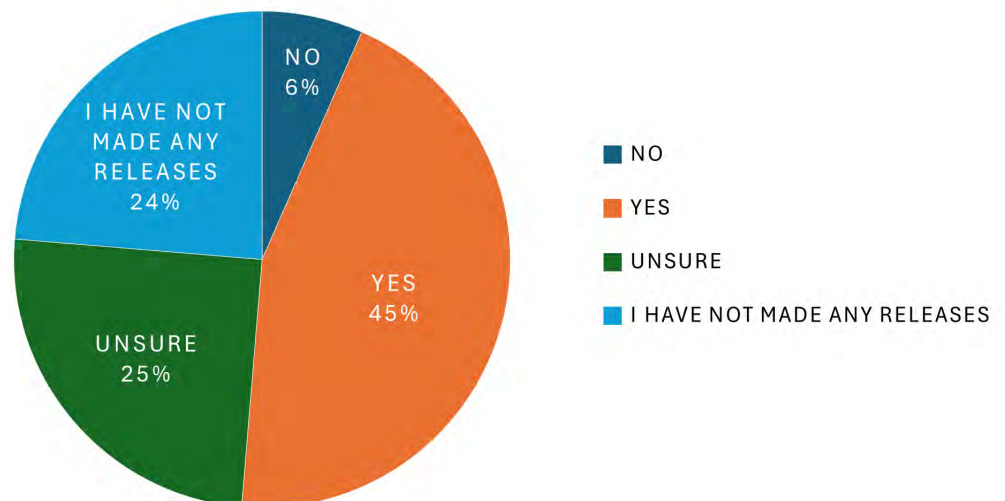
"WHY DO YOU NOT STORE/UPLOAD RELEASE/MONITORING DATA ON PUBLIC APPLICATIONS?"



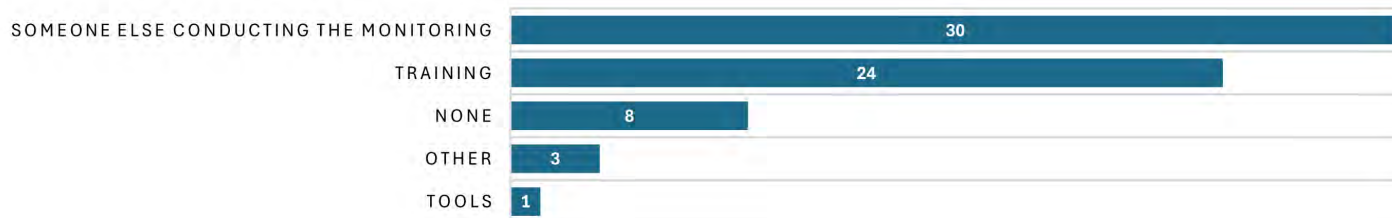
OTHER (please specify):

- Federal agency workflow/programs which at some point are added to public repositories
- Was not aware of the need to upload this data.
- Have not yet
- My techs do not know how
- Already store/upload to government applications
- Never really thought about it
- Cost, just started biocontrol program
- Never had a permanent employee or standardized system
- We will moving forward

"HAVE THERE BEEN REDUCED WEED DENSITIES AS A RESULT OF BIOCONTROL AGENTS ON THE LANDS YOU MANAGE?"



"WHAT ASSISTANCE WOULD YOU NEED TO CONDUCT PERIODIC MONITORING OF RELEASE SITES?"



OTHER (please specify):

- Cost-share
- We visually assess, but don't monitor.
- We check sites but haven't been doing SIMP. But I'm open to establishing new transects

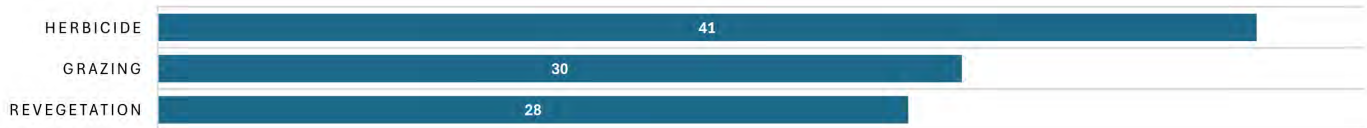
"WHAT INFORMATION ON THE USE OF BIOCONTROL WOULD BENEFIT YOUR WEED MANAGEMENT PROGRAM?"



