

HARDING GRASS

Phalaris aquatica

Grass Family (Poaceae)

DESCRIPTION

Large clumps of Harding grass can be found growing in coastal areas, open sites such as grasslands and rangelands, and watercourses. It also moves into disturbed sites such as roadsides and trails.

Harding grass is an erect, tufted perennial with short rhizomes around the base. The gray-green, hairless leaf blades grow to 15 inches long, and the stems are hollow. Its deep roots allow it to tap into water reserves and withstand drought.

REPRODUCTION

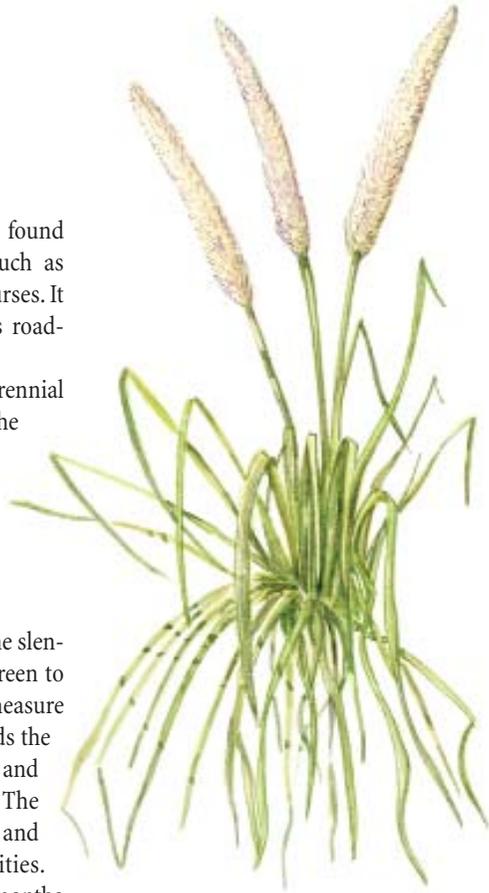
Flowering stems grow up to 4 feet tall. The slender, compact inflorescences turn from green to creamy white in May and June. They measure 2–5 inches long and taper slightly towards the tip. Seed production tends to be high, and occurs between May and September. The seeds are carried short distances by wind and animals and farther by human activities. Seeds can remain dormant for 1–4 months before germinating. Harding grass also spreads vegetatively by sending out tillers or shoots.

IMPACT

Growth is slow at first, but once established, Harding grass can form dense patches and deprive native species of water and nutrients. During summer drought, the dormant grass increases the risk of fire. Prolonged grazing on Harding grass can cause the potentially fatal staggers disease in sheep.

KEY FACTORS

- u Seed longevity is thought to be 1–3 years.
- u Removal is easier before large stands are established (the seedlings are less aggressive



- and do not compete well with other species).
- u Resprouts from roots left in the soil.

TREATMENT OPTIONS

- u Cut around the base of the clump with a Pulaski and dig out the roots. All roots longer than 2 inches must be removed, or the plant could reestablish. Then mulch with a thick layer (about 6 inches) of rice straw to discourage resprouts.
- u Mow close to the ground late in the growing season (generally late spring). Alternatively, mow repeatedly (at least 3 times), ensuring that plants do not flower. Cutting when the grass is at the flowering stage suppresses shoot formation.

Research points to greater success with repeated mowing, although there's no clear consensus on when during the active growth period this should take place. Multiple mowings weaken the grass and reduce the seedbank, but other methods are needed to prevent new growth; mowing alone will prevent expansion but will not kill Harding grass. However, some land managers believe mowing can actually spread seed; instead, they are disking and reseeding with natives.

- u **Brush cut** small patches and **cover** with landscape fabric. Check the fabric monthly to ensure that it is still tightly secured. Alternatively, after brushcutting, **mulch** with a 6-inch layer of rice straw, and pull any emerging plants the following year.
- u **Mow and treat.** After mowing the grass close to the ground, some practitioners have experimented with applying 1–2 percent glyphosate using a wick-type applicator after plants have begun to grow back.

DISPOSAL

Bag and dispose of the debris, especially any seed heads, or pile for composting.

FOLLOW-UP

After mowing and covering with landscape fabric, some practitioners have planted native shrubs and trees into the fabric to shade out any Harding grass resprouts that come through.

INTERESTING FACTS

Harding grass is native to Mediterranean Europe. It may have been introduced to the US from Australia for grazing. Its high protein content makes it a valued source of forage for livestock. However, it contains quantities of DMT, a hallucinogen federally classified as a controlled substance. This may explain the sometimes fatal illness it causes in sheep. It has also been used for post-fire revegetation.

Notes