



November 22, 2019

Rep. Kathy Castor, Chair
Select Committee on the Climate Crisis
U.S. House of Representatives
H2-359 Ford Building
Washington, DC 20024

Rep. Garrett Graves, Ranking Member
Select Committee on the Climate Crisis
U.S. House of Representatives
H2-359 Ford Building
Washington, DC 20024

Re: Policy Recommendations on Organic Agriculture, Climate Mitigation and Resilience
Submitted electronically to ClimateCrisisRFI@mail.house.gov

Dear Chairwoman Castor and Ranking Member Graves,

Thank you for the opportunity to provide input for the House Select Committee on the climate Crisis. I am writing on behalf of the Virginia Association for Biological Farming (VABF, <https://vabf.org>).

VABF is Virginia's lead membership organization for sustainable and organic farming and gardening. Comprised of a community of farmers, homesteaders, gardeners, students, teachers, and researchers, VABF promotes, advocates, and provides educational materials and events for organic and biological farming and gardening. While VABF membership is not limited to USDA certified organic producers, our farmer members generally avoid the use of synthetic fertilizers and pesticides, and emphasize a biological approach to soil fertility and rely on natural substances and methods rather than strong pesticides to cope with insect pests, weeds, and disease. Our annual Virginia Biological Farming Conference attracts several hundred producers, agricultural professionals, and other stakeholders.

Climate change has significantly impacted Virginia farmers, including vegetable, fruit, and other specialty crop growers, beef and other livestock producers, and commodity grain farmers. Since the turn of the 21st Century, we have frequently experienced unseasonably mild winters followed by spring freezes that wiped out tree fruit and even berry crops in some years. In 2018, Virginia logged its wettest year on record, including two destructive tropical storms (remnants of Hurricanes Florence and Michael). In the hilly terrain of the western half of the state, these intense rainfalls aggravated soil erosion challenges. This year (2019) started out with excessive rainfall, swinging abruptly to hot, nearly rainless conditions in August and September. The sudden drought dried up pasture and severely hurt vegetable production on farms without irrigation infrastructure.

As the reality of climate disruption becomes undeniable, the program for the upcoming 21st Annual Virginia Biological Farming Conference (January 11-13, 2020 in Roanoke) includes multiple sessions on climate resilience strategies including building healthy soils, diversifying crops and enterprises, livestock-crop integration, and advanced grazing management.



From this perspective, we offer the following comments and recommendations for the Committee’s consideration.

General comment:

VABF is in full alignment with the comments submitted on November 22 by the National Sustainable Agriculture Coalition (NSAC) of which VABF is a member organization. NSAC has conducted an in-depth review of the science of climate change impacts on agriculture and vice versa, and the capacity of organic and agroecological production systems to improve resilience and help mitigate net GHG “footprint” of the farming or ranching operation.

Regarding the Committee’s Question 5, “Where should Congress focus an innovation agenda for climate solutions? Please identify specific areas for federal investment and, where possible, recommend the scale of investment needed to achieve results in research, development and deployment.”

Farmers and ranchers who take integrated, holistic approaches to production (including but not limited to organic and ecological farming, permaculture, management intensive grazing, and crop-livestock integrated systems) are among our nation’s greatest innovators. They comprise a vital resource for helping the nation’s food and agricultural system meet the challenges of increasingly uncertain rainfall, shifting seasonal patterns, and freak storms. Examples from our region include:

- Farmer-plant breeders Edmund Frost of Louisa, VA who is developing squash and cucumber cultivars resistant to diseases that are becoming more prevalent with climate change; and Brett Grosгал of Lexington Park, MD who has selected tomato, Asian greens, and other vegetable crops in outdoor trials over the past 20 years, leading to new land races that can withstand the increasingly erratic weather and seasonal patterns his locale has experienced.
- Farmer and author Pam Dawling of Louisa, VA, who has developed comprehensive cover crop recommendations for all seasons and situations that can arise in central Virginia, including “abnormal” weather conditions.
- Farmer-author Anthony Flaccavento of Abingdon, VA and vegetable grower Rick Felker of Cape Charles, VA, whose integrated organic systems sustain high yields while building healthy, living soils that effectively absorb and store carbon.

The tools and methods these and other innovative producers develop not only enhance resilience to drought and other stresses, but also help reduce the net greenhouse gas (GHG) footprint of the farming system. Indeed, research to date indicates that nationwide implementation of best organic and sustainable farming and ranching practices could make US agriculture climate-neutral.ⁱ *However, farmers cannot alone solve the climate crisis.*

- i. Schonbeck, M., D. Jerkins, and L. Snyder. 2018. *Soil Health and Organic Farming: Organic Practices for Climate Mitigation, Adaptation, and Carbon Sequestration*. Organic Farming Research Foundation, <https://ofrf.org>, 78 pp.



It will take an effective collaboration of our best producers, land stewards, and agricultural scientists, backed by sufficient investment of federal tax dollars in key USDA research and conservation programs, to make the goal of a climate-neutral agriculture and food system a reality before mid-century. The 2018 Farm Bill took important steps in the right direction by increasing funding for the Organic Research and Extension Initiative (OREI) and reauthorizing the Sustainable Agriculture Research and Education (SARE) – two programs that have an excellent track record for integrating producers as active partners with agricultural professionals in researching, developing, and implementing solutions to farming challenges, from crop nutrition and pest management to climate change.

