

SOLVING LANDSCAPE PROBLEMS WITH GRASSES AND GROUND COVERS

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Numerous landscapes require low-growing, perennial ground-covering plants tolerant of harsh environments or low maintenance. Only a few commonly used turfgrasses (e.g., tall fescue and zoysiagrass) are tolerant of widely varied growing conditions; to perform best, most turfgrasses require full sun, decent soil, and regular mowing, fertilization, and irrigation. There are, however, other less commonly used turfgrasses capable of surviving some of aberrant situations. In addition, there are some settings for which there are no turfgrasses capable of survival or the desired appearance precludes the use of turf. Non-turf ground covers and ornamental grasses may be desirable in these landscape areas. This article will identify the growing conditions and present traditional and alternative turfgrasses and other ground covers tolerant of these settings.

PROBLEM GROWING SITUATIONS

Often, ground-covering plants are required for environments more extreme than commonly used turfgrasses can tolerate. These environments include extreme shade; wet, compacted, or droughty soils; saline, acid, or alkaline soils; and highly erodible sites. In addition, the maintenance in some landscape settings is much less than commonly used turfgrasses receive. Occasionally plants must become established under adverse conditions and then be required to survive in landscapes that are unirrigated, infrequently mowed, and without fertilization, cultivation, or pest control. Finally, some landscape settings require temporary cover to hold soil in place until a permanent crop can be planted. There are plants available for these conditions.

Shade

Turfgrasses for Dry Shade

fine-leaf fescues

sheep fescue (*Festuca ovina*)

hard fescue (*Festuca longifolia*)

chewings fescue (*Festuca rubra* ssp. *commutata*)

creeping red fescue (*Festuca rubra* ssp. *rubra*)

tall fescue (*Festuca arundinacea*)

Japanese lawngrass (*Zoysia japonica*)

Turfgrasses for Wet Shade

rough bluegrass (*Poa trivialis*)

Other Plants for Shade

bugleweed (*Ajuga reptans*)
English ivy (*Hedera helix*)
periwinkle (*Vinca minor*)
pachysandra (*Pachysandra terminalis*)
plantain lily (*Hosta* spp.)
lily-of-the-valley (*Convallaria majalis*)
purpleleaf winter creeper (*Euonymus fortunei coloratus*)
goutweed (*Aegopodium podagraria*)
woodland native plants (e.g., wild ginger, bunchberry, partridgeberry, columbine, ...)

Ornamental Grasses for Shade

striped tuber oat grass (*Arrhenatherum elatius* subsp. *bulbosum* 'Variegatum')
common quaking grass (*Briza media*)
Karl Foerster's feather reed grass (*Calamagrostis x acutiflora* 'Karl Foerster')
variegated feather reed grass (*Calamagrostis x acutiflora* 'Overdam')
Korean feather reed grass (*Calamagrostis brachytricha*)
most sedges (*Carex* spp.)
northern sea-oats (*Chasmanthium latifolium*)
tufted hair grass (*Deschampsia cespitosa*) and cultivars
golden-variegated Hakone grass (*Hakonechloa macra* 'Aureola') and other cultivars
bottlebrush grass (*Hystrichia patula*)
purple moor grasses (*Molinia caerulea*) and varieties, cultivars
gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta') and other cultivars
autumn moor grass (*Sesleria autumnalis*)

Problem Soils

Saline-Tolerant Turfgrasses

tall fescue (*Festuca arundinaceae*)
perennial ryegrass (*Lolium perenne*)
bermudagrass (*Cynodon dactylon*)
western wheatgrass (*Agropyron smithii*)
weeping alkali grass (*Puccinellia distans*)
red fescue (*Festuca rubra*)

Other Saline-Tolerant Plants

bearberry (*Arctostaphylos uva-ursi*)
daylily (*Hemerocallis* spp.)
creeping juniper (*Juniperus horizontalis*)
fragrant sumac (*Rhus aromatica*)
smooth sumac (*Rhus glabra*)
birdsfoot trefoil (*Lotus corniculatus*)
sweetfern (*Comptonia peregrina*)
snowberry (*Symphoricarpos albus*)
wineleaf cinquefoil (*Potentilla tridentata*)

