



Kentucky Bluegrass for Home Lawns in Washington State

WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS098E

General Description

This fact sheet provides specific information about growing and maintaining Kentucky bluegrass for Washington lawns. Kentucky bluegrass (*Poa pratensis* L.) is the most commonly used lawn grass in the northern United States. It is very wear tolerant and is frequently used in high-traffic lawn areas throughout central and eastern Washington. If Kentucky bluegrass goes dormant due to draught, it is one of the quickest cool-season grasses to recover following irrigation.

Kentucky bluegrass spreads by underground lateral stems, or rhizomes, which provide good sod strength and recuperative potential (Figure 1). The spreading rhizomes of Kentucky bluegrass can fill in damaged areas of lawn quickly without the need for the homeowner to continually reseed or fix damaged areas. However, rhizomes can also be a weed problem when they spread into flower beds. Additional information and management strategies for home lawns can be found in *Home Lawns*, Washington State University Extension Publication EB0482.

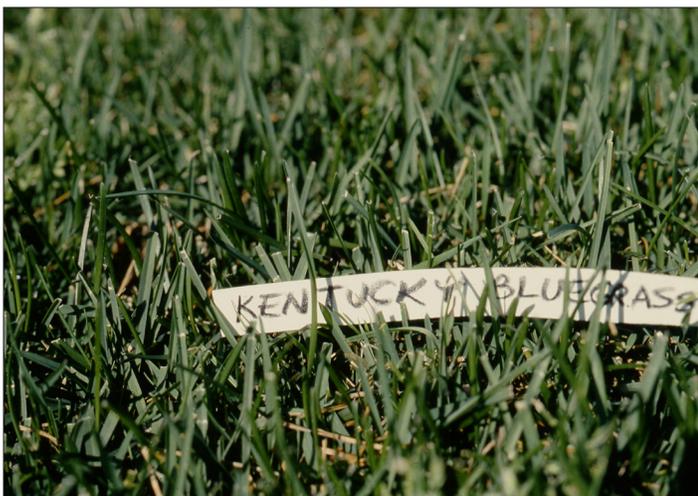


Figure 1. Kentucky bluegrass close up for grass identification.

Adaptation

Kentucky bluegrass is well-adapted to eastern Washington's climate and soils. It can be planted alone or as a mixture with perennial ryegrass and/or fine fescues (Figure 2). In areas of adaptation, Kentucky bluegrass will have a dark green color, withstand intensive use, and once established, quickly fill in bare spots. It should be grown in full sun, or in a predominantly sunny location. Grass cultivars (or cultivated varieties), which are adapted to eastern Washington, and have been tested in the National Turfgrass Evaluation Program (NTEP) at the WSU Turfgrass Research Center in Pullman, Washington can be found at www.ntep.org.



Figure 2. Kentucky bluegrass used in a home lawn situation.

Kentucky bluegrass is generally not well-adapted to western Washington's climate and soils. For home lawns, planting pure Kentucky bluegrass is not recommended due to the low light levels and cooler soil temperatures (below 50°F) that occur in western Washington. Most of the Kentucky bluegrass cultivars that have been tested in the NTEP at the WSU Goss Turfgrass Research Farm in western Washington (www.ntep.org) are very slow to grow at lower soil temperatures. In wet, winter weather, Kentucky bluegrass also has a tendency to exhibit symptoms of leaf spot disease and become thin. These conditions can

This fact sheet is part of the WSU Extension Home Garden Series.

remain until the soil and air temperatures rise above 50°F. Based on NTEP evaluations, there are approximately a dozen Kentucky bluegrass cultivars that have survived more than 5 years without being inundated with annual bluegrass and/or colonial bentgrasses (two grasses that are better adapted to the climate of western Washington).

When Kentucky bluegrass is planted as part of a seed mixture, it should comprise less than 50% by weight of the total seed mixture for a home lawn in western Washington. For lawns in eastern Washington, home owners can plant 100% Kentucky bluegrass using two or three cultivars. Turfgrass breeders have divided Kentucky bluegrass into 13 different classifications. When Kentucky bluegrass is selected for a seed blend, be sure to select cultivars that are from different classification types to give the best performance.

Throughout Washington State, Kentucky bluegrass is usually planted at 3 lb /1000 sq ft, for a home lawn. The most common home lawn mixture of perennial ryegrass and Kentucky bluegrass is a 50:50 ratio by seed weight. This equates to 80% Kentucky bluegrass and 20% perennial ryegrass by seed number. The actual seeding rate would be 2 lb each of perennial ryegrass and Kentucky bluegrass. This is the highest percentage of Kentucky bluegrass to use in a mixture. A better choice for western Washington lawns, is 30% Kentucky bluegrass (by weight) mixed with a fine fescue and/or perennial ryegrass.

