



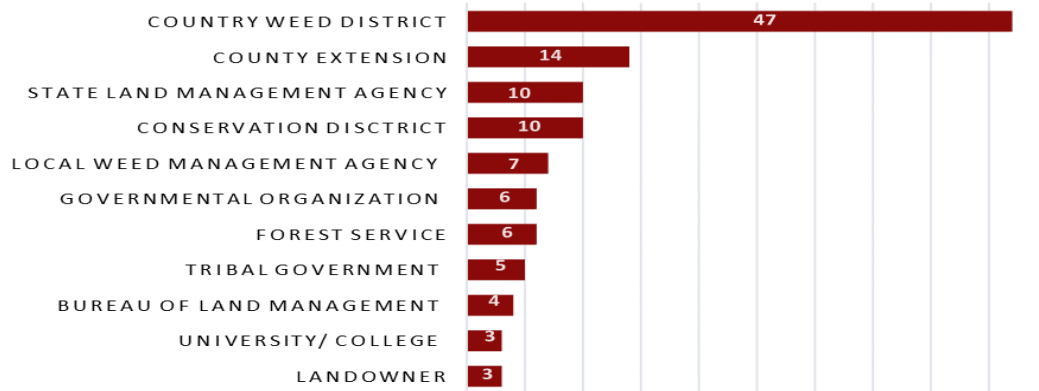
# 2019 Montana Biocontrol Coordination Project (MTBCP) Assessment



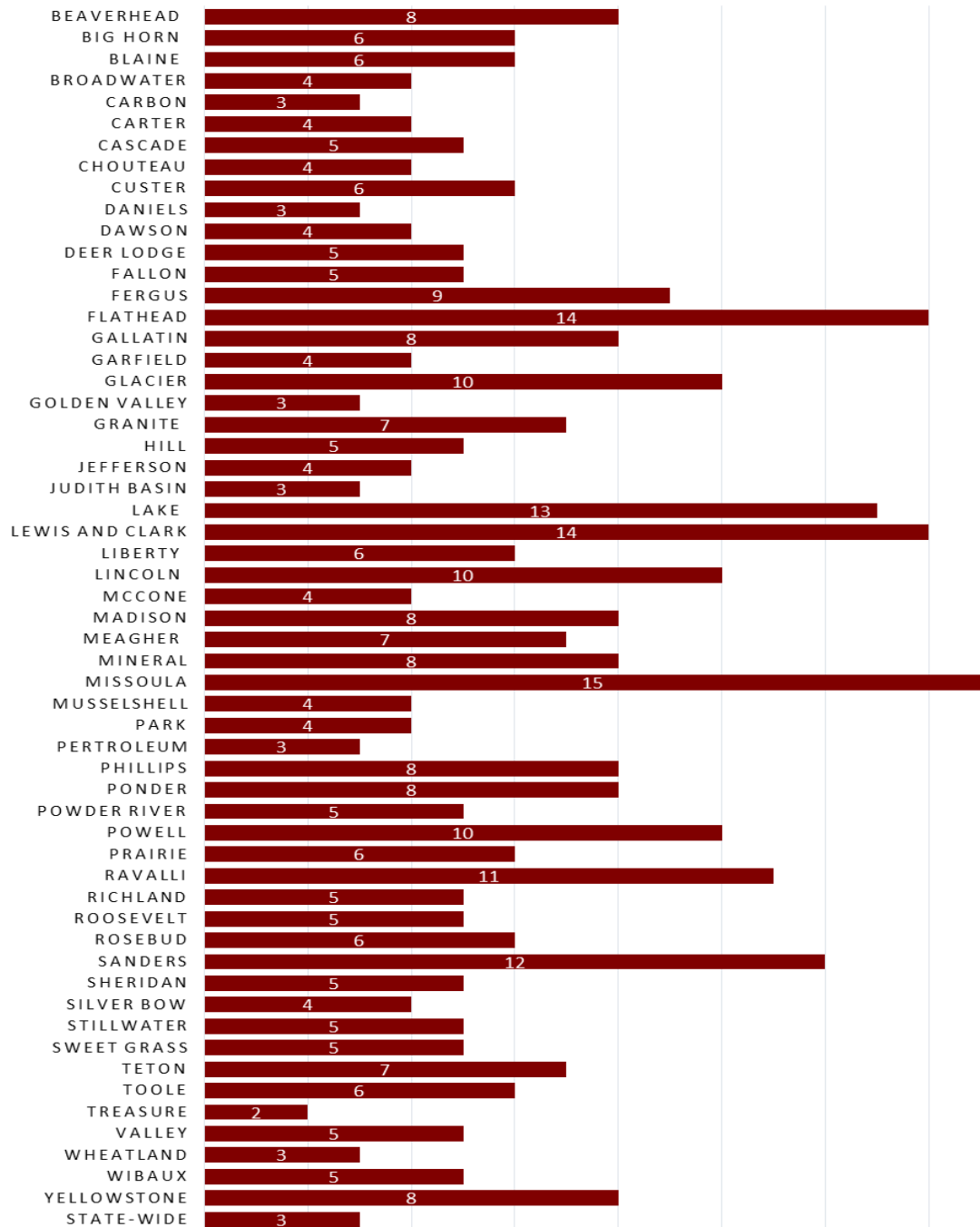
**Noxious Weed Trust Fund**  
Montana Department of Agriculture



## WHAT IS YOUR AGENCY/ORGANIZATIONS AFFILIATION?

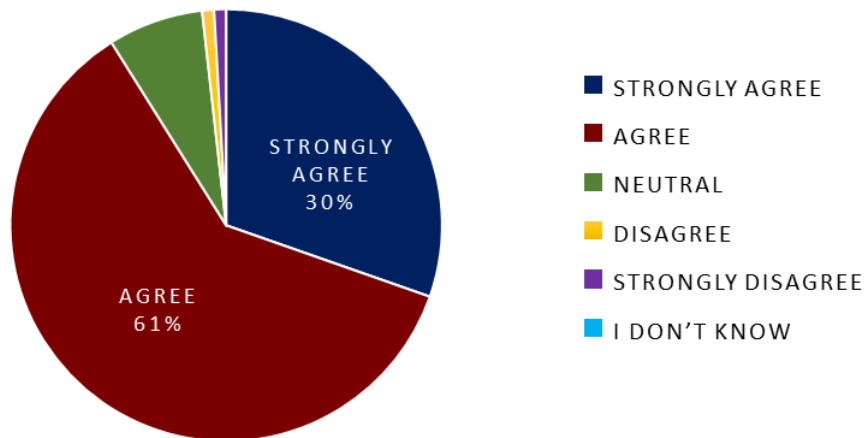


## IN WHAT COUNTY(IES) ARE THE LANDS YOU MANAGE WITHIN?

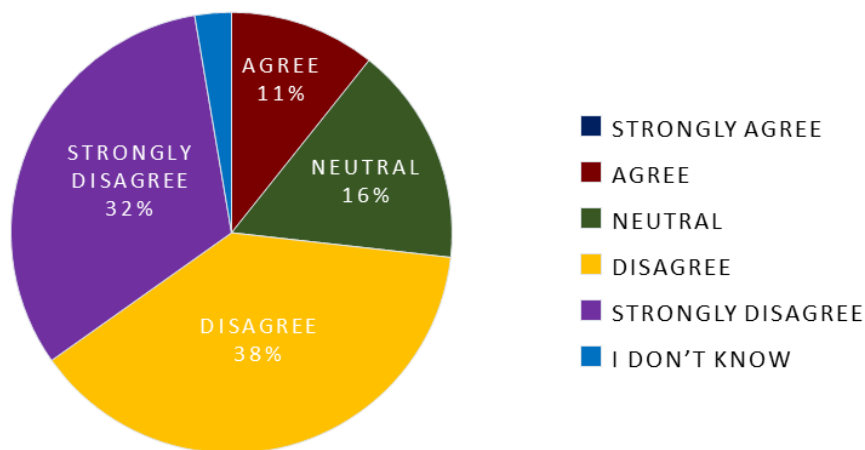


*How much do you agree with the following statements regarding biocontrol?*

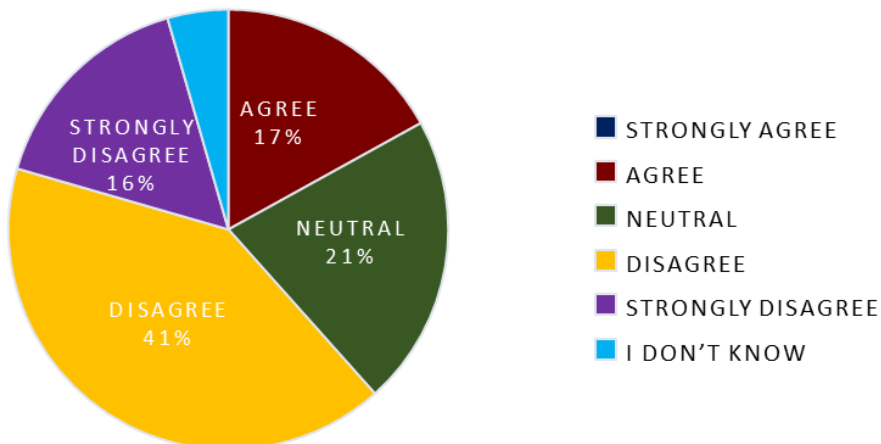
**"BIOCONTROL IS EFFECTIVE FOR CONTROLLING INVASIVE SPECIES."**



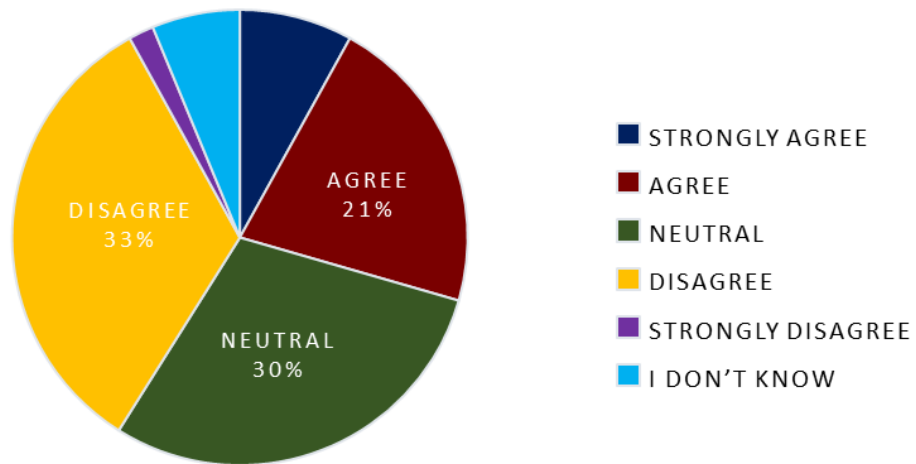
**"BIOCONTROL AGENTS COULD BECOME A PEST TO HUMANS AND/OR PETS."**



