COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

March 20, 2024

Date Received by DCR 3/14/2024

John W. Mason
Virginia Peninsula Community College-Historic Triangle
99 Thomas Nelson Drive
Hampton VA 23670

Your nutrient management plan (NMP) dated 3/14/2024 located in James City County has been approved by the Virginia Department of Conservation and Recreation (DCR). The approved plan is for 8 acres. Only nutrient recommendations for applications to be made after the date of this letter are approved by this letter. Your NMP was written by Christy Smith, a nutrient management planner certified by DCR.

This site has not been inspected by DCR and this approval is contingent upon site conditions being as stated in the NMP. Any revisions to this plan must be approved by DCR. Any change in personnel resulting in a change to the plan manager should be reported to the Certified Nutrient Management Planner who will then make DCR aware. Please note that this letter should be kept with the NMP and supporting documentation including nutrient application records. This plan expires on 3/13/2027. Please feel free to contact me with any questions or concerns regarding this approval.

Best regards,

Anita Tuttle
Urban Nutrient Management Coordinator
Division of Soil and Water Conservation
600 East Main Street, 24th Floor
Richmond VA 23219
(804) 513-5958

Nutrient Management Plan

VA Peninsula CC/Historic Triangle

Prepared For:

John W. Mason
99 Thomas Nelson Drive
Hampton, VA 23670
757-825-3694

Prepared By:

Christy F. Smith
3160 Jacobia Lane
Cape Charles, VA 23310
757-678-6129

Certification Code: 297

Total Acreage: 8 acres

The purpose of this Nutrient Management Plan is to ensure minimum movement of nitrogen and phosphorus from the specified area of application to surface and groundwaters where they can potentially have a detrimental effect on water quality as well as ensuring that plants have optimum soil nutrient availability for good productivity and quailty. By following this soil test based plan you are helping to protect local waters and the Chesapeake Bay.

If you have questions, please contact your plan writer, local Virginia Cooperative Extension

DCR
Virginia Department of Conservation & Recreation

Nutrient Management Plan for:
Virginia Peninsula CC/Historic Triangle Campus

Landowner Information	
Company Name	*Virginia Peninsula CC/Historic Triangle Campus*
Customer Name	*John W. Mason*
Mailing Address	*99 Thomas Nelson Drive*
City State Zip	*Hampton, VA 23670*
Phone	*757-825-3694*
Email	*MasonJ@vpcc.edu*

Planners Informaiton	
Planner Name	*Christy F. Smith*
Mailing Address	*3160 Jacobia Lane*
City State Zip	*Cape Charles, VA 23310*
Phone	*757-678-6129*
Fax	*757-331-3957*
Email	*christy@smithagronomic.com*
Certification Code	*297*

Location Information	
Physical Address	*4601 Opportunity Way*
City State Zip	*Williamsburg, VA 23188*
Coordinates	*37.335916*
Please Use NAD 83 Deg Min Sec	*-76.755489*
VAHU6 Watershed Code	*JL31*
County	*James City County*

Square Footage	
Total	*8 acres*
Area 1	*135,036 sq ft*
Area 2	*213,444 sq ft*
Area 3	
Area 4	

Plan Start Date	*3/14/24*
Plan End Date	*3/13/27*
Planner Signature	Christy F. Smith

Narrative

Virginia Peninsula Community College/Histric Triangle Campus is located on 4601 Opportunity Way, Williamsburg, VA 23188, just off of Centerville Road. The site is seeded with fescue.

Currently 8 acres of turfgrass (348,480 square feet) receive nutrient applications. The acreage was measured by laser. Lime is not needed at this time. The agency must not apply nutrients at higher rates or more frequently than specified in the nutrient management plan.

There are no environmentally sensitive sites located on campus.

Nutrient applications are prohibited on frozen/snow covered ground.