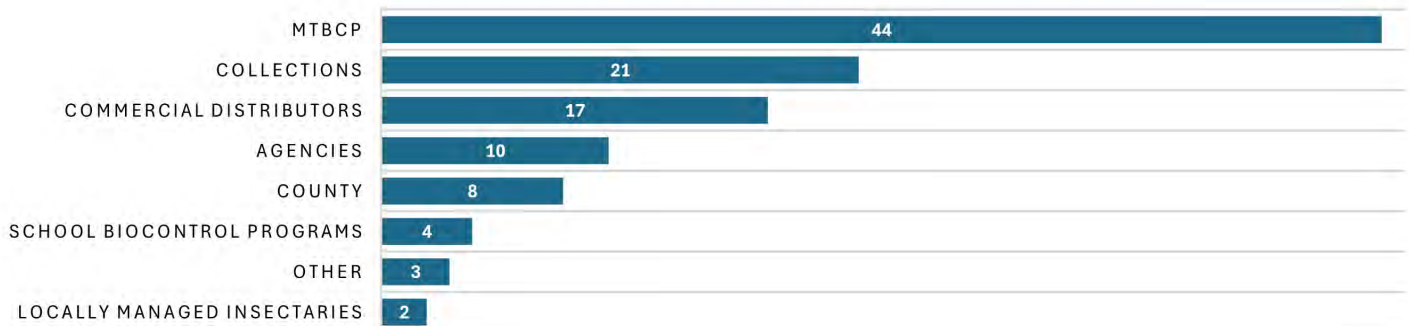
OTHER (please specify):

- Insectary development/ management
- Information on establishing insectary sites and how to monitor their progress to determine feasibility
- All of the above
- Information on how to establish incubation sites

"WHAT OTHER METHODS ARE YOU MOST INTERESTED IN LEARNING HOW TO INTEGRATE WITH BIOCONTROL?"



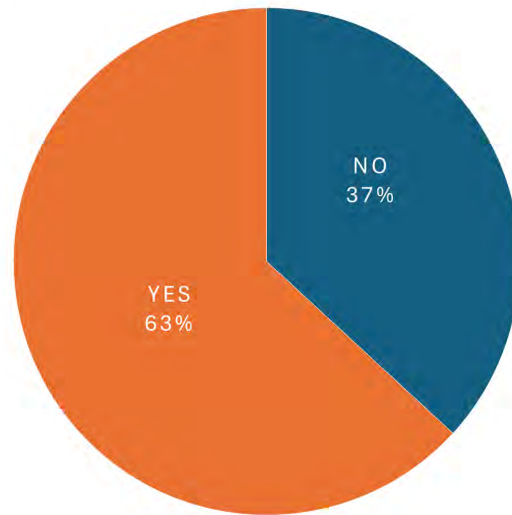
"WHERE DO YOU GET YOUR BIOCONTROL AGENTS?"



OTHER (please specify):

- Our County Extension Agent is the main contact for Biocontrols getting to the county. She gets them all from MTBCP
- Not sure where techs are getting bio

"HAVE YOU OR YOUR STAFF ATTENDED A MTBCP PRESENTATION OR WORKSHOP?"



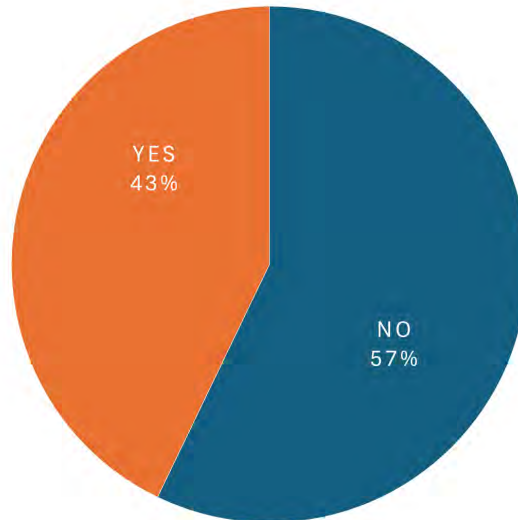
“BRIEFLY DESCRIBE WHAT, IF ANYTHING, YOU HAVE LEARNED FROM ATTENDING A PRESENTATION AND/OR WORKSHOP”:

- Monitoring sites, collecting (when and what is acceptable collection amount)
- Great updates on research and new agents
- I came to the Spring meeting and it was awesome to know that a ton of research and monitoring is done right here in Montana. I had no clue, besides the Whitetop research done in my home area. I would love to attend a presentation or workshop with more specific information on certain species or in the field.
- All of the things about biocontrol.
- Have learned a great deal about the ecology and life cycles of various biocontrol agents, as well as monitoring protocols. I have also become more informed about the process of researching and vetting new biocontrol agents and all of the work and time that is put into that. Finally, I have been able to gain perspective from others in the profession using biocontrol about the fluctuating cycles of agents and target weeds populations, and the patience needed for treatment over time. Would like to learn more about when it is appropriate to move biocontrol populations in our own project area to new infestations based on observed attributes of treatment effectiveness.
- Biocontrol is another good tool to have in the noxious weed fighting toolbox
- Timing, release sites, how to release, how to monitor...
- How to use the SIMP protocol, choosing release sites.
- How to look for the presence of bio agents in dead plants
- Where and what to look for in identifying biocontrol agents and density

(CONTINUED) “BRIEFLY DESCRIBE WHAT, IF ANYTHING, YOU HAVE LEARNED FROM ATTENDING A PRESENTATION AND/OR WORKSHOP”:

