

AMERICAN FORAGE AND GRASSLAND COUNCIL AFFILIATE COUNCIL ANNUAL REPORT FORM

Affiliate:Virginia Forage and Grassland Council (VFGC)				
Date: _11/1	4/2019 Sub n	nitted by: _	_Jim Tate, President VFGC	

Council Overview:

This section can include the council's mission, vision, objectives, strategies, etc.

Our council has had another incredible year in 2019 working with and educating forage producers across Virginia. Major activities included the 4-day winter forage conference, pasture walks, sponsored field days, and 4 intensive grazing schools where farmers and ag professionals were challenged to go deeper and learn principles and skills to implement a higher level of grazing management. The VFGC has partnered with member producers as well as local, regional, state and out-of-state entities to accomplish our mission in 2019. Some of these include numerous Soil and Water Conservation Districts, the Natural Resources Conservation Service, Virginia Cooperative Extension, RC&D's, Ferrum College, Virginia Tech, the Chesapeake Bay Foundation and the Mountains to the Bay Grazing Alliance as well as an extremely supportive group of forage and livestock industry sponsors.

Events:

This section should highlight events the council has conducted over the past year including attendance and support.

The VFGC achieved its goal by focusing on the numerous outreach and education events held throughout the year.

Winter Forage Conference Series

The foundational activity each year is our Winter Forage Conference and the theme for 2019 was *Alternative Forages: Unlocking Your Farm's Production* Potential. The meetings were held in 4 regional locations (Wytheville, Blackstone, Brandy Station and Weyers Cave) with a total attendance of 452 participants for the week. The speakers highlighted why Virginia producers should consider alternative forages, the options and uses for annuals in a livestock system and how native warm season forages may be the next step in a forage system that could provide good, dependable summer forage that puts pounds on growing cattle. This educational outreach partnership directly supported the technical knowledge needed by producers, Extension Agents and conservation planners to facilitate using annuals and perennials to convert cool season pastureland to native warm season perennials using the NRCS Working Land for Wildlife Program. Producer evaluations confirmed that over 97% of the attendees rated the speakers and information presented to be useful or very useful.

Pasture Walks and Field Days

VFGC partnered with producers and local partners to conduct numerous pasture walks and forage field day during 2019 as itemized below:

Strip-grazing, Stockpiled Fescue Pasture Walk in February

This pasture walk was a cooperative effort between VFGC with NRCS, Extension, SWCD and Black Diamond RC&D to demonstrate and promote stockpiling and strip grazing fescue. The meeting began with 33 participants and a case study presentation of the stockpiling and strip-grazing demo of the Fox farm then we went to the field to show and discuss strip-grazing techniques and management, pre-grazing forage yield

estimation, quality sampling analysis and interpretation, post grazing ground cover, frost seeding legumes, nutrient cycling and nutrient management, and how this process helps build soil heath and vigorous pastures while extending the grazing season.

Establishing and Grazing NWSG's in Jonesville, VA

VFGC partnered with Extension, SWCD, the Black Diamond RC&D and the local NRCS staff to conduct a pasture walk at the Ingle Farm just west of Jonesville, on July 16, 2019. The program highlighted how Jerry and Judy Ingle successfully established native warm season grasses as forages for grazing livestock. Farmers were able to walk through and watch his cattle grazing the switchgrass and look at the rapid regrowth of the big bluestem and Indiangrass that had already been grazed earlier in the summer. Farmers were provided forage quality analysis showing how these native grasses met the nutritional needs of the livestock and specialists explained the process of site preparation, establishment and management of these grasses. The 42 attendees were provided basic details of the financial assistance available through EQIP and the Working Lands for Wildlife programs to establish these grasses working through our local field office.





Pasture Walk at Dragonfly Farms in Louisa, VA



The VFGC teamed together with Virginia Cooperative Extension, the local SWCD and NRCS staff, along with the Chesapeake Bay Foundation and the Mountains to the Bay Grazing Alliance to host a Pasture Walk at Bruce and Catherine Johnson's Dragonfly Farms in Louisa County on August 28, 2019. The event was attended by 79 people who learned about improved use of forages and grazing management practices to improve farm productivity and build soil health. Specialists from Virginia Tech, NRCS and the Soil and Water Conservation Districts presented information about using novel-endophyte fescue, native warm season perennial forages and annual forages to develop a highly-productive and seasonally balanced forage system to meet the needs of the livestock. The

participants then looked and walked through fields representing each of these topics and heard from Bruce Johnson who had established and utilized each of these different forage functional groups. Questions were asked and answered, and farmers were encouraged about how they might implement one or more of the same forage types combined with better grazing management on their own farming operations. Producers

were reminded of both the technical and financial assistance available through multiple conservation agencies to help with their planned improvements.