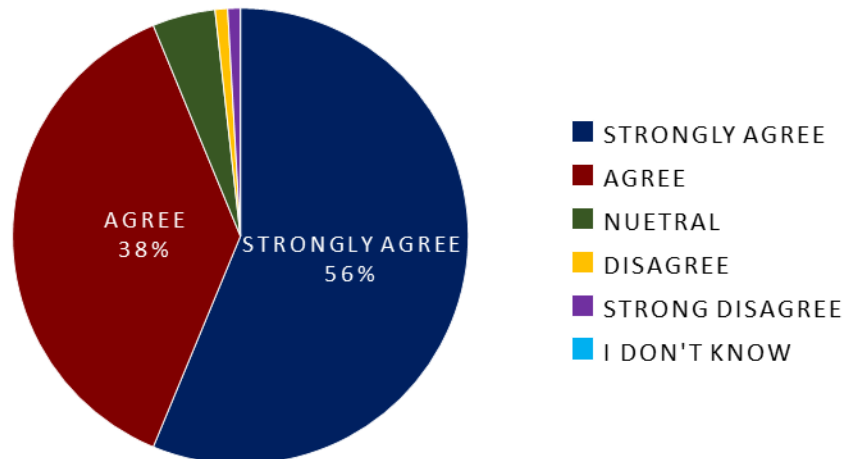
**"BIOCONTROL COULD HARM NATIVE SPECIES."**



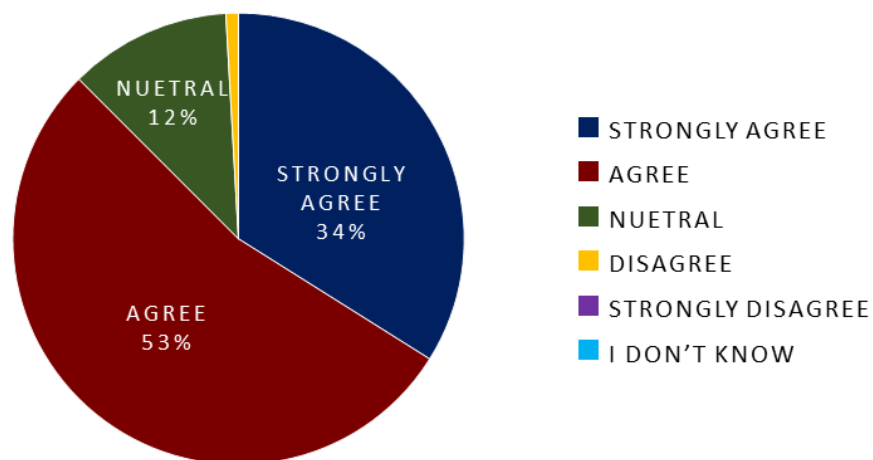
"THERE ARE NO PROBLEMS WITH BIOCONTROL."



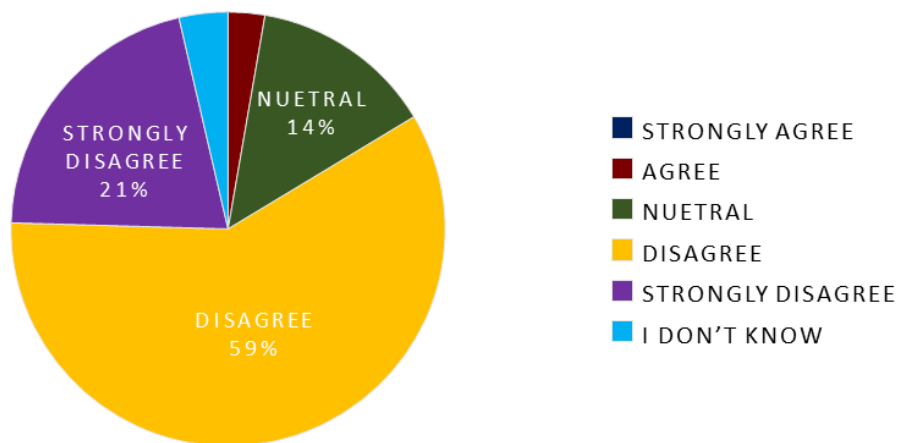
"I SUPPORT THE USE OF BIOCONTROL TO MANAGE INVASIVE SPECIES."



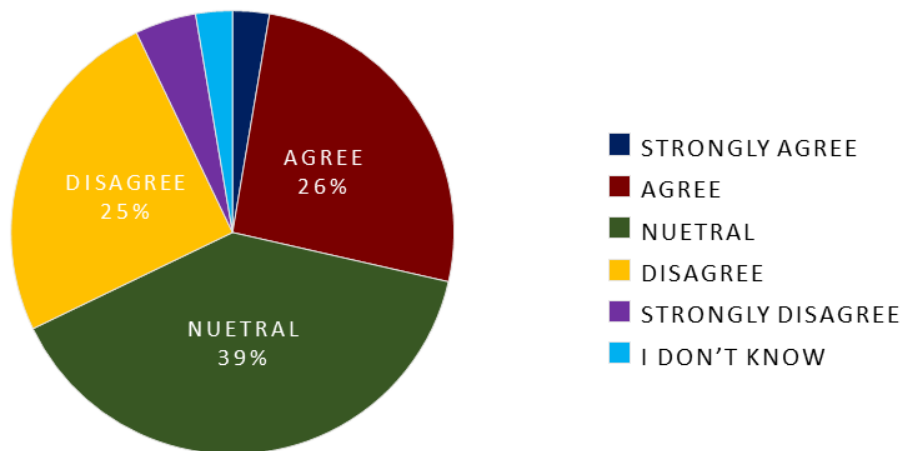
"BIOCONTROL BENEFITS NATIVE SPECIES."



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

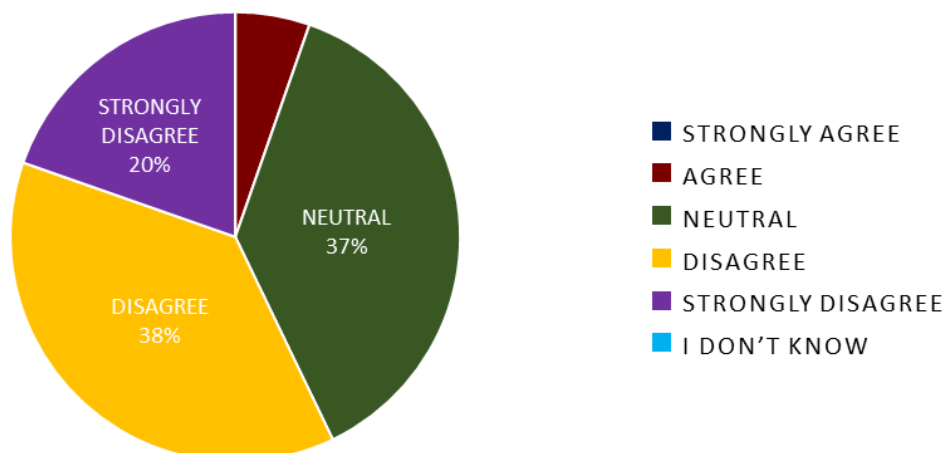


"BIOCONTROL OF NOXIOUS WEEDS IS ACCEPTABLE,  
EVEN IF THE BIOCONTROL AGENTS MIGHT FEED ON NATIVE PLANTS."

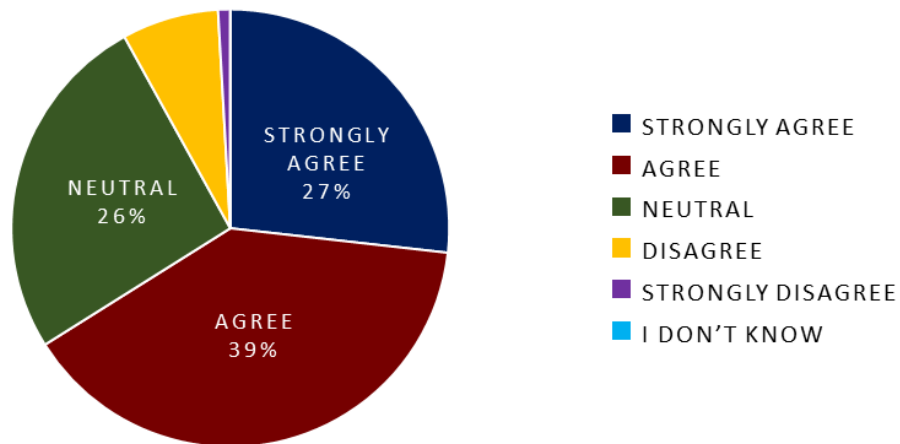


*How much do you agree with the following statements regarding biocontrol and pesticides?*

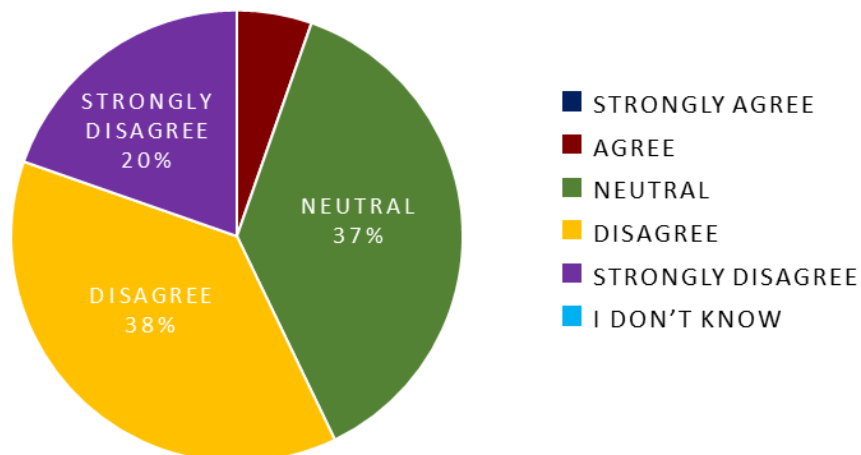
"PESTICIDES ARE SAFER FOR THE ENVIRONMENT THAN BIOCONTROL."



