Let meadowlarks nest.

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DELAY ROADSIDE MOWING UNTIL AUGUST 1

Minnesota Department of Natural Resources

Roadsides for Wildlife

DNR Roadsides for Wildlife Program

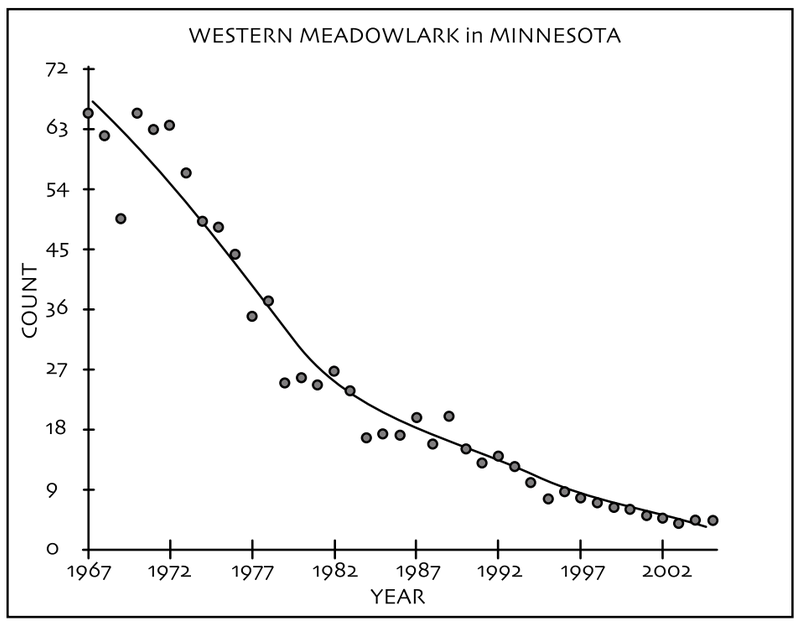
What's the difference between the Eastern and Western Meadowlark?

- Both Eastern and Western Meadowlark can be found along roadsides, grasslands, croplands, weedy fallow fields, and mixed grasslands/shrublands.
- The Eastern and Western Meadowlarks look very similar. A key difference is the extent of yellow on the feathers below the eye. In the Western Meadowlark, the yellow feathers extend behind the lower jaw, while in the Eastern the yellow feathers stop on the throat. The Western Meadowlark prefers drier grasslands and the Eastern chooses moister habitat
- The songs of the two are very different. The Eastern has a simple, clear, slurred whistle while the Western's song has a musical bubbling flute-like quality. Meadowlarks also make some short buzzy or cackling calls that are very easy to recognize.

Where do Meadowlarks nest?

- Meadowlarks nest only on the ground. They weave dried grasses into a dome shape, typically within a larger grass clump for shelter and camouflage. There is often a pathway to the nest that is about 4-5 inches wide and a foot long, sometimes it is a circular area. An average of five eggs are laid and they may have two clutches per year. The eggs are white with brown and lavender spots concentrated at the wider end. Incubation takes two weeks and the young are full grown six weeks after hatching. The female does most of the nesting and brood-rearing chores, although the male may help feed the young.
- Males commonly use fence posts as perches while singing. They will sing to stake out a breeding territory, which averages seven acres in size. The males will have more than one mate. Up to three females may nest within his territory.
- Meadowlarks are ground feeders. They eat grasshoppers, insects, spiders and other small invertebrates. Seeds become the bulk of their food in the winter.

Why don't I see Meadowlarks very often anymore?



(Count = Roadside counts, number of birds in 25 miles)

Meadowlark populations have declined for number of reasons, although loss of suitable habitat is significant in most areas. The decline since 1967 is quite dramatic in Minnesota. This is true of many grassland birds.

Disturbance of roadsides and other cover by mowing, spraying, burning, farm tillage, grazing, field turnaround spraying, ATV and equipment encroachment during the peak nesting months (May, June, July) significantly lowers production.

How can the Roadside for Wildlife Program help Meadowlarks and other birds?

- Minnesota's roadsides can provide permanent, well-distributed wildlife habitat.
- Using Best Management Practices, wildlife habitat and nesting cover could be significantly improved. Roadsides provide a corridor between other good habitats.
- More than 40 species of birds and animals nest along Minnesota roadsides including: Ring-necked Pheasant, Wild Turkey, Mourning Dove, Gray (Hungarian) Partridge, Bobwhite Quail, Meadowlark, Song Sparrow, American Goldfinch, Common Yellowthroat, Red-winged Blackbirds, Dickcissel, Vesper Sparrow, and several species of ducks.
- Roadsides occupy approximately 1.5 percent of Minnesota's land area (about the size of Rhode Island).

