



*Virginia Agricultural Council*

*ANNUAL REPORT*

*Fiscal Year Ending  
June 30, 2022*

## Virginia Agricultural Council Annual Report

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### **PUBLICATION YEAR 2022**

#### **Document Title**

Virginia Agricultural Council Annual Report

#### **Author**

Virginia Agricultural Council

#### **Legislative Mandate**

Va. Code § 3.2-2904

#### **Executive Summary**

Summarizes the management and expenditure of the Virginia Agricultural Foundation Fund for programs of agricultural research, education, and agricultural services to strengthen and promote the best interests of agriculture in the Commonwealth. The report contains the annual financial statements of the Agricultural Council for the fiscal year ending June 30, 2022.

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*Tscharner D. Watkins, III*  
*Chair*

*Cecil E. Meyerhoeffer, Jr.*  
*Vice Chair*



*Jason O. Bush*  
*Secretary*

*Kendra Brown Shifflett.*  
*Executive Director*

November 30, 2022

The Honorable Glen Youngkin  
Governor  
Commonwealth of Virginia  
Richmond, Virginia 23219

Dear Governor Youngkin:

The Virginia Agricultural Council is pleased to present its annual report for the fiscal year ending June 30, 2022. The annual report submission was delayed to accommodate prior adjustments to the 2020 grant cycle dates.

The members of the Council appreciate the opportunity to serve the agriculture industry in the Commonwealth of Virginia.

We trust you will find the report informative and rewarding, and we recognize the diversity of agricultural interests in the state that contribute greatly to the Commonwealth's economic prosperity.

Sincerely,  
VIRGINIA AGRICULTURAL COUNCIL

Tscharner D. Watkins, III  
Chairman

**MEMBERS OF THE VIRGINIA AGRICULTURAL COUNCIL**

<p>Mr. Keith M. Dunn  Oak Hill Farms  21100 Peters Bridge Road  Yale, VA 23897  Commodity: Cotton  Keith.oakhillfarms@gmail.com</p>	<p>Mr. Jason O. Bush  Bush Farms  471 Brickchurch Circle  Castlewood, VA 24224  Commodity:Cattle, Tobacco  <a href="mailto:cowmanjob@yahoo.com">cowmanjob@yahoo.com</a></p>
<p>Mrs. Kathy G. Coffee  W. J. Coffee Farms  2255 Fletcher Chapel Road  Kenbridge, VA 23944  Commodity:Tobacco, Soybeans, Wheat  <a href="mailto:kgcoffee1979@yahoo.com">kgcoffee1979@yahoo.com</a></p>	<p>Mr. Travis Croxton  Rappahannock Oyster Company  4777 Wormleys Drive  Mechanicsville, VA 23116  Commodity:Aquaculture  <a href="mailto:travis@rroysters.com">travis@rroysters.com</a></p>
<p>Mr. Philip B. Glaize Jr.  Fred L. Glaize  112 Piccadilly Street  P. O. Box 2077  Winchester, VA 22604  Commodity:Apples  <a href="mailto:glzapple@visuallink.com">glzapple@visuallink.com</a></p>	<p>Mr. George G. Grattan  305 Wickham Glen Drive  Richmond, Virginia 23238  Commodity:Turf  <a href="mailto:Gil.grattan@virginiagreenlawncare.com">Gil.grattan@virginiagreenlawncare.com</a></p>
<p>Ms. Ashley E. Hardesty  Harvue Farms  1458 Longmarsh Rd.  Berryville, VA 22611  Commodity: Dairy  <a href="mailto:alelgin85@gmail.com">alelgin85@gmail.com</a></p>	<p>Mr. Cecil B. "Sonny" Meyerhoeffler  7865 Kiser Rd.  Mount Crawford, VA 22841  Commodity:Poultry, Grain  <a href="mailto:sonnyeyp@gmail.com">sonnyeyp@gmail.com</a></p>

