



Weed of The Week

Musk Thistle (*Carduus nutans*.)

This week's weed of the week is a thorny nuisance in many pastures and hay fields. I was inspired to choose Musk Thistle as this week's weed of the week as I was walking some pastures and noticed this low-growing thorny plant crowding out other grasses and was very noticeable throughout the landscape. In my mind, I knew that this low-growing camouflaged growth structure called rosette would soon become a large upright plant with a very large purple flower bulb full of seeds. Musk Thistle is a biennial and a member of the Asteraceae (Sunflower) family. Key Identifiers of this plant include its deeply lobed leaves that are about 10 inches long and four inches wide with a very prominent white midvein. In the first year of growth, the plant grows very slowly, building up a strong root system and very little vegetation. In the second year, the plant bolts and begins to grow very tall, reaching heights of 6 feet or greater. Probably the most identifiable characteristic of this plant is its larger bulb-like flower and purplish pink in color. The bulb is solitary and attached to the tip of the main stem of the plant, at the base of the bulb there are many spined-tipped bracts. One musk thistle plant can produce about 11,000 seeds, reproducing rapidly. Musk thistle can be found growing in many different environments but is most prominent in grass pastures, rangeland, and fallow fields (CRP) and prefers moist rich soils. Reproduction takes place in early summer and can continue well into early fall. Some practices that can help control musk thistle is to first establish and maintain a strong forage stand to out-compete the musk thistle in the first year of growth. Grazing management practices such as rotational grazing and managed grazing allow forages to grow stronger and outcompete Musk Thistle. Hand digging up the plant root crown can be effective in smaller stands or low-populated pastures. Mowing the plant before the seed set can also prevent seed distribution and reproduction. Some work has been done with biological control practices using two weevil species that feed on the seed head and rosette. Herbicides are very useful tools, and applications should be made in the first year of growth usually fall or very early spring applications are best, 2-4-D, Dicamba, and picloram have been found very successful in Musk Thistle control.

