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## A realistic approach to managing leafy spurge, or: Toto, I don't think were in Kansas anymore

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Besides spotted knapweed, leafy spurge is an extremely troublesome noxious weed in Gallatin County. Herbicides have been the mainstay of our control program with good results in some areas and poor results in others. Generally, infestations greater than two years old defy treatment with herbicides. What we are currently developing is an integrated, realistic approach to leafy spurge control. We realize that spurge is here to stay. We just have to manage it to a certain level of infestation and learn to live with it.

Successful "control" of leafy spurge is seldom achieved with a one-shot control effort. Variety of terrain and environmental constraints where the spurge grows are factors in deciding which control method we attempt to use. We have opted for no control in some areas and intensive chemical control in others and a combination of techniques for the "in-between" spots. The many different aspects that go into developing a successful management program include:

- 1. Adopting a realistic approach to spurge control. Look at the big picture rather than just a part. Education can be used effectively when adopting a multi-faceted approach to spurge management.
- 2. Being aware of the proper stage of growth most susceptible to control measures used (herbicides, tillage, sheep, goats, biological control, etc).
- 3. Recognizing the levels of control that are possible and how they are achieved. (i.e., eradication, top-kill only, reduction of vigor or competitive ability, prevention of formation of reproductive structures, damaging underground structures, no control).
- 4. Knowing when and how to evaluate the level of control or management (e.g., shoot kill vs. root kill, amount of burn down achieved, grass injury, long term control).
- 5. Understanding the probable effect of individual control measures and management practices on leafy spurge.
- 6. Tie it all together and be willing to accept or develop an integrated, multi-step control program. You will probably come under fire for adopting this approach. Many people will see you as ineffective and slow. Obviously, these people have never dealt with leafy spurge. Stick to your guns.