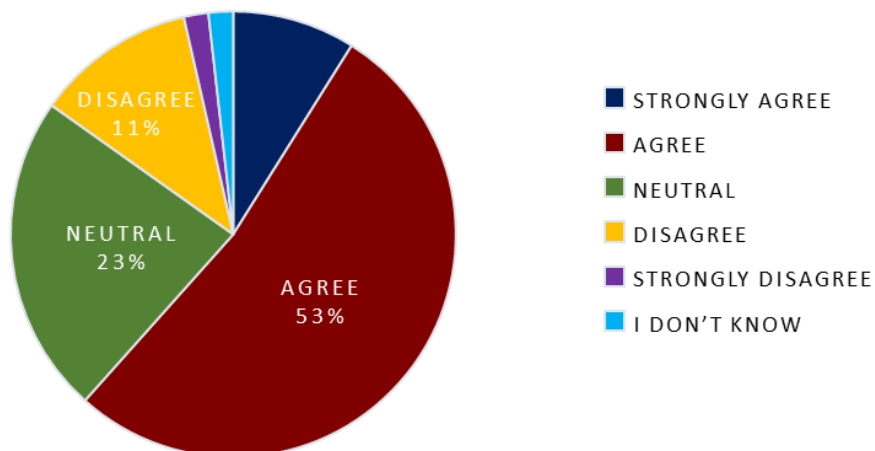
"BIOCONTROL IS SAFER FOR THE ENVIRONMENT THAN PESTICIDES."



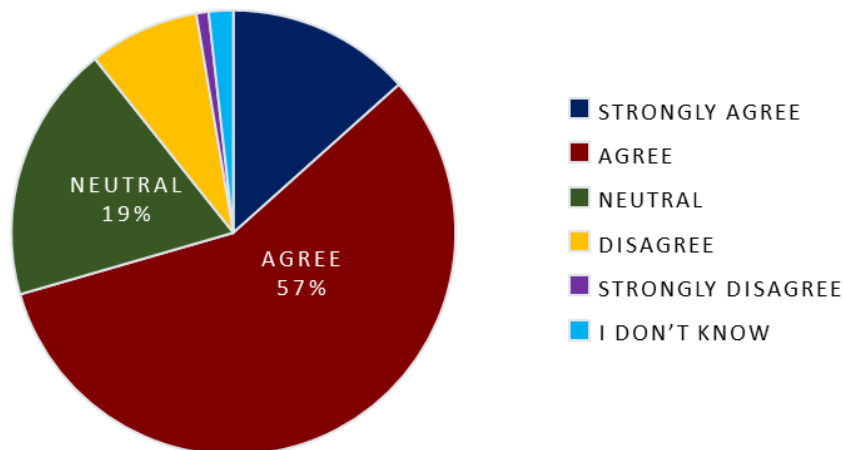
"PESTICIDES ARE SAFER FOR THE ENVIRONMENT THAN BIOCONTROL."



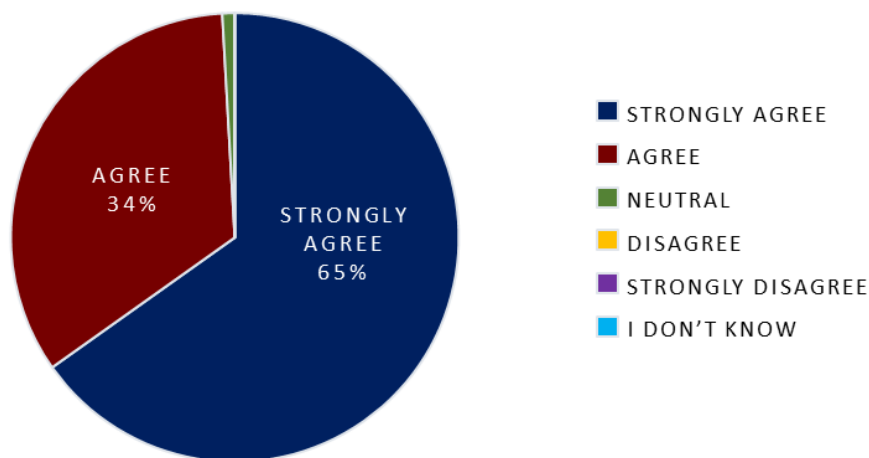
"THE ENVIRONMENTAL RISKS OF PESTICIDES ARE ACCEPTABLE IF THEY CONTROL INVASIVE SPECIES."



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

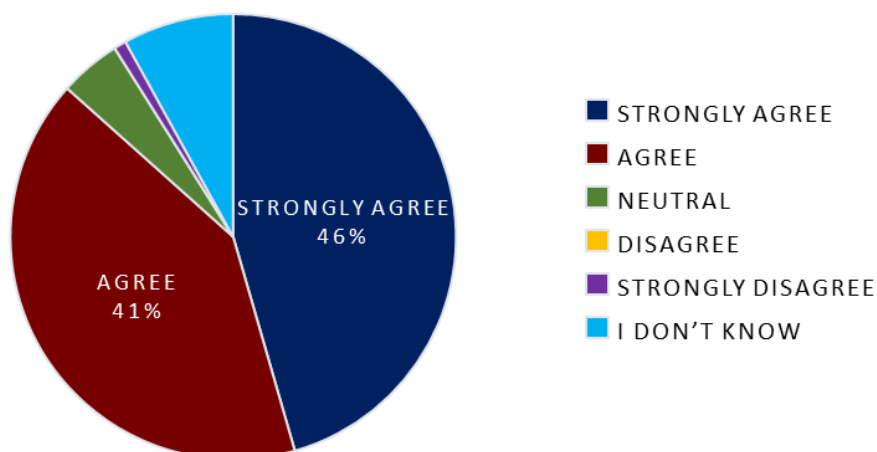


"BIOCONTROL AND PESTICIDES BOTH HAVE THEIR PLACE IN CONTROLLING INVASIVE  
SPECIES."

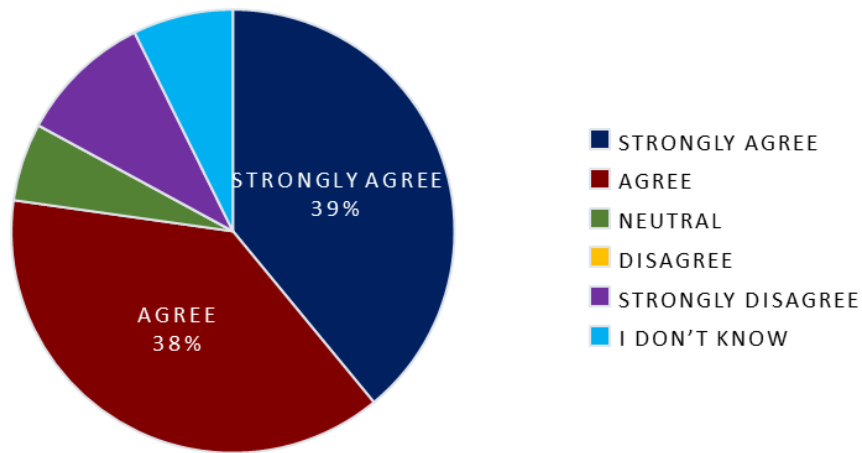


*How much do you agree with the following?*

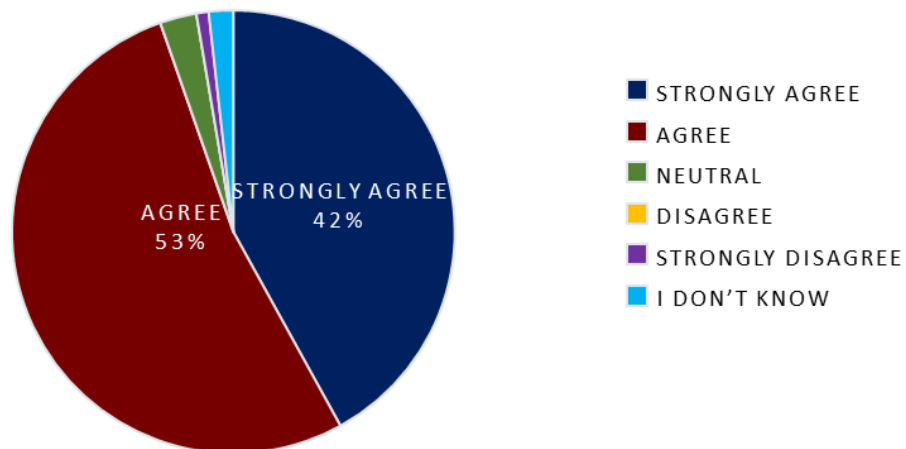
"POTENTIAL BIOCONTROL AGENTS ARE TESTED TO ENSURE THEY WILL NOT FEED  
ON NATIVE SPECIES."



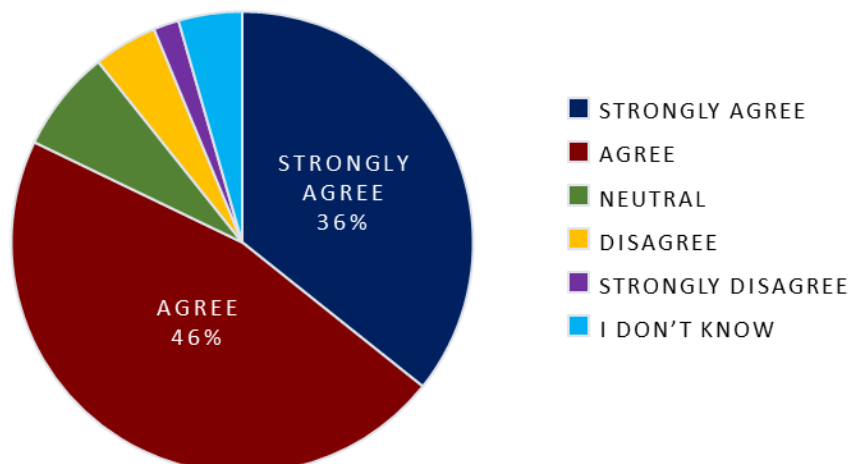
"POTENTIAL BIOCONTROL SPECIES ARE TESTED TO ENSURE THEY WILL NOT FEED ON ECONOMICALLY IMPORTANT SPECIES."