Virginia Peninsula Community College agrees to comply with all requirements set forth in the Nutrient Management Training and Certification Regulations, 4VAC5-15-10 et seq,. and to follow recommendations for turf fertilization and management as described in the attached Virginia Nutrient Managemet Standards and Criteria, Revised July 2014. This includes implementing the Department of Conservation and Recreation's approved Nutrient Management Plan and maintaining fertilization records. Soil testing is recommended at least once every three years. This plan is effective for 3 years, expiring 3/13/2027 or until any major renovation or major changes to maintenance practices occur which effects the fertilized/lime areas.

Google Maps Thomas Nelson Community College, Historic Triangle Campus

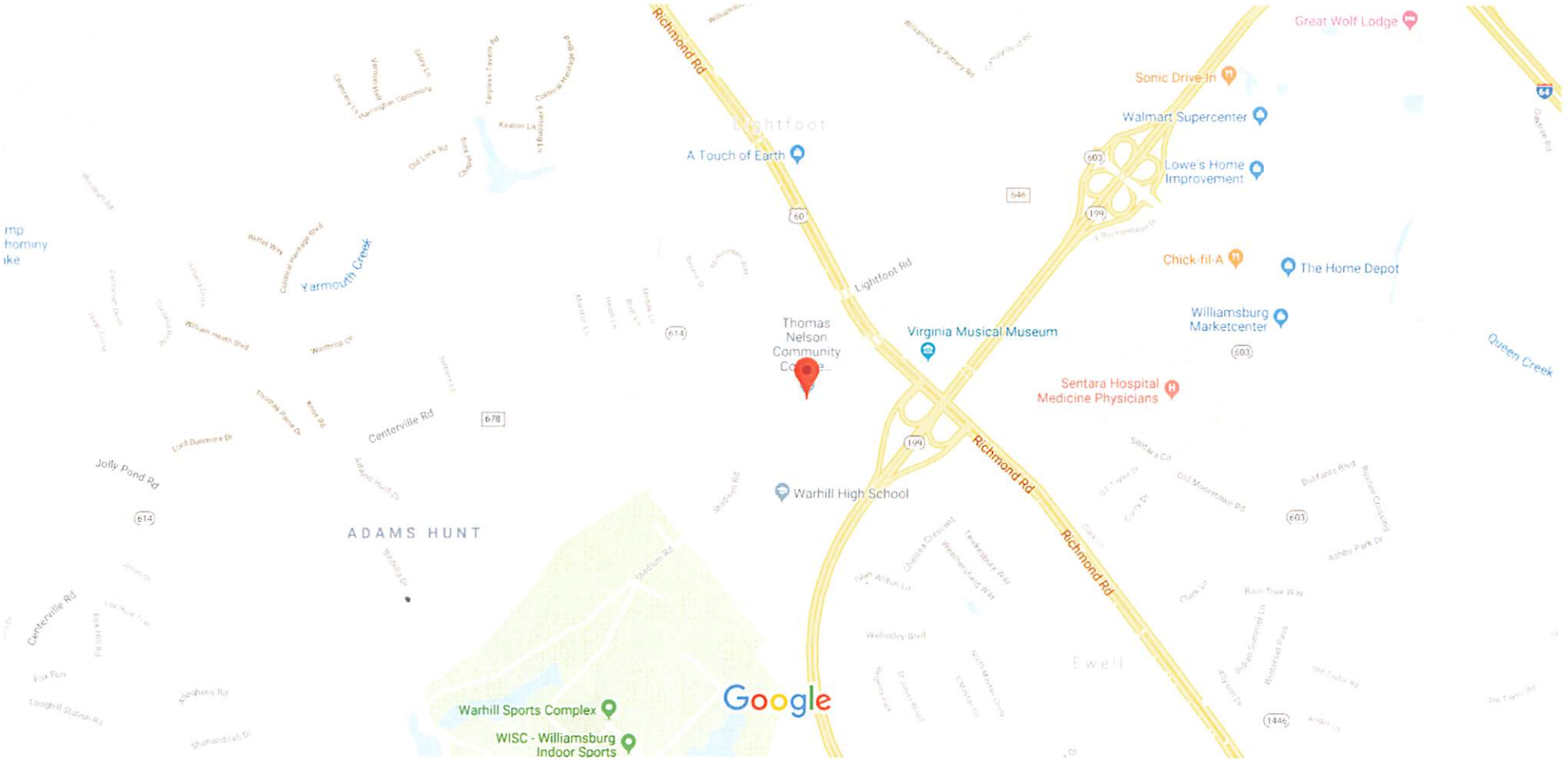
Imagery ©2018 Commonwealth of Virginia, DigitalGlobe, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2018 Google 100 ft

