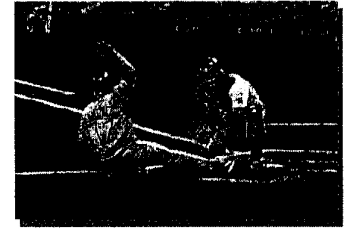


Overseeding Turf Reach 11 Sports Center, 2017.



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Listed are some conditions that are not good for the bermudagrass in the fall.

1. *Aggressive dethatching at overseeding:* Cut stolons which are removed in the process are "lost growing points" for next springs transition. Aggressive vertical mowing removes 80%-85% or more of the stolon buds. The only place the bermuda grows back is from rhizomes buds. Bermuda has way more stolon buds in a square foot of surface turf than rhizome buds.
2. *Early overseeding:* Overseeding when the bermuda is still actively growing allows (forces) the bermuda to grow back. This occurs at the immediate expense of loss of food reserves in rhizomes, crowns, and remaining stolons. After it grows back again, the plants have little or no food reserves for the wintertime and even less for the spring push back to bermuda! The result is often poor fall establishment because of the direct competition from bermudagrass and poor spring transition from a tired out bermudagrass plant from the "spring get go."
3. *Aggressive dethatching with an early overseed:* This is probably the worst case scenario and you just have to read why!
4. *Too "late" an overseed:* This is not a problem for bermudagrass per se, but couple it with an aggressive dethatching/vertical mowing and you've got severely damaged bermuda that will have open wounds all winter long. This comes at an "energy" price as well. When late spring rolls around there are often not enough food reserves left for the spring push. The result – bad spring transition.

For Arizona, overseed when the low night temperature is about 55F. This means that the daytime high temperature is about 82-83 F. This works well ! Go www.ag.arizona.edu/AZMET and select DATA ARCHIVE, and click on the AZMET STATION closest to your facility. Then.....find out what days in October this occurs at !

Since many facilities force an **early overseed**, there are some optimal things you can do to **slow down the bermudagrass**. **Primo PGR** is about the best PGR for safely stunting bermudagrass with minimal to none discoloration. You **must** raise the mowing height **before** you apply Primo...that's the take home rule. Label rates for overseeding use run from 0.25 to 0.50 ounces/product/1000 ft².

The herbicide Turflon ester can be applied at rates for slowing down the bermudagrass rates for use ed preparation. From 4-7 days before overseeding apply 4 to 8 liquid ounces/product/1000 ft² on hybrids and 6 to 8 on common. **Do not scalp the grass before** applications of either Primo or Turflon ester if used for overseed preparations. The products need to be taken up and moved within the plant so they can cause the reduced growth responses.

Seed Selection:

Hybrid ryegrass. A cross between annual and perennial ryegrass, which usually dies in the spring quicker than most perennials. Transist, Transtar, Trans Eze.

Improved annual ryegrass: Some new cultivars can take mowing at 5/8" and have good color compared to "Oregon annual". Quickston, Quickstart and Candidame are improved turf-types.

Now it's time to start our turf calendar with ryegrass overseeding in mind. Here are some suggestions that give a solid agronomic framework.

- Mid Summer
If thatch is 1/2" or more vertical mow to remove thatch! Do not vertical mow aggressively at six weeks or less before overseeding.
- 35 Days Before Overseed
Stop all nitrogen fertilizer applications and increase potash levels.
- 12 Days Before Overseed
Raise mowing height by 35%-50%. This makes leaves appear farther apart on the stem.

Decrease irrigation by 25% to force food storage and slow growth of bermuda. If you are going to spray Primo or Tuflon ester, keep watering as usual.
- 5 Days Before Overseed
Optional application of Primo or Turflon ester. Apply pre-emergence and water carefully for desired edge affects (fairways vs. roughs).
- 1 Day Before Overseed
Mow turf at the former original mowing height (same height as three weeks ago). This scalps the grass, removing the upper leaves.

Drop the mowing height another 30%-35%. Although this is only the first actual decrease in mowing height, you have "double scalped" the turf. The result is a semi-upright stolon with one leave on it. This makes it east for seed to get down between the stolons and more importantly you have saved your stolons for next springs transition!

Note: If the grass still has a high stolon density (Tifway 419 or another dense bermudagrass), you still have to lightly vertical mow. Set the blades into the canopy, not into the soil!

Note: In the bermuda has elongated enough, you can seed after the first mowing, then roll with the reels turned off, then mow again at the lower height. The new cut turf acts as a mulch! *Don't do this with a rotary mower!*
- Day of Seeding
Overseed in 2 directions, minimal. Use the PLS calculations. Dray a mat over the turf and then roll if possible.
- Next Day
Set irrigation for light/frequent applications of water. No more than 1/4" per day total, from 3-5 irrigation start times. Don't water past 4:00 PM.