Pasture Walk at VT McCormick Farm in Raphine VA

The VFGC teamed together with Virginia Tech, Virginia Cooperative Extension and NRCS to host two pasture walks in September. A Bee-Friendly Beef Pasture Walk was held at the Virginia Tech Shenandoah Valley Ag Research and Extension Center (SVAREC) in Raphine, Va. on Sept. 11, 2019. Twenty people attended and learned about on-going projects at SVAREC led by Dr. Ben Tracy of Virginia Tech. The main focus of the pasture walk was establishment of 'Bee-Friendly Beef' pasturelands that include mixtures of native-warm-season grasses and wildflowers. The idea is that native grasses in the pasture will provide summer forage for cattle (beef), while wild flowers provide resources to help pollinator (mostly bee) populations. Dr. Tracy showed examples of mature grass-wildflower stands established 3 years ago and more recent stands planted this June. Attendees learned to identify



Dr. Ben Tracy discusses management of nativegrass/wildflower plantings at the Bee-friendly Beef Pasture walk. Maximillian sunflower is pictured in the background.

some of the major native grasses and wildflowers used in plantings and discussed challenges of establishing favorable grass to flower ratios in the mixtures. The pasture walk was supported by a NRCS Conservation Innovation Grant (CIG) awarded to Ben Tracy.

Pasture Walk Patrick County, VA

A second, double-header pasture walk was offered on Sept 13 in Patrick County. This pasture walk featured two farms and was focused both on establishing and managing stands of native warm-season grasses in grazing systems and on novel and toxic tall fescue management. A group of 35 people attended the event at the farms of Joe Sparks and Joe Clark. Work at each farm was funded by NRCS CIGs. For the CIG led by Dr. Tracy, a five-acre pasture was converted to a mixture of three native grasses in 2017. Attendees learned how to identify several common native warm-season grasses and got an overview of strategies of how to establish them. Some of the challenges of using fall cover crops for pasture renovation to native grasses were

discussed – namely the issue of managing cover crop residue after early spring grazing. By the third year of production (2019), the stand had reached maximum productivity. If cut for hay last week, we estimate the stand would yielded between 6-8 tons/acre with no N fertilization!



Dr. Ben Tracy demonstrates differences among native warm season grasses to eager learners at Mr. Joe Sparks' farm. In the background is a stand of big bluestem.

At Joe Clark's farm, the discussion focused on management of Kentucky 31 tall fescue with the toxic endophyte and conversion of pastures to novel endophyte tall fescue. Mr. Clark converted about five acres of toxic fescue to fescue with the non-toxic endophyte. Dr. John Fike from Virginia Tech and local extension agent Travis Bunn described animal performance and body temperature responses for animals that grazed novel tall fescue and toxic fescue at Mr. Clark's farm. In a short-term (~30-day) grazing study, animals on novel endophyte fescue gained about 0.4 lb./day more than animals on toxic fescue. Similar results have been recorded in other demonstrations of novel endophyte fescue in this CIG project. Methods of conversion were discussed – Mr. Clark used a spray, wait, spray – and concerns over the loss of novel endophyte stand and management to prevent recontamination with toxic fescue were addressed. The group also considered strategies to reduce the intake of toxins in tall fescue such as timely hay making, stockpiling, and increased diet diversity in field (by frost seeding legumes) or on farm (e.g., by adding native grasses to the forage base).

Pasture Walk and Native Grass Field Day at the Middleburg AREC in September

A field day was held on September 4, 2019 at the Middleburg Agricultural Research and Extension Center to showcase ongoing research on native warm season grasses for forage. Shayan Ghajar (PhD student) introduced the group of 22 participants to the grass species typically used for forage production in the southeastern US, as well as some of the reasons for utilizing these plants in a production system. Dr. Ben Tracy (Virginia Tech School of Plant and Environmental Sciences) led interactive discussions on the best ways to get these species established for grazing and then the management practices required for their longevity. Dr. Amy Johnson (Smithsonian Center for Conservation Biology) provided an overview of some recent work that her lab has completed on the benefits of native grasses in grazing systems for birds and insects and some of the forage management practices that can provide the greatest benefit to wildlife. Dr. Gabriel Pent (Virginia Tech Shenandoah Valley Agricultural Research and Extension Center) demonstrated the proper calibration of a notill drill using a seed drill that had been loaned by a local equipment dealer for the event. Finally, the group

toured some of Shayan Ghajar's research on the suitability of native warm season grasses for horse pastures. Participants enjoyed watching the horses in this study grazing on productive stands of big bluestem, Indiangrass, and Eastern gamagrass. The program was concluded with a sponsored meal (courtesy of the Loudon County Office for Economic Development and Loudon County Farm Credit), and participants heard from representatives of the Natural Resources Conservation Service and two local Soil and Water Conservation Districts on relevant programs for livestock producers.



