# USDA Climate Hubs Quarterly Report   Spring 2020

PURPOSE

The Climate Hubs reduce climate related risks to agriculture, forestry, and rural communities by working with and through USDA agencies and partners. The hubs develop and deliver science-driven strategies and tools so that USDA programs, advisors, and land managers can make informed decisions to manage risk.

The **Caribbean Climate Hub** officially launched a bilingual interactive platform to illustrate the origin and production of the main crops in Puerto Rico. Agricultural Statistics, a project led by Research Fellow Nora Alvarez-Berríos, provides information on more than 100 agricultural products. This information can help farmers, food marketers, and researchers to plan their agricultural business, assess transport routes and trends in agriculture, in downloadable map and table formats. For the first time, the general public, land managers, farmers, researchers, teachers and marketers have access to production data in an accessible format.
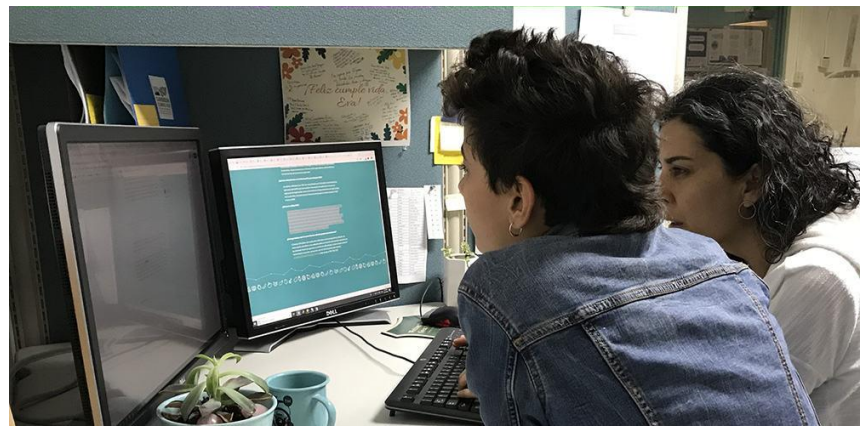
(L to R) Tanía Díaz Camacho and Dr. Nora Álvarez Berríos of the USDA Forest Service International Institute of Tropical Forestry Caribbean Climate Hub work on editing the Agricultural Statistics Tool.
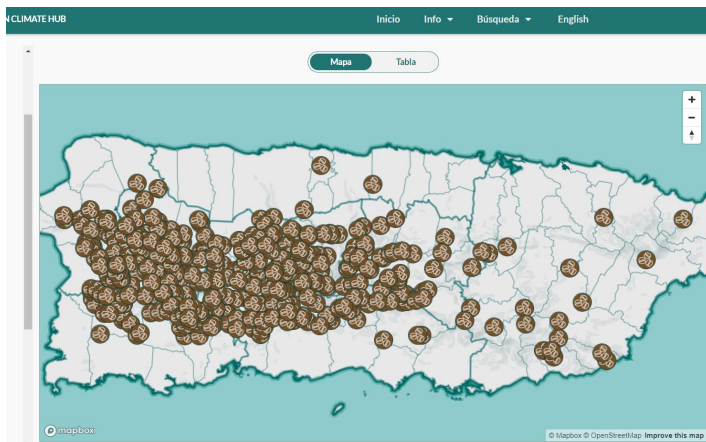
An example of the tool displaying the barrios with coffee production in Puerto Rico in 2016.

Check out new podcasts and videos on drought, soil health, and the Southern Plains perspective, on the **Southern Plains Climate Hub** media page!

The **Northern Forests Climate Hub** and the Northern Institute of Applied Climate Science (NIACS) completed a 7-week online Adaptation Planning and Practices course with 60 participants and 30 real-world projects from the Midwest and Northeast. This hands-on training was provided to natural resources management professionals working in forests and natural ecosystems. Throughout this course, participants were able to identify locally important climate change impacts, challenges, and opportunities; develop specific actions to adapt ecosystems and ecosystem management to changing conditions; use the Adaptation Workbook to document considerations and intention; learn to communicate with stakeholders regarding climate change and adaptation; and access post-training support during project planning and implementation. Videos of course sessions are available on the NIACS Youtube channel.

The **Northern Plains Climate Hub** co-organized a World-Café session at the 2020 Society for Range Management (SRM) meeting in Denver. Roughly 150 meeting participants engaged in three rounds of facilitated small-group discussion about a variety of topics, including adapting rangeland management to climate change, land ownership shifts, and public-lands restoration. As part of the event, the Northern Plains Climate Hub partnered with Bureau of Land Management and North Central Climate Adaptation Science Center to facilitate discussions with range managers and researchers about changes they have observed in their rangelands, management challenges exacerbated by climate change, and potential adaptation options.

2020 SRM World-Café-style "Campfire Conversation" about climate-related changes and management challenges in rangeland ecosystems. Photo credit: Heather Yocum (NC-CASC).

The **Southwest Climate Hub** was also active at SRM 2020, coordinating a Bison Technical tour with the SRM Native American Range Advisory Committee (NARAC). SWCH staff have recently hosted presentations and information tables at Southwest Beef Symposium the NM Farmers Marketing Association meeting as well.

The **Northeast Climate Hub** held a free workshop, 'Tree Canopy from Big Cities to Small Towns: A Pathway to Climate Resilience' that brought 100 participants to Washington DC on March 10th, 2020. The agenda focused on interactive discussions sharing knowledge and resources to build climate resilience by managing urban tree canopies. This workshop welcomed extension and research specialists from around the Northeast to learn tools and creative ways to discover solutions. The workshop was hosted by the University of District of Columbia, the USDA Northeast Climate Hub, and American Forests.

The **Midwest Climate Hub**, partnering with Iowa State University Extension, Iowa Department of Natural Resources, the Iowa Department of Agriculture and Land Stewardship, and the National Drought Mitigation Center, co-led a drought workshop in Northwest Iowa for rural water systems, large livestock producers and processors, and extension staff to discuss drought impacts/demands on regional water systems and the potential issues coming with the next major drought. Rural water systems will likely not be able to maintain when drought depletes the local aquifers. The goal of the meeting was to begin discussions on potential paths forward in the short and longer term to address the situation, including current and early warning efforts.

In partnership with the USDA Northern Forests Hub, the **California Climate Hub** designed and co-facilitated a week- long climate adaptation action planning workshop for the UC Davis landscape units. Landscape experts designed action-based objectives, assess climate impacts, consider climate adaptation actions and metrics for success for each of the following landscapes: campus core, arboretum and public garden and agricultural fields and nature reserves. The action plans will be used by the division of planning and environmental stewardship for the creation of the living landscape adaptation plan for the university as a whole.

Increases in annual temperatures have already occurred in Alaska, leading many farmers and gardeners to wonder what they can grow in a warmer climate. **The Northwest Climate Hub** helped fund an online decision support tool. Garden Helper assists Alaskan farmers and gardeners to understand which crops can be grown under current climate conditions and future projected climate conditions in terms of variables important to crop production for their community. Alaska Garden Helper has a demonstration video available to the public.