



More ▾

TURF HACKER

Ideas about growing grass

[Home](#)

[Jason's Productivity Files](#)

[Support me on Patreon](#)

MONDAY, 11 JUNE 2018

If I had a magic 8 ball



It would probably read,

"All signs point to fertilizing more!"

Why?

BUY

VISA

FEAT

**Turf
Tha**

Ever
gues
prior
on th

POP

prett
why

Address
Phone
Email
Website
Social

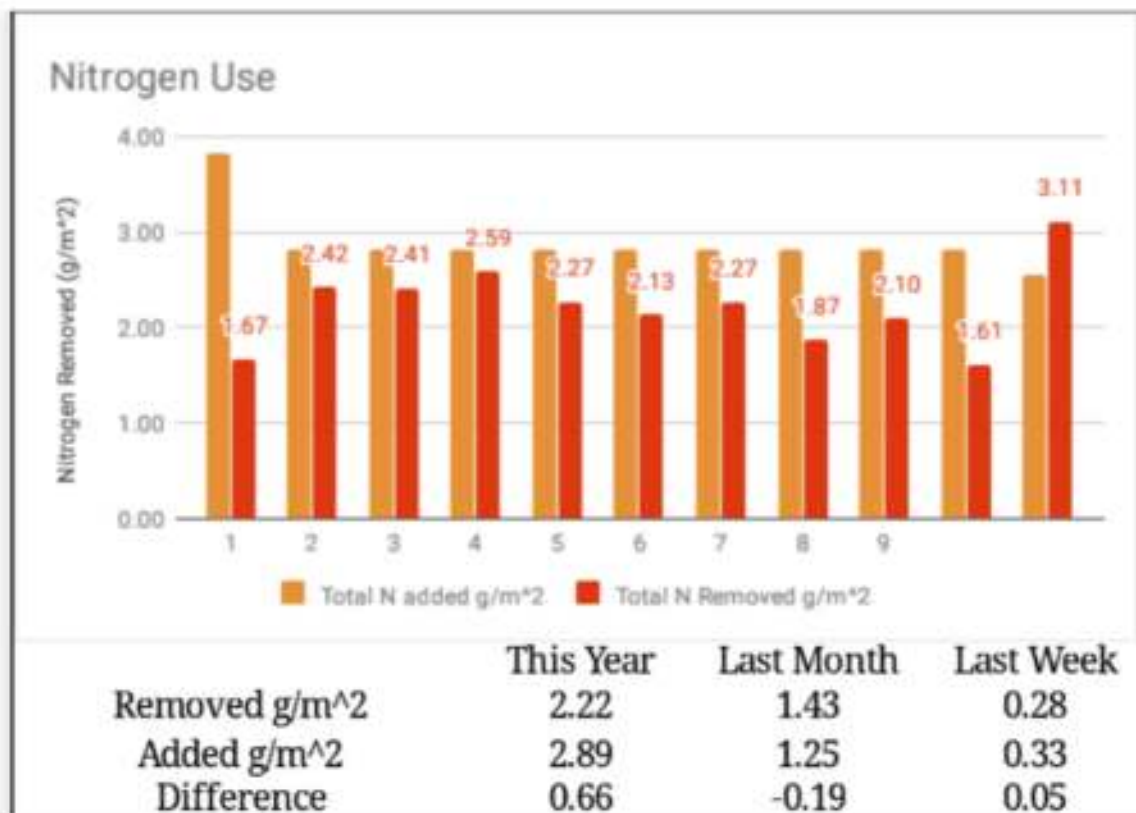
Despite my lack of a magic 8 ball I do have the next best thing. A HUD (Heads Up Display) which shows all my course data. This is supposed to help me make better decisions by automatically analyzing the data I collect and presenting it in a single place for my observation.