Ornamental Grasses for Salt Wind and Salt Spray

northern sea-oats (*Chasmanthium latifolium*)
blue lyme grass (*Leymus arenarius*)
switch grass (*Panicum virgatum*)
gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta) and other cultivars
common reed (*Phragmites australis*)
prairie cord grass (*Spartina pectinata*)

Grasses for Acid Soils

Canada bluegrass (*Poa compressa*)
bermudagrass (*Cynodon dactylon*)
sheep fescue (*Festuca ovina*)
hard fescue (*Festuca longifolia*)
red fescue (*Festuca rubra*)
reddtop (*Agrostis alba*)
tall fescue (*Festuca arundinaceae*)
Kentucky bluegrass (*Poa pratensis*)

Other Plants for Acid Soils

Canby paxistima (*Paxistima canbyi*)
partridgeberry (*Mitchella repens*)
dwarf holly grape (*Mahonia repens*)
cinquefoils (*Potentilla* spp.)
bearberry (*Arctostaphylos uva-ursi*)
junipers (*Juniperus* spp.)
creeping thyme (*Thymus serpyllum*)

Ornamental Grasses for Acid Soils

big bluestem (*Andropogon gerardii*)
striped tuber oat grass (*Arrhenatherum elatius* subsp. *bulbosum* 'Variegatum')
mosquito grass (*Bouteloua gracilis*)
tufted hairgrass (*Deschampsia caespitosa*)
purple moor grasses (*Molinia caerulea*) and varieties, cultivars
fountain grasses (*Pennisetum alopecuroides*) and cultivars
gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta') and other cultivars

Turfgrasses for Alkaline Soils

bermudagrass (*Cynodon dactylon*)
crested wheatgrass (*Agropyron desertorum*)
tall fescue (*Festuca arundinaceae*)
perennial ryegrass (*Lolium perenne*)
western wheatgrass (*Agropyron smithii*)
red fescue (*Festuca rubra*)

Ornamental Grasses for Alkaline Soils

big bluestem (*Andropogon gerardii*)
side-oats grama (*Bouteloua curtipendula*)
mosquito grass (*Bouteloua gracilis*)
June grass (*Koeleria cristata*)

Soil Compaction Tolerant Turfgrasses

perennial ryegrass (*Lolium perenne*)
Kentucky bluegrass (*Poa pratensis*)
tall fescue (*Festuca arundinaceae*)

Turfgrasses for Wet Soils

reddtop (*Agrostis alba*)
rough bluegrass (*Poa trivialis*)
tall fescue (*Festuca arundinaceae*)
buffalograss (*Buchloe dactyloides*) – limited duration

Other Plants for Wet Soils

plantain lily (*Hosta* spp.)
violets (*Viola* spp.)
white clover (*Trifolium repens*)

Ornamental Grasses for Wet Soils

big bluestem (*Andropogon gerardii*)
giant reed (*Arundo donax*) and cultivars
Karl Foerster's feather reed grass (*Calamagrostis x acutiflora* 'Karl Foerster')
variegated feather reed grass (*Calamagrostis x acutiflora* 'Overdam')
Korean feather reed grass (*Calamagrostis brachytricha*)
bluejoint (*Calamagrostis canadensis*)
most sedges (*Carex* spp.)
northern sea-oats (*Chasmanthium latifolium*)
variegated manna grass (*Glyceria maxima* 'Variegata')
vanilla grass (*Hierochloe odorata*)
giant Miscanthus (*Miscanthus* 'Giganteus')
flame grass (*Miscanthus* 'Purpurascens')
silver banner grass (*Miscanthus sacchariflorus*)
eulalia (*Miscanthus sinensis*) and cultivars
purple moor grasses (*Molinia caerulea*) and varieties, cultivars
switch grass (*Panicum virgatum*) and cultivars
gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta') and other cultivars
common reed (*Phragmites australis*) and cultivars
prairie cord grass (*Spartina pectinata*) and cultivars
cat tail (*Typha latifolia*)

