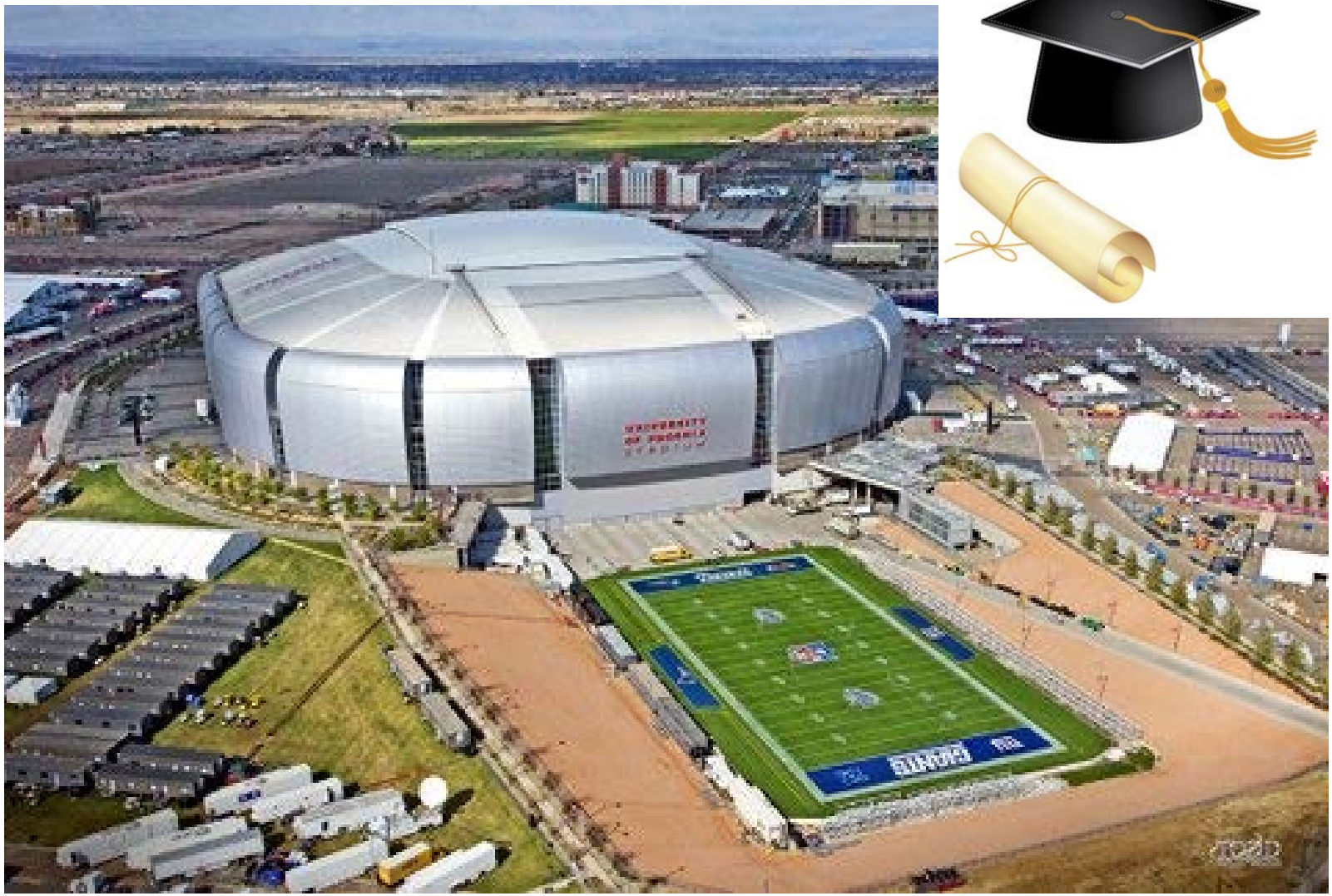
PLAY - - - UNTIL YOU CAN'T PLAY ANYMORE




CONDEMNED

OBSTACLES FACE

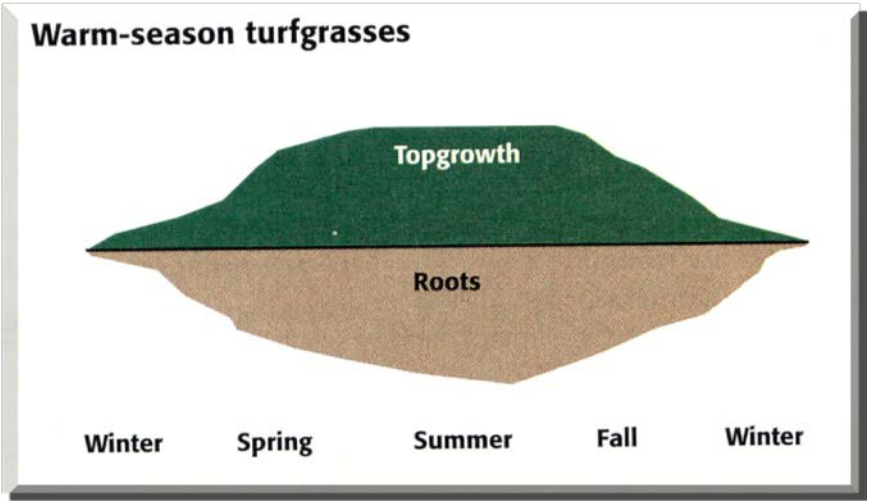
- OVER SCHEDULED FIELDS
- PRACTICE FIELDS = MULTI USE FIELD (lack a formal practice field)
- PRACTICE FIELD(s) = closest field is the field we will use today.
- FERTILIZATION = Not when school is in session (months !)
- FERTILIZATION = Not when students are present (weekend applications only)
- FERTILIZATION = No funds, no budget.
- WATER = fix all.

