



**THE NATIONAL GENETICS  
RESOURCES ADVISORY  
COUNCIL (NGRAC)**

**NPGCC Meeting  
June 13, 2019**



## What We Do



- Advise the Secretary of Agriculture and Director of the National Genetic Resources Program (NGRP) on the activities, policies, and operation of NGRP.
- Scope includes acquisition, preservation, access, evaluation, characterization, distribution, and exchange of genetic resources of life forms important to American agriculture; plants, forest species, animals, aquatics, insects, and microbes.
- NGRAC shall make recommendations to ensure that these essential resources are adequately conserved and appropriately accessible in order to address current and future agricultural needs.
- NGRAC is also to advise on research needs for genetic resources, on coordination of NGRP with similar domestic activities, and on policies—both international and domestic—regarding access and exchange of genetic resources for the public's benefit.

# 2018 Farm Bill Additions



NGRAC shall make recommendations on...

- The state of cultivar development, including
  - An analysis of existing cultivar research investments
  - The research gaps relating to the development of cultivars across a diverse range of crops; and
  - An assessment of the state of commercialization of federally funded cultivars
- The training and resources needed to meet future breeding challenges
- The appropriate levels of Federal funding for cultivar development for underserved crops and geographic areas

# Who We Are

## Scientific Members (6 members)

Terry Tiersch, Louisiana State University

Jim McFerson, Washington State University

Kevin McCluskey, private industry (formerly Kansas State)

Vacant

Vacant

Vacant

## General Public (3 members)

Sarada Krishnan, Denver Botanic Garden

Vacant

Vacant

## Public Cultivar & Animal Breed Development (4 members)

Vacant

Vacant

Vacant

Vacant

## Ex-Officio Members:

- Peter Bretting, ARS
- Harvey Blackburn, ARS
  
- Under Secretary for REE
- Director of NAL
- Director of NIH
- Director of NSF
- Secretary of Energy
- Director of OSTP

NOTE: 4 members of the council must also represent the 1862, 1890, 1994, and HSI institutions

# Meetings and recommendations



**First meeting in March, 2013.**

**Then, monthly teleconferences and 1 or 2 in-person meetings annually**

- Identified major issues and needs in plant genetic resources
- Strongly encouraged the Secretary of Agriculture to seek ratification of the International Treaty for Plant Genetic Resources for Food and Agriculture by the U.S. Senate
- At the request of Secretary of Agriculture, identified the principal players, problems and solutions at different stages of the seed development process **for response to AC21 recommendations**

**After response to AC21, the Council has been engaged in thinking broadly about supporting genetic resources infrastructure needs and benefits to users. So, discussions have been held on the following major issues:**

- Crop Genetic Vulnerability
- Animal Genetics Conservation
- Aquatic Genetic Efforts in ARS
- Tribal Issues and Genetic Resources
- Wild Crop Relatives
- Microbial Collections



# Meetings

- November 2015 – Baton Rouge

- Crop Genetic Vulnerability, Animal Genetic Resources, Crop Wild Relatives, tribal issues

- April 2016 – Griffin, GA

- A new NGRAC Crop Vulnerability Subcommittee was formed to recommend how to enhance the baseline crop genetic vulnerability data. The subcommittee has drafted a letter which is being mailed to the Crop Genetic Committees for input.
- A new Animal Genetics Subcommittee was formed to present the larger view of the program and its needs. The subcommittee is working to provide the needs and opportunities for animal and aquatic genetic resources.



# Meetings

## ● July 2017 – Kansas City, MO

- Finalized recommendations for addressing aquatic and animal genetic resources and developed actions on crop vulnerability
- The NGRAC Crop Vulnerability Subcommittee reviewed data received so far from the Crop Genetic Committees (with the help of Peter Bretting) and strategized how to improve data
- Worked on finalizing recommendations on the needs and opportunities for animal and aquatic genetic resources.
- Further developed tribal issues document

## ● August 2018 – Washington, DC

- Finalized and approved recommendations on the needs and opportunities for animal and aquatic genetic resources.
- Discussed and reviewed data submitted from crop germplasm committees on crop vulnerability.
- Discussed the economic impacts of genetic resources and genetic collections.
- Introduced recommendations on microbial genetic resources and further discussed crop wild relatives conservation.





# Next Steps

- Appoint new members (currently 9 vacancies)
  - Federal Register was released this spring
  - Nominations have been received (25!!)
  - Will be presented to REE Under Secretary and then Secretary of Agriculture
  - Appointments made by the Secretary of Agriculture
- Reconvene members in open, public meeting



Thank you! Questions?



National Genetics  
Resource Advisory  
Council (NGRAC)