Turfgrasses for Dry Soils

fairway wheatgrass (*Agropyron cristatum*)
western wheatgrass (*Agropyron smithii*)
buffalograss (*Buchloe dactyloides*)
side-oats grama (*Bouteloua curtipendula*)
blue grama (*Bouteloua gracilis*)
bermudagrass (*Cynodon dactylon*)
creeping red fescue (*Festuca rubra* var. *rubra*)
sheep fescue (*Festuca ovina*)
weeping alkali grass (*Puccinellia distans*)

Other Plants for Dry Soils

sweetfern (*Comptonia peregrina*)
goutweed (*Aegopodium podagraria*)
junipers (*Juniperus* spp.)
thyme (*Thymus* spp.)
plantain lily (*Hosta* spp.)
daylily (*Hemerocallis* spp.)

Ornamental Grasses for Dry Soils

side-oats grama (*Bouteloua curtipendula*)
blue grama (*Bouteloua gracilis*)
tufted hair grass (*Deschampsia cespitosa*) and cultivars
purple love grass (*Eragrostis spectabilis*)
blue fescues (*Festuca* spp.) and cultivars
blue oat grass (*Helictotrichon sempervirens*) and cultivars
June grass (*Koeleria macrantha*)
blue lyme grass (*Leymus arenarius*)
eulalia (*Miscanthus sinensis*) and cultivars
purple moor grasses (*Molinia caerulea*) and varieties, cultivars
Mexican feather grass (*Nasella tenuissima*)
fountain grasses (*Pennisetum* spp.) and cultivars
little bluestem (*Schizachyrium scoparius*) and cultivars
autumn moor grass (*Sesleria autumnalis*)
Indian grass (*Sorghastrum nutans*) and cultivars
prairie dropseed (*Sporobolus heterolepis*)

Other Problem Sites

Turfgrasses for Erodible Sites

tall fescue (*Festuca arundinacea*)
Kentucky bluegrass (*Poa pratensis*)
zoysiagrass (*Zoysia japonica*)
buffalograss (*Buchloe dactyloides*)
creeping red fescue (*Festuca rubra* var. *rubra*)
western wheatgrass (*Agropyron smithii*)

Other Plants for Erodible Sites

sweetfern (*Comptonia peregrina*)
crown vetch (*Coronilla varia*)
birdsfoot trefoil (*Lotus corniculatus*)
daylilies (*Hemerocallis* spp.)
smooth sumac (*Rhus glabra*)
fragrant sumac (*Rhus aromatica*)
wildflowers (e.g., black-eyed Susan, purple coneflower, yellow coneflower, asters, goldenrods, ...)

Ornamental Grasses for Erodible Sites

gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta') and other cultivars

Grasses for Special Applications

Quick Establishment

perennial ryegrass (*Lolium perenne*)
annual ryegrass (*Lolium multiflorum*)
redtop (*Agrostis alba*)
tall fescue (*Festuca arundinaceae*)

Low Management

buffalograss (*Buchloe dactyloides*)
tall fescue (*Festuca arundinaceae*) (pasture type)
fine-leaf fescues (*Festuca* spp.)
zoysiagrass (*Zoysia japonica*)

Temporary Cover

oats (*Avena sativa*)
annual ryegrass (*Lolium multiflorum*)
wheat (*Triticum sativum*)
barley (*Hordeum vulgare*)

Ornamental Grasses with Spreading Habit

striped tuber oat grass (*Arrhenatherum elatius* subsp. *bulbosum* 'Variegatum')
variegated manna grass (*Glyceria maxima* 'Variegata')
blue lyme grass (*Leymus arenarius*)
gardener's garters ribbon grass (*Phalaris arundinacea* 'Picta') and other cultivars
common reed (*Phragmites australis*) and cultivars
prairie cord grass (*Spartina pectinata*) and cultivars
cat tail (*Typha latifolia*)