MAINTENANCE SCHEDULE FOR NON-OVERSEED BERMUDAGRASS

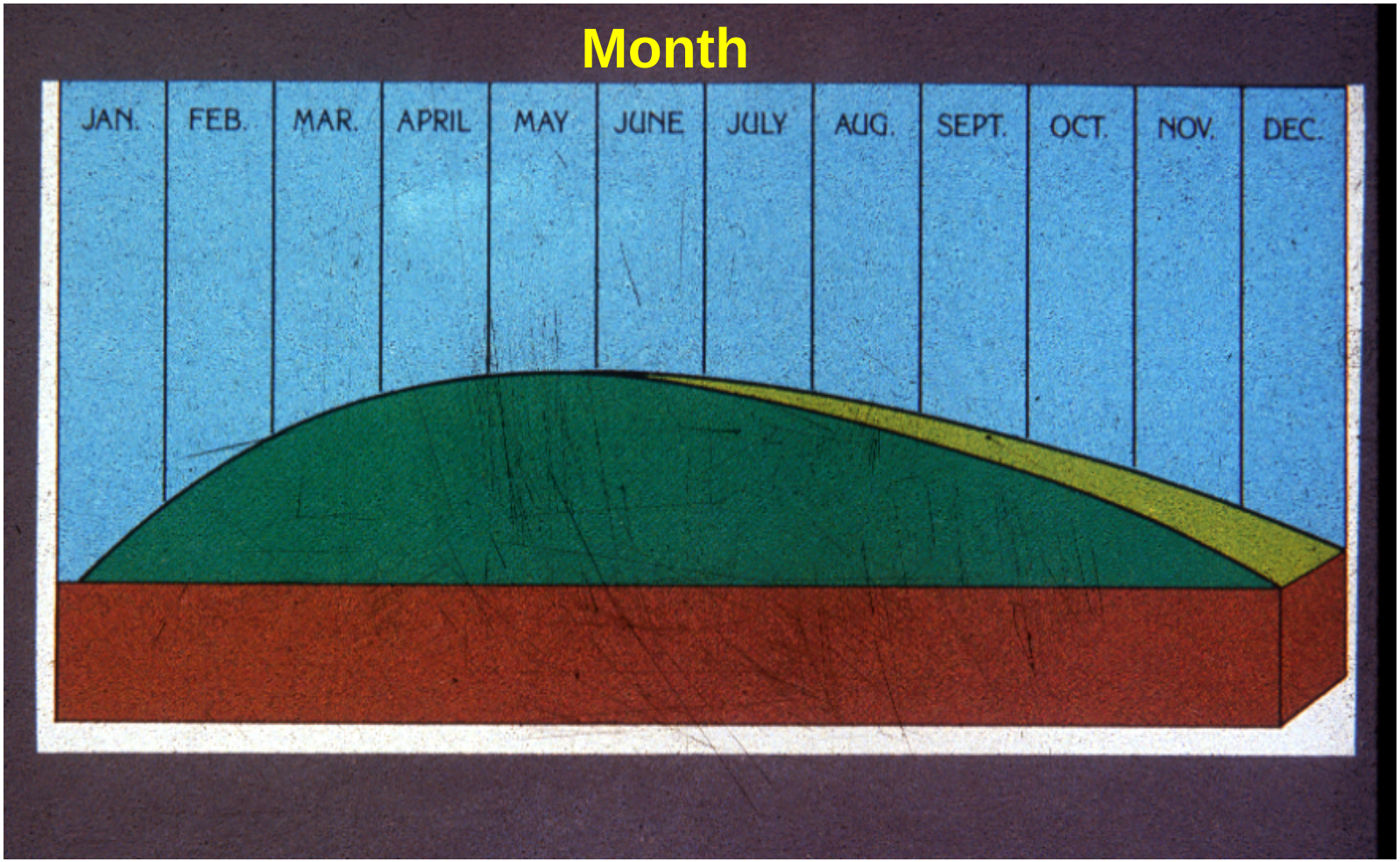
LOW ELEVATION - DESERT

	MONTH												
ACTIVITY	J	F	M	A	M	J	J	A	S	O	N	D	REMARKS
Seeding					X	X	X						After May 15. Do not overseed bermuda until second year
Sodding	O	O	O		X	X	X	X			O	O	X = bermuda sod only. o = overseeded sod only, rye over bermuda.
Fertilizing					1/2	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4				1/2 to 3/4 lb. -N- per 1000 ft^2 1.0 lb. after dethatching or aerification
Dethatch/Aerify						X	X	X					After May 15, up to Aug. 10.
Pre-emergent weed control		X	X							O	O		X = For summer annual weeds, apply Feb. 20 - March 5. O = For fall annual weeds, apply Oct. 25 - Nov. 25
Water (inches per week)				3/8	3/8 to 1/2	1-1/2 to 1-3/4	1-1/2 to 1-3/4	1-1/2 to 1-3/4	1-1/4 to 1-1/2	1 to 1-1/4			Inches per week

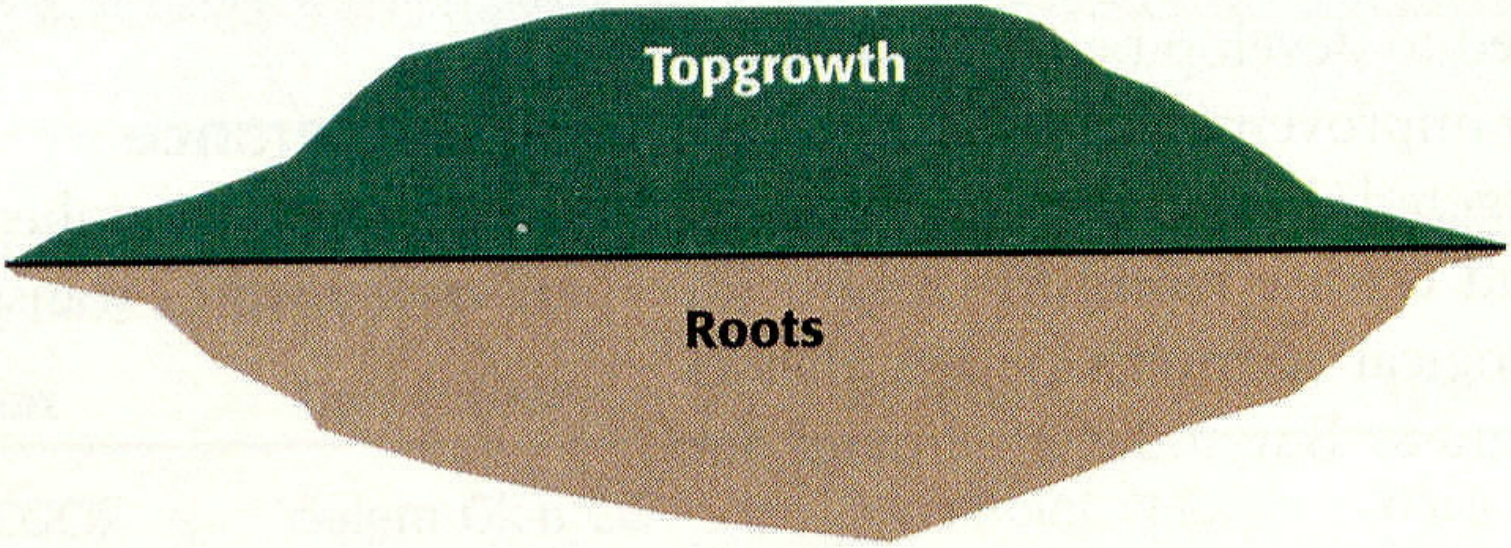
TEMP / Part	Ryegrass	Bermuda
SHOOTS (opt) air	60 to 75	80 to 95
ROOTS (opt) soil	50 to 65	75 70 85
ROOT (heat stress) soil	> 80	.> 100
LEAF TEMP (lethal)	104 to 112	110 to 120
COLD HARD. (air)	40 - 34	58 to 66
CHILL STRESS (air)	none	54 to 60
LOW TEMP KILL (leaf)	26 to - 20	18 – 0



