Alaska’s Berries in a Changing Climate
Listening Session Series

December 9, 2021
Session Series Goals

- Discuss **issues and concerns about berries** in a changing climate

- **Listening & sharing** as a first step to coordinate

- Identify ways that berry observations and science (there are a lot!) can be shared **to best help address concerns.**
Alaskans have noticed increased variability in berry abundances and timing.
Climate change can influence every phase in a berry plant’s life.
Berry plants make flower buds a year before they flower.

Lowbush cranberry buds in fall.

Highbush cranberry buds in fall.

Schaub et al. 2021, Diggle and Mulder 2019
Pollinators and timing of flowering may be changing

A bumblebee & swallowtail butterfly visiting lowbush cranberry flowers.

Timing of snow melt and winter ice storms influence berries.

Spellman et al. 2015,16; Wipf
Pathogens and herbivores may change as climate warms.

Lowbush cranberry leaves affected by herbivore and fungal damage

 Reads: Roy and Mulder 2014, Mulder et al. 2021, new MicroBerry project
Landscape changes can influence berry habitat.

Wildfire, shrubification, permafrost thaw all influence berry habitat.

Photo: K. Spellman

Parkinson and Mulder 2020,
Communities and Tribes are naming berry concerns in adaptation plans

- Changing or increased variability in berry abundance
- Changes in timing and amount of precipitation influencing berries
- Changing distribution of berries due to habitat change (permafrost, shrubification, etc.)
- Changes in timing of berries (flowering, fruting, harvesting)
- General mention of berries in connection to food security in a changing climate
- Changes in food storage, berry or jam sharing
- Changes in berry quality
- Influence of increasing dust on berries
- Changes in berry-animal interactions

Spellman analysis of 29 AK adaptation plans and risk assessment, unpublished
Regional discussions

Step 1. Pick a room.
Step 2. Round Robin

1. Introduce yourself and share one reflection on discussion Question 1.
2. Take turns. Make sure everyone gets a chance to speak. Be mindful of others
3. Open for general discussion on Q1.
4. Move on to Question 2 if there is time.
5. Nominate someone to report back for your group at 1:50 pm

Discussion Questions:

1. What changes have you noticed or what concerns do you have about berries?
2. What are you doing to adjust to the changes in berries or what ideas do you have to adapt to changes in berries?