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

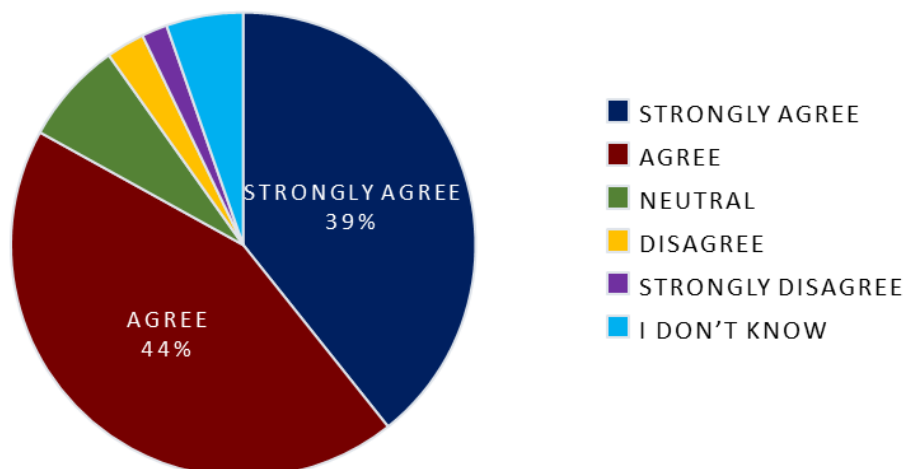


"EXPERTS AND REGULATORY OFFICIALS REVIEW ALL POTENTIAL ENVIRONMENTAL IMPACTS OF BIOCONTROL AGENTS BEFORE THEY CAN BE RELEASED IN THE ENVIRONMENT."

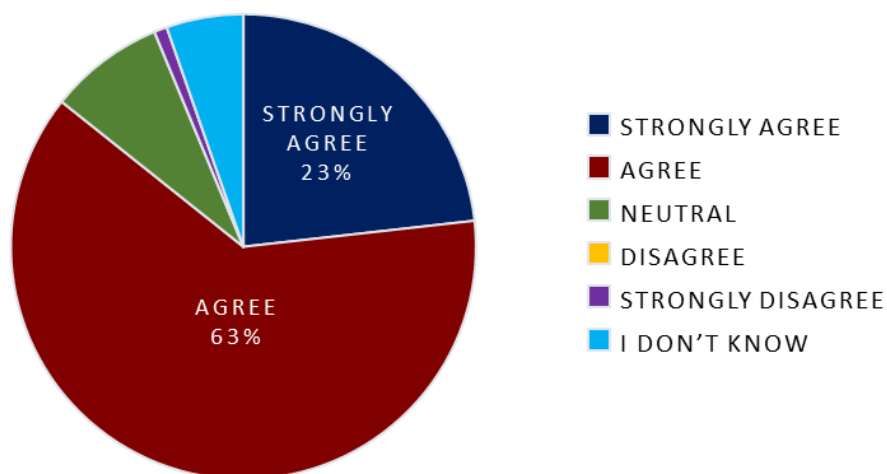




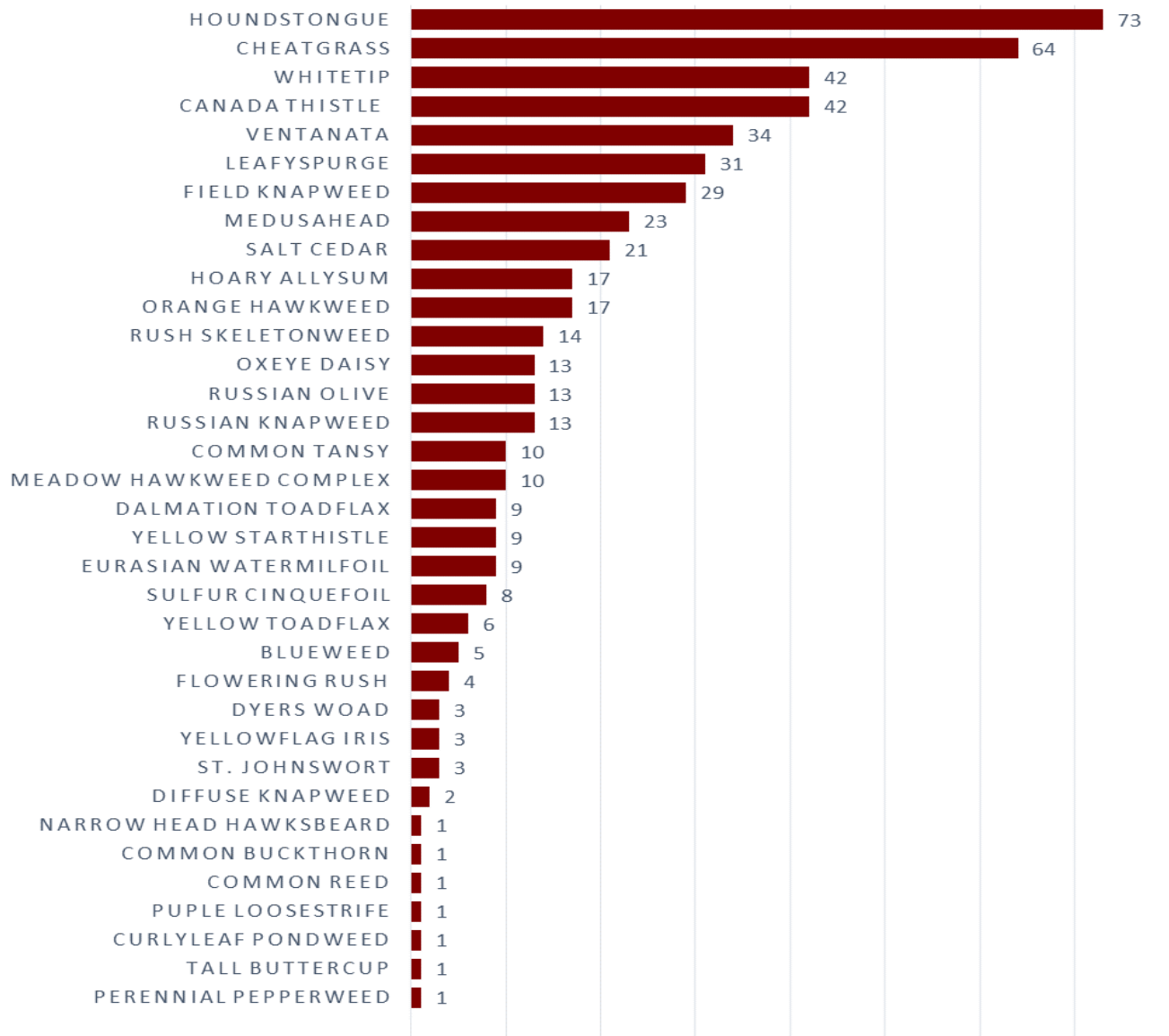
**"ALL BIOCONTROL AGENTS MUST BE PERMITTED BY THE FEDERAL GOVERNMENT  
BEFORE THEY CAN BE RELEASED."**



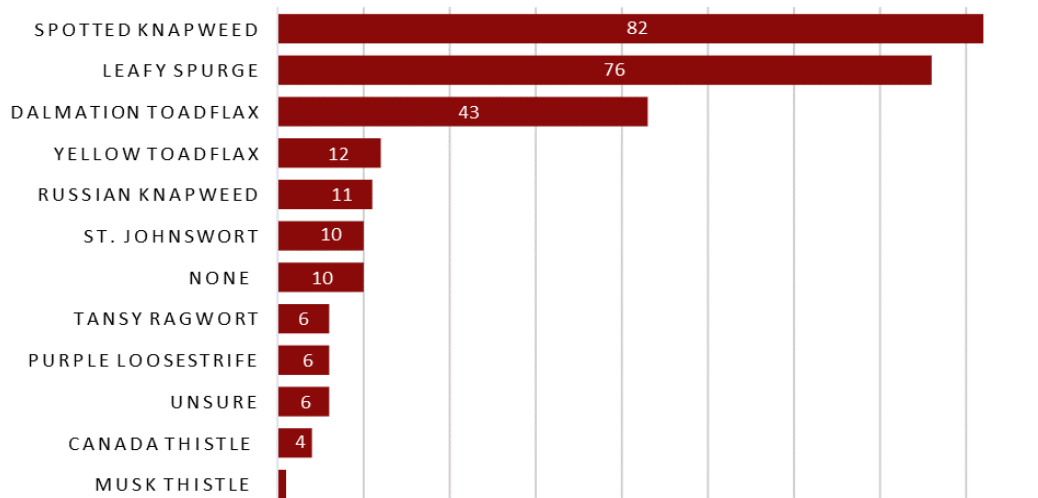
**"THE REGULATORY AGENCIES WHO APPROVE BIOCONTROL AGENTS FOR RELEASE  
INTO THE ENVIRONMENT REACH RELIABLE CONCLUSIONS."**



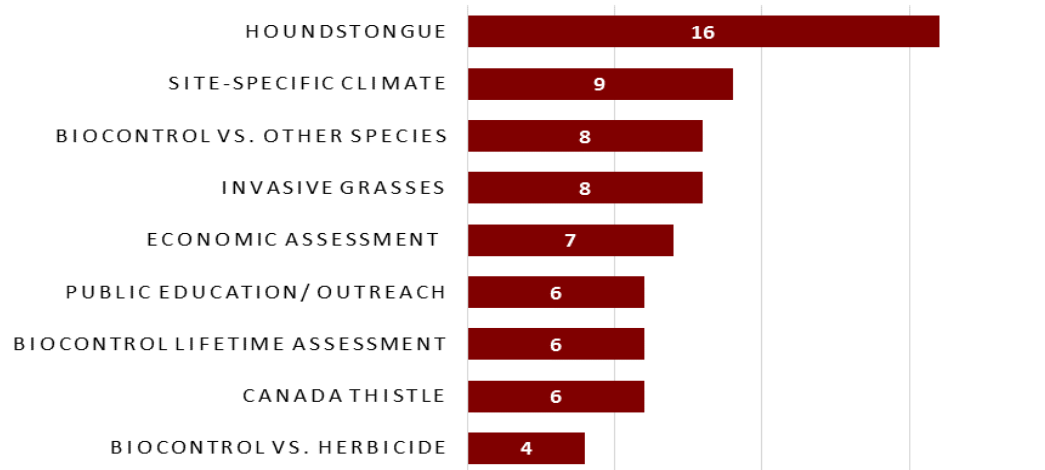
## WHAT ARE THE TOP 5 WEEDS YOU BELIEVE SHOULD BE TARGETED FOR DEVELOPMENT OF NEW BIOCONTROL AGENTS?