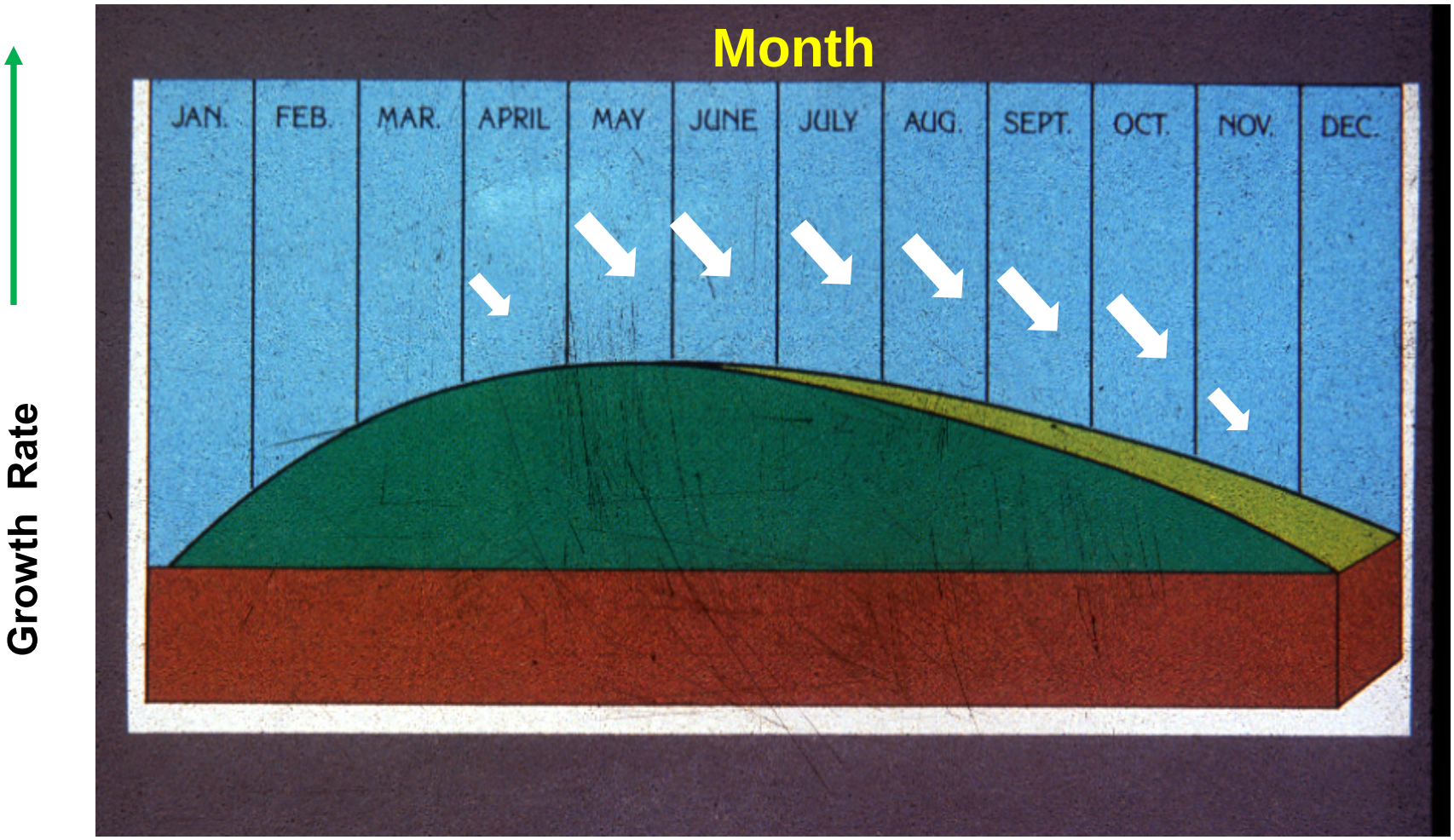
WARM SEASON


Month
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.
Growth Rate

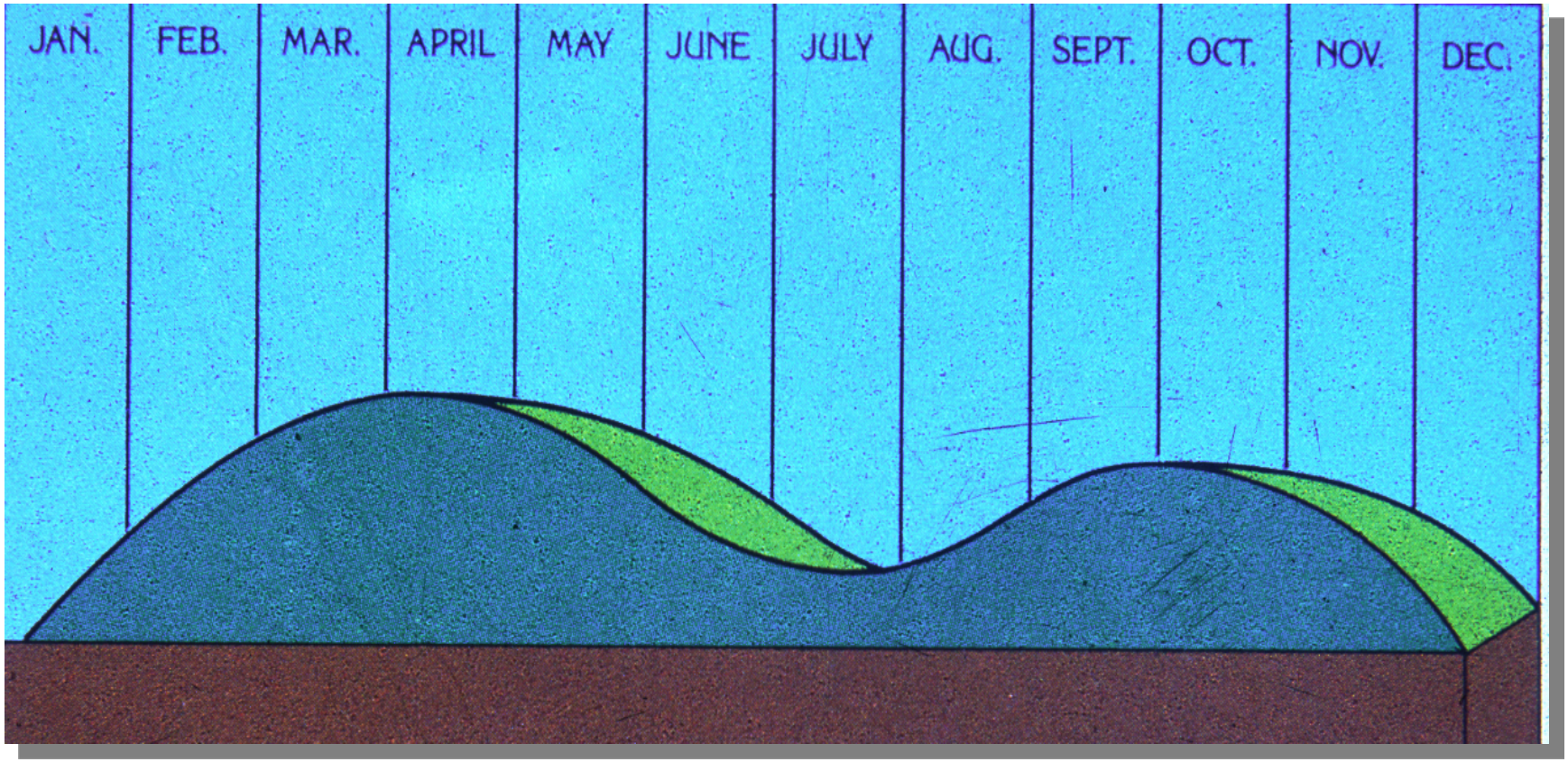
Warm-season turfgrasses



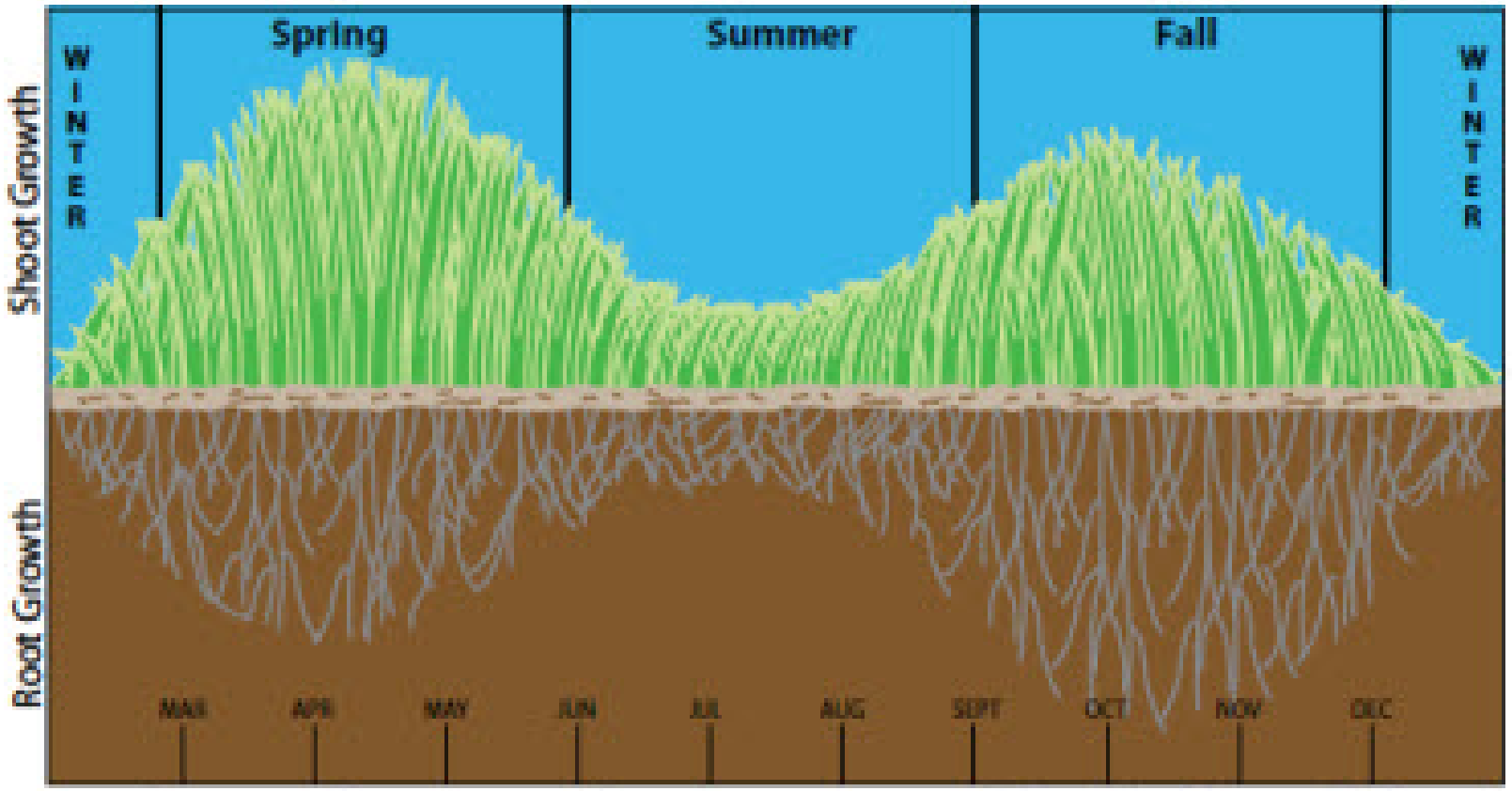
WARM SEASON


Growth Rate
Month
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.

Cool Season Grass Growth



GROWTH & TEMPERATURE - RYE

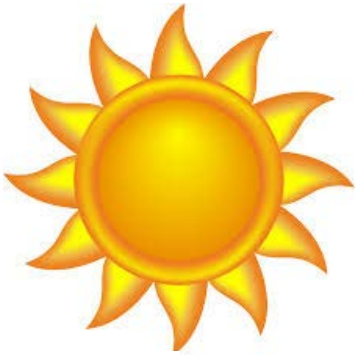