When I combine what the HUD is showing me with my disease observations it becomes clear what I should do and what I should do is fertilize my greens more. You might be thinking what's the big deal, just apply the fertilizer already you asshole! You are probably right but the reason I am so hesitant to apply fertilizer is that once you apply it, you can't take it back. As fertilizer has such a big impact on turf conditions and the costs associated with maintaining the golf course I need to be absolutely certain that the fertilizer is needed. So far this year we have mowed less than ever before. This has big impacts on fuel use, mower wear and tear and labor required to maintain the course. Growing the grass faster than absolutely necessary just wastes money.

1. Greens are lean

So far this year we have only applied 2.9 grams of nitrogen per square meter on our greens (0.64# N/1000). Through the measurement of our clipping volume I have been able to watch how much nutrients we are removing from our greens and compare that to how much we have applied.

In the last month we have removed more nutrients from our greens that we added. It's obvious from the chart below and it's also obvious with how visible the #friskyfairyring is on the greens. Bottom line, they are lean!



is pe

ferti

shee

main
Supe

was I
get ...

meet
the N

2018

Last
I cou
into r
weat



This fairy ring has never been visible on our greens. Bottom line, they are lean AF right now.

Wow, those greens sure are lean. Don't need a stupid graph to tell you that!

I know, I know, but having the data helps me understand how lean they are and why. In this case they are lean because we have applied less nutrient than we removed in the last month.

2. Disease

This week anthracnose showed up on our poa. For most of my greens there isn't much poa so I can let it die a quick and painful death. My first green is still mostly poa so I need to slow the death down to a level that will see the surface covered in turfgrass while the recently seeded bentgrass has a chance to fill in the gaps left behind by the disease and poa seed head.

have

BLO

▼ 2



▶ 2

▶ 2

▶ 2

▶ 2

▶ 2

▶ 2

▶ 2

LABI

#clip

aeral

anthr

apps

Bent

biolo

Budg

clipp

clove

comr

Cyar

Dew

digita

Disei



anthracnose is back and by the looks of it, widespread



bentgrass seeded into the voids left behind from the poa seed head and anthracnose

disea
Dolla
drou
effici
EQ
envri
equip
expe
fairw
fertil
Form
funny
Fusa
Goog
Gree
Grow
grow
grub
hack
Heig
hud (
IPM
Iron (
irriga
job b
labor
learn
M. ni
math
Micro
minir
MLSI
most
Mulc
newt
nitro
opini
Orga
other
Pesti
Pesti
pH (
phos
pigm
Poa :

The **BMP guide from Rutgers** suggests that increasing nitrogen rates will lessen the impacts of anthracnose among other things. My goal is not to eliminate the anthracnose but to slow its destructive tendencies down a bit. Anthracnose is a great selective pathogen that will kill out the poa and leave the bentgrass relatively unscathed.

So the increased nitrogen rates are double beneficial for dealing with anthracnose. They slow the disease down and hopefully help the bentgrass fill in the voids a bit quicker. I applied 1g of nitrogen per square meter to our first green which is the hardest hit with anthracnose for a cost of \$2 this week. As time goes on I will continue to add these relatively heavy fertilizer apps to manage the anthracnose on this green and others as required.

Growing the grass at an increased rate in the summer is also a good strategy for dollar spot and is one of the principle strategies employed at the Vineyard Club. This week we had dollar spot show up on our greens and not surprisingly our growth rates are well below that where I have observed are good for managing dollar spot.



Dollar Spot is back. F sake

prim
putt
putt
R. ce
robot
rolli
salar
sand
sand
Seec
Shac
silica
silver
Sma
socia
soil r
STIM
Suns
supe
Sust
techr
Turf
UAV
urea
VMC
Wate
weec
wetti
white
winte
wood
yellow