Area 1 - 3.1 acres
Area 2 - 4.9 acres

Campus

Fertilized areas
8 acres

Google Maps Thomas Nelson Community College, Historic Triangle Campus



Nutrient Application Worksheet

NAME:	**John W. Mason**	**Management Area:**	1	
Prepared:	**3/14/24**	**Area (sq ft):**	**135036**	**Species:** **fescue**
Expires:	**3/13/27**			

Total Nutrient Needs	**Application Month/Day**	**Analysis**	**# of Apps**	**Application Interval**	**Fertilizer Type**	**Fertilizer Description**	**Rate per 1000ft²**	**lbs or oz**	**%Slow Release N**	**Total NPK lbs/1000ft²**	**Gypsum**	**Lime**	**Total Product per App. (lbs or oz)**
Nitrogen		N - P - K								N - P_2O_5 - K_2O			
2	4/1	20 - 10 - 10	1	30 days	dry	granular	3.50	lbs	0%	0.70 - 0.35 - 0.35			473
Phosphorus	9/1	20 - 10 - 10	1	30 days	dry	granular	3.50	lbs	0%	0.70 - 0.35 - 0.35			473
1	10/1	17 - 8 - 8	1	30 days	dry	granular	3.50	lbs	0%	0.60 - 0.28 - 0.28			473
Potassium		- -								0.00 - 0.00 - 0.00			0
1		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
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		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
							Total		######	2.00 - 0.98 - 0.98			
				N Recommendation Range and Soil Test Ratings						2 / 1 / 1			

Notes:	

Nutrient Application Worksheet

NAME:	John W. Mason	**Management Area:**	2
Prepared:	3/14/24	**Area (sq ft):**	213444
Expires:	3/13/27	**Species:**	fescue

Total Nutrient Needs	Application Month/Day	Analysis	# of Apps	Application Interval	Fertilizer Type	Fertilizer Description	Rate per $1000ft^2$	lbs or oz	%Slow Release N	Total NPK $lbs/1000ft^2$	Gypsum	Lime	Total Product per App. (lbs or oz)
Nitrogen		N - P - K								N - P_2O_5 - K_2O			
2	4/1	20 - 5 - 10	1	30 days	dry	granular	3.50	lbs	0%	0.70 - 0.18 - 0.35			747
Phosphorus	9/1	20 - 5 - 10	1	30 days	dry	granular	3.50	lbs	0%	0.70 - 0.18 - 0.35			747
.5	10/1	17 - 4 - 8	1	30 days	dry	granular	3.50	lbs	0%	0.60 - 0.14 - 0.28			747
Potassium		- -								0.00 - 0.00 - 0.00			0
1		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
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		- -								0.00 - 0.00 - 0.00			0
		- -								0.00 - 0.00 - 0.00			0
							Total		######	2.00 - 0.49 - 0.98			
				N Recommendation Range and Soil Test Ratings						2 | 0.5 | 1			

Notes:

Soil Test Summary

Customer Name:	John W. Mason
Testing Lab:	Virginia Tech
Sample Date:	3/11/2024
Planner Name	Christy F. Smith
Certification Number	297

Managed Area ID	AREA (sq ft)	Soil pH	Buffer pH	Lab Test P	VT (H/M/L)	Lab Test K	VT (H/M/L)	Species
1	135,036	6.5	6.34	13	M-	110	M	fescue
2	213,444	7.4	6.6	46	H-	144	M	fescue

Notes:

No lime needed at this time.