Virginia Tech graduate student Shayan Ghajar shows attendees at the Middleburg AREC his experiment exploring use of native warm-season grasses for horse pasture.

Fencing Schools

VFGC partnered with the industry and conducted fencing schools in Buckingham, Blacksburg, and Broadway Virginia where a total of 85 participants learned the essentials of planning and constructing a pasture fencing project. This included classroom instruction with fencing a manual overview combined with hands-on activities including brace building, pulling fence and properly installing grounding systems.

VFGC Conducted 4 Grazing Schools at Different Locations between April and October

Grazing School for Agricultural Producers in Middleburg, VA

The Virginia Forage and Grassland Council concluded another very successful Grazing School on May 7-8, 2019. This 2-day intensive learning experience was hosted at the Middleburg Ag Research and Extension Center in Middleburg, VA. Twenty-five producers attended this school with levels of farm experience ranging between 1 to 46 years. These farmers collectively manage a total of 2,359 livestock on over 5,307 acres of combined pasture and hay land. The course focused on specifics and practical aspects of soils, forages, plant growth, grazing management, fencing and managing livestock on pastureland in a way that increases production, improves pasture condition and builds soil health. The training activities were



supplemented with a wealth of printed publications and related handouts as part of the grazing school manual. The grazing principles presented, applied to everyone in attendance including those managing cattle, goats, sheep, and horses. The course concluded with a one-on-one, hour long planning session, for each participant to meet with an instructor outlining their farm goals and summarizing farm information to develop a plan of action for their personal farm operation.

The participants learned the foundational principles of pasture and grazing management and left the school inspired to put into practice what they learned to improve grazing management and overall soil and water stewardship on their farm.

The instructors of the school included experienced graziers and specialized members of the forage industry including fencing professionals, Extension agents, an economist, NRCS and SWCD Conservationists and Grazing Specialists. The participants enjoyed meeting each other and getting to know the instructors in this interactive and personal setting.

Grazing School for Agricultural Professionals on Sustainable Grazing and Grassland Management Education

In a continued effort to address the identified need for more comprehensive, pasture and grazing management training for agricultural professionals in Virginia, the Virginia Forage and Grassland Council scheduled another grazing school. Working in coordination with the NRCS State Grazing Specialist, Extension Specialists and the expertise of key VFGC members and industry representatives, the producer grazing school materials and structure were designed to meet the specific needs of the agricultural professional.

A total of 16 agricultural professionals who work directly with forage and livestock producers across 33 counties attended this training on April 24-25, 2019 at the



Shenandoah Valley AREC and Extension Center in Raphine, VA. The participants included NRCS conservationists, SWCD conservationists, Extension Agents, Agricultural Stewardship Representatives, and a farm consultant ranging in experience from 1-29 years with just greater than 37% of those attending having 5 years or less experience.

The combined service area of the participating agricultural professionals covered 33 counties from different regions of the state, including one professional with statewide responsibilities. The total service area represented covers over 1,422,000 pasture and hay land acres on 10,829 cattle farms. The reach of these professionals has the potential to impact the management of almost 838,000 cattle, 50,000 sheep/lambs, 22,000 goats/kids and over 41,000 horses and ponies managed on these pasture acres.

Advanced Grazing School at Swallow Hill Farm in October

The Virginia Forage and Grassland Council planned, coordinated and conducted an Advanced Grazing School on October 2, 2019, in partnership with the M2B Grazing Alliance and the Chesapeake Bay Foundation, where 20 graziers attended to learn advanced level information and techniques related to forages and grazing management. This advanced level, intensive learning experience was hosted at Swallow Hill Farm in Woodford, VA. The producers in attendance had levels of farm experience ranging between 2 and 30 years (avg 8 years), with the combined management of 2,500 acres of pasture and hay land.