Cool Season turfgrass growth chart showing amount of growth of roots & leaf tissue.

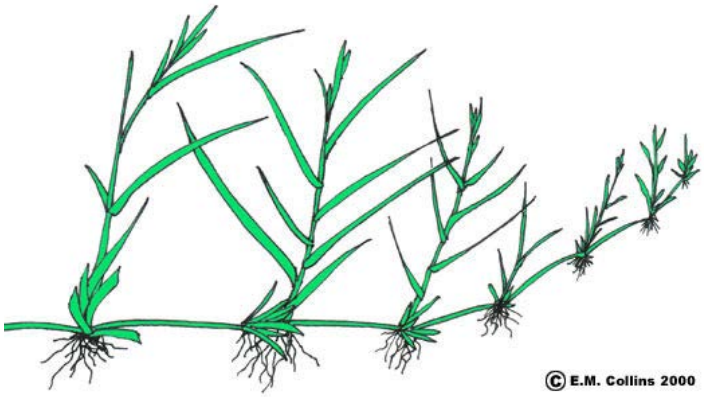
TEMP / Part	Ryegrass	Bermuda
SHOOTS (opt) air	60 to 75	80 to 95
ROOTS (opt) soil	50 to 65	75 70 85
ROOT (heat stress) soil	> 80	> 100
LEAF TEMP (lethal)	104 to 112	110 to 120
COLD HARD. (air)	40 to 34	58 to 66
CHILL STRESS (air)	none	54 to 60
LOW TEMP KILL (leaf)	26 to – 20	18 – 0

Good grass for graduation !