- I have learned the status of biocontrol agents including pathogens being tested for viability and potential release, and I have learned valuable information to pass on to land owners and land managers in my area.
- How safe bio is and what it can be effective in doing and what it will not do. Also the huge educational piece that it has become.
- How you can control with both chemical and Bio to get results
- I have attended several over the years and have learned a lot about the different species that are being researched for new agents.
- How rigorous the process is to ensure that potential biocontrol agents will not adversely impact native and/or commercially important species.
- Melissa has always helped our CWMA with decisions on how we run our bio projects. From what insects to release and where to release them. She has always helped us with what is coming up next in the Bio world. Her advice is crucial to how we work and especially to those folks that we are trying to help.
- Timing and location for collecting. How to collect. What the critters look like and what they do. Where and when to release.
- The huge overview of bio-control. Very interesting, learning about species and how they attack the plants and the regulatory process. Love the science behind it. Also, bio-control is great for CONTROL and MANAGEMENT, not ERADICATION.
- Biocontrols are worth consideration with an integrated weed management program
- The different agencies involved in creating or finding our bio control agents
- I learned when to use bioagents as a function of size of infestation, and also what to expect over time after the releases—to keep expectations realistic and that success is still achievable, depending on how you define it.
- The Biocontrols that are available and how they work.
- I learned a lot but just have been able to attend in the last few years.
- Biology of biocontrol species, how biocontrol affects particular plants, how to release species
- We have learned a multitude about the different biological control agents available, when to release, how to release, how to monitor for success and more.
- Status of new agents

"HAVE YOU MADE ANY CHANGES AS A RESULT OF ATTENDING A MTBCP PRESENTATION AND/OR WORKSHOP?"



“PLEASE DESCRIBE THE CHANGES YOU HAVE MADE”:

- We working with NRCS on a monitoring program.
- Been involved in the Canada thistle rush testing
- The more I learn about Biocontrol, the more information I have to spread to landowners and producers in my district. A lot of people are really against pesticides in the Western half of Sanders County so it's a great alternative for them. Not really a change, as I'm so fresh into learning about biocontrols.
- I have started to implement more monitoring sites in release areas. Additionally, our program has stopped chemical treatment of some areas that have healthy biocontrol populations and are allowing these agents to do their work over time as we monitor.
- Where to release biocontrol, how to monitor
- Started using SIMP forms and protocol and uploading data to EDDMaps.
- I have changed my expectations as some potential agents don't work out and some are on the horizon that I may not have known about.
- I feel good about MDT contributions to the biocontrol organizations, and provide information and support to any of the MDT techs that want to participate in the use or collection of biocontrol agents.
- I have started making plans to make releases.

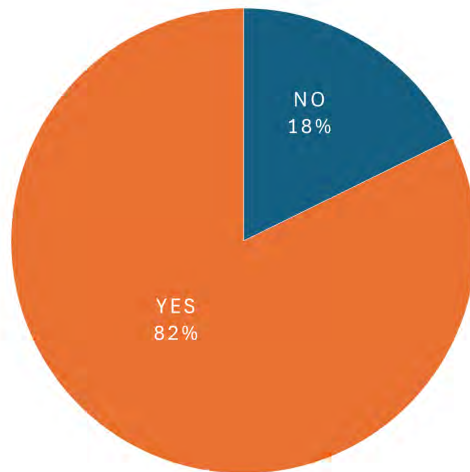
(CONTINUED) “PLEASE DESCRIBE THE CHANGES YOU HAVE MADE”:

- What where why when and how have all been effected by advice from Melissa.
- Mostly attitude and awareness.
- Being more involved in bio-control management and education.
- Convinced landowners into investing in biocontrols
- Made more releases and coordinated getting Biocontrols for our county
- Integrated weed management system
- Changed release locations to areas where weed density was more suitable
- Planning on more monitoring and visiting sites to see what might be collectible and to determine if agents survived
- Better able to spot and collect knapweed weevils
- Incorporated regular monitoring

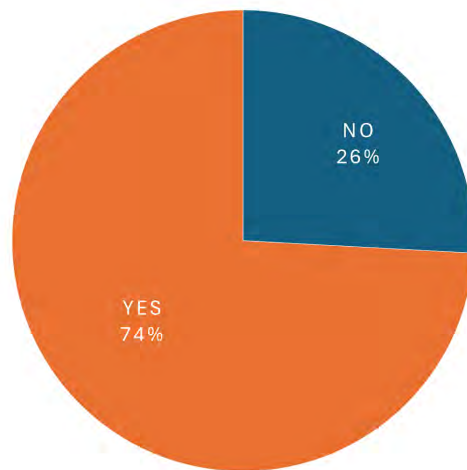
"HOW FREQUENTLY DO YOU CONSULT MTBCP FOR YOUR BIOCONTROL QUESTIONS?"



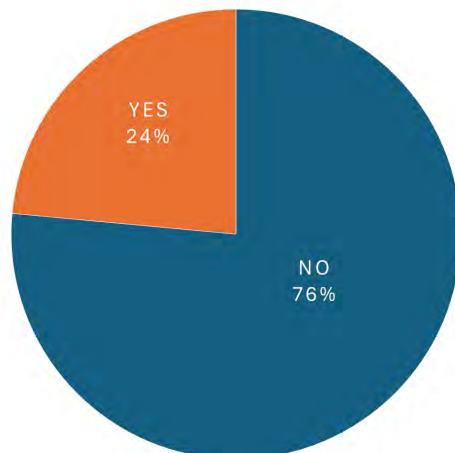
"DO YOU USE AGENCIES AS A RESOURCE TO GET INFORMATION ON WEED BIOCONTROL?"



