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Maintenance Calendar for Cool-Season Athletic Fields in Virginia[a]

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Maintenance Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Planting[b] (Initial establishment and/or renovation)			xxxxxxxxxxxxxxxxxx					XXXXXXXXXXXXX				
Nitrogen fertilization[c]			xxxxxxxxxxxxxxxxx					XXXXXXXXXXXXXXXxxxxx				
Preemergent herbicides[d,i]		XXXXXXXXXX						XXXXXX				
Postemergent herbicides[e,i]			xxxxxxxxxxxxxxxXXXXXXXXXXXXXxxxxxxxxxxxxxxXXXXXXXXXX									
Disease management[f,i]				xxxxxxxxxxxxxxxXXXXXXXXXXXXXXXXXXXxxxxxxxxxx								
Insect management[g,i]						XXXXXXXXXXXXxxxxxxxxxxx						
Cultivation/dethatching[h]			xxxxxxxxxxxxxxxxxxx					XXXXXXXXXXXXX				

[a]Preferred timing for respective maintenance activity is indicated by an upper case 'X'. Secondary timing indicated by lower case 'x'. Cool-season fields in Virginia can be grassed in Kentucky bluegrass, perennial ryegrass and/or tall fescue, and are often 2 or 3-way combinations of the three species. While these combinations generally take advantage of the positive attributes a particular species provides (regrowth potential of bluegrass, rapid establishment rates of ryegrass, deep rooting of fescue etc.), special attention must be given to pest and stress management strategies because the grasses respond differently to environmental and pest pressures.

[b]Sod installations are possible any time the soil is not frozen and/or supplemental irrigation is available to promote rooting.

[c]Fertilization with nitrogen applications of 0.7 lb water soluble N/1000 sq ft per active growing month are typical during preferred timing intervals. Rates of 0.25-0.5 lb N/1000 sq ft every 4 weeks are recommended for secondary timing intervals. Slowly available sources can be applied up to 0.9 lb N/10000 sq ft per active growing month. Other supplemental nutrients and/or lime should be applied based on soil test results. Never apply fertilizer to frozen ground.

[d]Spring preemergent (PRE) herbicide applications are primarily targeting summer annual weeds such as crabgrass, goosegrass, or foxtail. Fall applications are primarily targeting annual bluegrass and winter annual broadleaf weeds such as henbit, deadnettle, chickweed, and geranium. Before applying any PRE herbicide consider that most PRE herbicides will also control desirable turfgrasses that might need to be reseeded due to wear from traffic. For this reason, heavily trafficked fields often only use specific postemergent (POST) herbicides to allow for regular reseeding of worn turf areas.

[e]Weeds must be actively growing to achieve desirable postemergent (POST) herbicide control. For cool-season weeds, active growth occurs when temperatures are ≥ 50° F so broadleaf weed control is possible in spring, and preferred in late summer to mid-fall. For warm-season weeds, temperatures ≥ 80° F are typically required for maximum POST control and the primary window for controlling annual grassy weeds is early to mid-summer when the weeds are young and actively growing.

[f]Cool-season grasses have many potential diseases that vary in their host and their potential damage. Red thread/pink patch is primarily a spring disease that occurs on all cool-season grasses and most often does not require fungicide treatment. Dollar spot can appear in the spring and fall in our warmest climates but is a more concerning problem during the summer in the cooler locations of Virginia.Summer patch is an important disease on Kentucky bluegrass that attacks the roots in mid-spring and the plants then express symptoms later during environmental stress periods; fields with a history of summer patch should be treated with an appropriate fungicide in April. Summer extremes in heat and/or moisture can lead to Rhizoctonia blight (aka brown patch) on tall fescue, gray leaf spot on both tall fescue and perennial ryegrass, and Pythium blight that can attack and rapidly kill any grass during prolonged warm, wet periods. Fall diseases such as dollar spot and leaf spot warrant attention as to their progression in inciting turfgrass damage but likely won't require treatment.

[g]The most problematic insect on cool-season sports fields is usually the white grub, the larval stage of several beetle species that occur in this climate that reside in the soil and feed on turfgrass root systems. Grubs are typically treated with an appropriate insecticide from June to mid-July when newly hatched grubs are very small; when scouting finds 6 or more white grubs per square feet, treatment is warranted. Other insect pests such as ants, fall armyworm, cutworm, and sod webworm can reach significant populations in mid-summer to early fall in some years such that unacceptable damage to cool-season fields occurs and the pests warrant treatment with an appropriate insecticide.

[h]Aggressive cultivation programs (hollow tine coring, dethatching, vertical mowing, etc.) should only be done when the turf has optimal regrowth potential based on anticipated weather conditions and field use scheduling. Less invasive cultivation methods such as slicing, spiking, or solid-tine aeration can be used at a greater frequency during sub-optimal growing seasons with greatly reduced concerns about turfgrass recovery potential.

[i] Consult the Virginia Cooperative Extension Pest Management Guide for recommendations on pesticide selection, rates, and application timing.