## WHAT ARE THE 3 MOST EFFECTIVE BIOCONTROL SYSTEMS FOR THE LAND YOU MANAGE?



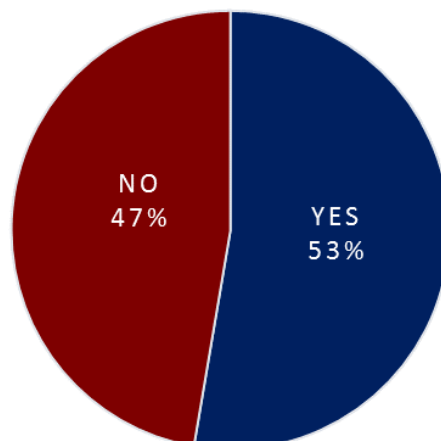
## WHAT OTHER BIOCONTROL RESEARCH WOULD BENEFIT YOUR INVASIVE PLANT MANAGEMENT PROGRAM?



**At least three other respondents suggested research on other invasive plants for potential biocontrol. they are listed below.**

SALT CEDAR  
BINDWEED  
JAPANESE KNOTWEED  
WHITETOP  
LEAFY SPURGE  
RUSSIAN OLIVE  
HAWKWEED  
POISON HEMLOCK  
TEASEL  
COMMON TANSY  
SULFUR CINQUEFOIL  
DALMATIAN TOADFLAX  
HOARY ALLYSUM  
BLUEWEED

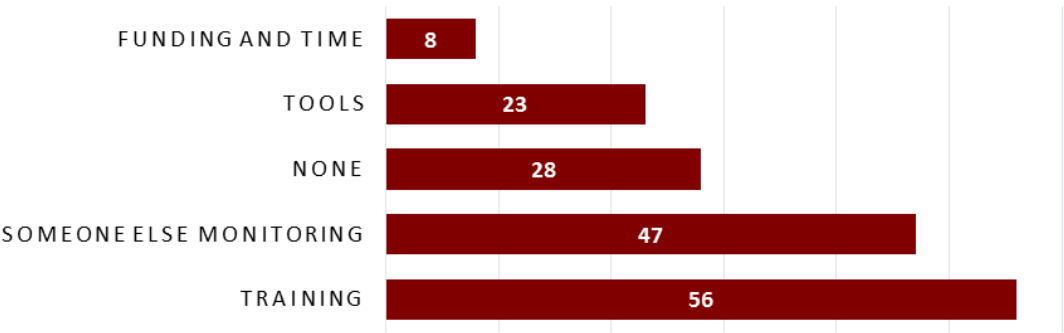
## DOES YOUR AGENCY/ORGANIZATION HAVE A STANDARD FORM THEY COMPLETE WHEN MAKING RELEASES?



# If yes, how do you utilize this information?

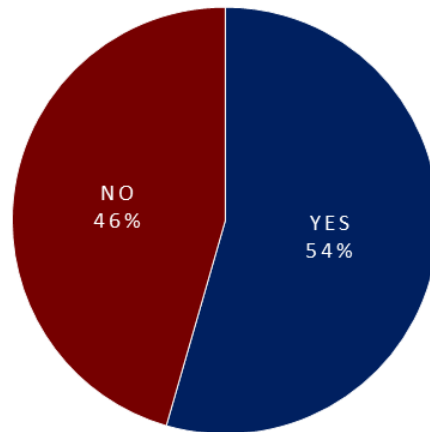
REPORT TO LARGER DATABASE (GOVERNMENTAL OR NON)  
KEEP ON FILE (I.E. RECORD KEEPING)  
HISTORICAL RECORDS FOR MONITORING ESTABLISHMENT, COLLECTABILITY, AND EFFECTIVENESS.  
THE LOCATION, TIME, AND WEATHER.  
GIS DATA COLLECTION AND MAPPING RELEASES.  
I MOSTLY USE THE SPECIES, LOCATION, AND NUMBERS INFORMATION ON THE FORMS.  
THAT LETS ME KNOW WHERE TO GO BACK AND MONITOR, AND TELLS ME WHERE WE SHOULD AVOID USING HERBICIDE  
OR FIRE.  
TRACK OTHER INSECT SIGHTINGS (OR ABSENCE OF) AND INFESTATION SIZES.  
I INTEND TO STANDARDIZE OUR COLLECTION/RELEASE/MONITORING FORMS.  
“I INTEND TO USE ANY PREVIOUS RELEASE SITE DATA AND PRIORITIZE THE ESTABLISHMENT OF LONG TERM MONITORING  
SITES WHERE APPLICABLE TO COLLECT QUANTITATIVE DATA ON THE IMPACTS OF OUR RELEASES ON THE WEED POPU-  
LATIONS.”  
KEEP TRACK OF RELEASE DATES AND INFESTATION LEVELS TO MEASURE EFFECTIVENESS INTO THE FUTURE.  
I SUMMARIZE AND ADJUST FUTURE MANAGEMENT PLANS.  
YES, AND WE ENTER IT INTO THE IDAHO STATE DATABASE MANAGED AT THE NEZ PERCE BIOCONTROL CENTER FOLLOW  
UP MEASUREMENTS AND PLANT SURVEY.  
VOLUME, LOCATION, SPECIES AND CONDITIONS OF THE LANDSCAPE FORM IS COMPLETED AND THEN ENTERED INTO A  
NATIONAL DATABASE.  
EVENTUALLY YOU WILL GET IT - BUT ALSO RESEARCH FOR MONITORING AND MAPPING REASONS  
MOSTLY FOR LOCATION AND DATE OF RELEASE TO DETERMINE THE EFFECTIVENESS OF THE RELEASE.

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



*Have you or staff attended a Montana Biocontrol Coordination presentation or workshop?*

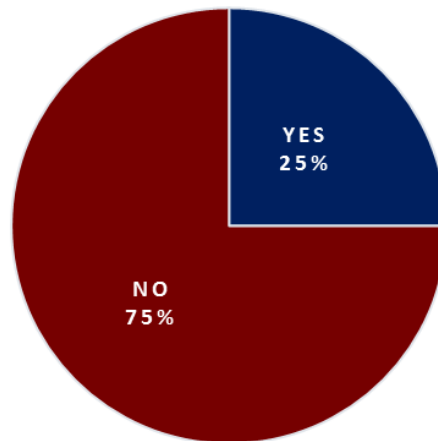
HAVE YOU OR YOUR STAFF ATTENDED A MONTANA BIOCONTROL  
COORDINATION PROJECT (MTBCP) PRESENTATION OR WORKSHOP?



**If yes, briefly describe what, if anything, you have learned from attending presentation and/or workshop.**

UNDERSTANDING SITE PREFERENCES FOR BIOLOGICAL CONTROL RELEASES  
THAT NOT ALL SITES ARE SUITABLE FOR BIOCONTROL.  
MONITORING AND BIOLOGY OF AGENTS.  
BIOCONTROL AGENTS ARE HIGHLY REGULATED - US IS CONSERVATIVE ABOUT APPROVAL OF NEW PRO-  
SPECTS, UPDATES, COLLECTION AND DISTRIBUTION OPPORTUNITIES  
MYTH DEBUNKING.  
RELEASE, MONITORING AND COLLECTION PROCEDURES.  
CURRENT RESEARCH ON BIOLOGICAL CONTROL AGENTS.  
TIME FRAME FOR SEEING RESULTS OF USING BIOCONTROL.  
BIOCONTROL VERSUS OTHER REMOVING AGENTS.  
COUNTRY WIDE MOVEMENTS TO USE BIOCONTROL AS INVASIVE PLANT MANAGEMENT: POWER OF WORKING  
ACROSS BORDERS TOWARDS A COMMON GOAL.  
INSECT SPECIES AND WHAT PLANTS THEY CAN CONTROL.  
WHERE TO FIND RESOURCES, AND WHY SOME AVAILABLE INSECT RESULTS ARE LIMITED.  
SITE-SPECIFIC CONCERNS: CHARACTERISTICS OF YOUR PROPERTY THAT WILL ALLOW/DISALLOW INSECT RE-  
LEASES.  
LIFE HISTORY OF BIOCONTROL SPECIES.  
THERE IS STILL A LOT OF KNOWLEDGE YET TO BE EXPLORED IN REGARD TO BIOCONTROL.  
TESTING/APPROVING OF BIOCONTROL IN YOUR AREA.  
HOW BIOCONTROL WORKS, HOW TO MEASURE SUCCESS, AND THE SCOPE OF CHANGE THAT IS POSSIBLE.

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



**If yes, please describe.**

COOPERATED WITH MORE LANDOWNERS TO RELEASE BIOCONTROL OPTIONS INSTEAD OF CHEMICAL APPLICATIONS.

RECOMMENDATIONS TO PRODUCERS

BETTER MONITORING PROCEDURES FOR BIOCONTROL

I NOW RELEASE THEM AT SITES MORE SUITABLE TO THEIR SURVIVAL.

EVALUATING SITE CHARACTERISTICS WITH CLIENTS MORE CLOSELY (SIZE/DENSITY OF PATCHES

BETTER DOCUMENTATION & BASELINE DATA COLLECTION, SIMP MONITORING SITES, AND GENERAL MONITORING SITES. TIMING CONTROL MEASURES TO FIT THE PLANT LIFE-CYCLE

DISCUSS THE ISSUE WITH NEIGHBORS AND FRIENDS

DID MORE RELEASES OF LEAFY SPURGE FLEA BEETLES

I PAY MORE ATTENTION TO WHERE I PUT A RELEASE SO IT IS MORE LIKELY TO BE SUCCESSFUL.