<p>Ms. Sarah Jane Thomsen  39 Malvern Avenue  Apt. 6  Richmond, VA 23221  Commodity: Agricultural Education  <a href="mailto:sthomsen@statefairva.org">sthomsen@statefairva.org</a></p>	<p>Mr. Mark Newbill  Forest Lake Farm &amp; NEWBILT  Construction  105 Darlington Drive  Rocky Mount, VA 24151  Commodity: Dairy  <a href="mailto:mnewbill@embarqmail.com">mnewbill@embarqmail.com</a></p>
<p>Ms. Kimberley H. Nixon  Co-Owner, Glenmary Farm LLC and  Western View Plantation LLC  21496 River Road  Rapidan, Virginia 22733  Commodity: Cattle, Turkey and Grain  <a href="mailto:khnixon1231@gmail.com">khnixon1231@gmail.com</a></p>	<p>Ms. Lynn Rush St. Clair  Swover Creek Farms  4176 Swover Creek Road  Edinburg, VA 22824  Commodity: Direct Marketing  <a href="mailto:swover@shentel.net">swover@shentel.net</a></p>
<p>Ms. Rosalea R. Potter  3673 Big Hill Road  Lexington, VA 24450  Commodity: Cattle  <a href="mailto:Riley.buffalocreekbeef@gmail.com">Riley.buffalocreekbeef@gmail.com</a></p>	<p>Mr. Tscharner D. Watkins III  3907 West Franklin Street  Richmond, VA 23221  Commodity:Nursery Stock  <a href="mailto:tscharnerwatkins@comcast.net">tscharnerwatkins@comcast.net</a></p>
<p>Mr. Alan Worrell  Worrell Family Farms  879 Sunrise Drive  Austinville, VA 24312  Commodity: Vegetables  <a href="mailto:Alanworrell@ymail.com">Alanworrell@ymail.com</a></p>	

**VIRGINIA AGRICULTURAL COUNCIL**  
**EX-OFFICIO MEMBERS**

<p>Dr. Robert Corley III Interim Dean, College of Agriculture Virginia State University 100 Owens Hall Box 9081 Petersburg, VA 23806 <a href="mailto:rcorley@VSU.edu">rcorley@VSU.edu</a></p>	<p>Joseph Guthrie Virginia Dept. of Agriculture and Consumer Services 102 Governor St. Richmond, VA 23219 <a href="mailto:Joseph.guthrie@vdacs.virginia.gov">Joseph.guthrie@vdacs.virginia.gov</a></p>
<p>Dr. Alan Grant Dean, College Of Agriculture VPI &amp; SU 104 Hutcheson Hall Blacksburg, VA 24061 <a href="mailto:algrant@vt.edu">algrant@vt.edu</a></p>	

## **Purpose of the Council**

Agriculture is Virginia's largest industry, with an economic impact of \$70 billion annually, and it provides more than 334,000 jobs in the Commonwealth.

The Pennies for Progress Act (Act) was passed in 1966 by the Virginia General Assembly to establish the Virginia Agricultural Council (Council) to administer the objectives of the Act. The current Agricultural Council Law (Virginia Code §3.2 – 2900 et seq.) permits financial assistance and support for agricultural research and other services. The Council is empowered to all such measures as will assist in strengthening and promoting the best interests of agriculture in the Commonwealth.

The Council is directed by 18 members, 15 of whom are engaged in farming and are appointed by the Governor. Insofar as practical, each of the members should be engaged in the production of a different agricultural commodity.

The General Assembly specified in the initial enabling legislation that it is in the public interest that assessments be levied upon certain agricultural supplies used by farmers. Monies are received from one-half cent per gallon of the state gasoline tax refund made on motor fuel used for agricultural purposes; a five cents per ton levy on lime sold; a 25 cents per ton levy on fertilizer sold, with five cents per ton for Virginia Agricultural Council use; a seven cents per ton levy on feed; and 3/10 of one percent of gross sale receipts from lawn and turf seed with 50 percent to the Council. In 2008, the General Assembly established the Seed Fund (Virginia Code §3.2-4004). Monies received for this fund are administered by the Council for the exclusive funding of lawn and turf research. The Council is also authorized to accept gifts and grants.

The Council accepts requests for financial assistance from any organized group within, or serving, Virginia's agriculture industry. This includes suppliers, farmers, marketers, extension centers, colleges, and universities.

The Council's philosophy on selecting projects for support dictates that projects should exhibit the capabilities of yielding timely results that are applicable and useful. Studies should address current or foreseeable problems and interests, and should have the potential to provide benefits to a reasonably broad spectrum of agricultural needs. All projects will be considered; however, projects should show promise with results that can be applied in a reasonable timeframe.

There are five basic considerations, as follows:

- a. Importance of the project to Virginia's agricultural economy.



- b. Recognition by the public or the Council of the project's importance.
- c. Availability of other funds from industry, commodity groups, governmental agencies, or private individuals in support of the project.
- d. Availability of personnel and facilities to conduct the project.
- e. Ability of the group, organization, or agency to execute the proposal.