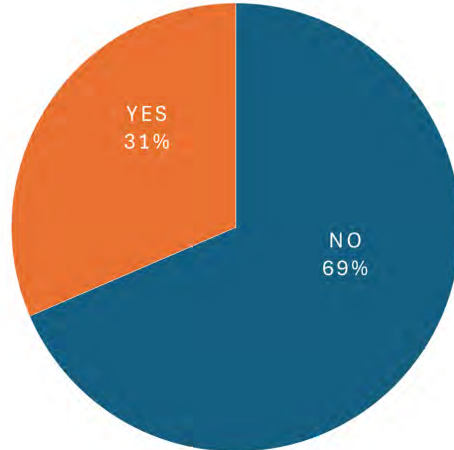
"DO YOU USE BIOCONTROL RESEARCHERS AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



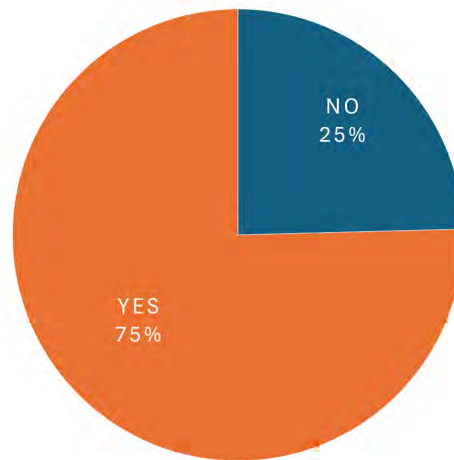
"DO YOU USE COLLECTION DAYS NOT COORDINATED BY MTBCP AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



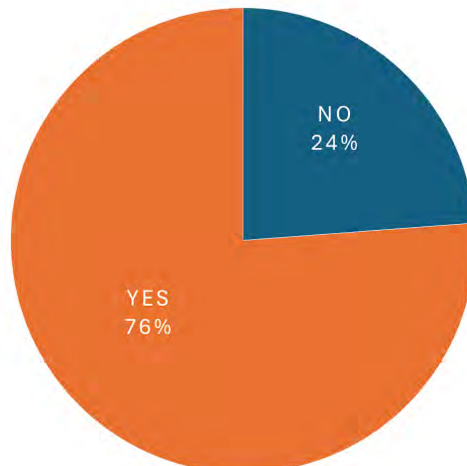
"DO YOU USE COMMERCIAL DISTRIBUTORS AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



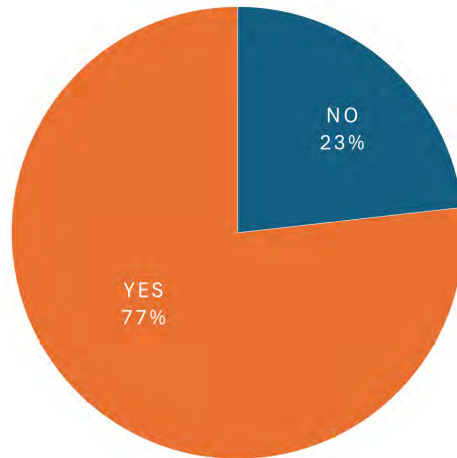
"DO YOU USE CONFERENCES/TRAININGS NOT COORDINATED BY MTBCP AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



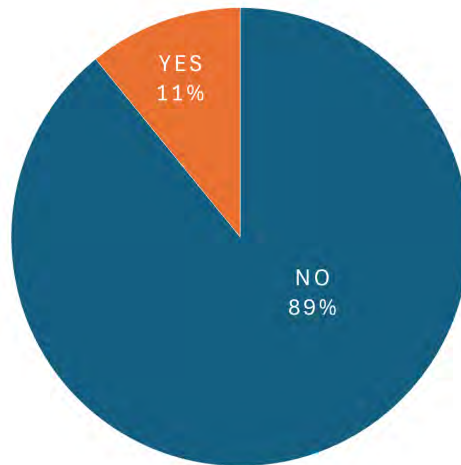
"DO YOU USE MSU EXTENSION AS A RESOURCE TO GET INFORMATION ON WEED BIOCONTROL?"



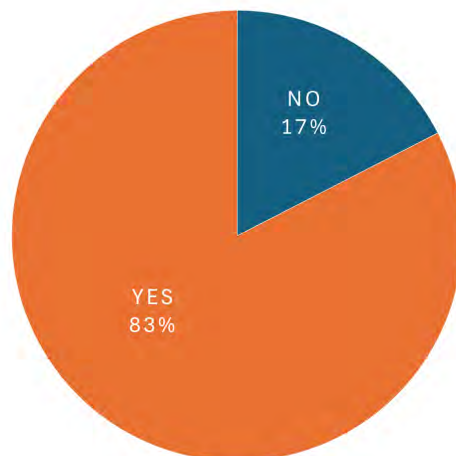
"DO YOU USE MWCA AS A RESOURCE TO GET INFORMATION ON WEED BIOCONTROL?"



