Turf Maintenance Schedule
IMP Program, Iowa State University

Cultural Practices	Highest Care Grounds	%*	High Care Grounds	%*	Moderate Care Grounds	%*	Lowest Care Grounds	%*
Area (acres)**	11.81 acres		21.22 acres		371.76 acres		63.76 acres	
	• Knoll • South Campanile lawn • Green space between Alumni and Library • Information Booth		• Cemetery • Courtyards • Central Campus • Golden Loop • Marching Band Field		• Playfields and Cross Country Track • Moderate use areas • Vet Med (near bldg) • Applied Science (near bldg) • Grass parking lots		• Institutional road ditches • Natural areas, i.e., arboretum and pastures • Power plant • Vet Med and Applied Science property edges	
Turf goal and expectation *On a scale of 1-10*: 10 = best turf quality & operation 5 = lowest acceptable quality 1 = poorest turf quality	***Turf rating of 8-9*** • Turf color is fairly important, patrons may desire mower pattern striping • Very routine schedule of turf management activities	90%	***Turf rating of 7-8*** • Intense human contact and visibility, i.e., special events and funerals • Pleasant and neat appearance is key • Routine turf maintenance and monitored for other needs	70%	***Turf rating of 6-7*** • Limited to intense human activity and contact • Routine turf maintenance and monitored for other needs	90%	***Turf rating of 5*** • Primary function is to maintain adequate vegetative cover to prevent erosion • Routine mowing as needed	100%
Turf quality	Uniform to good turf density, relatively weed-free surface, no bare soil	90%	Uniform to good turf density, relatively weed-free surface, no bare soil	70%	Good to moderate turf density, some weed species, some bare soil	90%	Moderate turf density, weed species and some bare soil present	100%
Irrigation	Permanent irrigation installed and will be used as needed to promote active turf growth and prevent summer dormancy	90%	Most areas not irrigated	70%	No irrigation	90%	No Irrigation	100%
Weed tolerance Tolerance is dependent on weed species present and if in concentrated areas	Weed level < 10%	90%	Weed level < 10-15%	70%	Weed level < 20%	90%	Weed level < 30%	100%
Aeration • Shatter tine	2 times/ year at a depth of 2½-3 inches using shatter tine. Intense traffic areas such as practice fields require the most aeration	50%	2 times/ year at a depth of 2½-3 inches using shatter tine. Intense traffic areas such as cow paths require the most aeration	50%	Playfields aerated by Rec Services several times/year All other areas once/year	65%	Seldom	100%
Fertilization* • Combination of slow release nitrogen (N) • 1 lbs N/1000 sq.ft. per application depending on N source and application date. • Potassium is in mix	• 1 lbs N/1000 sq.ft. August application • Potassium is in mix Knoll and south Campanile receive additional care	50%	• 1 lbs N/1000 sq.ft. August application • Potassium is in mix • Band field may receive additional fertilization as needed.	50%	• 1 lb N/1000 sq.ft. August application • Potassium is in mix Rec Services may request additional applications	100%	• 0-1 lb N/1000 sq.ft. August application • Potassium is in mix	100%
Mowing height & frequency • Do not remove more than 1/3 of plant height each time grass mowed • Lawn areas are swept to remove excess grass clippings as needed	• 3 inches maintained turf height	100%	3 inches maintained turf height	100%	• 3 inches maintained turf height	100%	• 3 inches maintained turf height Low mow areas mowed 2/year to control weeds	100%
Pre-emergent herbicide and fertilizer use* • IMP practiced • Scouting to determine where applications will be applied is done season prior to application (Once year June-Oct) Pendimethaline plus fertilizer applied	• Spring break application • Coordinate with annual overseeding program so desirable turf seed is not damaged	50%	• Spring break application • Coordinate with annual overseeding program so desirable turf seed is not damaged	50%	• Spring break application • Coordinate with annual overseeding program so desirable turf seed is not damaged	50%	• Spring break application • Coordinate with annual overseeding program so desirable turf seed is not damaged • Application in these areas as needed •	50%