Council members meet at least twice each year; once in the spring, and again in the summer. In FY 2022, the summer meeting was not held due to COVID-19. To be considered for funding, principle investigators complete a preproposal outlining the objectives of their proposal, and selected applicants are invited to submit full proposals. New project proposal requests are considered at the spring meeting.

The Council approves project funding for one fiscal year (July 1 - June 30). Continued financial support for the second year depends upon reports of progress, availability of funds, and priority in relation to other requests. Due to COVID-19, the project period was adjusted to September 1 through August 30 for the FY 2021 funding cycle. The standard funding cycle was resumed in FY 2022.

The Council's grant award requires the researchers to submit final reports summarizing their research and results, and more importantly, to disseminate the results to industry. Researchers will present at conferences, publish results and summaries in industry newsletters, or work with cooperative education and stakeholder groups, such as the Virginia Turfgrass Council, to share the information with Virginia's agricultural producers.

## GRANTS APPROVED BY THE COUNCIL FOR FISCAL YEAR 2022

Last Name	Project Name	Amount
<b>Persia</b>	Evaluation of Dietary Particle Size on the Growth Performance and Litter Moisture of Turkey Hens Raided without Antibiotics	\$ 20,000
<b>Marroof</b>	Development of High protein with Desirable Oil Soybean Cultivars	\$ 12,000
<b>Zhao</b>	Genetic Characterization of Cantaloupe Germplasm that Produces Fruits Without	\$ 8,000
<b>Ovissipour</b>	Enhancing Soybean Meal Demand and Market by Developing Soy Meal Based Aquafeeds	\$ 23,000
<b>Oakes</b>	Validating the Use of Aerial Imagery to Apply Nitrogen in Winter Wheat	\$ 15,000
<b>Li</b>	Developing GreenTram, a Low-Cost, Autonomous Device for Monitoring Crop Health in the Greenhouse	\$ 16,000
<b>Dias</b>	Exploring Vaginal Microbiome and pH Fertility Markers for Beef Cattle	\$ 15,500
<b>Estienne</b>	Mitigating the Negative Effects of Heat Stress on Reproductive and Lactation Performance in Sows	\$ 13,000
<b>Wilson</b>	Supplementation of Tannin-Rich Peanut Skins to Alleviate Fescue Toxicosis in Grazing Beef Cattle	\$ 11,446
<b>Haines</b>	The Hunt for a Bull Fertility Marker: Characterization of Phosphatidylserine (PS) in Bovine Sperm and its Role on Fertilization	\$ 14,500
<b>Pancini</b>	Impact of Early Life Nutrition and Supplementation of a Yeast Deprived Product in Beef Calves' Stress Response, Growth and Development	\$ 16,000
<b>Ferreira</b>	Comparing the Nutritional Effects When Feeding Virginia-Grown Grass Hay or Alfalfa Hay within the Rumen of Dairy Cattle	\$ 18,500
<b>Balota</b>	Helping Wheat and Soybean Breeding with More Accurate Selection Technologies	\$ 15,000
<b>Stewart</b>	Development of a Novel Technique to Synchronize and Breed Ewes Using Ram Seminal Plasma	\$ 15,000
<b>Taghavi</b>	Identify the Beneficial Endophytes from Turmeric Plants	\$ 20,000
<b>Welbaum</b>	Using natural Medicinal Plant-based Supplements to Maintain Animal Health to Reduce Reliance on Antibiotics	\$ 22,000
<b>Cockrum</b>	Single Use Bio-Based Plastics: Impact on Rumen Function and Feed Efficiency In Dairy Heifers	\$ 19,000
<b>Abaye</b>	Introducing Mungbean as an Alternative of Rotation Crop to Tobacco in Virginia	\$ 17,000
	<b>Total</b>	<b>\$290,946</b>