BEGAN USING BIOCONTROL IN OUR DISTRICT AGAIN

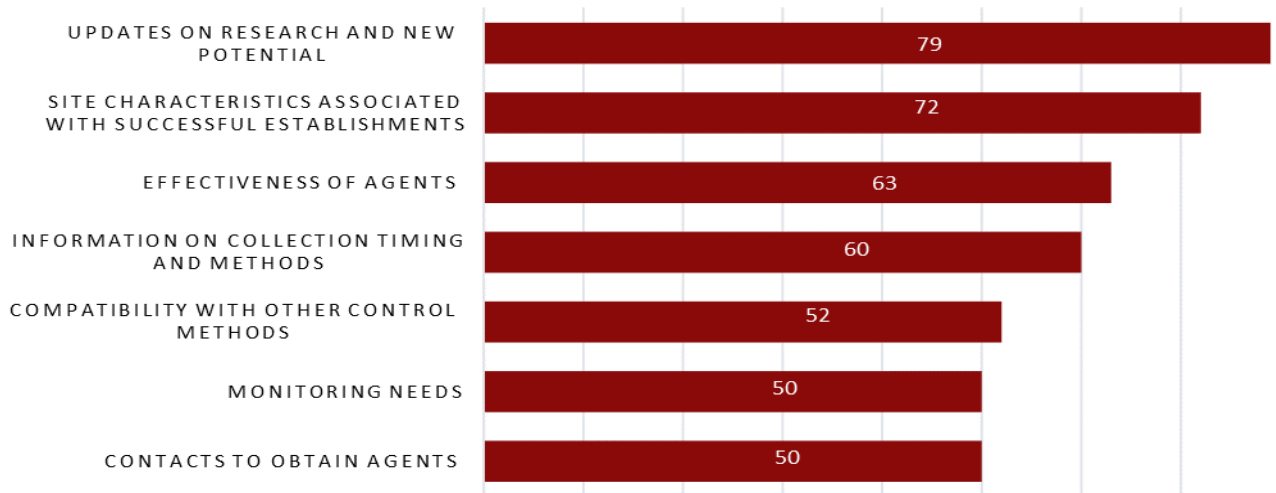
PRIORITIZATION OF SITES TO RELEASE AND OR/RERELEASE

I NOW HAVE A MORE STANDARDIZED METHOD OF PRIORITIZING.

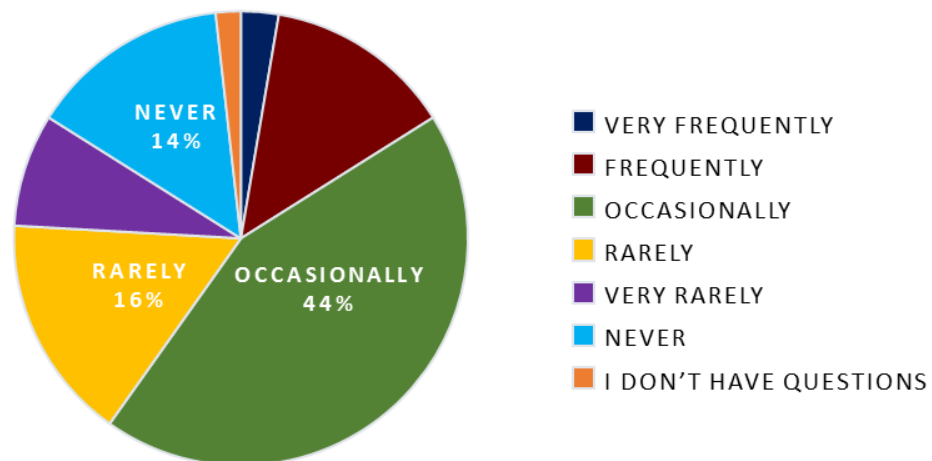
PROVIDED EDUCATIONAL RESOURCES AND REFERRED PEOPLE HOW TO OBTAIN BIO-CONTROL AGENTS

RELEASED CANADA THISTLE MINING WEEVIL AND GALL FLY, ALTHOUGH NOT AS GOOD AS BELIEVED WE STILL RELEASED MANY INTO THE COUNTY.

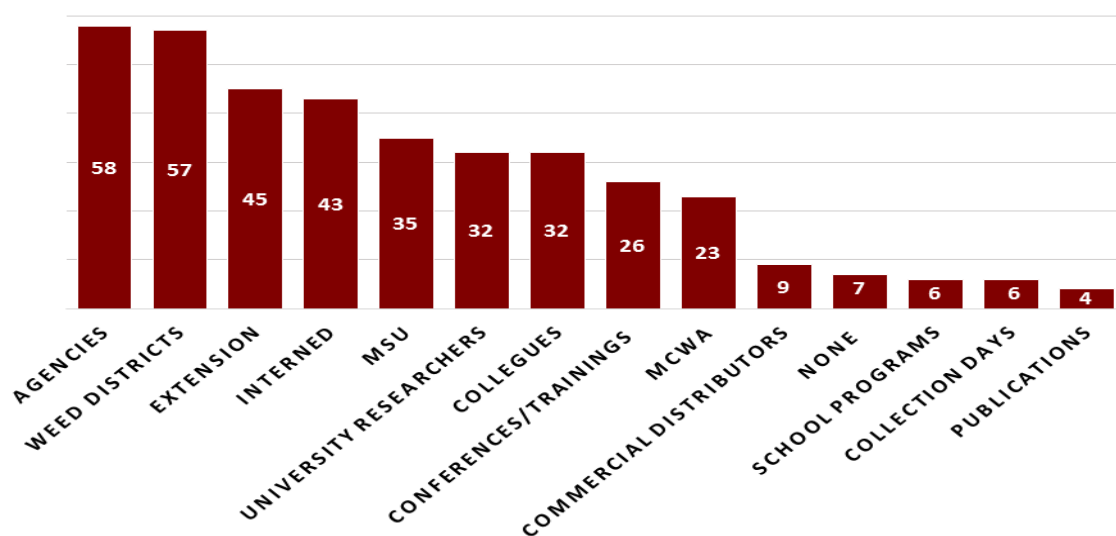
## WHAT INFORMATION ON THE USE OF BIOCONTROL WOULD BENEFIT YOUR WEED MANAGEMENT PROGRAM?



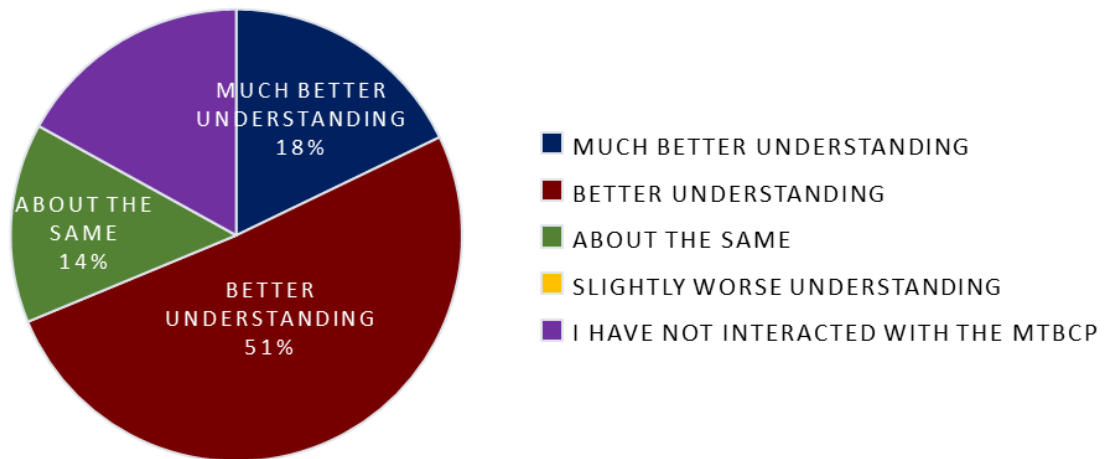
## HOW FREQUENTLY DO YOU CONSULT MTBCP FOR YOUR BIOCONTROL QUESTIONS?



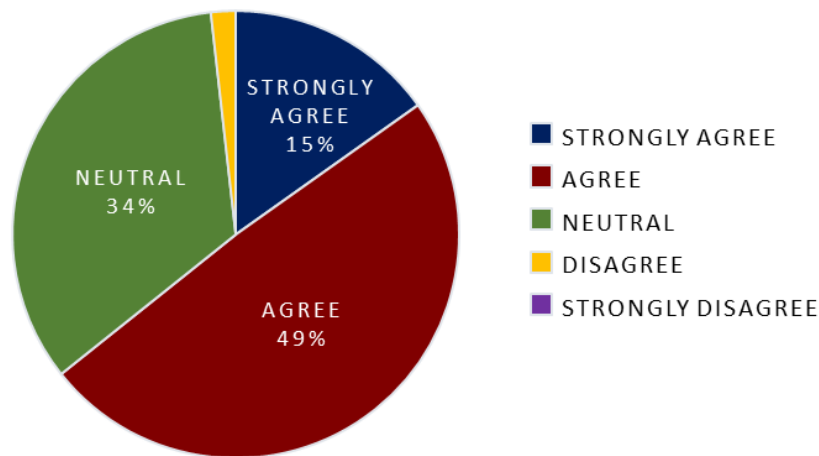
## WHAT OTHER RESOURCES DO YOU USE TO GET INFORMATION ON WEED BIOCONTROL?



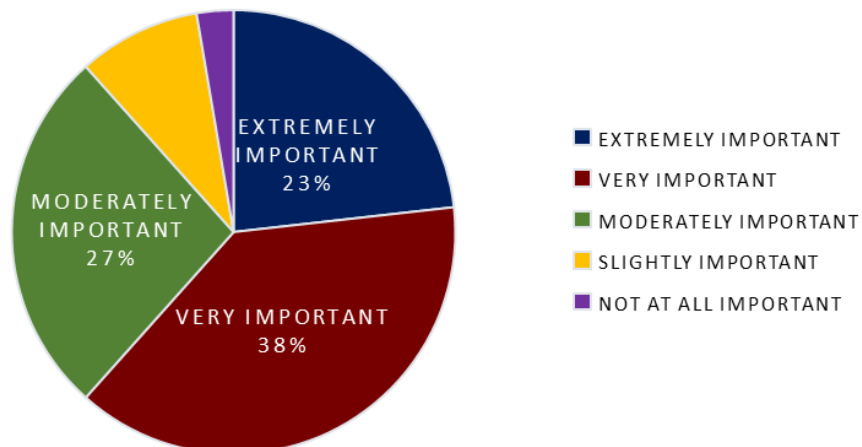
HOW HAS YOUR UNDERSTANDING OF BIOCONTROL CHANGES AFTER INTERACTING WITH MTBCP?