However, more needs to be done to foster, support, and harness farmer innovation toward climate change mitigation and adaptation. For example, farmers face initial costs and learning curves in adopting more climate-friendly (soil building / carbon sequestering) and climate-resilient systems and practices, such as diversified crop rotations, cover crops, reduced tillage, etc. USDA Natural Resources Conservation Service (NRCS) conservation programs offer cost share, though at this point, these programs do not specifically address climate issues per se. In addition, while the Farm Bill expanded OREI funding, it reduced funding for the NRCS Conservation Stewardship Program (CSP) by half, reducing that program's capacity to help farmers build resilient systems and sequester carbon. Furthermore, the recent abrupt relocation of the National Institute for Food and Agriculture (NIFA) and Economic Research Service (ERS) from DC area to Kansas City may compromise these agencies' capacity to administer OREI and other key programs for the next several years.

Therefore, Congress should take the following steps to support agricultural innovations to prepare for and combat climate change:

- Expand the authorization for the SARE program to at least \$100 million per year.
- Continue to expand funding for OREI under the next Farm bill, and increase authorization for the Organic Transitions (ORG) program to at least \$10 million per year.
- Increase USDA research dollar investment in plant breeding and development of new, regionally adapted crop cultivars to at least \$50 million per year within Agricultural Research Service (ARS) and another \$50 million per year across NIFA programs. Emphasize development of resource-efficient (nutrients and moisture), drought- heat- and flood-resilient, disease and pest resistant, and weed-competitive cultivars that perform well in organic and other low input, climate-friendly production systems.
- Establish climate change mitigation and resilience as research priorities across USDA funding programs.
- Take effective steps to help ERS and NIFA recover capacity and staff as soon as practical.
- Establish climate as a new major Resource Concern in NRCS conservation programs, to support conservation practices that sequester carbon, reduce GHG, and build agricultural resilience to climate disruption and weather volatility.
- Restore full funding for the Conservation Stewardship Program to the 2014 Farm Bill level, about \$2 billion per year.



Regarding the Committee's Questions 6 and 7. *What policies should Congress adopt to reduce carbon pollution and other greenhouse gas emissions and maximize carbon storage in agriculture? What policies should Congress adopt to help farmers, ranchers, and natural resource managers adapt to the impacts of climate change?*

Again, VABF is in full agreement with recommendations submitted on November 22 by NSAC. In addition, we urge a strong emphasis on research, extension, and conservation cost-share support for both USDA certified organic and non-certified but biologically based systems and practices, including recognition of these farming and ranching sectors as major innovators (see preceding section) in the nation's response to the climate crisis.

Regarding the Committee's Question 9. *What policies should Congress adopt to reduce emissions of non-CO2 greenhouse gases, including methane, nitrous oxide, and fluorinated gases?*

Today's dominant methods of livestock production in the US – commonly known as Confined Animal Feeding Operations or CAFOs – are major emitters of the greenhouse gases methane (CH₄) and nitrous oxide (N₂O). Thus, we are happy to see that the 2020 CSP now offers a 150% supplemental payment for adoption of advanced grazing management and management intensive rotational grazing (MIG) systems, which reduce these GHG emissions and can promote carbon sequestration of 1 ton per acre per year or more in MIG-managed pasture and rangeland. On the other hand we are distressed to see that the NRCS Environmental Quality Incentives Program (EQIP) continues to fund CAFO related infrastructure as “conservation practices.”

In addition, not all pasture based livestock are alike. Here in southwest Virginia, many farms have poorly managed, continuously grazed pastures, with thin, unhealthy forage and evidence of soil compaction, erosion, and loss of organic carbon. In addition cattle often have direct access to streams which then become polluted. Producers need both financial and technical assistance to install infrastructure (fencing, watering facilities, etc) and to learn techniques (MIG) that will help them become more productive and profitable in the long run while greatly improving soil health, protecting water quality, and reducing – possibly zeroing-out – the GHG footprint of their livestock enterprises.

Because of the large GHG footprint of industrial livestock production and the potential for advanced grazing management to make animal agriculture climate-neutral, we urge Congress and the USDA to take the following steps:

- Expand technical and financial assistance to help farmers adopt MIG and other climate-friendly approaches to livestock production and to transition from CAFO or unmanaged pasture to best advanced grazing management systems.
- Phase out all EQIP and other USDA subsidies for CAFO livestock production and associated infrastructure. End such subsidies within five years.



Finally, the majority of agriculture's N₂O emissions come from fertilized or manured soils. Overuse of N and other fertilizers is both the result of, and perpetuates, the problem of unhealthy soils that cannot nourish crops efficiently. Recent research and practical experience shows that organic and ecological practices that build soil health can cut the amount of N needed to sustain yields by at least half. Additional research – including development of nutrient efficient crop cultivars that partner effectively with beneficial soil microbes for nutrient uptake – is also needed to optimize the potential to reduce N₂O emissions from cropland soils as well as nitrate leaching to drinking water supplies. Thus, Congress and USDA should take the following steps:

- Strengthen the NRCS Nutrient Management Conservation Practice Standard (CPS 590) and associated CSP enhancement activities to support best N management and allow a major reduction in application of soluble N fertilizers.
- Establish N cycling, biological nutrient management, and reduction/elimination of soil N₂O emissions as a research priority in NIFA competitive grant RFAs.

Thank you very much for this opportunity to provide input to the Select Committee on the Climate Crisis. VABF and farmer advocates across the nation look forward to new policy initiatives that will enable our producers to cope with – and help mitigate – climate change.

Sincerely,

Mark W. Schonbeck,
Policy Liaison, Virginia Association for Biological Farming