**Noxious weeds survey**

*Introduction*: The goal of this survey is to evaluate economic losses resulting from noxious weeds on private rangeland in Montana. **Participation is completely voluntary; you may choose to not answer any questions**. Any questions or concerns can be addressed to Kate Binzen Fuller, MSU-Extension Agricultural Economist ([kate.fuller@montana.edu](mailto:kate.fuller@montana.edu)) or Jane Mangold, MSU-Extension Invasive Plant Specialist (jane.mangold@montana.edu). Thank you for taking the time to help us!

*Survey:*

1. Do you currently manage livestock?

Yes

No

*If no*, you do not need to complete the rest of the survey. Thank you for your time.

2. List the number of privately owned and/or leased rangeland acres your livestock graze each year ***excluding state, BLM and other lands leased from government agencies***.

Owned \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (# of acres)

Leased\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (# of acres)

Does your lease include agreements about noxious weed management or control?

Yes

No

*If sum of both types of private land is 0,* you do not need to complete the rest of the survey. Thank you for your time.

*Please answer all remaining questions about the largest contiguous block of privately owned land (not state or federally owned) on which you graze livestock. This block can be leased or owned. We’ll refer to this block of land as Block A for the remainder of the survey.*

3. How many acres is Block A?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_acres

4. Where is Block A located? \_\_\_\_\_\_\_\_\_\_county

5. Do you lease Block A?

Yes

No

*If yes,* what kind of lease do you have on Block A?

* + Cash per AUM, cow-calf pair, or head basis
  + Cash per-acre basis
  + Cash, other basis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Livestock share (landowner and lessee share expenses and proceeds)

6. Are you responsible for noxious weed management on Block A?

Yes, I am responsible for all noxious weed management.

I share responsibility for noxious weed management.

No, I am not responsible for noxious weed management.

7. What percentage of Block A is infested by noxious weeds listed below? For example, if 5% of Block A is covered by spotted knapweed, 10% by sulfur cinquefoil, and the remainder has very few or no weeds, place 5% next to spotted knapweed, 10% next to sulfur cinquefoil, and leave other slots blank.

If you have noxious weeds other than those listed below, list the % in the slot next to “Other.” If you have no noxious weeds on Block A, put an X in the slot next to “None.” (**Note that cheatgrass is a regulated plant, not a noxious weed, and therefore should not be considered in this survey**.)

Canada thistle\_\_\_\_\_\_\_\_

Dalmatian toadflax\_\_\_\_\_\_\_\_

Diffuse knapweed\_\_\_\_\_\_\_\_

Field bindweed\_\_\_\_\_\_\_\_

Hoary alyssum\_\_\_\_\_\_\_\_

Houndstongue\_\_\_\_\_\_\_\_

Leafy spurge\_\_\_\_\_\_\_\_

Russian knapweed\_\_\_\_\_\_\_\_

Saltcedar\_\_\_\_\_\_\_\_

Spotted knapweed\_\_\_\_\_\_\_\_

St. Johnswort\_\_\_\_\_\_\_\_

Sulfur cinquefoil\_\_\_\_\_\_\_\_

Whitetop\_\_\_\_\_\_\_\_

Yellow toadflax\_\_\_\_\_\_\_\_

Other\_\_\_\_\_\_\_

None\_\_\_\_\_\_\_\_

8. Which noxious weed do you believe causes the largest decrease in livestock production on Block A? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. What strategies do you use to *prevent* noxious weeds from becoming established on Block A (select all that apply)?

* Monitoring (looking for weeds on regular basis)
* Proper grazing management to maintain competitive vegetation
* Limiting disturbance
* Washing equipment and vehicles
* Restricting vehicle entry
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* None

10. Please indicate strategies and costs for *controlling* established noxious weeds on Block A (select all that apply). Please *do not* include labor costs for you, your family members or your employees. Please *do* include applicable custom costs such as contract sprayers or herders.

* + Chemical control

Average cost/year: \_\_\_\_\_\_\_\_\_

* + Mechanical control

Average cost/year\_\_\_\_\_\_\_\_\_

* + Biological control insects

Average cost/year\_\_\_\_\_\_\_\_\_

* + Grazing for the purpose of noxious weed control

Average cost/year\_\_\_\_\_\_\_\_\_

* + Seeding species that compete with noxious weeds

Average cost/year\_\_\_\_\_\_\_\_\_

* + Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average cost/year\_\_\_\_\_\_\_\_\_

* None

11. Estimate how many hours per year that you, your family members, and/or employees spend managing weeds on Block A, including prevention activities. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Over the last 5 years, noxious weeds on Block A have:

* Increased
* Decreased
* Remained the same
* Don’t know

Questions 13 and 14 refer to animal unit months (AUMs) on Block A. For information on AUMs and how they are calculated, please see <http://animalrange.montana.edu/documents/extension/forageconsump.pdf>

13. What is your stocking rate on Block A now? \_\_\_\_\_\_\_\_acres/AUM

14. What do you think your stocking rate would be if noxious weeds were not present on Block A?\_\_\_\_\_\_\_\_\_\_acres/AUM

15. What animals are you currently grazing on Block A? (Select all that apply)

* Sheep
* Cattle
* Goats
* Horses
* Other: \_\_\_\_\_\_\_\_\_\_

16. Regarding Block A, please indicate your level of agreement with the following statements:

Noxious weeds are not a problem.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I do not have noxious weeds on Block A because I have prevented them from becoming established.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Noxious weeds are a problem for me despite my efforts to manage them.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Noxious weeds are a problem for me, but I do not engage in activities to manage them.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Noxious weeds are a problem for me because of their potential to spread *onto* my neighbors’ lands and cause conflict.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Noxious weeds are a problem for me because they are spreading *from* my neighbor’s land to mine.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Noxious weeds are only a problem for me because of regulations that say I must control them and not because they cause a reduction in my grazing carrying capacity.

Strongly Agree Agree Neutral Disagree Strongly Disagree

17. Can we contact you for follow up with additional questions?

* No
* Yes, and I prefer to be contacted by:
* Phone, and my number is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Email, and my email address is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thank you very much for your time! Please let us know if you have any comments or questions: Kate Binzen Fuller, MSU-Extension Agricultural Economist ([kate.fuller@montana.edu](mailto:kate.fuller@montana.edu)) Jane Mangold, MSU-Extension Invasive Plant Specialist (jane.mangold@montana.edu)