DOES MTBCP HELP YOU STAY UP-TO-DATE WITH THE LATEST BIOCONTROL RESEARCH PROJECTS?

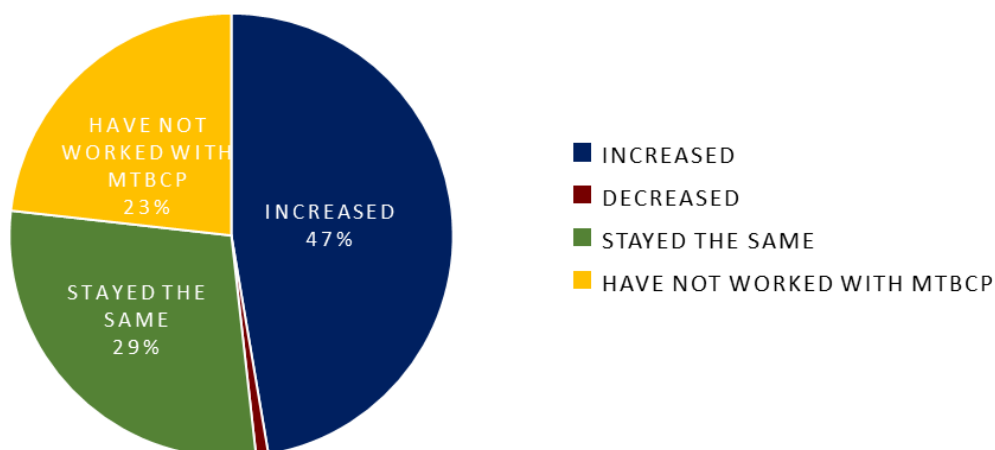


HOW IMPORTANT DO YOU CONSIDER BIOCONTROL USE AS PART OF YOUR INTEGRATED WEED MANAGEMENT PLAN?

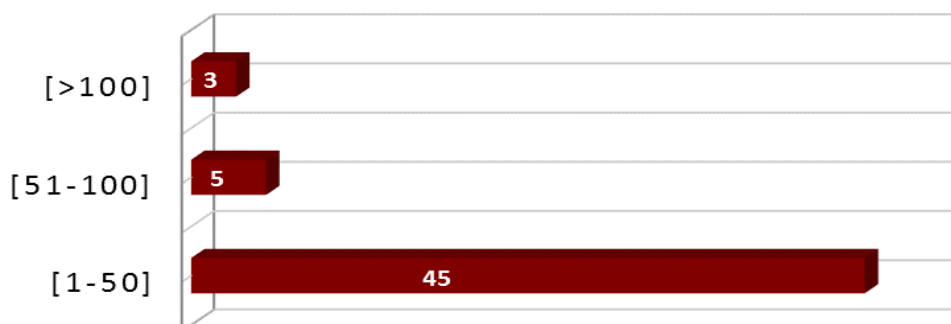




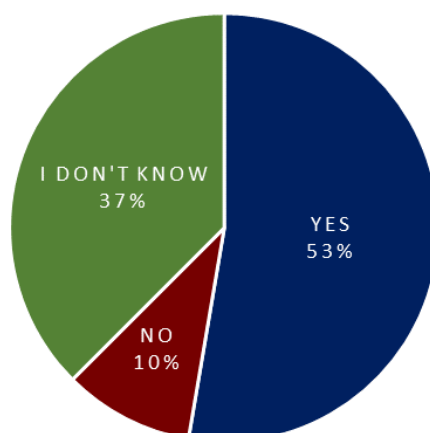
"SINCE YOU BEGAN WORKING WITH MTBCP, YOUR USE OF BIOCONTROL HAS..."



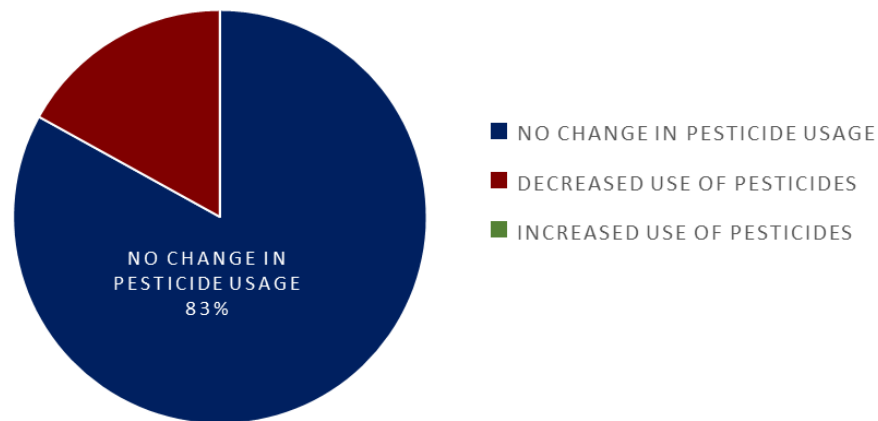
SINCE YOU BEGAN WORKING WITH MTCBP,  
APPROXIMATELY HOW MANY RELEASES DO YOU MAKE  
ANNUALLY?



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



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



### If increased or decreased, please briefly explain how.

LANDOWNERS USE BIOCONTROL IN AREAS THAT THEY EITHER PREVIOUSLY OR NEVER WANTED TO/ COULDN'T USE HERBICIDES

AREAS IDENTIFIED FOR BIOCONTROL USE, DID NOT RECEIVE ANY HERBICIDE APPLICATIONS.

WHERE THE RELEASES WERE EFFECTIVE, THERE WAS NO NEED OR AT LEAST A REDUCTION IN THE AMOUNT OF HERBICIDE TO KEEP THOSE SITES CLEAN.

DECREASED - BIOCONTROL'S ARE BEING USED MORE WHERE PESTICIDES ARE NOT APPLICABLE AREAS THAT SHOW AN IMPACT FROM BIOCONTROL ARE NOT TREATED WITH HERBICIDE.

BECAUSE MORE BIOCONTROL AGENTS ARE AVAILABLE PRODUCERS ARE MORE LIKELY TO USE THEM THAN PESTICIDES I DON'T USE PESTICIDES ON ANY RELEASE SITES.

WE DON'T USE PESTICIDES ON NOXIOUS WEEDS THAT ARE CONTROLLED BY BIOLOGICAL AGENTS EXCEPT IN AREAS CONSIDERED TO BE HIGH VECTORS OF SPREAD ON DALMATIAN TOADFLAX, JUST TREATING OUTSIDE PERIMETER.

WE TREAT SATELLITE INFESTATIONS AND LEAVE LARGER INFESTATIONS FOR BIOCONTROL.

MORE SELECTIVE PESTICIDE TREATMENTS AND SINCE THERE ARE FEWER PLANTS THEREFORE LESS PESTICIDE IS REQUIRED.

LESS WEEDS

RELYING MORE LETTING BIO CONTROL WORK OVER TIME

DECREASED APPLICATIONS OF HERBICIDES

BLM DOESN'T SPRAY WHERE WE RELEASE BIOCONTROL...IF NOT ESTABLISHED THEN WE SPRAY HERBICIDES...THIS IS NO DIRECT RELATION TO REDUCING HERBICIDES...BLM DOESN'T SPRAY "PESTICIDES" AS STATED IN THIS SURVEY.

BIOCONTROL AND HERBICIDES WORK IN CONJUNCTION.

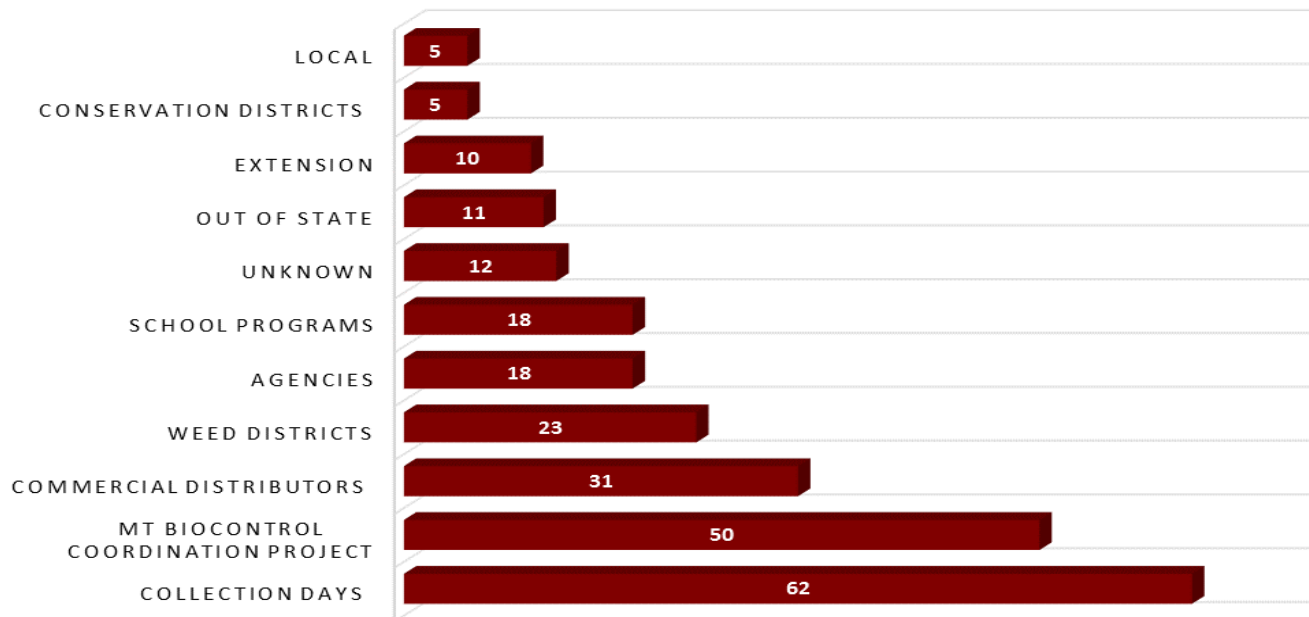
NOT GOING TO BE ABLE TO MEASURE REDUCTION IN HERBICIDE BECAUSE OF BIO CONTROL.