1. Warm weather , warm soil.

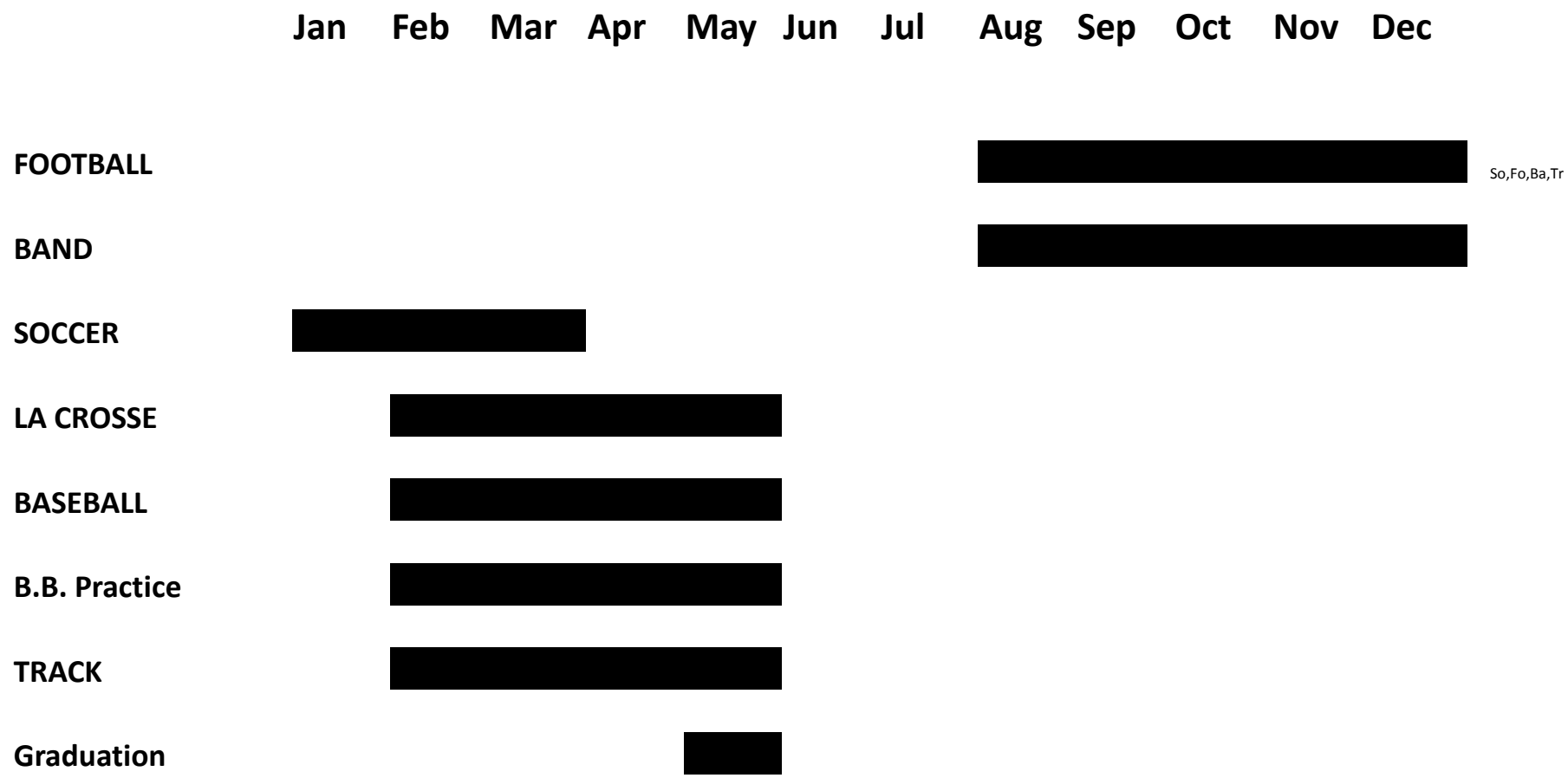


2. Bermudagrass



3. Valid graduates

TURFGRASS FIELD USE PATTERNS vs. ACTIVITY



BERMUDAGRASS (no overseed) for graduation

Avoid any aggressive soil cultivation in spring.

Apply iron for green color

Soil Temperature dependent, (N) fertilizer. !! ??

Avoid getting behind in mowing. Scalping will not recover at “summer rates”.

Scalping = negative root growth in spring, also brings on iron chlorosis.

Low density - low cover ? Raise mowing height. Get at least two mows in at the new taller height.

BERMUDAGRASS (with overseed) for graduation

High air temperatures on ryegrass. Not making much food ! (NMMF)
Avoid aggressive aerification.

NMMF:

- Avoid heavy (N) after Mid March.
- USE Iron for color
- Roots get “Shorter” with increased air and soil temperature, and “less food”.

DON’T scalp (force new shoots at both root and shoot expense) Run out of buds.

Fertilize with Potash (0 0 50).

Light (N) for color (0.10 to 0.20 lbs N / 1000 ft2).

GETTING RID OF RYEGRASS

IF YOU WAIT LONG ENOUGH…..

High night temperatures take it out.

IF YOU WAIT LONG ENOUGH…..

You end up with straw turf (dead ryegrass)

Straw probably chemically supresses bermuda !

Shorter bermuda season (if you plan on overseeding again)

GETTING RID OF RYEGRASS

Culturally.

Early program:

Lightly verticut, Mid March to late April.

(injuring the elevating crowns of rye). (thin canopy enough to let bermuda “start in !” Non advertised weakening of the ryegrass . Works best at reel mow heights.

Don’t verticut away the incoming bermuda stolons.

GETTING RID OF RYEGRASS

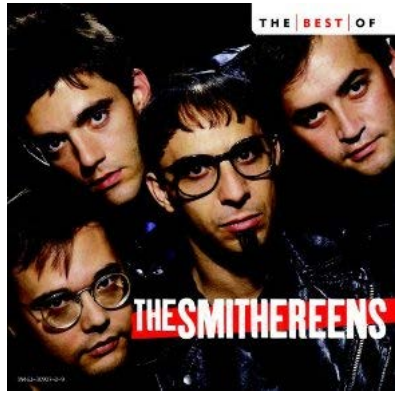
GETTING RID OF RYEGRASS

Culturally.

Post Graduation :

Repeat (N) fertilizer.

Mow lower, but must mow more often.



Scalp and vericut to smitherens.

Follow with repeat (N) fertilizer.

Repeat w/scalps.

Getting Rid of Ryegrass w/herbicides

- Kerb

- Manor (slow at low rates)
- Corsair (slow at low rates)
- Revolver
- Monument
- Tranxit
- Katana
- Certainty

- Sapphire (slow)

Keeping bermuda green late into the fall !

- AERIFY in the summer on fields with no play.
- FERTILIZE in the summer to get as many stolons as possible (100% cover f.b. rhizomes)
- DON'T scalp , ever !
- IRON sulfate = Oct 1 every 10 days = EOS.
- BERMDAGRASS var. TiffSport, Celebration, Princess (not rotary types),
- Avoid extra activities – specific use field.

Keeping bermuda as a uniform surface for fall use ! (1)

Want to build up highest stolon density possible and MAKE THATCH.

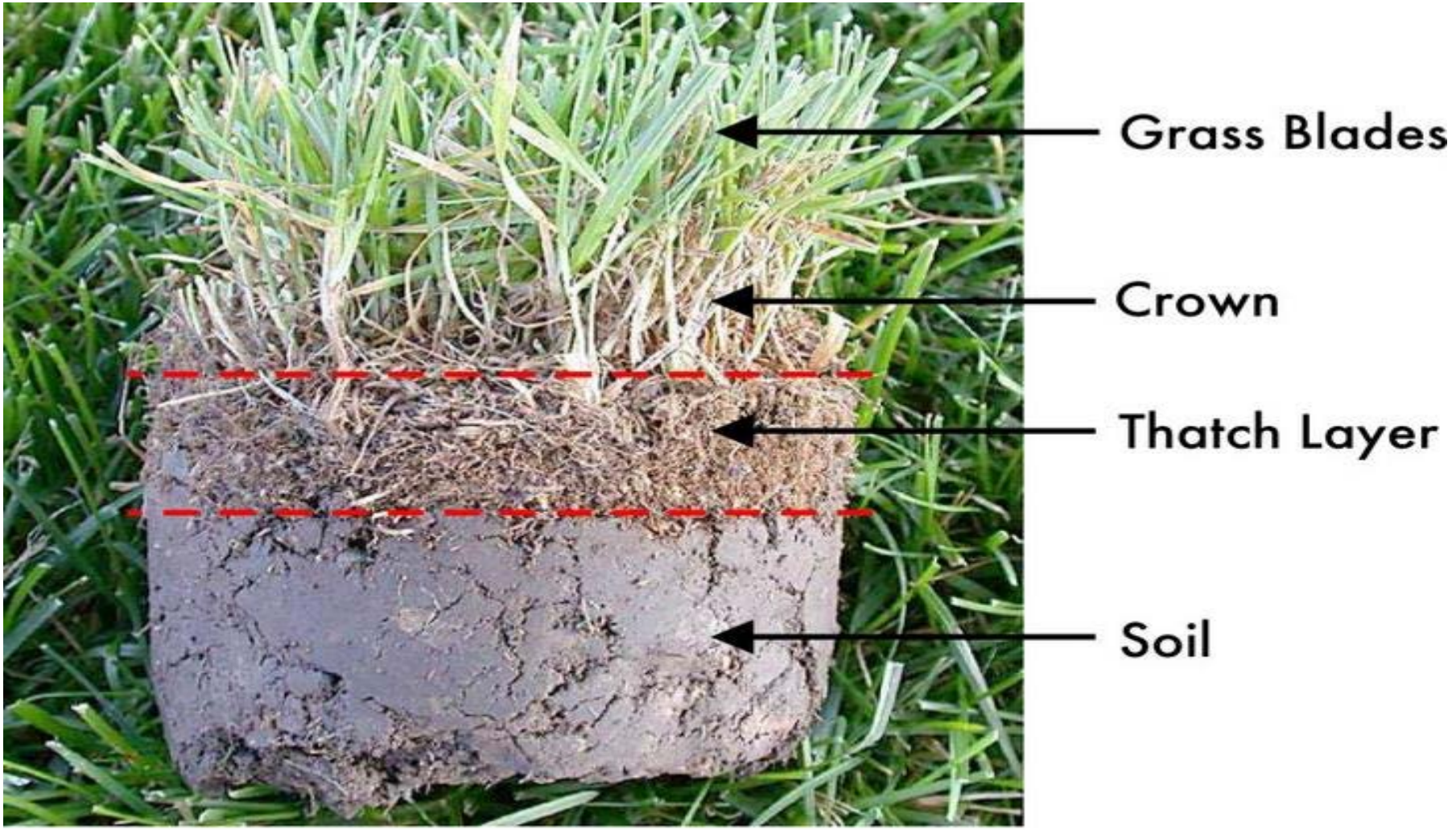
- Constant (N) program. (1/2 lb/M 14 day)
- Mow low with a reel-mower.
- Roll field to promote some compaction.
- Include potash fertilizer (1:1 with (N).
- High density bermudagrass cultivar
  (Tifway 419, TifSport, BobSod)
- Consider paint at end of season.

