



Client: Coyote Springs Golf Club
Spring 2025 Report

	<u>4/11/24</u>	<u>3/20/25</u>
Humidity/Air Temperature	15%/85°	15%/69°
Greens Temperature	(avg)52°	(avg)49°
Fairway Temperature	(avg)50°	(avg)50°

WATER	Acceptable Range For Water Sample	Hole #1 3/5/19	Hole #18 4/11/24	Hole #5 3/20/25
EC	<2.25 mmhos/cm	0.90	0.75	0.85
Sodium		84.94	82.28	84.94
Calcium	20 - 60 ppm	47.06	48.23	50.08
Magnesium	10 - 25 ppm	19.59	22.10	23.35
Potassium	5 - 20 ppm	14.79	11.62	14.41
Sulfur	30 - 90 ppm	95.52	104.03	114.83
Bicarbonate	<120 ppm	321.40	295.52	314.81
Boron	<0.67 ppm	0.32	0.35	0.36
Chloride	<177 ppm	28.77	33.19	36.76



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TEE	Acceptable Range For Tissue Sample	5 3/20/25
Nitrogen	3.34%-5.10%	4.09
Phosphorus	0.35% - 0.55%	0.42
Potassium	2.0% - 3.42%	2.64
Calcium	0.25%-0.5%	0.60
Magnesium	0.16%-0.32%	0.28
Sodium	229-1107 ppm	2,074.00

FAIRWAY	Acceptable Range For Tissue Sample	5 3/20/25
Nitrogen	3.34%-5.10%	4.00
Phosphorus	0.35% - 0.55%	0.41
Potassium	2.0% - 3.42%	2.46
Calcium	0.25%-0.5%	0.46
Magnesium	0.16%-0.32%	0.22
Sodium	229-1107 ppm	1,317.10

GREENS	Acceptable Range For Tissue Sample	5,14(avg) 3/20/25
Nitrogen	3.0%-6.5%	3.59
Phosphorus	0.2%-0.55%	0.37
Potassium	0.86%-2.55%	1.67
Calcium	0.21%-0.50%	0.94
Magnesium	0.09%-0.22%	0.28
Sodium	506- 2264 ppm	1,921.50

TEES	Acceptable Range For Alkaline Soils Sample	5,14(avg) 3/5/19	5,14(avg) 3/20/25
Organic Matter (Humus)	2 - 3%	1.72	2.07
Sulfur	12 - 16 ppm	11.50	27.00
Olsen - Phosphorus	13 - 20 ppm	10.00	7.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,167.00	4,140.00
Magnesium	>7% base saturation or at least 200 lbs/acre	16.97%/593	17.15%/601
Potassium - TEC of 0 - 35	100 ppm	303.00	286.50
Manganese	>50 ppm	16.50	21.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	5,14(avg) 3/5/19	5,14(avg) 3/20/25
Organic Matter (Humus)	2 - 3%	1.54	1.56
Sulfur	12 - 16 ppm	14.00	32.00
Olsen - Phosphorus	13 - 20 ppm	21.00	13.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,337.00	4,257.00
Magnesium	>7% base saturation or at least 200 lbs/acre	17.21%/630	16.92%/636
Potassium - TEC of 0 - 35	100 ppm	340.50	508.00
Manganese	>50 ppm	14.00	17.50

GREENS	Acceptable Range For Alkaline Soils Sample	5,14(avg) 3/5/19	5,14(avg) 3/20/25
Organic Matter (Humus)	2 - 3%	1.04	0.79
Sulfur	12 - 16 ppm	13.50	39.50
Olsen - Phosphorus	13 - 20 ppm	29.50	15.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,441.00	3,367.00
Magnesium	>7% base saturation or at least 200 lbs/acre	14.45%/392	12.71%/338
Potassium - TEC of 0 - 35	150 ppm	159.50	188.00
Manganese	>50 ppm	61.50	42.50

TEE	Acceptable Range For Saturated Paste Sample	5 3/5/19	5 3/20/25
Nitrate - Ryegrass	10 -15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	1.73	4.43
Potassium	40 - 100 ppm	15.96	20.87
Calcium	60 - 200 ppm	35.91	46.93
Magnesium	20 - 70 ppm	15.73	20.91
Sodium	0 - 30 ppm	58.74	107.19
Soluble Salts	<1,920 ppm	343.00	451.00
Bicarbonate	<60 ppm	185.47	249.77
Chloride	<1,000 ppm	12.00	35.00
SAR	<4%	2.06	3.27

FAIRWAY	Acceptable Range For Saturated Paste Sample	5 3/5/19	5 3/20/25
Nitrate - Ryegrass	10 -15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	2.90	1.69
Potassium	40 - 100 ppm	20.53	21.16
Calcium	60 - 200 ppm	32.81	55.80
Magnesium	20 - 70 ppm	14.89	25.60
Sodium	0 - 30 ppm	64.79	111.47
Soluble Salts	<1,920 ppm	358.00	511.00
Bicarbonate	<60 ppm	187.91	315.61
Chloride	<1,000 ppm	10.00	35.00
SAR	<4%	2.36	3.10