**SECOND YEAR PROJECTS FY 2022**

<b>Last Name</b>	<b>Project Title</b>	<b>Amount</b>
<b>Booher</b>	Virtual Fencing to Enable Stream Exclusion Without a Physical Fence	\$ 2,000
<b>Derr</b>	Control of New Invasive Weed Species in Cool- and Warm-season Turfgrass	\$ 11,830
<b>Ferreira</b>	Assessing the Growing-degree-days to Optimize Harvesting Time of Small Grains and to Maximize Digestibility of Silage to Feed Dairy and Beef Cattle	\$ 9,000
<b>Rideout</b>	Maximizing Virginia Pumpkin Production Through Increased Understanding of Disease and Heat Tolerance	\$ 16,250
<b>Shortridge</b>	Improving Water and Nutrient Use Efficiency in Virginia Cropping Systems	\$ 10,000
<b>Snyder</b>	Seaside Aquaculture: Improving Hard Clam Broodstock	\$ 21,546
<b>Stewart, R</b>	Should Virginia Vineyards Bulldoze their Topsoil?	\$ 6,065
<b>Williams</b>	Determine The Growth Promoting Potential of Previously Undescribed Bacterial and Fungal Helpers to Support Soybean Yield; & Resilience to Environmental Variation	\$ 11,541
<b>Yin</b>	Innovative Packaging for Virginia Hops: Strategies to Preserve Premier Flavor and Physical Characteristics	\$ 7,000
<b>Zhang, B.</b>	Continue Developing Public, Roundup Ready® Soybean Varieties	\$ 12,181
<b>Zhang, X</b>	Land Application of Exceptional Quality (EQ) biosolids for Improved Soil Health and Drought Resistance of Tall Fescue Lawn	\$ 11,000
<b>Zumbaugh</b>	Determining the rate of ergot alkaloid degradation in ensiled toxic endophyte infected tall fescue during long-term storage	\$ 11,845
<b>Total</b>		<b>\$130,258</b>

**SEED FUND PROJECTS FY 2022**

<b>Last Name</b>	<b>Project Title</b>	<b>Amount</b>
<b>Askew</b>	Characterization of Targeted Weed Control Technologies in Managed Turf	\$ 14,000
<b>McCall</b>	Evaluation of Blue Grama Cultivars as a Warm-Season Option for Low-Input Turfgrass in Virginia	\$14,000
<b>Del-Pozo</b>	Monitoring Annual Bluegrass Weevil (ABW) and the Use of Remote Sensing in Virginia Turfgrass Golf Courses	\$ 14,000
	<b>Total</b>	<b>\$42,000</b>

## PROJECTS COMPLETED FY 2022

Project Number	Title
732	Can Sericea Lespedeza Pellets Reduce the Effects of Fescue Toxicosis?
735	Investigating the Effect of Dexamethasone on Productivity, Immune Function, and Behavior in Dystocic Periparturient Dairy Cattle
736	Edible Landscape Species E-Book Publication
737	Cultivars Trials of Alternative Crops for Hydroponic Production in Virginia
738	Improvement of Colostrum Production in Dairy Breeds via Photoperiod Manipulation
745	Defining the Best Bull to Cow Ratio to Maximize Pregnancy Rates and Economic Return after Resynchronization of Estrus in Beef Cow-calf Operations
747	Virginia Hemp Production and Management Trials
749	Using Ethylene Inhibitor and Polyamine to Prolong Tall Fescue Sod Shelf Life
751	Alternatives to Glyphosate for Renovating Mixed Vegetation on Farmland and Industrial Sites
752	Virtual Fencing to Enable Stream Exclusion Without a Physical Fence
756	Improving the Efficiency of Embryo Production and Transfer in Dairy and Beef
757	Herbicide Tolerance of Industrial Hemp for CBD Production
758	Optimizing the Soil Warming Properties of Turf Blankets
759	Spray Application Water Quality
760	Laying the Groundwork for Insecticide Resistance Management for Corn Earworm
762	Evaluation of Butyric Acid in Broiler Diets Raised Without Antibiotics
764	Developing an Open Source Sensor as a Strategy to Identify and Decrease the Effects on Growing Animals Grazing Fescue Toxic
766	Unmanned Aerial Vehicles Based Herbicide Spray Applications in Diverse Cropping Systems

<b>767</b>	Expanding the Adoption of Targeted Pesticide Applications Using Drones and GPS Sprayer Technology
<b>771</b>	Protein and Mineral Supplementation on Digestibility, Performance and Gastrointestinal Parasitic Load in Sheep Consuming Low Quality Hay
<b>774</b>	Innovative Packaging for Virginia Hops: Strategies to Preserve Premier Flavor and Physical Characteristics
<b>775</b>	Continue Developing Public, Roundup Ready® Soybean Varieties
<b>793</b>	Impact of Early Life Nutrition and Supplementation of a Yeast Deprived Product in Beef Calves' Stress Response, Growth and Development
<b>794</b>	Evaluation of Dietary Particle Size on the Growth Performance and Litter Moisture of Turkey Hens Raised without Antibiotics
<b>799</b>	Genetic Characterization of Cantaloupe Germplasm that Produces Fruits Without Artificial Pollination