FOLI
Eme

Growth Rate, Yield, and Disease Targets



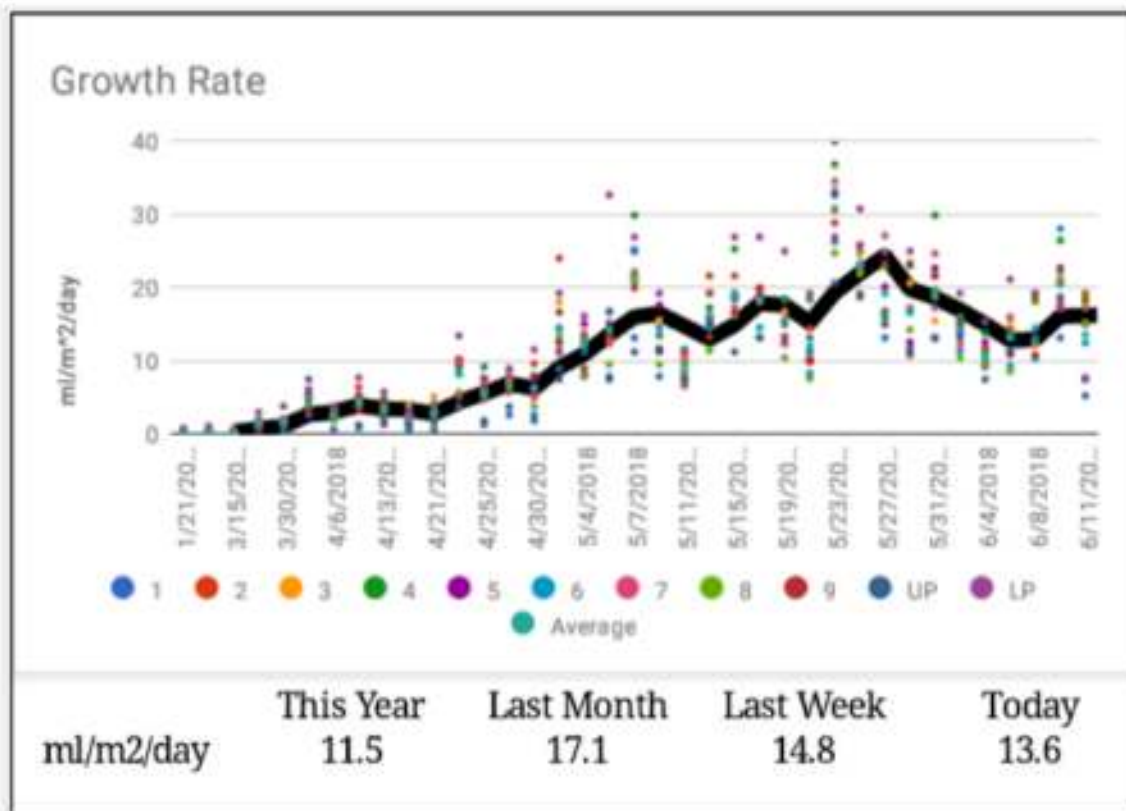
Average ml/m ²	This Year	Last Month	Last Week	Recent
Cv	869	560	109	12
	34%	24%	31%	51%

Growth rates are currently below the dollar spot target

Smith Kerns Dollar Spot Model



There was a spike in disease pressure yesterday. The DS action threshold is probably set too high btw.