Dr. Tom Griggs from West Virginia University provided a hands-on learning activity of advanced plant physiology and morphology and how this relates to good grazing management. These farmers learned about improved forage varieties, advanced genetics, managing for shade and using summer annuals and perennials for improved system consistency and resiliency. The school also provided the perspective from Tim Tobin, the host farmer, who has successfully developed a calf to finish production system in a grass fed, grass finished production system and successfully marketing 100% of his livestock product directly to the consumer. Summary evaluations from participants confirmed that 100%

plan to implement improvements in their grazing system, 85% plan to select and utilize forages with improved productivity potential, 71% plan to use warm season forages to improve consistency of forage production through the season, and 100% of respondents believe the information learned at this school will improve their overall farm economic viability. In the end all the participants reported the information presented was practical and useful for easy implementation on their farm.

Grazing School for Students and Young Farmers at Ferrum College's Titmus Farm

The Virginia Forage and Grassland Council partnered with Extension, NRCS, and the Chesapeake Bay Foundation through the Mountains to the Bay Grazing Alliance to plan and conduct a 1-day, intensive grazing school for 17 participants in Ferrum, VA, on October 9, 2019. These participants will use this knowledge and skill on their own farm and when planning and providing technical support to farmers they are supporting. The participants learned identification and classification of pasture grasses, legumes and forbs, differences in physiology and morphology and how that impacts grazing management, hands-on use of portable electric fence materials, and using



basic grazing arithmetic to calculate stocking rates related to carrying capacity and the possible use of different forage species to balance seasonal forage production and availability to support the livestock in the

system. <u>Every</u> participant confirmed on their evaluation form that they plan to use the knowledge and basic skills developed at the grazing school to improve the level of grazing management and overall soil and water stewardship either on their own farm or with farmers they will support in their future job.

Forage Community Involvement:

This section can include any partnerships with other forage industry groups for events, education, etc. The VFGC has been a central player and successful in connecting with other industry or partner groups to leverage each other strengths to accomplish our objectives. Our partner efforts in the industry include the Alliance for Grassland Renewal, the Chesapeake Bay Foundation, the Mountains to the Bay Grazing Alliance and Virginia Tech, Virginia State, Virginia Cooperative Extension, the Soil and Water Conservation Districts, the Natural Resources Conservation Service and a Resource Conservation and Development Council. Each of these various organizations plays a large or small role in the various activities of VFGC as we carry out our missing at the local, regional and state level.

Alliance for Grassland Renewal

For the second consecutive year in a row, the VFGC assisted in the facilitation of an Alliance for Grassland Renewal workshop in Virginia and is making plans to hold a third workshop in 2020. This year's workshop was in Blackstone and was attended by 29 farmers and eight extension agents from Virginia. The producers in attendance represented 10,964 acres of land in forage crops and pasture, 3,173 cattle, 40 horses, 458 small ruminants, and 12 donkeys. While 17 producers indicated that they had planted novel endophyte tall fescue on their farms before this workshop, an additional ten producers that had not utilized this technology before indicated that they would establish novel endophyte tall fescue on their farms in the future. In all, participants indicated that they would establish an additional 517 acres of novel endophyte tall fescue in the future.

The Chesapeake Bay Foundation Partnership

The VFGC just completed a multi-year partnership initiative to promote rotational grazing in the Chesapeake Bay Watershed. This partnership was supported by valuable grant dollars to help develop, promote and conduct activities and events like the Annual Grazing Planner (3,500 copies), grazing schools, field days and pasture walks. These activities and the partnership led to a broader initiative that with other MD, PA, DE called the Mountains to the Bay Grazing Alliance.

The Mountains to the Bay Grazing Alliance

The VFGC agreed to participate in the Mountains to the Bay Grazing Alliance to share some of the positive attributes and activities with other states and learn from some of them as well. The goal of the M2B Grazing Alliance is to bring together private and public partners from the Bay region to promote the implementation to promote the implantation of rotational grazing and related practices that enhance soil health, protect and improve water quality, and contribute to farm economic viability. We are sharing ideas and activities that truly make a difference at the farm level.

Southern SARE

VFGC has partnered with Southern SARE to develop and conduct Grazing Schools for Agricultural Professionals. Southern SARE has awarded two grants to offset costs and provide the specialized and advanced training to agricultural professionals so they can better serve forage and livestock producers in their local area. This is a valued partnership and has provided a way to help more professionals learn about the many other benefits of Southern SARE resources.

Member Communications:

This section should highlight forms of communication done by the affiliate with members. Such as newsletters, email blasts, social media, etc.

The VFGC published, printed and mailed 4 quarterly-newsletters to our 455 active members this year. Newsletter articles were submitted by board members and industry representatives as well as Extension specialists. In an effort to strengthen the connection between members and participants of the organization uses regular email blasts to keep people posted of upcoming events, promote activities and direct them to specific parts of the website to read a summary of results of a pasture walk or demonstration.