Virginia Cooperative Extension
Soil Test Report

Questions? Contact:
Roanoke Office
3738 Brambleton Ave., S.W.
Roanoke, VA 24018-3639
540-772-7524

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:
1 3
at www.soiltest.vt.edu under Report Notes

OWNER
SMITHAG AND ENVIRONMENTAL
3160 JACOBIA LN

CAPE CHARLES, VA 23310

COPY FOR

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
TNHT1	TRIANGLE									III

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	13	110	1544	165	0.8	6.4	0.3	59.6	0.3	
Rating	M-	M	H-	H-	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	6.5	6.34	5.0	7.1	92.9	76.6	13.5	2.8	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: Native or Unimproved Pasture (42)

Lime, TONS/AC	
Amount	Type
0	

Fertilizer, lb/A		
N	P205	K20
See Comment	90	80

825. If stand contains less than 25 percent clover, apply 40-60 lbs N/A.

131. If additional production is needed later on, apply 40 to 60 lbs/A of N during the grazing season. If you are planning to overseed a legume into the stand, omit the N recommendation.

123. P2O5 and K2O recommendations are for single applications made every 3 to 4 years. After this time, soils should be re-tested.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

Virginia Cooperative Extension
Soil Test Report

Questions? Contact:
Roanoke Office
3738 Brambleton Ave., S.W.
Roanoke, VA 24018-3639
540-772-7524

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:
1 3
at www.soiltest.vt.edu under Report Notes

OWNER
SMITHAG AND ENVIRONMENTAL
3160 JACOBIA LN

CAPE CHARLES, VA 23310

COPY FOR

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
TNHT2	TRIANGLE									III

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	46	144	3976	214	2.0	14.3	0.3	38.0	1.0	
Rating	H-	M	VH	H+	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	7.4	6.60	11.0	0.0	100.0	90.3	8.0	1.7	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: Native or Unimproved Pasture (42)

Lime, TONS/AC	
Amount	Type
0	

Fertilizer, lb/A		
N	P205	K20
See Comment	0	80

825. If stand contains less than 25 percent clover, apply 40-60 lbs N/A.

131. If additional production is needed later on, apply 40 to 60 lbs/A of N during the grazing season. If you are planning to overseed a legume into the stand, omit the N recommendation.

123. P2O5 and K2O recommendations are for single applications made every 3 to 4 years. After this time, soils should be re-tested.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

Section VI. Turfgrass Nutrient Recommendations for Home Lawns, Office Parks, Public Lands and Other Similar Residential/Commercial Grounds

Definitions

For the purposes of this section, the following definitions, as presented by the Association of American Plant Food Control Officials (AAPFCO), apply:

"Enhanced efficiency fertilizer" describes fertilizer products with characteristics that allow increased plant nutrient availability and reduce the potential of nutrient losses to the environment when compared to an appropriate reference product.

"Slow or controlled release fertilizer" means a fertilizer containing a plant nutrient in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant significantly longer than a reference "rapidly available nutrient fertilizer" such as ammonium nitrate, urea, ammonium phosphate or potassium chloride. A slow or controlled release fertilizer must contain a minimum of 15 percent slowly available forms of nitrogen.

"Water soluble nitrogen", "WSN" and "readily available nitrogen" means: Water soluble nitrogen in either ammonical, urea, or nitrate form that does not have a controlled release, or slow response.

