### Grazon P+D 2,4-D Amine Pasture and Range Vanquish® Transline® Roadsides Weedmaster GrazonNext® for non-cropland. Grazon P+D 2,4-D, GrazonNext®, Grazon P+D and Weedmaster® are labeled 2 to 4 pints/acre 1.5 to 2 pints/acre 404 1 to 2 quarts/acre 1.2 to 2.1 pints/acre 1 oz./acre 0.7 to 1.4 pt./acre 1 to 2 pt./acre S a restricted use pesticide. Read labels for specific information B-M-S and guidelines prior to using B-M-S $0 \le 0$

# Herbicides labeled Expense Level<sup>t</sup> for pastures and rangelands. Escort®, Transline® and Vanquish® are labeled Recommendations for controlling Thistles Spring - rosette the product.

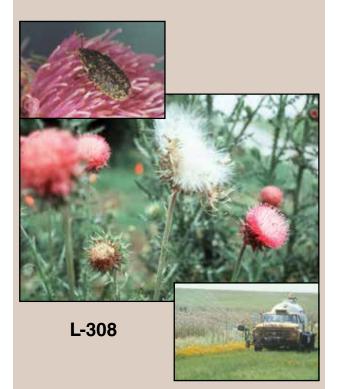
Herbicide recommendations for control of invasive thistles in Oklahoma

## For more information contact your local Cooperative Extension office or refer to the Oklahoma State University Extension Fact Sheet EPP-7318.

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## **Musk Thistle** Management **Action List**





#### **Calendar of Thistle and Weevil Activity**

Rosette weevil larval Musk thistle head weevil January damage can be detected overwinters in rosette. in thistle rosettes. February Biennial musk thistles begin to emerge. These plants will not begin their reproductive growth (bolting) until next spring. March Thistles that have overwintered begin their upright reproductive growth (bolting). Now is the time to control problem areas **April** with herbicides. Head and rosette weevil adults emerge and feed on thistles. Head weevils May Purple to red flowers indicate are laying eggs. Collect weevils now for redistribution in other fields. musk thistle is in full bloom. Head weevil larvae are feeding on the June seeds in thistle heads. Head weevil pupae and empty pupal chambers Musk thistle seeds July are being dispersed can be found in thistle heads. New adult head by the wind. weevils have moved into the ground until spring. August If at least half of the thistle heads in a field have four to six pupae per head, there will be enough adults to collect and redistribute in the spring. Annual musk thistle begins to Septemberemerge. These plants will not flower until the spring. October Rosette weevils are laying eggs on the thistle seedlings.

December —

November-

Musk thistle overwinters as a rosette.

Rosette weevils (eggs, larva, adults) and adult head weevils are hibernating until late February.