First Mow.

- Mow ryegrass when it's $\frac{3}{4}$ inch to $\frac{1}{2}$ " with a sharp reel mower at low ground speed on dry turf. Try and make turns on the non-seeded areas when possible. IF not, make wide gentle turns.
- First Fertilization
Apply a starter fertilizer **after the first mowing**. Try to apply a high phosphorous material. Ammonium phosphate is 16-20-0 and is cheap. Apply 1 lb. of phosphorus per 1000 ft². This is 5 lbs. of ammonium phosphate! Water the fertilizer in right away!
- Mowing Reductions
As part of regular mowing, don't let the grass get over 1/3rd taller the regular mowing height, EVER! The day you want to drop the mowing height to a new mow height, mow the grass first at the regular height. Than on the same day, drop the height by another 25%. Keep mowing as needed, not breaking the 1/3 rule. If temperatures are warm the grass will "adapt" quickly to the new mowing height and you may have to mow everyday. If it's cold, you will have to wait a while for the grass to adjust to the "new" lower height(s). Judge accordingly.

SOME TRICKS!

If you need to touch up some areas, you can speed up germination by presoaking seed. Place a 50-lb. bag of seed in a clean 50-gallon or larger tub or barrel. Put a cinder block on the bag to hold it underwater. Fill the tub with tepid water at 8:00 am. Dump it and repeat at 12:00 noon. Dump it and repeat at 4:00 PM and let the seed sit overnight in the water filled tub. The next day dump the water at 8:00 AM and refill again. Let it sit to 4:00 PM. At 4:05 PM dump the seed on a clean garage floor, out of the sun in a pile like a pyramid. The next day rotate the seed pile(s) several times with a pitchfork to disperse the heat that is being generated by the seed. The seed is now beginning to swell and a small white "bulb" appears at the base of the seed. This is the baby root (not the Baby Ruth) as it first pushes its way out of the seed. It looks like a "granny" popcorn which did not fully pop. If the root is 1/8" longer or more you may damage the seed when applying it to the turf. For the now swollen seed (with granny's if showing), either hand broadcast or use a rotary spreader, depending on the size of the area(s) that are being reseeded. You can also mix in the seed with mulch, sand or Milorganite-type products. If it's cold, topdress the area after reseeding with a dark color topdressing material. The dark color will gather much needed heat from the sun.

Turf covers will work also. Make sure the cover is breathable! Don't leave covers on day and night after the turf emerges. Remove covers during the day and then roll them out before night.

SPRING TRANSITION

After the work and a full winter sports season, it's time to think about spring transition. Research in the last ten years shows that the cultural management practices done 30 years ago do not work anymore. Vertical mowing, aerification, and irrigation deprivation don't get rid of the ryegrass anymore. So what's left?

Herbicides have come to the rescue. Newer chemistries are now on the market that stop the growth of the ryegrass and have minimal or no affect on the bermudagrass. The old style

herbicide of KERB (pronamid) is inconsistent in results from year to year and also from application rate as well. Newer herbicides such as Revolver, Tranxit, Monument and older types (of the same chemistry background) such as Manor and Corsair are used for transition. These herbicides block the protein making ability of the ryegrass, but not the bermuda. After a spray application, the grass will stop growing in just a few days. After that, the ryegrass turns straw. The trick is to apply the herbicide when it's warm enough for bermuda growth and apply a rate of the herbicide which will not work too fast on the ryegrass. Monument and Tranxit can cause the greatest amount of straw ryegrass quickly. Revolver is intermediate and Manor the least. There is no magic bullet (yet?). The rate of bermuda return is related to the rate of exit of the ryegrass. Some of these products can track off site and then are taken up (by the most part) by the foliage. So it's important to (1) stay off the turf at least 8 hours after application, (2) irrigate that night after the 8 hours is up, and (3) don't apply to wet turf in the morning. Each product should have instructions on the irrigation interval requirements.

Bermuda season "starts" when the nighttime temperatures are above 60F (as the low temperature) for seven straight nights. You can apply these products when the nighttime temperatures are 50-55F for a week. Depending on your location, that's either an early May application or a early June application. If you wait to apply these herbicides "later" in the summer, you still get your "straw." It depends on your play schedule at that point. If you can apply earlier you will have a longer bermuda season. This is important since the longer the bermuda grows before the next overseeding, the better your turf will be the next spring. That's because a longer growing season means more rhizomes and better food storage for the long winter haul.

FN: Overseed sports turf SHORTIE Surprise 2016 : Q3 2016.