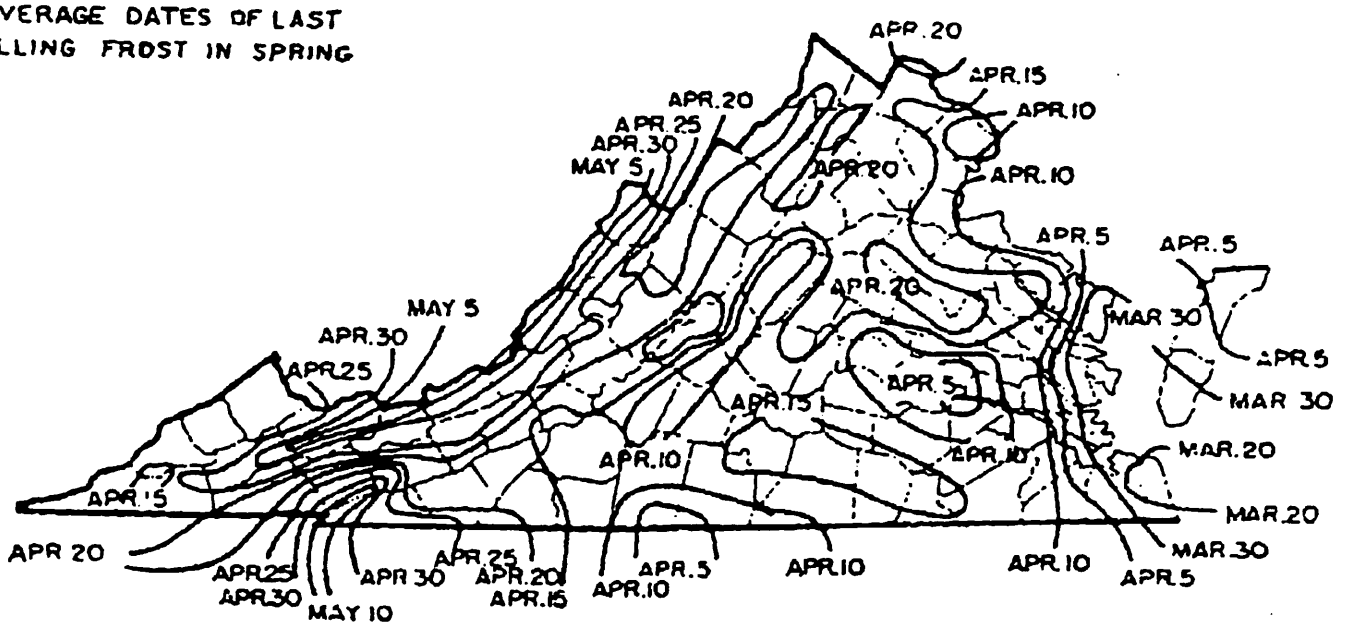
Recommended Season of Application For Nitrogen Fertilizers - Applies to all Turf

A nitrogen fertilization schedule weighted toward fall application is recommended and preferred for agronomic quality and persistence of cool season turfgrass; however, the acceptable window of applications is much wider than this for nutrient management. The nutrient management recommended application season for nitrogen fertilizers to cool season turfgrasses begins six weeks prior to the last spring average killing frost date and ends six weeks past the first fall average killing frost date (see Figures 6-1 & 6-2). Applications of nitrogen during the intervening late fall and winter period should be avoided due to higher potential leaching or runoff risk, but where necessary, apply no more than 0.5 pounds per 1,000 ft^2 of water soluble nitrogen within a 30 day period. Higher application rates may be used during this late fall and winter period by using materials containing slowly available sources of nitrogen, if the water soluble nitrogen contained in the fertilizer does not exceed the recommended maximum of 0.5 pounds per 1,000 ft^2 rate. Do not apply nitrogen or phosphorus fertilizers when the ground is frozen.

The acceptable nitrogen fertilizer application season for non-overseeded warm season turfgrass begins no earlier than the last spring average killing frost date and ends no later than one month prior to the first fall average killing frost date (see Figures 6-1 & 6-2).

