THE HEIGHTS GOLF CLUB

Client: The Heights Golf Club

Spring 2025 Report

	4/8/25
Humidity/Air Temperature	35%/77°
Greens Temperature	(avg)68°
Fairway Temperature	(avg)70°

	Acceptable Range For Water Sample	Well Fill 4/8/25	Hole #1 4/8/25
pH	<2.25 mmhos/cm	7.92	7.30
EC	<2.25 mmhos/cm	1.89	1.94
Sodium		319.36	281.62
Calcium	20 - 60 ppm	82.71	87.55
Magnesium	10 - 25 ppm	42.16	42.36
Potassium	5 - 20 ppm	13.32	4.03
Sulfur	30 - 90 ppm	125.73	282.52
Bicarbonate	<120 ppm	268.31	111.03
Boron	<0.67 ppm	0.33	0.27
Chloride	<177 ppm	471.99	443.56

SOIL AND WATER CONSULTING

GREEN		Green #1 0-4" 4/8/25	Green #1 Below 4" 4/8/25	TLC 20/30 4/8/25
Clay		2.20	2.20	0.40
Silt		1.90	2.90	1.80
Sand		93.30	92.50	97.80
Gravel		2.60	2.40	0.00
Organic Material		1.50	0.99	<0.1
Sieve #:				
Fine Gravel	10	2.60	2.40	0.00
Very Coarse Sand	18	2.00	9.60	0.60
Coarse Sand	35	43.30	27.20	41.30
Medium Sand	60	43.50	41.50	54.30
Fine Sand	100	3.10	9.00	1.20
Very Fine Sand	140	0.70	2.90	0.20
Very Fine Sand	270	0.60	2.30	0.20
Infiltration Rate		n/r	<0.5	n/r

TEES	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/8/25
Organic Matter (Humus)	2 - 3%	6.80
Sulfur	12 - 16 ppm	118.33
Olsen - Phosphorus	13 - 20 ppm	47.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,862.67
Magnesium	>7% base saturation or at least 200 lbs/acre	20.44%/756.66
Potassium - TEC of 0 - 35	100 ppm	80.67
Manganese	50-80 ppm	13.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/8/25
Organic Matter (Humus)	2 - 3%	4.11
Sulfur	12 - 16 ppm	160.00
Olsen - Phosphorus	13 - 20 ppm	15.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,810.00
Magnesium	>7% base saturation or at least 200 lbs/acre	21%/788
Potassium - TEC of 0 - 35	100 ppm	163.33
Manganese	50-80 ppm	51.00

GREENS	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/8/25
Organic Matter (Humus)	2 - 3%	1.53
Sulfur	12 - 16 ppm	35.67
Olsen - Phosphorus	13 - 20 ppm	21.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,732.00
Magnesium	>7% base saturation or at least 200 lbs/acre	20.39%/328
Potassium - TEC of 0 - 35	150 ppm	74.33
Manganese	50-80 ppm	95.00

TEE	Acceptable Range For Saturated Paste Sample	1 4/8/25
Nitrate- Rye/Bermudagrass	5-10 ppm	<0.5
Phosphorus	2 - 10 ppm	1.77
Potassium	40 - 100 ppm	14.23
Calcium	60 - 200 ppm	103.89
Magnesium	20 - 70 ppm	37.55
Sodium	0 - 30 ppm	289.70
Soluble Salts	<1,920 ppm	1,032.00
Bicarbonate	<60 ppm	130.15
Chloride	<1,000 ppm	245.00
SAR	<4%	6.19

FAIRWAY	Acceptable Range For Saturated Paste Sample	1 4/8/25
Nitrate - Bermudagrass	5-10 ppm	<0.5
Phosphorus	2 - 10 ppm	2.08
Potassium	40 - 100 ppm	21.79
Calcium	60 - 200 ppm	63.37
Magnesium	20 - 70 ppm	23.09
Sodium	0 - 30 ppm	270.71
Soluble Salts	<1,920 ppm	895.00
Bicarbonate	<60 ppm	195.68
Chloride	<1,000 ppm	241.00
SAR	<4%	7.40

GREENS	Acceptable Range For Saturated Paste Sample	1,10,18(avg) 4/8/25
Nitrate- Poa annua	1-3 ppm	1.90
Phosphorus	2 - 7 ppm	1.91
Potassium	25-40 ppm	20.17
Calcium	50- 75 ppm	34.27
Magnesium	15-30 ppm	13.48
Sodium	0 - 30 ppm	103.76
Soluble Salts	<1,000 ppm	458.67
Bicarbonate	<60 ppm	64.80
Chloride	<200 ppm	139.33
SAR	<4%	3.82