Select VFGC members and Board members supported the Chesapeake Bay Foundation with developing the 2019 VA Graziers Planner. The planner highlights VA farms with photos and tips for better utilizing forages and promoting good grazing management all year long. This grazing calendar and planner was printed with over \$4,000 of partner grant funding and distributed to 3,500 producers across Virginia.

Membership:

The VFGC paid membership for 2018 was 425 and the membership in 2019 is 455 members.

Additional Information:

This section should include any additional information you want to provide.

One of the objectives of the VFGC is to encourage outstanding achievements in the forage industry through recognition programs. Each year nominations are received and the VFGC Outstanding Forage Producer of the Year is selected and awarded at the annual meeting in January. The 2019 VFGC Outstanding Forage Producer of the Year was Mr. Ronnie Nuckols of Overhome Farm in Goochland County. Ronnie became an active

participant in VFGC programs in 2011and began implementing improvements in all aspects of his forage and livestock operation. He attended grazing schools, pasture walks and began hosting educational events with VFGC at his farm. His use of forages combined with improved grazing management practices is exceptional and serves as an example of what can be done to improve the productivity of pastures in a forage and livestock system while at the same time enhancing soil



health and water quality. Ronne and his wife Cherly were nominated for the NCBA Environmental Stewardship Award and were selected as the Regional I Winners in July of 2019. To see and learn more about the changes and accomplishments check out these three short videos; A Step by Step Approach to Building Pasture Productivity and Soil Health (7 min) https://www.youtube.com/watch?v=1-sDefIgIFM; Soil Health and Grazing Management: Putting Science into Practice on Overhome Farm (3 min)

https://vaforages.org/resources/videos/ and the NCBA Cattlemen to Cattlemen TV show October 30, 2018; (8 min. segment 28:00 – 36:00) https://www.youtube.com/watch?v=YZM40MCKxCQ

David Fiske Memorial at McCormick Farm and the New Scholarship Fund

After the passing of David Fiske, dedicated VFGC Board Member and servant leader of the Virginia Forage Industry, last November, the VFGC decided to initiate the development of a memorial. This memorial includes a stone bench with inscription beside a newly planted White Oak tree at Virginia Tech McCormick Farm. The VFGC put up \$2,000 to match donations needed to raise the money needed to develop, install and maintain this memorial. Support from VFGC members, co-workers, family and friends of David has been overwhelming. To date \$12,000 has been donated. The additional money has been allocated for the development of the David A. Fiske Innovator Scholarship Fund administered by VFGC to be used for scholarships, education, demonstration and other activities related to the promotion and better understanding of forages and the broader forage industry. He will be remembered through the memorial as well as this scholarship fund as "a man whose commitment to developing and sharing innovations"



helped improve farms across Virginia." Anyone will soon be able to make donations online at www.vaforages.org.

VFGC 2019 Distinguished Service Award

The VFGC awarded its Harlan White Distinguished Service Award to J.B. Daniel, NRCS Grassland Agronomist and Grazing Specialist. JB has been a dedicated Board member in various positions for 10 years, now serving as an Educational Advisor to the Board. He was recognized for his outstanding leadership and devoted service to the forage and livestock industries of Virginia.



Future Partnership Opportunities for 2020

NFWF Grant

VFGC is currently a partner on a National Fish and Wildlife Federation (FTWF) grants proposal led by Virginia Tech. We anticipate being a sub-awardee on this grant with the specific role of Improving Grazing Management and Soil Health Across Virginia. The goal of this partnership is for VFGC to network interested producers with experienced graziers to facilitate a peer-to-peer mentoring relationship for increased implementation of prescribed grazing for increased forage productivity and soil health.

Dr. Kathryn Payne is working on a NRCS National Conservation Innovative Grant (CIG) with Dr. Ray Smith at the University of Kentucky on a project titled: 'Ecological and Economic Impacts of Resource Conservation on Horse Farms'. This project will be looking at the soil health, vegetative cover, and forage yield on pastures where rotational grazing, tall fescue remediation, and other practices that were implemented in Kentucky in 2016. We'll be quantifying the financial impacts of these practices, from reduced cost of fertilizers and hay to the labor saving from automatic waterers. Here in Virginia, we would be establishing these same practices and monitoring any improvements to see if this is could be beneficial in multiple locations. All of the data will be compiled into extension publications to demonstrate the ecological and financial benefits of resource conservation on equine operations. The VFGC is supporting this project.