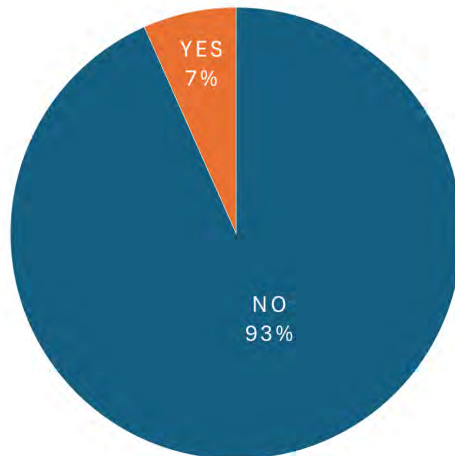
"DO YOU USE SCHOOL PROGRAMS AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



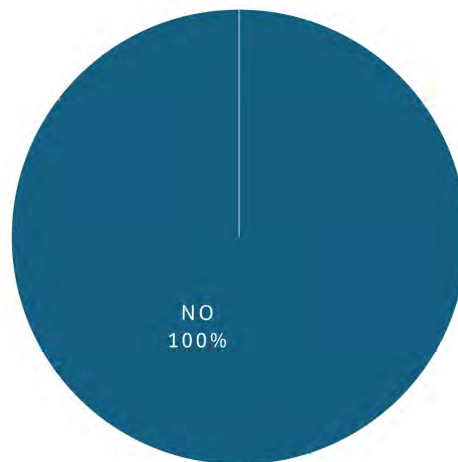
"DO YOU USE WEED DISTRICTS AS RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



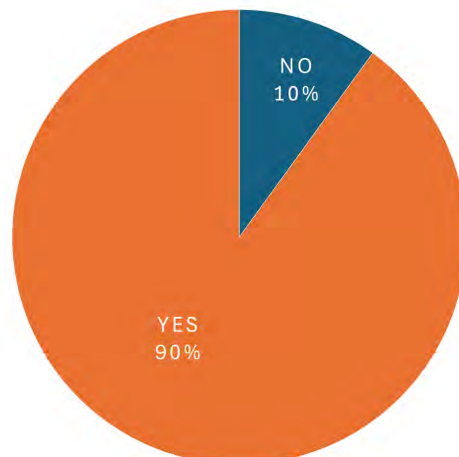
"DO YOU USE THE FOLLOWING RESOURCES TO GET INFORMATION ON WEED BIOCONTROL? - NONE"



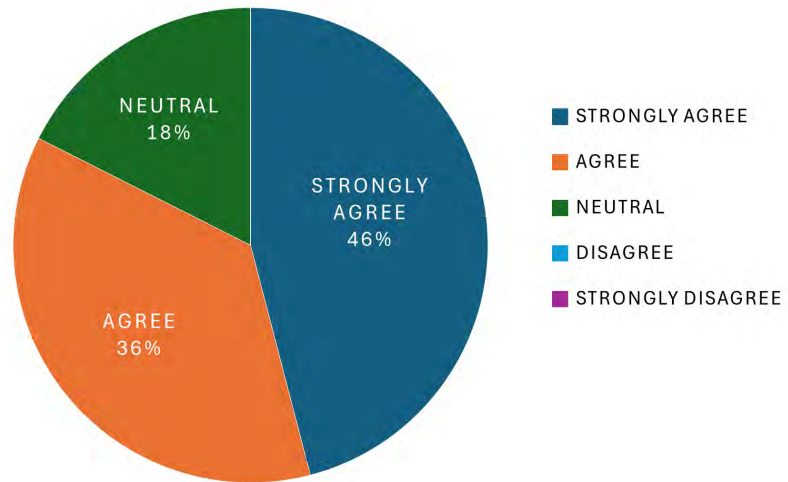
"DO YOU USE OTHER RESOURCES TO GET INFORMATION ON WEED BIOCONTROL?"



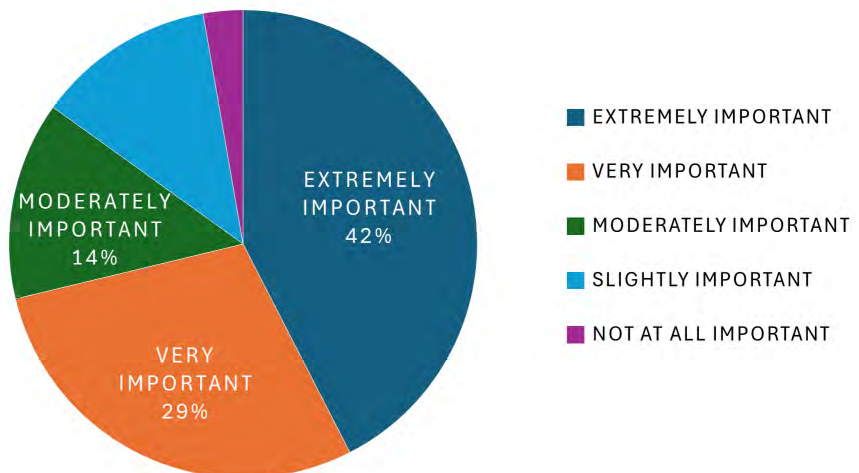
"HAS YOUR UNDERSTANDING OF BIOCONTROL IMPROVED DUE TO MTBCP'S EFFORTS?"