<b>Financial Statement for</b>					
<b>July 1, 2021 - June 30, 2022</b>					
<b>Revenue and Expenditures</b>					
<b>Cash balance - June 30, 2021</b>					<b>\$ 652,375.72</b>
<b>Add: Revenues</b>					
	Feed Tonnage		\$ 253,463.82		
	Seed		\$ 66,454.66		
	Fertilizer Tonnage		\$ 43,647.87		
	Lime Tonnage		\$ 20,785.14		
	Motor Fuel		\$ -		
	Interest		\$ 956.45		
	Miscellaneous (VT refund)		\$ 556.97		
			\$ 385,864.91		
<b>Total Balance and Receipts</b>					<b>\$ 1,038,240.63</b>
<b>Less - Expenses</b>					
	Administration		\$ 15,000.00		
	Miscellaneous		\$ 606.00		
	Travel and meetings		\$ 8,193.96		
	Grant Expenditures		\$ 453,949.31		
			\$ 477,749.27		
<b>Cash Balance - June 30, 2022</b>					<b>\$ 560,491.36</b>

REVENUE SUMMARY 2017 - 2022							
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5 YR AVERAGE	Difference
Feed Tonnage	\$ 263,455.18	271,020.90	278,111.79	230,385.22	253,463.82	259,287.38	23,078.60
Fertilizer Tonnage	\$ 41,310.49	42,673.69	41,031.55	45,020.48	43,647.87	42,736.82	(1,372.61)
Lime Tonnage	\$ 23,100.67	21,876.07	15,300.50	21,258.75	20,785.14	20,464.23	(473.61)
Motor Fuel/Interest/Misc.	\$ 745.44	14,709.32	7,895.44	2,197.22	1,513.42	5,412.17	(683.80)
NON SEED TOTAL	\$ 328,611.78	350,279.98	342,339.28	298,861.67	319,410.25	327,900.59	20,548.58
Seed	\$ 58,239.59	60,646.62	67,342.72	30,395.70	66,454.66	56,615.86	36,058.96
TOTAL	\$ 386,851.37	410,926.60	409,682.00	329,257.37	385,864.91	384,516.45	56,607.54

COMMONWEALTH OF VIRGINIA  
Department of Accounts  
General Accounting  
**Certification of Agency Reconciliation to Cardinal**

Agency : 307 - AGRICULTURAL COUNCIL

To the Comptroller:

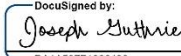
Our agency's management accepts responsibility for the integrity and objectivity of the financial transactions provided to the State Comptroller. We believe the data provided are accurate in all material respects. The basis for these conclusions relates to our assessment of the internal controls operating within our Agency. The establishment of such internal controls requires estimates and judgments from management so that, in attaining reasonable assurance as to the adequacy of such controls, the cost of controls should not exceed the benefits obtained. I believe the Agency's internal controls adequately safeguard its assets and provide reasonable assurance as to the proper recording of financial transactions.

Additionally, I certify that, for the agency listed above, the accounting records represented in Cardinal, the official record of the Commonwealth, are accurate in all material respects.

Our agency accounting records for the year ended June 30, 2022, have been verified and reconciled to Cardinal, and when any submitted General Ledger Journals have posted to Cardinal, and/or items shown below (if any) are processed, our internal records will be in agreement with those reported in Cardinal for each of the following:

- |     |  |    |  |
|-----|--|----|--|
| Yes | All cash balances (by Fund)                    | No | <b>PLEASE INDICATE IF THERE ARE ITEMS NOTED ON THE EXCEPTION REGISTER.</b> |
| Yes | All appropriations (by Fund, Program)          |    |  |
| Yes | All allotments (by Fund, Program)              |    |  |
| Yes | Total expenditures (by Fund, Program, Account) |    |  |
| Yes | Net revenues (by Fund, Account)                |    |  |
| Yes | Capital assets (by Fund)                       |    |  |

\*Note that agencies must adhere to the reconciliation requirements outlined in CAPP Topic No 30905, Reconciliation & Error Correction, for capital asset accounts, including Construction in Progress.

Signature :   
DA1A587F1026433...

Email : joseph.guthrie@vdacs.virginia.gov

Printed Name : Joseph Guthrie

Title : Commissioner

Role : Agency Head

Date : 7/12/2022

Signature :   
E31C3BAC43B7438...

Email : tyhisha.pittman@vdacs.virginia.gov

Printed Name : Tyhisha Pittman

Title : Finance Director

Role : Fiscal Officer

Date : 7/12/2022

Fiscal Officer's  
Telephone No : 804-371-2292