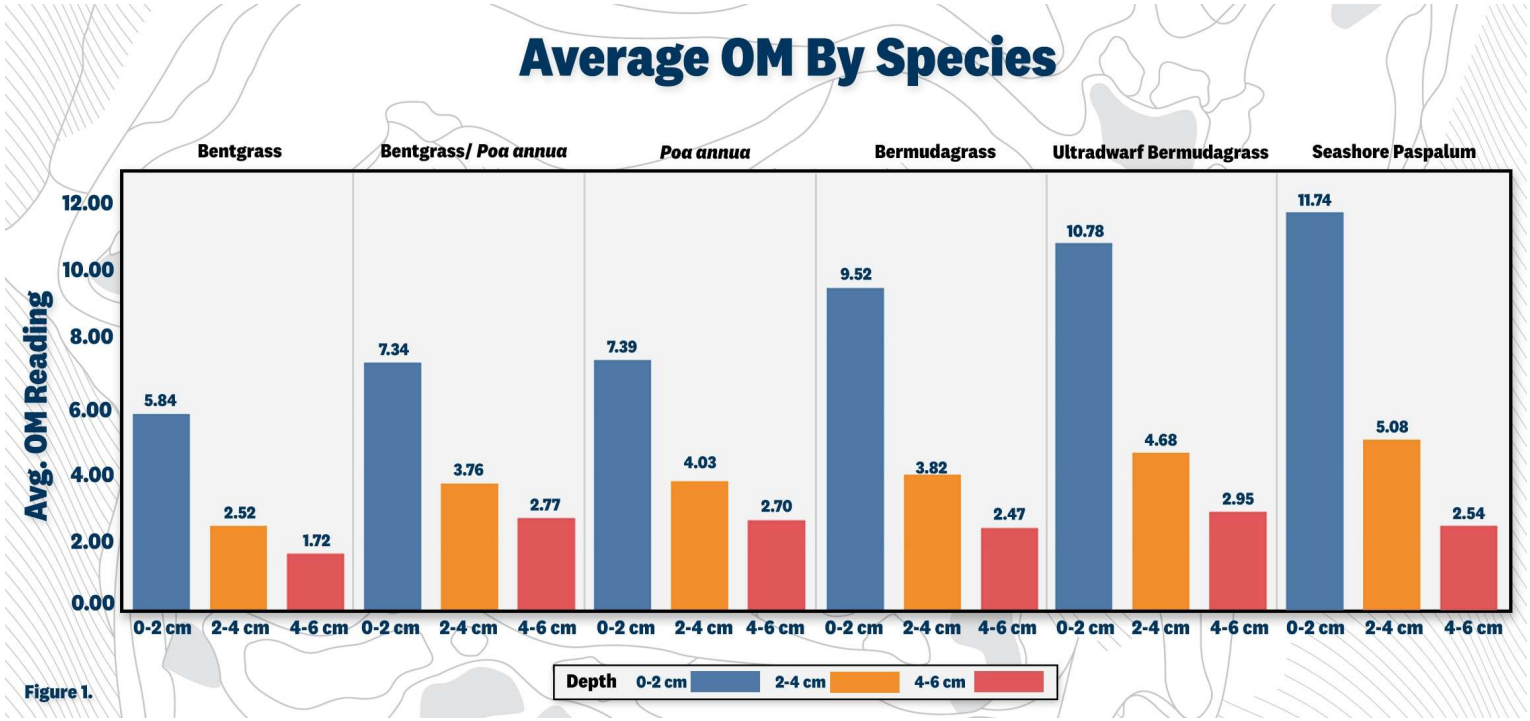

Figure 1.

https://www.usga.org/content/usga/home-page/course-care/green-section-record/62/issue-22/are-you-managing-putting-green-organic-matter-or-is-it-managing-.html#sectionFilters=research&returnable

	Green #10 (4-2025)	USGA Research *National Averages (Poa Annua)*
Organic Material 0-2cm	4.53	***7.39***
Organic Material 2-4cm	1.29	***4.03***
Organic Material 4-6cm	0.87	***2.7***

Nutrient Deficiencies

		K	Na
TEE	1	123	518
TEE	10	49	366
TEE	18	70	355
FAIRWAY	1	148	376
FAIRWAY	10	157	604
FAIRWAY	18	185	292
GREEN	1	75	140
GREEN	10	80	119
GREEN	18	68	121

Potassium can be added in the form of 0-0-50 at a rate of 2 pounds of product per 1,000 sq ft one time on ***Tees*** *and monthly on* ***Greens***

Comments and Next Level Cultural Practices

- The sulfur burner came on-line the day I was there. But we saw a difference in the field and the first lab results. That pond is a perfect size for burning sulfur and being able to keep up with the well fill daily. After more and seasonal water sampling, we can know if injecting acid may be helpful as well. Having the system is always valuable.
- Although Sodium levels are high and make the soils “out of balance”, the greens seem to have the ability to move water and the negativity from that water.
- Verti-cutting the greens should be a regular part of your programs through the growing season. There was a “puffiness” in the top layer that may get more difficult to manage as the heat increases.
- We can discuss the topdressing sand in more detail, but I would like to see it be slightly coarser. Maybe consider taking the 30 out.