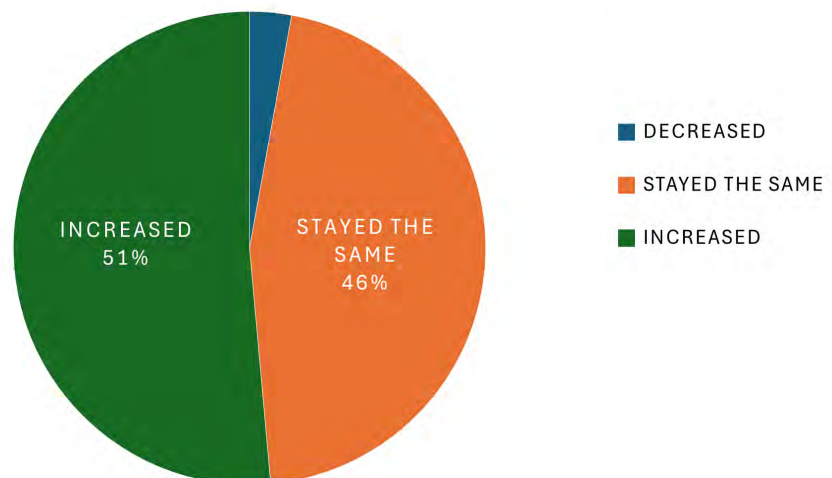
"MTBCP HELPS ME STAY UP-TO-DATE WITH THE LATEST BIOCONTROL RESEARCH PROJECTS."



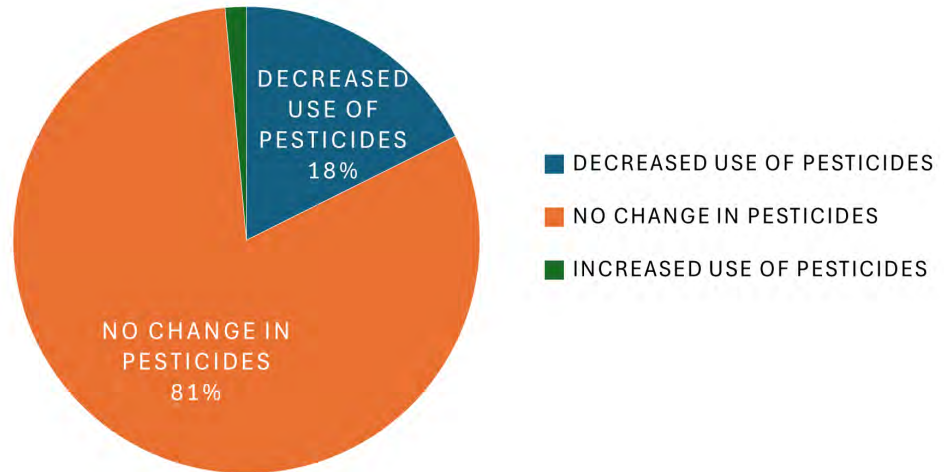
"HOW IMPORTANT DO YOU CONSIDER BIOCONTROL USE AS PART OF YOUR INTEGRATED WEED MANAGEMENT PLAN?"



OVER THE LAST 10 YEARS, MY USE OF BIOCONTROL HAS:



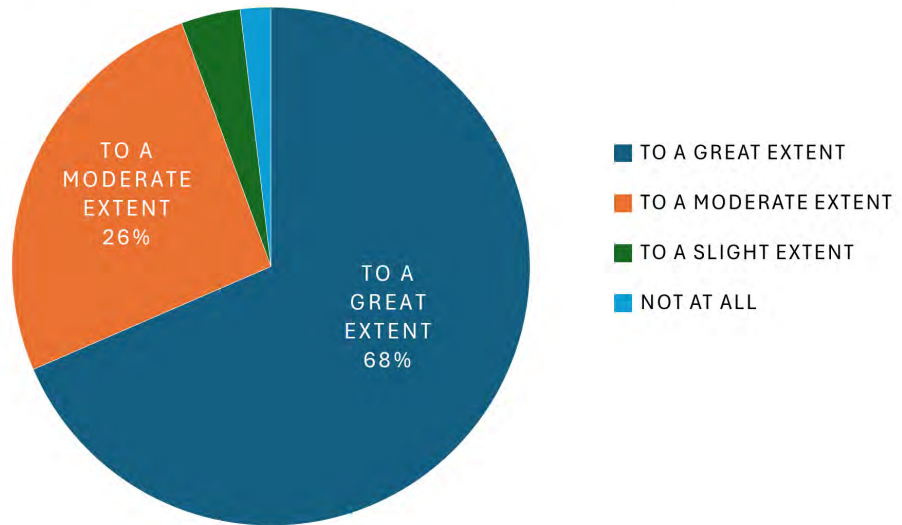
HOW HAS YOUR PESTICIDE USE CHANGED AS A RESULT OF USING BIOCONTROL?