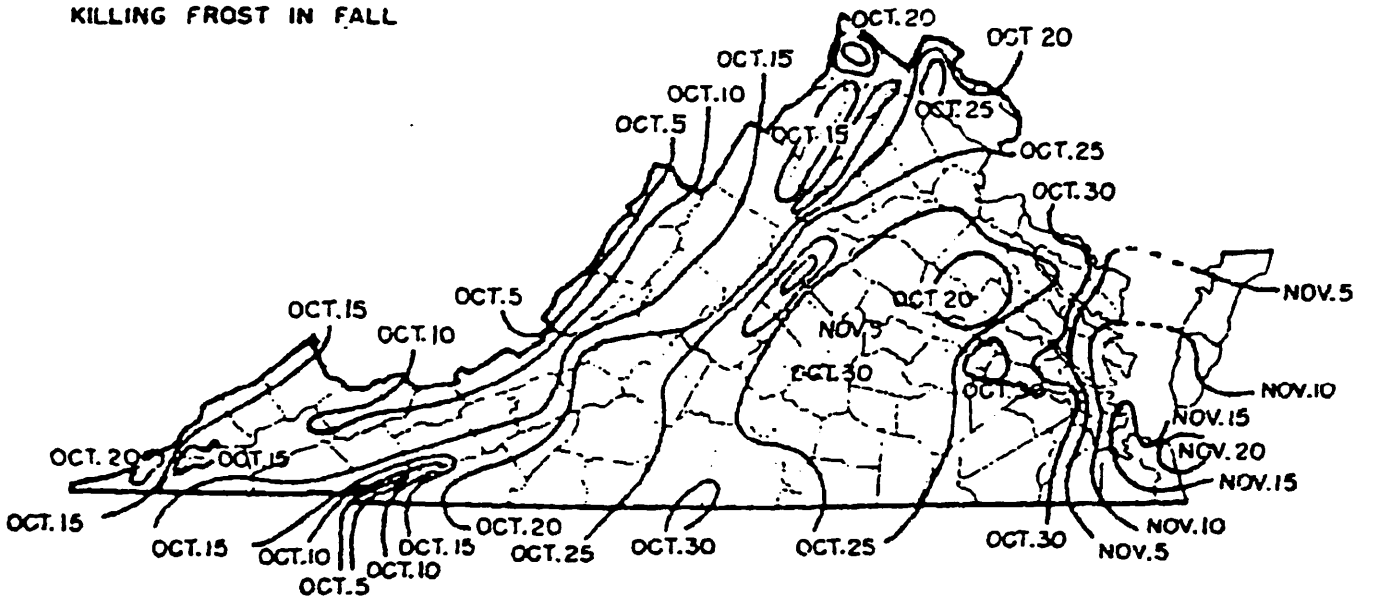
VIRGINIA

AVERAGE DATES OF LAST KILLING FROST IN SPRING



VIRGINIA

AVERAGE DATES OF FIRST KILLING FROST IN FALL



Per Application Rates
Do not apply more than 0.7 pounds of water soluble nitrogen per 1,000 ft^2 within a 30 day period. For cool season grasses, do not apply more than 0.9 pounds of total nitrogen per 1,000 ft^2 within a 30 day period. For warm season grasses, do not apply more than 1.0 pounds of total nitrogen per 1,000 ft^2 within a 30 day period. Lower per application rates of water soluble nitrogen sources or use of slowly available nitrogen sources should be utilized on very permeable sandy soils, shallow soils over fractured bedrock, or areas near water wells.

Annual Application Rates for Home Lawns and Commercial Turf
Up to 3.5 pounds per 1,000 ft^2 of nitrogen may be applied annually to cool season grass species or up to 4 pounds per 1,000 ft^2 may be applied annually to warm season grass species using 100 percent water soluble nitrogen sources. Lower rates of nitrogen application may be desirable on those mature stands of grasses that require less nitrogen for long-term quality. As a result, lower application rates will probably be more suited to the fine leaf fescues (hard fescue, chewings fescue, creeping red fescue, and sheep fescue) and non-overseeded zoysiagrass. Lower rates should also be used on less intensively managed areas.