Keeping bermuda as a uniform surface for fall use ! (2)

Want to build up highest stolon density possible and MAKE THATCH.

- Need to get rid of the existing thatch before……
- You repeat the “thatch making program again….
- Need a uniform surface to manage……
- The unique uniform surface you make *(and remake)..*
- *NOTE : Works best with high denisty low mowing bermudagrasses. (high thatch tendency).*

Keeping bermuda as a uniform surface for fall use ! (2)



Thatch Layer in this picture is Approx. 1.5" thick. Aeration is definitely needed!

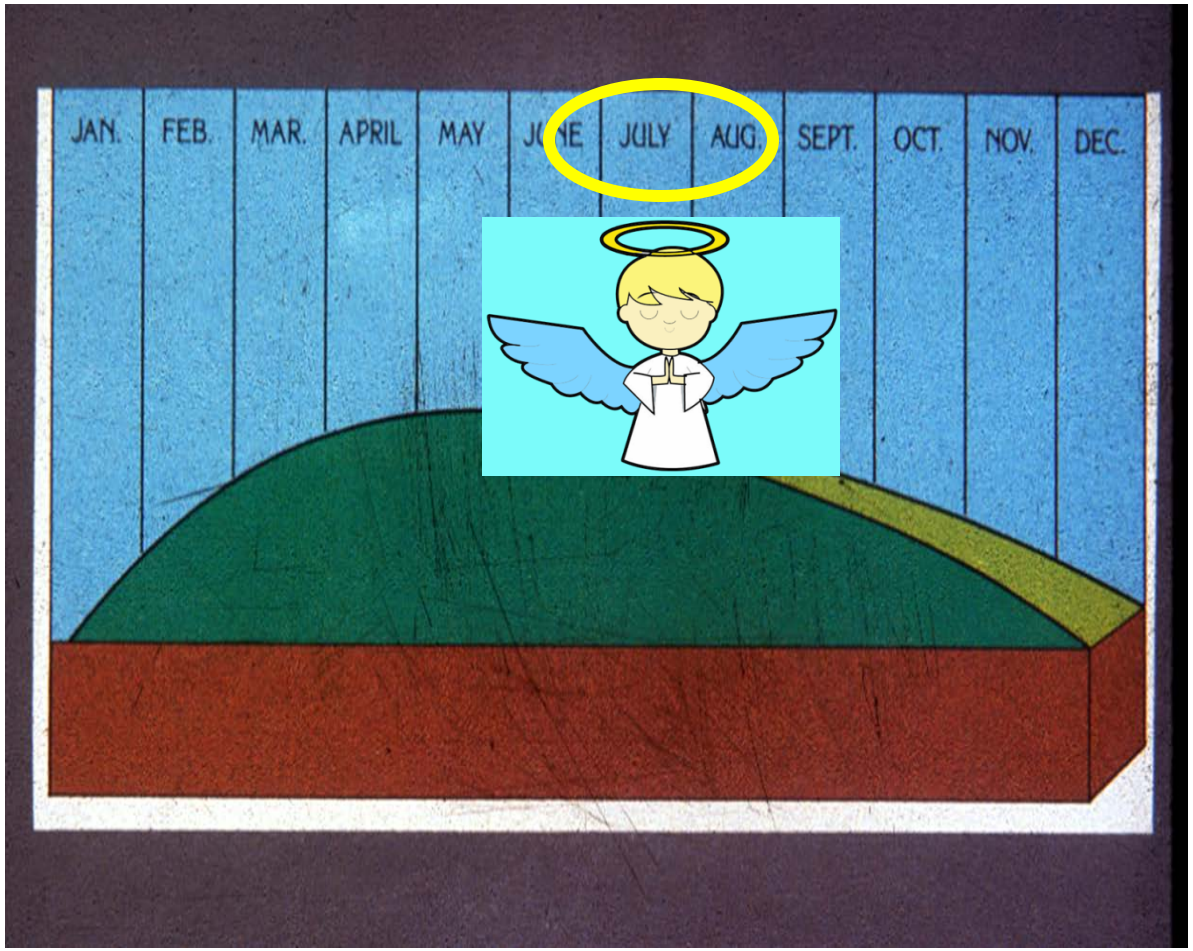
BIG HELPS !

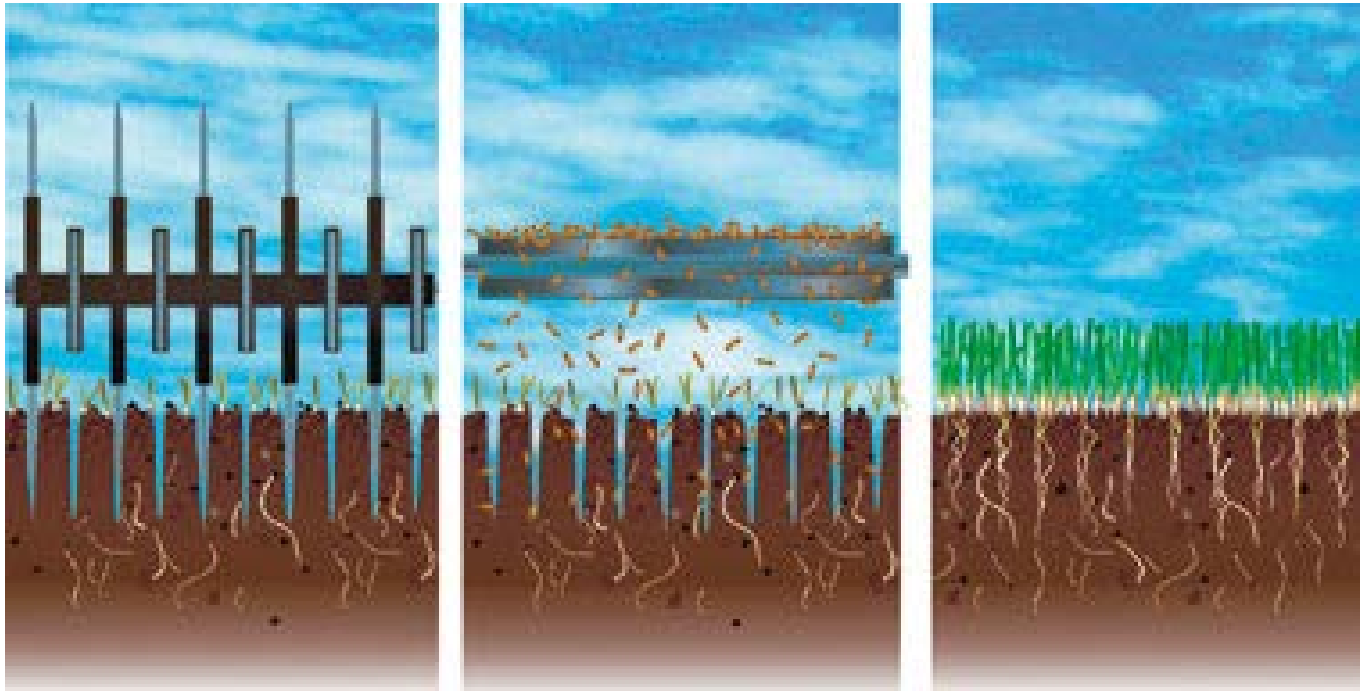
- ADMIN & A.D.’s
- Scheduling office.
- Don’t use the closest field, just cause it is !
- Use practice groundcover/pads.
- Move soccer goals – practice.
- Aerify.
- Don’t skip fertilizing bermuda in the summer