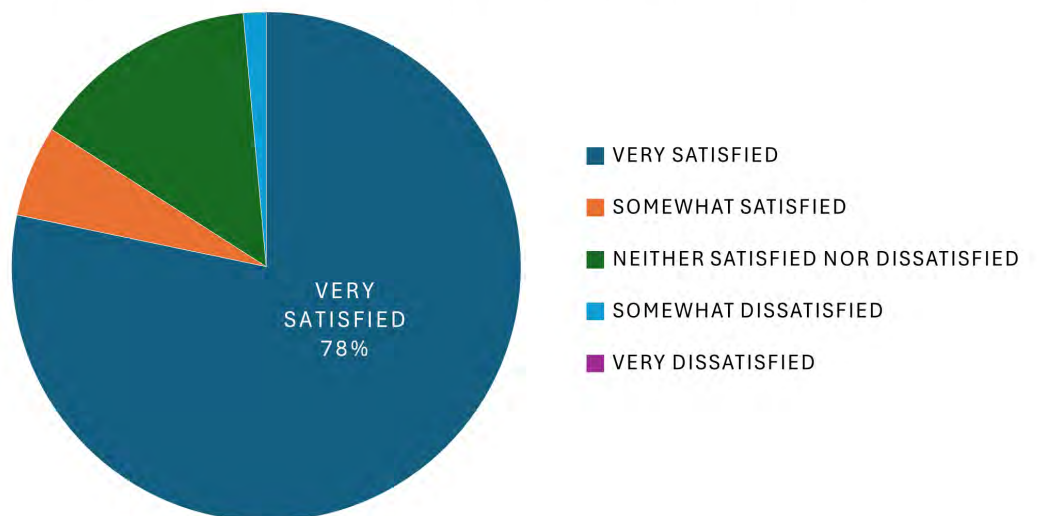
“PLEASE BRIEFLY DESCRIBE HOW YOUR PESTICIDE USE CHANGED BELOW”:

- As mentioned previously, our program has now designated some treatment polygons as just “biocontrol”, whereas before all of our polygons were primarily chemical treatment oriented. We continue to seek out appropriate areas for biocontrol treatment on our project landscape and are striving to implement more SIMP and agent monitoring techniques to begin discovering trends in vegetation and agent populations.
- I have worked harder to integrate biological control into noxious weed management protocols with the support of MTBCP’s program
- I believe pesticide use has gone up as has bio control and I attribute this to education. When having educational meetings we talk about both and folks find out that does not have to be either or. They also find out a lot more about both and in doing so feel more comfortable doing them.
- Certain situations, we just rather use bio-control.
- In our Bio Control areas. I do not use chemical.
- For the colonies that have biocontrols on them, they are not sprayed with pesticides.
- I used to integrate some small level of pesticide use, but now only use biocontrol and handpulling.
- I have large areas that were sprayed every season and are now sprayed only every other year. The use of biocontrol has reduced some of the weeds in the area which now doesn’t need any herbicide treatment.

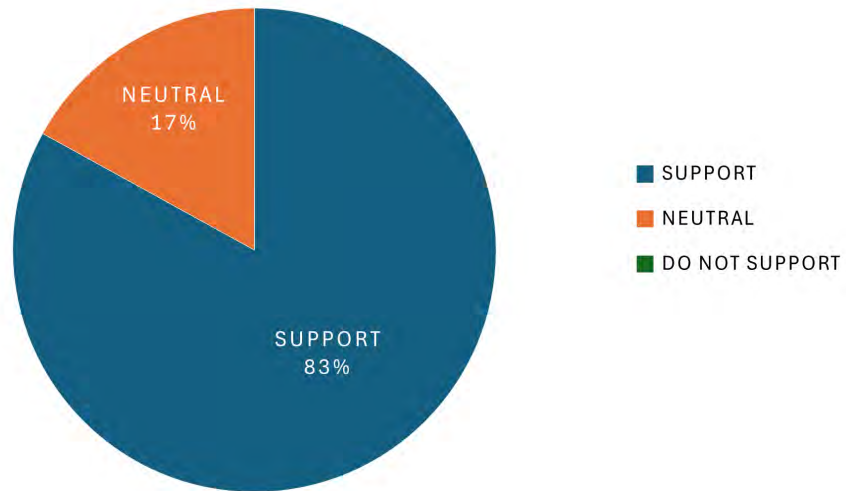
TO WHAT EXTENT DOES MTBCP MEET YOUR NEEDS?