**"WE HAVE STOPPED USING PESTICIDES IN SEVERAL AREAS THAT ARE VERY DIFFICULT TO REACH OR ENVIRONMENTALLY RISKY, THEREFORE ARE MORE SUITED TO BIOCONTROL."**

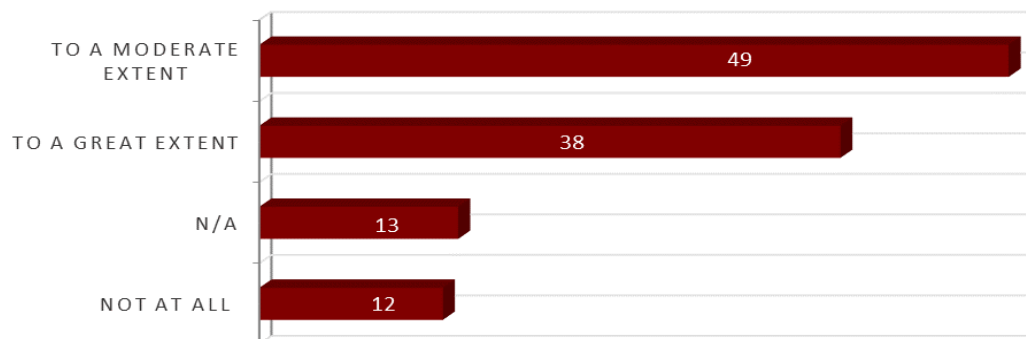
USED AGENTS INSTEAD OF SPRAYING NEITHER

IN AREAS THAT ARE HARD TO GET TO IT IS THE ONLY OPTION THERE IS AND IT IS LESS COSTLY THAN HERBICIDE USE.

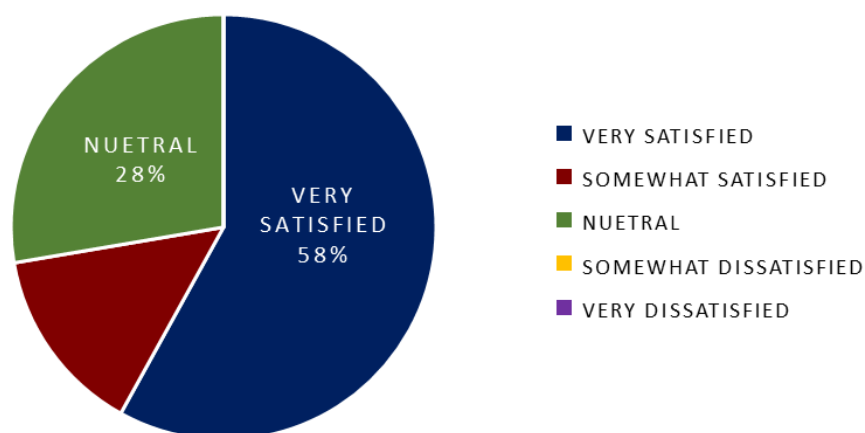
## WHERE DO YOU GET YOUR BIOCONTROL AGENTS FROM?



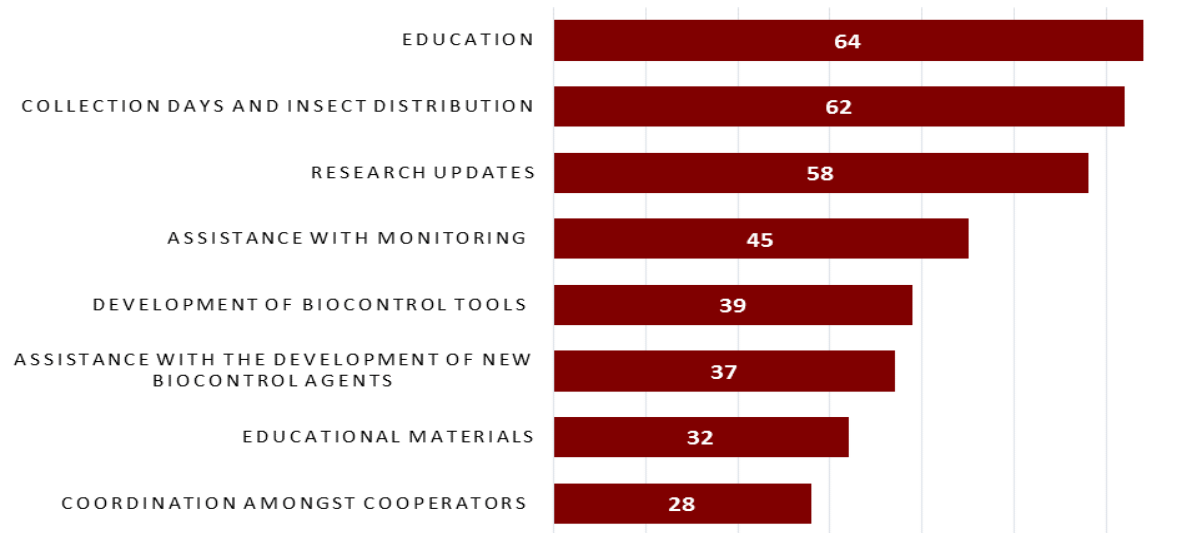
## TO WHAT EXTENT DOES MTBCP MEET YOUR BIOCONTROL NEEDS?



## HOW SATISFIED ARE YOU WITH YOUR INTERACTIONS WITH MTBCP?



## WHAT SERVICES WOULD YOU LIKE MTBCP TO PROVIDE?



## Additional Comments:

THANK YOU FOR THE WORK YOU DO TO HELP PROVIDE ANOTHER ALTERNATIVE TO WEED CONTROL. IT SEEMS IMPERATIVE THAT WE NEED MANY TOOLS IN THE BOX TO BEST CONTROL WEEDS AND BIO-CONTROL IS AN IMPERATIVE ALTERNATIVE THAT FITS IN AREAS OF DIFFICULT AND COSTLY ACCESS FOR LABOR AND EQUIPMENT. AND THESE BIO-CONTROL METHODS WORK FOR US WHEN WE ARE NOT AT THE SITE.

THANKS AGAIN FOR YOUR CONTINUED WORK! WE APPRECIATE WHAT YOU DO! THANK YOU MTBCP  
THANKS YOU DO A GOOD JOB

**IF THERE WAS A WAY THAT APPLICATORS COULD USE BIOLOGICAL CONTROLS TO MEET LANDOWNERS MANAGEMENT GOALS AND GENERATE INCOME THERE WOULD BE POTENTIAL FOR MUCH WIDER USE OF THESE AGENTS.**

HOWEVER, THE TIME REQUIRED FOR AN APPLICATOR TO ASSIST LANDOWNERS IN THE USE OF BIO-CONTROL IS NOT WORTH THE AMOUNT OF REVENUE THAT CAN BE GENERATED. SAME STORY WITH USING VERBENONE PATCHES FOR PINE BEETLES.

WASTE OF TIME AND YOU LOSE MONEY COMPARED TO SPRAYING TREES FOR PREVENTION.

I THINK BIOCONTROL IS A GOOD THING, JUST EXPLAINING WHY AS A PROFESSIONAL APPLICATOR I DO NOT RECOMMEND OR PROMOTE THE USE OF BIOLOGICAL CONTROLS TO CUSTOMERS.

PLEASE DO LET US AT RAILS TO TRAILS OF NW MONTANA (OR THE GREAT NORTHERN HISTORICAL TRIAL) KNOW IF THERE ARE WAYS WE CAN WORK WITH BIO CONTROL IN THE FUTURE

SOMEWHAT DISAPPOINTED WITH RESULTS MELISA IS DOING A GREAT JOB AND GLAD TO HAVE HER AS OUR BIOCONTROL PERSON. THIS IS A GREAT PROGRAM, AND MELISSA & OTHERS ARE VERY MUCH APPRECIATED.

MELISSA DOES A SUPER JOB. SHE HAS REALLY FILLED IN SOME GAPS IN OUR BIOCONTROL PROGRAM. THANK YOU!

MT BIO IS AND HAS BEEN AN INTEGRAL PART OF BIOCONTROL OUTREACH/KNOWLEDGE AND SUCCESS ACROSS THE STATE OF MT.

IF THEY COULD EXPAND TO ASSIST WEED DISTRICTS IN MONITORING/RELEASE/COLLECTION, THIS WOULD GREATLY IMPROVE THE SUCCESS OF WEED DISTRICT'S BIOCONTROL PROGRAMS.

I'M GREATFUL FOR THE MONTANA BIOLOGICAL CONTROL PROGRAM!

BEING NEW TO MY POSITION, I HAD LIMITED INTERACTION WITH MTBCP OVER LAST SUMMER. BUT THEY WERE ALWAYS VERY HELPFUL WHEN I DID HAVE QUESTIONS AND I LOOK FORWARD TO BETTER DEVELOPING OUR BIOCONTROL PROGRAM IN THE FUTURE.

WE WOULD LIKE TO GET OUR COUNTY WEED BOARD ON THE SAME PAGE AS US- SEEING THE BENEFITS OF BIOCONTROL AGENTS.

MORE PROMOTIONAL INFORMATION, VIDEOS, SUCCESS STORIES ETC WOULD BE VERY BENEFICIAL FOR OUR SITUATION. THANKS!

THANK YOU I AM NOT A BIG BELIEVER IN BIOCONTROL.

THE BUGS ARE THERE, BUT THE INFESTATION IS GETTING LARGER. BUGS HAVE BEEN THERE FOR OVER 10 YEARS.

KEEP UP THE GOOD WORK

**MTBCP IS VERY VALUABLE TO MONTANA LAND MANAGERS BUT ALSO TO SURROUNDING STATES AND IDAHO IN PARTICULAR.**

WE APPRECIATE ALL YOU DO AND YOUR WILLINGNESS TO CONTINUE TO BUILD YOUR PROGRAM THROUGH PARTNERSHIPS WITH OTHERS.

THANK YOU! I HAVE GREATLY INCREASED MY KNOWLEDGE OF BIOCONTROLS WORKING WITH YOUR PROGRAM!

YOU ARE AN EXCELLENT RESOURCE.

**BIOCONTROL IS AN ESSENTIAL PART OF GOOD STEWARDSHIP**

**THIS IS A GREAT PROGRAM HAS HELPED ME ESTABLISH BIOCONTROL INTO OUR IPM PROGRAM.**

I JUST WISH THERE WERE MORE OPTIONS FOR TO TREAT MORE WEEDS.