Post-emergent herbicide use* *Goal:* to produce a healthy, thick turf that out competes broadleaf weeds • IMP practiced • Scouting to determine where applications will be applied. •	• Application of broadleaf weed control in designated areas while classes are not in session in May • Fall application in high weed areas • Crabgrass post-emergent application in designated areas. Scouting monthly during growing season	90%	• Application of broadleaf weed control in designated areas while classes are not in session in May • Fall application in high weed areas • Crabgrass post-emergent application in designated areas Scouting monthly during growing season	80%	• Application of broadleaf weed control in designated areas while classes are not in session in May • Fall application in high weed areas • Crabgrass post-emergent application in designated areas Scouting 2x/year during growing season	90%	• Application of broadleaf weed control in designated areas while classes are not in session in May • Fall application in high weed areas • Crabgrass post-emergent application in designated areas Scouting 1x/year during growing season	100%
Insect Control IMP practiced White grubs are the primary insect problem for Iowa. Damage is often site specific & therefore a site-specific strategy should be practiced Turf injury from white grubs occurs from late August through mid-October	• Preventative grub control may be necessary on fields that have a history of injury from grubs • A grub monitoring program in August can indicate if curative insecticide applications are needed • Irrigate as needed to promote grass root growth in mid to late summer Knoll may require applications of insecticides and fungicides.	95%	• Preventative grub control may be necessary on fields that have a history of injury from grubs • A grub monitoring program in August can indicate if curative insecticide applications are needed Irrigate as needed to promote grass root growth in mid to late summer	95%	• A grub monitoring program in August can indicate if curative insecticide applications are needed Treatment seldom needed	95%	Never	0 %
Overseeding Slit-seeding and hydroseeding as needed	• August – November as needed • March – May to repair worn turf areas. Coordinate w/pre-emergent program	80%	• August – November as needed • March – May to repair worn turf areas. Coordinate w/pre-emergent program	60%	• August – November as needed • March – May to repair worn turf areas. Coordinate w/pre-emergent program	60%	• August – November as needed March – May to repair worn turf areas. Coordinate w/pre-emergent program	100%
Troubleshooting • Bare Soil - due to mechanical disturbances	Maintain vegetative cover by seeding or sodding any time soil is exposed. Seeding strategies include: ▪ Drill seeding in 2 - 4 directions ▪ Hydroseed • A traffic control strategy should be specifically developed for each area	80%	Maintain vegetative cover by seeding or sodding any time soil is exposed. Seeding strategies include: ▪ Drill seeding in 2 - 4 directions ▪ Hydroseed • A traffic control strategy should be specifically developed for each area	60%	Maintain vegetative cover by seeding any time soil is exposed. Seeding strategies include: ▪ Drill seeding in 2 - 4 directions ▪ Hydroseed • A traffic control strategy should be specifically developed for each area	60%	Seldom to never. Only if turf cover is lost and erosion or other problems are anticipated. Seed in September when adequate moisture is anticipated • A traffic control strategy should be specifically developed for each area	100%