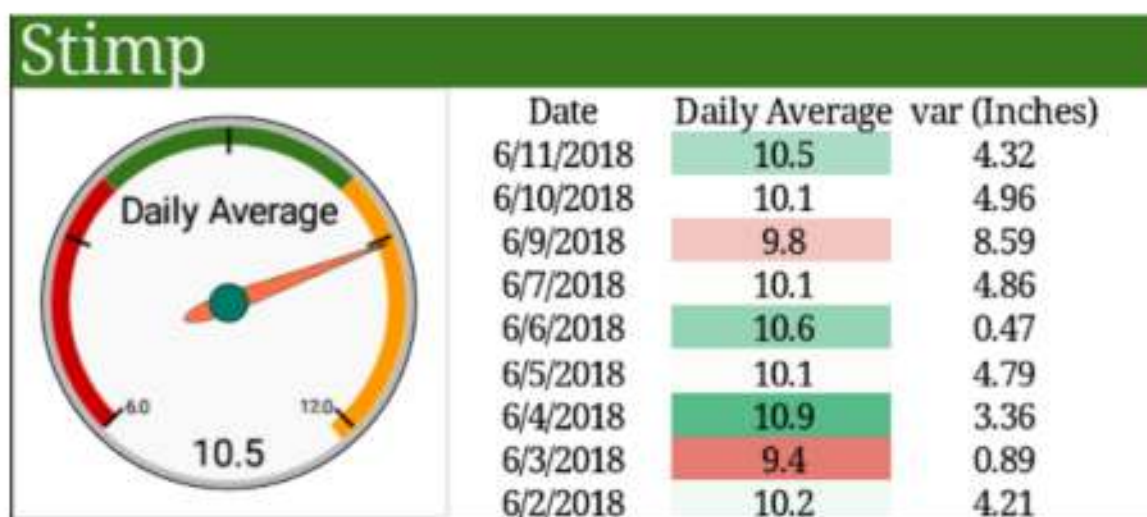


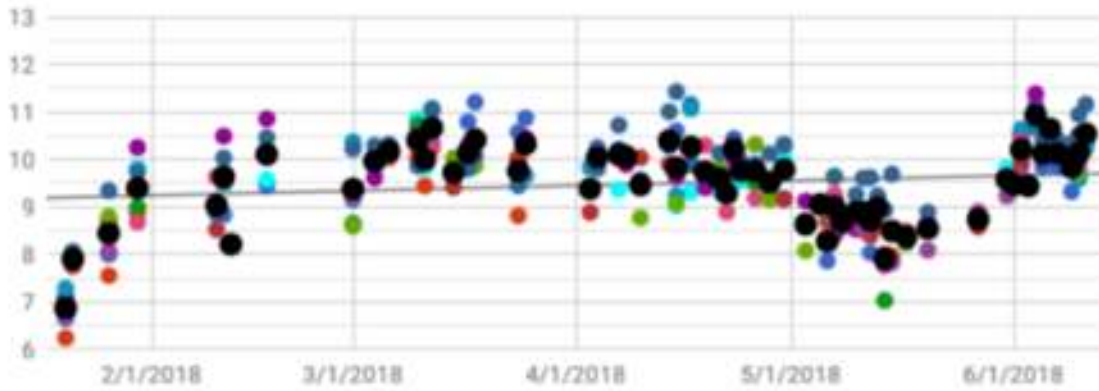
Despite the high disease pressure last month, the increased growth rates were enough to keep the disease away.

So there you have it. Growing the grass faster than we currently are will help reduce disease. Why don't I just apply a fungicide? Well a fungicide costs about \$600+ where increasing fertilizer will cost maybe \$10. It just doesn't make sense to run to a fungicide (yet) when I clearly have options that are much cheaper and probably (hopefully) just as effective.

3. Greens are too fast

Our green speeds are too fast which isn't a bad problem if you are a good golfer. Our course is difficult enough and as we approach the busy season where there are many novice golfers playing we need to keep our green speeds down to keep the time it takes per round down. No one likes a 5 hour round. Either way, we can stand to have them slow down a bit without worrying about them being too slow.





Greens speeds are the high. Note the dip in speeds during the effing poa seed head flush.



The sure are fast downhill these days

So there you go. This is just one example of how I am using my HUD and the data collection to make better decisions (hopefully) about how we grow our grass.

If you like my blog and want to support what I do you can support me on [Patreon](#) or [paypal](#). Thanks!

Posted by [Jason Haines](#)



Labels: [#clipvol](#), [anthracnose](#), [Dollar Spot](#), [Google docs](#), [growth rates](#), [nitrogen](#)

No comments:

Post a Comment

Enter your comment...



Comment as: Force Of Nature --

[Sign out](#)

[Publish](#)

[Preview](#)

[Notify me](#)

[Newer Post](#)

[Home](#)

[Older Post](#)

Subscribe to: [Post Comments \(Atom\)](#)



Google Sheets

Sorry, unable to open the file at this time.

Please check the address and try again.

Get stuff done with Google Drive

Apps in Google Drive make it easy to create, store and share online documents, spreadsheets, presentations and more.

Learn more at drive.google.com/start/apps.