SUMMER MAINTENACE FOR FALL FOOTBALL

If you have ryegrass, get rid of it, culturally or chemically.

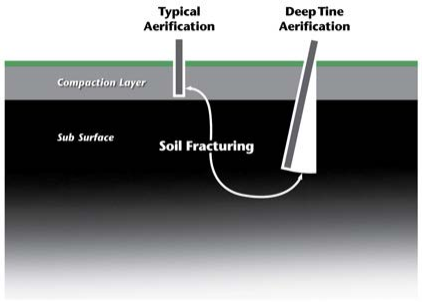
Best 8 weeks of the year on your side !

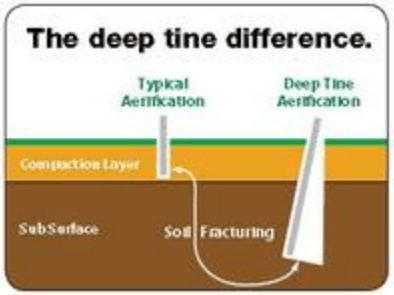




SUMMER MAINTENACE FOR FALL FOOTBALL

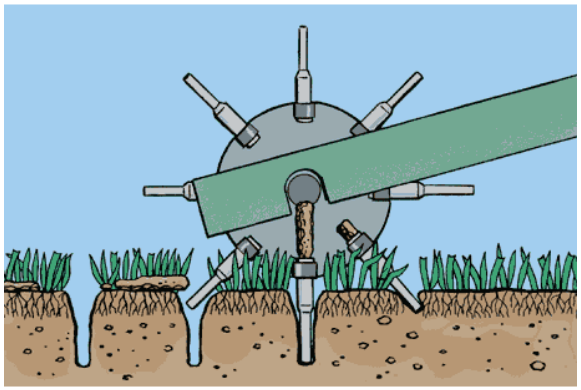
MOST UNDER-UTILIZED & UNDER-PRACTICED CULTUTAL MANAGEMENT ITEM IS ?