Fertility

Home lawns of Kentucky bluegrass should receive between 2 to 4 lb of nitrogen (N)/1000 sq ft, per year. The 2 lb of nitrogen rate is for an older lawn, where the clippings are being returned to the soil. The 4 lb nitrogen rate is for newly established lawns, lawns where the clippings are being removed, or lawns growing on sandy soils. A soil test should be done at least once every 3 years to determine the soil fertility and fertilizer needs. Beginning in January of 2013, a homeowner in Washington State must have a soil test that shows a phosphorus deficiency in order to apply a fertilizer containing phosphorus. For more information see *Phosphorus and Home Lawns: Quick Facts and Recommendations*, Washington State University Extension Publication FS058E.

Irrigation

Depending upon the cultivar, location, soil type, and soil depth, Kentucky bluegrass can be moderate to high in its water use. For Kentucky bluegrass to remain green during the height of summer in eastern Washington, when water loss, or evapotranspiration (ET), from the plant and soil are high, it should be watered at 0.8 ET. For example, in eastern Washington the weekly ET might be 1.5 inches. The Kentucky bluegrass could be watered at 0.8 ET, or 1 inch of water per week. It is best to divide the irrigation amounts into 2 to 3 applications during the week to reduce the possibility of soil runoff. Kentucky bluegrass can also be allowed to go dormant; however, heavy traffic on the area should be limited or it will result in a loss of cover, plant damage or death. To find evapotranspiration (ET), use the WSU Weather website: <http://weather.wsu.edu>.

Mowing height

Kentucky bluegrass should be mowed to a height between 1.5 to 2.5 inches for lawns in eastern Washington, and between 1.25 to 2 inches for lawns in western Washington.

Aeration

For the average home lawn, aeration (the process of removing soil cores from a compacted lawn) should be done in April to May, or early September. Removing soil cores will allow more oxygen to enter the root zone and increase the lawn's capacity to take up water and nutrients, resulting in a healthier lawn. The lawn should not be under stress during aeration. The homeowner may need to reseed some bare areas if necessary.

Thatch

Thatch is a layer of decomposing organic matter (living and dead stems) at the soil surface. This layer should be about ½-inch thick. If the layer gets to ¾- to 1-inch thick, some of the organic matter should be removed (Figure 3). Thatch can also build up if a lawn is over-fertilized and/or watered too much or too frequently. Dethatching should be done around same time as aeration. If a lawn has both thatch and compacted soil, it would be best to dethatch first and then aerate after the thatch has been removed.



Figure 3. Thatch buildup on Kentucky bluegrass.

Weeds

Weeds, or unwanted plants within the lawn, can be a major problem for new lawns, especially while the grass is young and establishing roots. If the soil used for planting the grass seed was not clean, there is the potential for many weeds to sprout along with the newly planted grass seed. Unfortunately, many weed control products cannot be used on young grass plants without significantly harming the plant. Most weed control products state on the label: "Do Not Apply Until Grass is Well Established." It usually takes a minimum of 6 weeks for a new lawn to become established. If there are open soil areas, competitive plants will fill in the spaces, unless grass is already present. Over-seeding at about half of the original

seeding rate is one of the best options to fill in bare areas, and keep weeds out of the lawn. For more information on weed control products for lawns, visit the Lawn and Turf section of the WSU HortSense website: <http://pep.wsu.edu/hortsense/>.

Diseases

The principal diseases that affect many Kentucky bluegrass cultivars include leaf and stem rusts, powdery mildew, stripe smut, leaf spot, and necrotic ring spot. Additional information about these diseases can be found in the Lawn and Turf section of the WSU HortSense website: (<http://pep.wsu.edu/hortsense/>), and in the *Diseases of Turfgrass*, Washington State University Extension Publication EB0713.

Insects

There are several types of insects that can infest Kentucky bluegrass in Washington State. These include the European Crane Fly, common Crane fly, sod webworm, Kentucky bluegrass billbug, and hunting billbug. Strategies for controlling insects can be found on the WSU HortSense website: <http://pep.wsu.edu/hortsense/>.

Further Reading

Home Lawns, *Washington State University Extension Publication* EB0482.

Lawn Weed Control for Washington State Homeowners, *Washington State University Extension Publication* EB0607.

Diseases of Turfgrass, *Washington State University Extension Publication* EB0713.

Corticium Red Thread of Turfgrass, *Washington State University Extension Publication* EB1016.

Thatch and Its Control *Washington State University Extension Publication* EB1117.

Managing Necrotic Ring Spot on Turfgrass in the Pacific Northwest, *Washington State University Extension Publication* EB1734.

Phosphorus and Homelawns: Quick Facts and Recommendations, *Washington State University Extension Publication* FS058E.



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Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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