

# On weeds, seeds and vegetation policy

When you think of white clover, a plant likely growing in your yard, do you see it as a weed? Do you see it



as a food source for a wide range of native bees?

**CLEAN WATER LAND & LEGACY AMENDMENT**

Opinions vary.

Likewise, opinions about what

plants are appropriate for conservation projects vary widely among conservation practitioners, seed producers and landowners. Ideas have evolved significantly over the past century, with the focus turning to native species.

For the past 10 years, the Minnesota Board of Water and Soil Resources (BWSR) has provided guidance about appropriate vegetation and methods for state-funded conservation plantings. That guidance is based on research, field experience and environmental challenges.

During the Dust Bowl, fast-establishing grasses and legumes stabilized soils. Non-native species were available; they became the norm for conservation before native seed production increased a few decades later.

Non-native species are still used for some projects such as “flowering bee lawns”; intensive agricultural



*A bumblebee visits wild bergamot in front of solar collectors.*

**Contributed Photo**

scenarios where cover crops will be used; or where perennial vegetation will be mowed often, grazed, or exposed to pesticides — making conditions unsuitable for native species or risky to pollinators.

Native species’ use increased greatly in the 1970s as their wildlife, carbon sequestration, water quality and other benefits were understood and touted. At about the same time, the conservation field increased

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its focus on protecting and restoring biodiversity.

Kansas and Nebraska were early sources of native grass seed. But that seed grew differently and matured later in the season, making it unsuitable for establishing native plant communities in Minnesota.

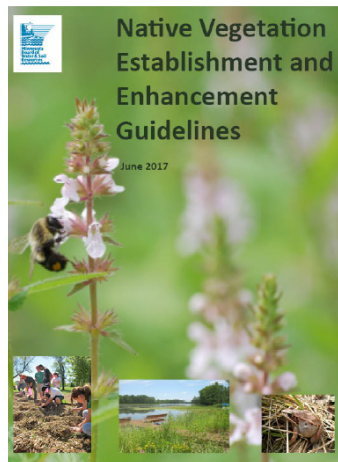
Over time, plant species and local sources increased. Minnesota became a national leader in native seed production. It remains a source of seed for conservation plantings throughout the northern United States.

Concerns about negatively affecting native populations’ genetics with seed from too far away led to policies requiring local seed sources

whenever possible.

In response, in 2008 BWSR developed Native Vegetation Establishment and Enhancement Guidelines. BWSR uses a vegetation planning sequence that starts with local seeds, and then allows some flexibility for sources using “ecological subsections” and then “ecological sections.” There are some differences in the seed source maps that state and federal agencies use; an effort is underway to align policies.

Recently, big increases in pollinator plantings and habitat-friendly solar projects have spiked demand for native flowers. That’s led to shortages of some flowers such as common milkweed, a key food source for monarch butterfly larvae. This demand is producing increases in seed production and seed collection. The Minnesota Conservation Reserve Enhancement Program initiative and other large conservation efforts are increasing demand for



**Left:** *The Minnesota Board of Water and Soil Resources developed guidelines in response to concerns about using local seed sources.*  
**Contributed Image**

**Right:** *The introduction of palmer amaranth in Minnesota is among the developments prompting a review of the guidelines by agencies, conservation partners and vendors.* **Photo Credit:** Minnesota Department of Agriculture

native seed, too.

New challenges require updates to BWSR’s Native Vegetation Guidelines and state noxious weed control policies.

For example, after the highly invasive palmer amaranth was found in federally funded pollinator plantings in 2016 and 2017, efforts focused on preventing seed contamination and



spread into agricultural fields. Because palmer amaranth may become one of the first extremely herbicide-resistant weeds, agencies and conservation professionals are strongly supporting Minnesota Department of Agriculture efforts to enforce the State Seed Law.

Palmer amaranth also could make landowners reluctant to buy native seed. Updated

guidance is under review by a team of agencies, conservation partners and vendors. Among the control measures being discussed: requiring seed producers and installers to be certified.

Guidance is also being written to help protect conservation plantings from insecticide drift, and to handle fields where the use of pre- and post-emergent herbicides can prevent native vegetation from germinating for more than a year.

One constant: Conservation professionals want plantings to meet project goals and to be resilient.

Fortunately, we have research partners, a state restoration evaluation program, and monitoring to help us advance with good information. We also have many partners who are willing to guide the continued evolution of good policies. The BWSR “What’s Working” webpage is one place to share pertinent experience about conservation plantings.