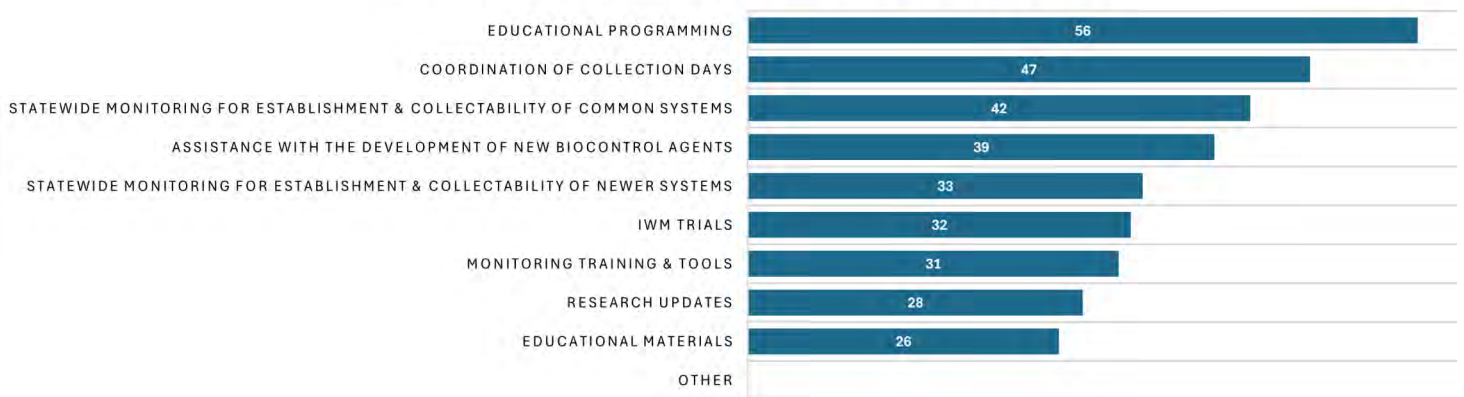
HOW SATISFIED ARE YOU WITH YOUR INTERACTIONS WITH MTBCP?



ARE YOU IN SUPPORT OF REDIRECTING A PORTION OF MTBCP'S PERSONNEL TIME TOWARDS STATEWIDE MONITORING OF RELEASE SITES TO EVALUATE COLLECTIBILITY?



WHAT SERVICES WOULD YOU LIKE MTBCP TO PROVIDE?



Additional Comments about the MTBCP program:

THANK YOU FOR YOUR VALUABLE PROGRAM AND ALL THE HARD WORK YOU PUT INTO IT.

GREAT ASSET FOR MONTANANS

YOU ARE AWESOME!

KEEP UP THE GREAT WORK AND OUTREACH — OUR PROGRAM HAS PROGRESSED BECAUSE OF IT!

THIS IS A FABULOUS PROGRAM AND OUR PROGRAM IN POWELL COUNTY AND THE BLACKFOOT RIVER WATERSHED HAVE BENEFITED GREATLY.

I AM JUST STARTING TO GET INTO BIOCONTROL AS A PART OF MY WEED MANAGEMENT AND THE MONTANA BIOCONTROL PROJECT HAS BEEN CENTRAL TO MY EDUCATION OF THE SYSTEMS.

THIS PROGRAM IS OF THE UTMOST IMPORTANCE. FOLKS THAT WILL NOT USE HERBICIDES WILL USUALLY USE BIO. NOT HAVING AN ALTERNATIVE WOULD BE A DISASTER. MELISSA HAS SUCH CREDIBILITY STATEWIDE THAT SHE CAN HELP ANYONE AND I FOR ONE NEED LOTS OF IT AND THIS PROGRAM IS THERE TO ANSWER ALL OF MY QUESTIONS.

OUR FEW DIRECT INTERACTIONS WITH MTBCP PERSONNEL WERE UNFAVORABLE SINCE THE INDIVIDUALS WERE CONDESCENDING, DID NOT RESPOND TO OUR INQUIRES, AND DID NOT PROVIDE REQUESTED INFORMATION. OTHERWISE, WE SUPPORT THE OVERALL MISSION OF MTBCP.

I THINK IT'S AN IMPORTANT PROGRAM AND SHOULD BE SUPPORTED AS MUCH AS POSSIBLE SO IT CAN CONTINUE ITS GREAT AND MUCH NEED WORK.

OVERALL I FEEL MTBCP DOES AN AWESOME JOB. WE'RE SO GRATEFUL FOR THIS RESOURCE. IT'S A GREAT HELP TO SUPPORT OUR COUNTY AND ALSO TO PROMOTE METHODS THAT POTENTIALLY REDUCE CHEMICAL HERBICIDE AND PESTICIDE USE. WE'RE EXTREMELY GRATEFUL FOR THE WORK YOU DO AND FOR MAKING THESE BIOCONTROL OPTIONS AVAILABLE TO LANDOWNERS. THANK YOU!

GREAT WORK! SO THANKFUL THAT MONTANA HAS THIS PROGRAM.

WE ARE THANKFUL TO WORK WITH MTBCP.

DOING A GREAT JOB