GREEN	Acceptable Range For Saturated Paste Sample	5 3/5/19	5,14(avg) 3/20/25
Nitrate -A-1/A-4 Bentgrass	1-3 ppm	<0.5	<0.5
Phosphorus	2 - 7 ppm	3.66	2.30
Potassium	25-40 ppm	11.67	24.60
Calcium	50- 75 ppm	29.46	40.25
Magnesium	15-30 ppm	11.59	14.59
Sodium	0 - 30 ppm	41.85	98.48
Soluble Salts	<1,000 ppm	237.00	374.00
Bicarbonate	<60 ppm	114.70	153.49
Chloride	<200 ppm	7.00	24.50
SAR	<4%	1.65	3.38



Average OM By Species

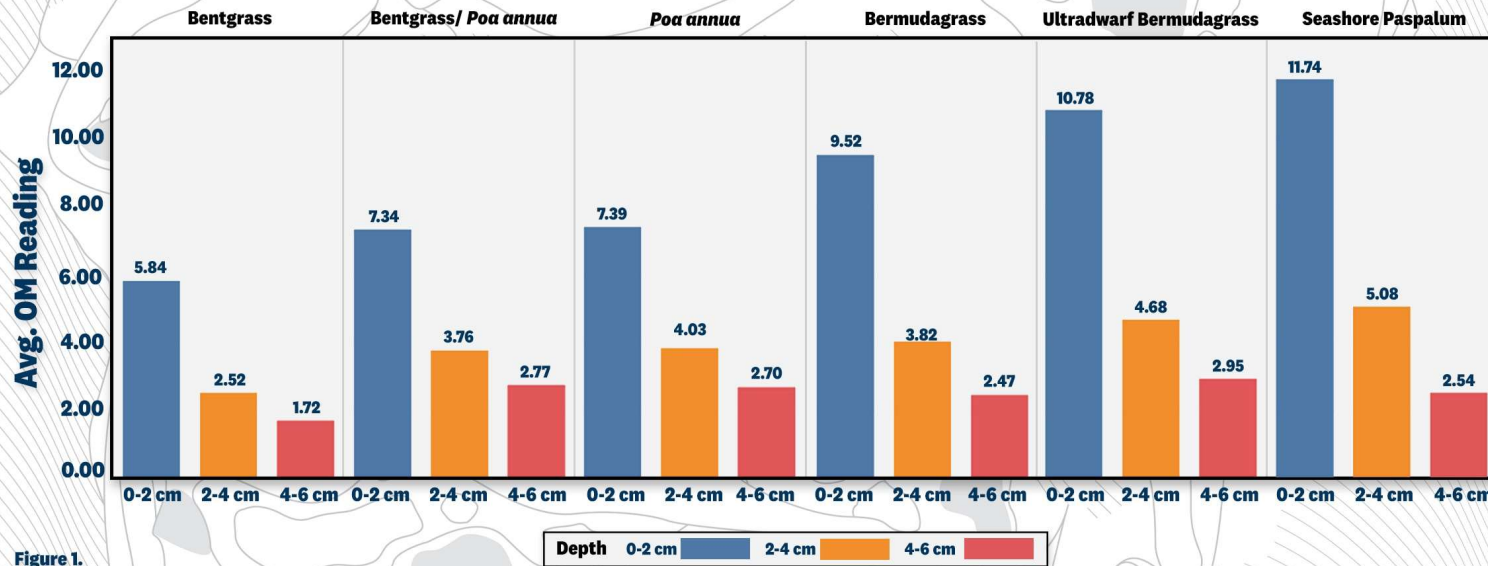


Figure 1.

<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 #14 (3-2025)	USGA Research <u>National Averages (Bentgrass)</u>
Organic Material 0-2cm	8.59	5.84
Organic Material 2-4cm	5.07	2.52
Organic Material 4-6cm	2.37	1.72

Nutrient Deficiencies

		P
TEE	5	7
TEE	14	7
FAIRWAY	5	4
FAIRWAY	14	23
GREEN	5	< 2
GREEN	14	29

Phosphorus was addressed with the Turf Royale application.

Comments and Next Level Cultural Practices

- The greens were in very good condition. I did collect the 2-4-6 OM Analysis from Green #14. I want to begin to collect this data seasonally on select clients. With the age of your greens and grass variety, the top 2-3" is critical in determining how well water drains and how you address thatch and organic matter accumulation could be determined with this testing.
- You made a recent switch to a low, topdressing sand from Arizona Silica. We should analyze that at some-point and correlate that with the original greens-mix by collecting a core sample. I don't have any history of physical analysis of the greens profile. Nearing 20 years old, the greens can age rapidly and the correct sand for topdressing is important to not only keep up with the thatch that A-1/A-4 produces but make sure you are not putting finer sand over coarser sand.
- I was able to find holes 5 and 14 data from 2019 and showed it on the previous pages. I was most impressed with the OM reading on the fairways. You have been able to stay at the 2019 levels.
- The Turf Royale application being made the day of my visit was a great choice. Even though there are few nutrient deficiencies on these test results, the nitrogen was low, and you can always use the Potassium. The Phosphorus in that fertilizer should have addressed the low P levels on tees.



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