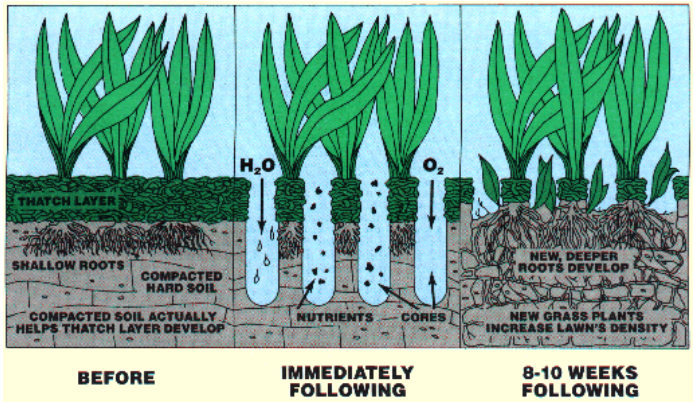
AERIFICATION

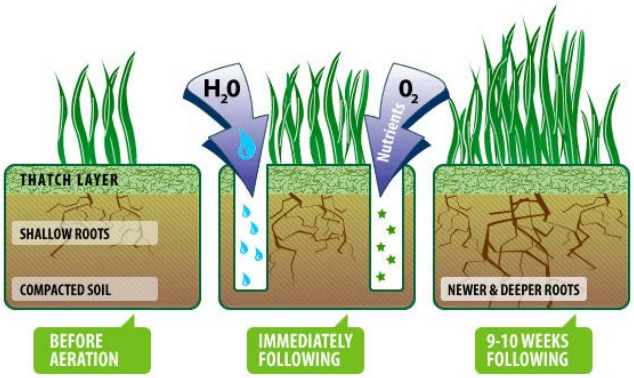
SPOONER

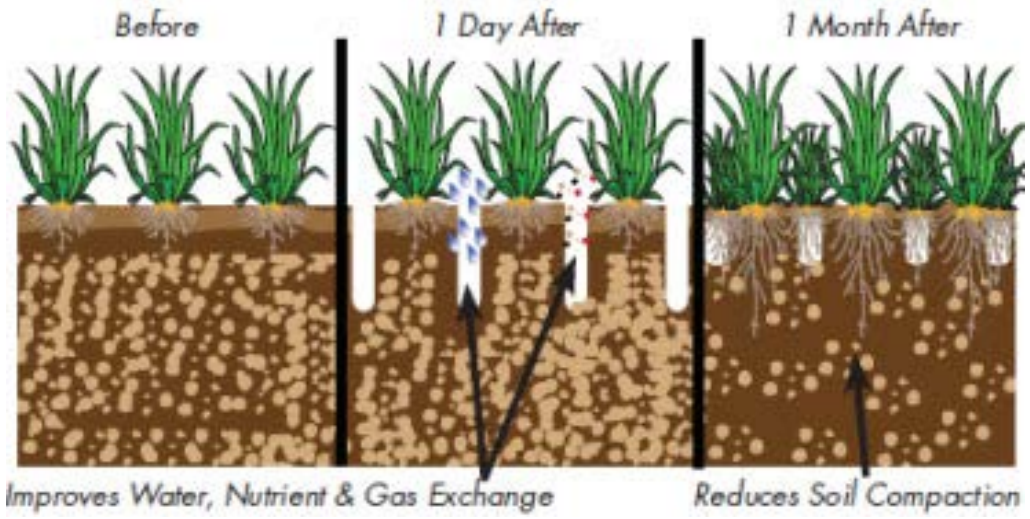


SLICER SPIKER

SUMMER MAINTENACE FOR FALL FOOTBALL







DEEP TINES


Push your Hay and Pasture Performance with AerWay®
• Aerate and renovate to increase air, water, fertilizer and manure uptake into the soil
• Helps to hold moisture and soils on hillsides and challenging field conditions
• Boost yields and stand longevity
• Optional heavy duty chain harrows
AerWay®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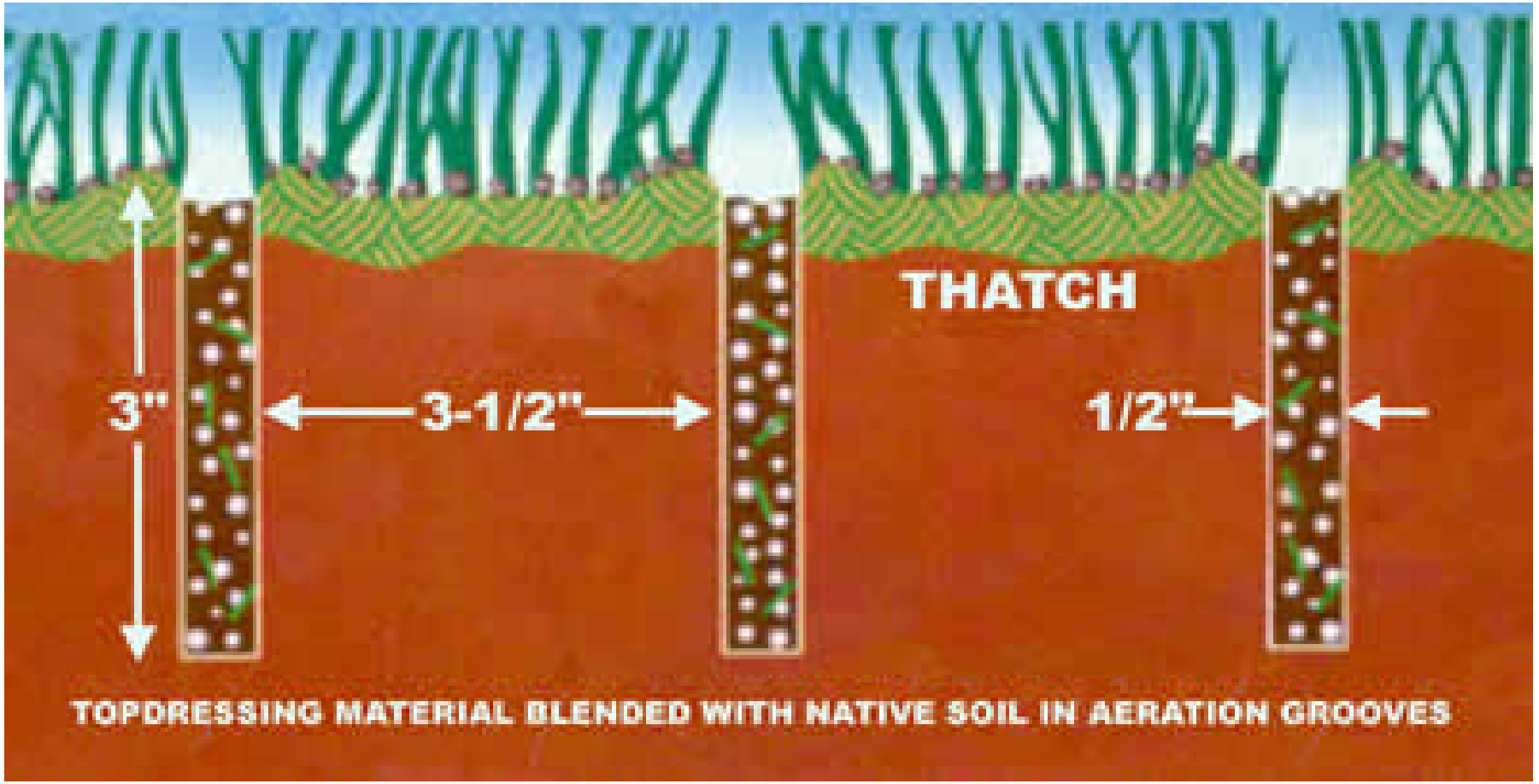
AerWay®


imants
SHOCKWAVE


GROUND QUAKE
GROUND QUAKE


THATCH
3"
3-1/2"
1/2"
TOPDRESSING MATERIAL BLENDED WITH NATIVE SOIL IN AERATION GROOVES


BLEC
SANDMASTER
BLEC SANDMASTER

TURF IS YOUR BUSINESS

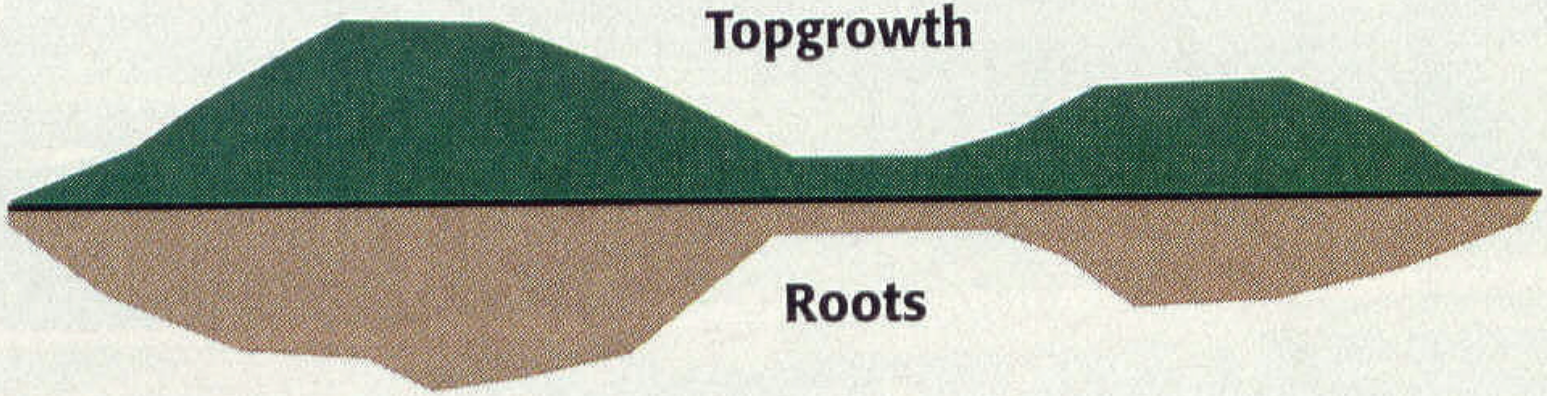
TITLE

Summary of temperature criteria affecting cool- and warm-season turfgrasses.

Temperature Parameter	Most C_3 Cool-Season Turfgrasses		Most C_4 Warm-Season Turfgrasses	
Optimum* Shoot Growth	60 to 75°F	(16 to 24°C)	80 to 95°F	(27 to 35°C)
Optimum** Root Growth	50 to 65°F	(10 to 18°C)	75 to 85°F	(16 to 26°C)
Root Heat** Stress	>80°F	(27°C)	>100°F	(38°C)
High Temperature*** Kill	104 to 112°F	(40 to 44°C)	110 to 120°F	(43 to 49°C)
Cold* Hardening	40 to 34°F	(4 to 1°C)	58 to 66°F	(15 to 19°C)
Chill* Stress	None		54 to 60°F	(12 to 16°C)
Low Temperature*** Kill	26 to –20°F	(–3 to –29°C)	31 to 20°F	(–1 to –7°C)

* Canopy temperature
** Soil temperature
*** Tissue temperature

Cool-season turfgrasses



Grass mowed higher will "feed" cool-season turfgrass roots better in spring and fall than in summer when hot weather tends to suppress some cultivars' shoot growth.