

## Water Conservation Techniques for Established Home Lawns West of the Cascades

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1. Check the lawn for the depth of thatch in April. If the thatch depth is greater than  $\frac{1}{2}$  inch, dethatch the lawn to increase water penetration. If thatch is  $\frac{1}{2}$  inch or less, do not dethatch the lawn.
2. Check the lawn for soil compaction in April. If the grass roots are shallow due to traffic on the area, aerate (pull soil cores) the lawn. Make sure the soil is moist before you aerate the lawn in order to get better penetration of the tines. Aeration will help get oxygen and water down into the rootzone to help develop a stronger root system for the turfgrass. Both aerators and dethatching units are available to rent at most rental centers.
3. If lawn coverage is thin, it is a good idea to overseed (put out turfgrass seed at about  $\frac{1}{2}$  the normal establishment rate, i.e. for a perennial ryegrass lawn, overseed at 3 lbs. seed per 1000 sq. ft.), after aerating the lawn to fill in the gaps and prevent weed invasion. Bentgrass lawns should fill in via stolons, or above ground lateral stems, and should not need overseeding in most cases. If you plan to let the lawn go totally dormant in the summer, do not overseed until fall. Newly seeded grass plants and perennial ryegrass lawns on sandy soils will require some moisture in the soil throughout the summer to survive. Water levels in the fall may be even lower and it is a critical time for salmon to use water as well. It may be less feasible to overseed in the fall due to water levels, even if it is the best time to establish cool season grass plants. If you fill in the gaps in spring, you should have fewer weeds in the lawn for the growing season.
4. When fertilizing in April/May, apply only  $\frac{1}{2}$  lb. of quickly available nitrogen per 1000 sq. ft., per application, in order to prevent lush growth of the grass. A fertilizer with at least 50% to 70% slow-release nitrogen is a good choice. If soil temperatures are cool, an organic source of nitrogen will not be available to the plant for immediate use. Use a slow-release or organic source of nitrogen in June to limit growth but provide a source of food when irrigation or rainfall is available. Do not fertilize established lawns in the summer (July and August). If weeds are a problem, control is best in spring or fall. Depending upon the weed species, it could be pulled or spot treated with the appropriate herbicide in spring. The weed should be identified in order to select the best time for control. Do not use herbicides for postemergent control of weeds, if the lawn is dormant due to lack of irrigation.
5. Mow perennial ryegrass and perennial ryegrass mixture lawns at 2 inches maximum height. Bentgrass lawns should be mowed no higher than 1 inch to prevent thatch buildup. Return clippings to the lawn to increase nutrients available to the turfgrass plants, as well as limit evaporation from the soil surface. A thick, dense, lawn will shade the soil and limit water loss.
6. Irrigate in early morning. Your water district may have to modify this according to the demand for water at that time. Late evening watering is also a possibility. Turn off

water immediately if it begins to run off of the lawn. Irrigate to a 4 to 6 inch depth, as needed using published evapotranspiration (ET) rates from your local water district. Only 80% of ET should be applied to the lawn and only three times per week maximum at the hottest portion of the summer. (One inch of water per week.) If you decide to let the lawn go totally dormant, do not begin watering the grass midsummer and revive the grass and then turn the water off again. This will damage the grass. Bentgrass lawns can go totally dormant and recover in the fall. Traffic should be eliminated on dormant grass. Perennial ryegrass lawns will need to have some moisture in the soil to keep the grass from severely thinning out.