About 40 percent of the state highways are owned in fee-title and 60% is easement. Most county roadsides are controlled by easements; a few are fee-title owned by the county. Almost all township roadsides are easements.

Best Management Practices (BMP) for Roadsides:

- **Road authorities, by law, must delay mowing until August 1. MS 160.23. Exceptions:**
  - **mowing the first eight feet for safety,**
  - **intersection corners may be mowed for safety, and**
  - **precision mowing for weed control is allowed.**
- **Vegetation should be 10-12" high by end of growing season for winter cover and early nesting cover.**
- **Private landowners should delay mowing and haying ditch bottoms and back-slopes until August 1. May-July mowing destroys 40-70 percent of roadside nests. By August 1, approximately 90 percent of the bird eggs have hatched.**
- **Plant native prairie vegetation on new roadside projects, or on existing roadsides with weed or erosion problems, or on roadsides entrances to cities and towns.**
- **Plant local ecotype native prairie plants whenever possible.**
- **Plant a diverse mix of grasses and wildflowers.**
- **Use BMPs when applying pesticides. Use spot mowing or spot spraying to manage sites for noxious weed control. Fall treatment is best. Pesticides with a petroleum-based carrier may stick to eggs, reducing air transfer through the shell membrane and killing bird embryos. Herbicides kill food plants for insects. Monarch caterpillars need milkweed; butterflies and honeybees need nectar plants. Herbicides that kill broadleaf weeds also kill wildflowers. Insecticides kill beneficial insects such as pollinators and natural control agents such as ladybugs.**
- **Identify sites for a living snow fence that address snow drift concerns on the roadway. Living snow fences provide excellent grassland nesting bird habitat.**
- **Use rotational mowing for brush control (3-5 years). Save mowing for brush control until fall when possible.**
- **Preserve native prairie plants. Do not spray with herbicides as they are an important seed source.**
- **Update and repost right-of-way markers and property lines to reduce agricultural residential encroachment.**
- **Be aware of the importance of roadsides for ground nesting birds.**

Why is native prairie vegetation being used on roadside projects?

- Prairie once covered one-third of Minnesota. Now less than 1 percent of native tallgrass prairie remains.
- Roadsides provide an important opportunity to visually restore native prairie for future generations.
- Roadsides with undisturbed native vegetation provide improved wildlife habitat, reduce long-term weed and erosion control costs, and improve water filtration into the soil.
- Because so few undisturbed native prairies have been preserved, it is important that we restore diverse, healthy grasslands. This may prevent the extinction of rare plants and animals.
- Native prairies are home to diverse plant and animal communities. Some animals require prairie plants, such as the monarch butterfly which feeds only on milkweed plants.

Native prairie plants have many benefits including:

- Deep root channels improve water infiltration and reduce runoff.
- Hold 50 tons of water per acre on the leaves.
- Thrive in summer drought.
- Anchor the soil.
- Are adapted to local climate and soil.
- Provide long-term maintenance savings (no fertilizer, less mowing, less weeds).
- Help catch blowing snow.
- Provide wildlife cover and food.
- Are long-lived perennials.
- Do well in poor soil.
- Biologically diverse.
- Visually interesting and improve aesthetics.
- Restore natural heritage.
- Prairie plants lock carbon in the soil, which helps reduce global warming.

Is roadside native vegetation cheaper to maintain than non-native vegetation?

Initially there is a significant investment in time, labor and seed with native prairie reconstruction, but the long-term savings are significant.

- Reduced need to clean ditches and un-clog culverts.
- No fertilizer needed, ever.
- Healthy prairie stands resist invasive plants and reduce the need of using herbicides for weed control.
- Reduced need for snow plowing and temporary snow fence.
- Reduce salting cost because prairie vegetation can delay or halt freezing of moisture on pavement.

Future of Roadsides

Roadsides planted with mixed prairie grasses and wildflowers may provide future cellulosic fuel and help address climate change. Since roadsides require periodic mowing for brush control it may be possible to achieve roadside management goals while also contributing to the biofuel industry. Even when harvested for fuel, prairie plants leave considerable carbon locked in their extensive roots. This results in a net reduction in atmospheric carbon. University of Minnesota Dr. Tilman's research has shown "that restored prairies can produce more bioenergy per acre than land used to grow corn for ethanol."

For more information on Roadsides For Wildlife

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Photo: Carroll Henderson