***Continuous looking for alternatives to chemical use.**
****Vet Med, grass tailgate lots, and road corridors not included in area calculations. Moderate and low priority areas will change.**

g:Facilities Services(Miller)/Campus Services/IMP/IMP Turf Maint Sched/sm
9/30/11-revised

Shrub Bed Maintenance Schedule
IMP Program, Iowa State University

Cultural Practices	High Care Beds	%*	Moderate Care Beds	%*	Low Care Beds	%*
	• Lebaron Courtyard • Lagomarcino Courtyard • Golden Loop • Memorial Union • Campanile • Knoll		• General Campus Areas		• University Village • Schilletter University Village • Frederiksen Court • Towers Residence Complex • Arboretum • Nursery	
Goal and expectation <u>*On a scale of 1-10*</u>: 10 = highest shrub bed quality 5 = medium quality 1 = lowest quality	***Shrub rating of 7-9*** • High visibility and high user contact • Shrubs pruned to maintain natural form once/year • Shrub beds edged yearly • Maintain 3-4" mulch • Scouting performed weekly		***Shrub rating of 4-6*** • High to medium visibility • Shrubs pruned to maintain natural form every 2-3 years • Mulch applied 3-4" as time and material allow • Edging as time allows • Scouting 1-2 times a year		***Shrub rating of 1-3*** • Medium to low visibility • Shrubs pruned to maintain natural form every 5+ years • Mulch occasionally to seldom • No edging • Scouting 0-1 times a year	
WEED CONTROL	Weed level <10% • Mechanical and chemical applications used • 1-3 applications of Round-Up • 2 applications of pre-emergent (Gallery, Snapshot, Pennant)		Weed level < 20% • Mechanical only when time allows • Chemical applications used most often due to budget restraints • 1-2 applications of Round-Up • 1-2 applications of pre-emergent (Gallery, Snapshot, Pennant)		Weed level < 50% • Mechanical only when time allows • Chemical applications used most often due to budget restraints • 0-1 application of Round-Up • 0-1 application of pre-emergent (Gallery, Snapshot, Pennant)	
PRUNING	• General pruning once a year or as needed • Maintain sidewalk clearance for snow equipment and pedestrians • Shrubs pruned to maintain natural form wherever possible		• General pruning one time every 1-3 years • Maintain sidewalk clearance for snow equipment and pedestrians • Shrubs pruned to maintain natural form wherever possible		• General pruning one time every 5+ years • Maintain sidewalk clearance for snow equipment and pedestrians • Shrubs pruned to maintain natural form wherever possible	
IRRIGATION	By central irrigation systems, building faucets, or tractor w/wagon Frequency = weekly or as needed		By central irrigation systems, building faucets, or tractor w/wagon Frequency = weekly or as needed		New plantings only By building faucets or tractor w/wagon	
FERTILIZATION	Shrub receives same broadcast application as turf (1-2 lbs N./1,000 sq.ft.)		Shrub receives same broadcast application as turf (1-2 lbs N./1,000 sq.ft.)		Shrub receives same broadcast application as turf (1-2 lbs N./1,000 sq.ft.)	
DISEASE AND INSECT CONTROL	• Monitor by scouting • Control as needed		• Monitor by scouting • Control as needed		• Monitor by scouting • Control as needed	

Percentages indicate progress in attaining specific goals within a category (as of 7-17-07)

Woodland Maintenance Schedule
IMP Program, Iowa State University

Cultural Practices	Highest Care Woodland		High Care Woodlands		Moderate Care Woodlands		Lowest Care Woodlands	
	• South of Lake LaVerne • Campus tree groves		• Applied Science Woods (Lynn Fuhrer Lodge area)		• Pammel Woods • Arboretum • Applied Science Woods (west of Scholl Road)		• VMRI woodland • Ames High pine grove • Creek corridors	
Goal and expectation <u>*On a scale of 1-10*</u>: 10 = best quality 5 = medium quality 1 = lowest quality	***Woodland rating of 8-9*** • Trees managed for safety and aesthetic qualities • Routine schedule of management activities		***Woodland rating of 5-7*** • Trees managed for user safety • Trails monitored regularly by Student Affairs		***Woodland rating of 3-4*** • Trees managed for user safety • Trails not monitored regularly		***Woodland rating of 1-2*** • Trees managed to protect adjacent properties	
Woodland quality	• High visibility and high user contact • Species and age diversity actively managed for successional growth		• Medium visibility and medium user contact • Species and age diversity managed through natural regeneration		• Low visibility and medium user contact • Species and age diversity managed through natural regeneration		• Low visibility and low user contact • Species and age diversity managed through natural regeneration	
Scouting and Assessment • Hazards • Pests and diseases	Frequency: monthly		Frequency: biannually		Frequency: annually		Frequency: Not regularly scouted	
Maintenance • Pruning • Removals	• Structural and corrective pruning of young trees • Damaged or diseased trees and branches pruned for user safety, to protect campus property, and maintain tree health		• Hazardous branches and trees removed for user safety		• Hazardous branches and trees removed for user safety		• Hazardous branches and trees removed to protect adjacent property	
Disease and Insect Control IMP practiced Management plans may be developed for individual species	• Removal of diseased trees • Mechanical removal and chemical herbicide application for invasive plant species • Preventive insecticide treatments for priority trees • Preventive removal of low-priority susceptible trees		• Removal of diseased trees, as resources allow		• Removal of diseased trees, as resources allow		Removal of diseased trees, as resources allow	