Use of Slowly Available Forms of Nitrogen
For slow or controlled release fertilizer sources, or enhanced efficiency fertilizer sources, no more than 0.9 pounds of nitrogen per 1,000 ft^2 may be applied to cool season grasses within a 30 day period and no more than 1.0 pounds of nitrogen per 1,000 ft^2 may be applied to warm season grasses within a 30 day period. Provided the fertilizer label guarantees that the product can be used in such a way that it will not release more than 0.7 pounds of nitrogen per 1,000 ft^2 in a 30 day period, no more than 2.5 pounds of nitrogen per 1,000 ft^2 may be applied in a single application. Additionally, total annual applications shall not exceed 80 percent of the annual nitrogen rates for cool or warm season grasses.

Phosphorus and Potassium Nutrient Needs (Established Turf)
Apply phosphorus (P_2O_5) and potassium (K_2O) fertilizers as indicated necessary by a soil test using the following guidelines:

Soil Test Level	Nutrient Needs (lbs /1000 $ft^{2)}$ *	
	P_2O_5	K_2O
L	2-3	2-3
M	1-2	1-2
H	0.5-1	0.5-1
VH	0	0

* For the lower soil test level within a rating, use the higher side of the range and for higher soil test level within a rating use the lower side of the recommendation range. (For example the recommendation for a P_2O_5 soil test level of L- would be 3 pounds per 1,000 ft^2.)

Do not use high phosphorus ratio fertilizers such as 10-10-10 or 5-10-10, unless soil tests indicate phosphorus availability below the M+ level.

Recommendations for Establishment of Turf

These recommendations are for timely planted turfgrass, that is, the seed or vegetative material (sod, plugs, and /or sprigs), are planted at a time of the year when temperatures and moisture are adequate to maximize turfgrass establishment. These recommended establishment periods would be late summer to early fall for cool-season turfgrasses and late spring through mid-summer for warm-season turfgrasses.

Nitrogen Applications

At the time of establishment, apply no more than 0.9 pounds per 1,000 ft^2 of total nitrogen for cool season grasses or 1.0 pounds per 1,000 ft^2 of total nitrogen for warm season grasses, using a material containing slowly available forms of nitrogen, followed by one or two applications beginning 30 days after planting, not to exceed a total of 1.8 pounds per 1,000 ft^2 total for cool season grasses and 2.0 pounds per 1,000 ft^2 for warm season grasses for the establishment period. Applications of WSN cannot exceed more than 0.7 pounds per 1,000 ft^2 within a 30 day period.

Phosphorus and Potassium Recommendations for Establishment

Soil Test Level	Nutrient Needs (lbs /1000 $ft^{2)}$ *	
	P_2O_5	K_2O
L	3-4	2-3
M	2-3	1-2
H	2-1	0.5-1
VH	0	0

* For the lower soil test level within a rating, use the higher side of the range and for higher soil test level within a rating use the lower side of the recommendation range.

Fertilizer Application Records

Customer Information		Management Area Information	
Name:	John W. Mason	Management Area ID:	
Address:	4601 Opportunity Way	Management Area Size:	
	Williamsburg, VA 23188	Plant Species:	
		Notes:	
Phone #:	757-825-3694		

Date (M/D/Y)	Supervisor/Applicator	Weather Conditions			Fertilizer Analysis	Rate	Amount Fertilizer Used	Application Equipment Used
		Temp	Wind Speed	Precip				

When was the last time your fertilizer equipment was calibrated???
For information on calibration see Chapter 10 of the "Urban Nutrient Management Handbook".
Available for download at http://pubs.ext.vt.edu/430/430-350/430-350.html