UK UNIVERSITY OF KENTUCKY
College of Agriculture
Department of Plant and Soil Sciences

Weed Management Options for Grass Pastures Following a Dry Summer

J. D. Green, Extension Weed Scientist

Dry weather conditions during the past two summers have resulted in grazed pastures with areas that have bare soil and thin vegetative cover. Fields with thin stands of desirable pasture species are more likely to contain winter annual weeds such as chickweed, henbit, purple deadnettle, and mustard species. As these cool-season weeds die back, warm-season weeds will emerge and take their place. Other weeds such as buttercup and musk thistle are also likely to be more abundant this spring. Broadleaf pasture herbicides such as 2,4-D will aid control of buttercup and musk thistle; however, 2,4-D alone is not very effective for control of other plants such as chickweed. Therefore other labeled herbicide options should be considered.

The first step in determining weed management options is to do a critical evaluation of pasture fields in the early spring. Scout fields looking for any developing weed problems. Identify areas of the field with potential problems such as biennial thistles, poison hemlock, buttercup, chickweed, or spring mustard species. Also, assess the growth of desirable forage grasses and legumes.

The primary question then becomes – does the existing stand of desirable forages appear to be healthy and potentially competitive against any emerging weed problems? If the forage stand is acceptable and weed pressure is light, then the best course of action is likely to do nothing this spring except other routine pasture management practices. However, if you do see developing weed problems then you may want to take action in early spring to begin to correct these problems. In some cases there may not be any good solutions that will correct all weed problems observed. Highlighted below are some points to consider as you make those decisions.

After evaluating the field, you must decide whether or not to 1) overseed or drill more forages into an existing pasture to improve the stand of desirable forage grasses or 2) spray to control emerging broadleaf weeds. *You will not be able to do both practices in the spring since most broadleaf herbicides have the potential to injure newly emerging forage grasses.* For most broadleaf pasture herbicides such as 2,4-D it is generally recommended to wait 4 to 6 weeks after spraying before reseeding forage crops. Other broadleaf herbicides may require a 6 month or longer waiting period between application and seeding forage legumes and grasses (consult the label of specific herbicide products used). As a rule of thumb, if you decide to spray this spring you will need to wait until late summer or fall before seeding additional forages. If you

decide to reseed first, then it is recommended that you wait until the new seedlings have become well established with a good root system before making an herbicide application this summer. It is important to also note that broadleaf type herbicides cannot be used in fields where desirable clovers or other legumes have been seeded.

Another alternative to consider is the use of a more complete pasture renovation technique to control or suppress growth of the weedy vegetation followed by interseeding more forage grasses or legumes. This assumes that the field is not needed for grazing animals until the newly seeded forages become well established. In this approach an herbicide product containing paraquat (e.g. Gramoxone) is applied to kill back winter annual weeds. Leaves of actively growing forage grasses will also be "burned back" by the paraquat application, but established plants are not likely to be killed. Desirable forage grasses and legumes which have a good root system should regrow and resume active growth within a few days after treatment. Since paraquat has no soil-residual activity, desirable forages can be interseeded into the soil immediately after herbicide application. Paraquat is a "Restricted Use" pesticide, only licensed and certified applicators are allowed to purchase and apply it. Weedy plants such as curly dock, chicory, or Canada thistle with perennial roots or other weeds with established taproots (such as musk thistle) will likely survive this treatment.

Another course of action is a "wait and see" approach. But, keep in mind that smaller weeds are easier to control than after they increase in size. Specific details on herbicides labeled for use on grazed pastures and hay fields and their effectiveness on target weed species can be obtained in the University of Kentucky Extension bulletin, *Weed Management in Grass Pastures, Hayfields, and Fencerows* (AGR-172) available at: http://www.ca.uky.edu/agc/pubs/agr/agr172/agr172.pdf.