Crop Yields Update

12/8/23

Recap

1) Crop data

- We are getting the best yield data available
  - Ex.: NASS Corn for grain, Soybeans for beans, etc.
- New data sets were found from previous discussions
  - Initial QA/QC process
- Governs the application of nutrients across the watershed

Existing Agriculture CAST aggregation:

Crop yield data

~100 different crops

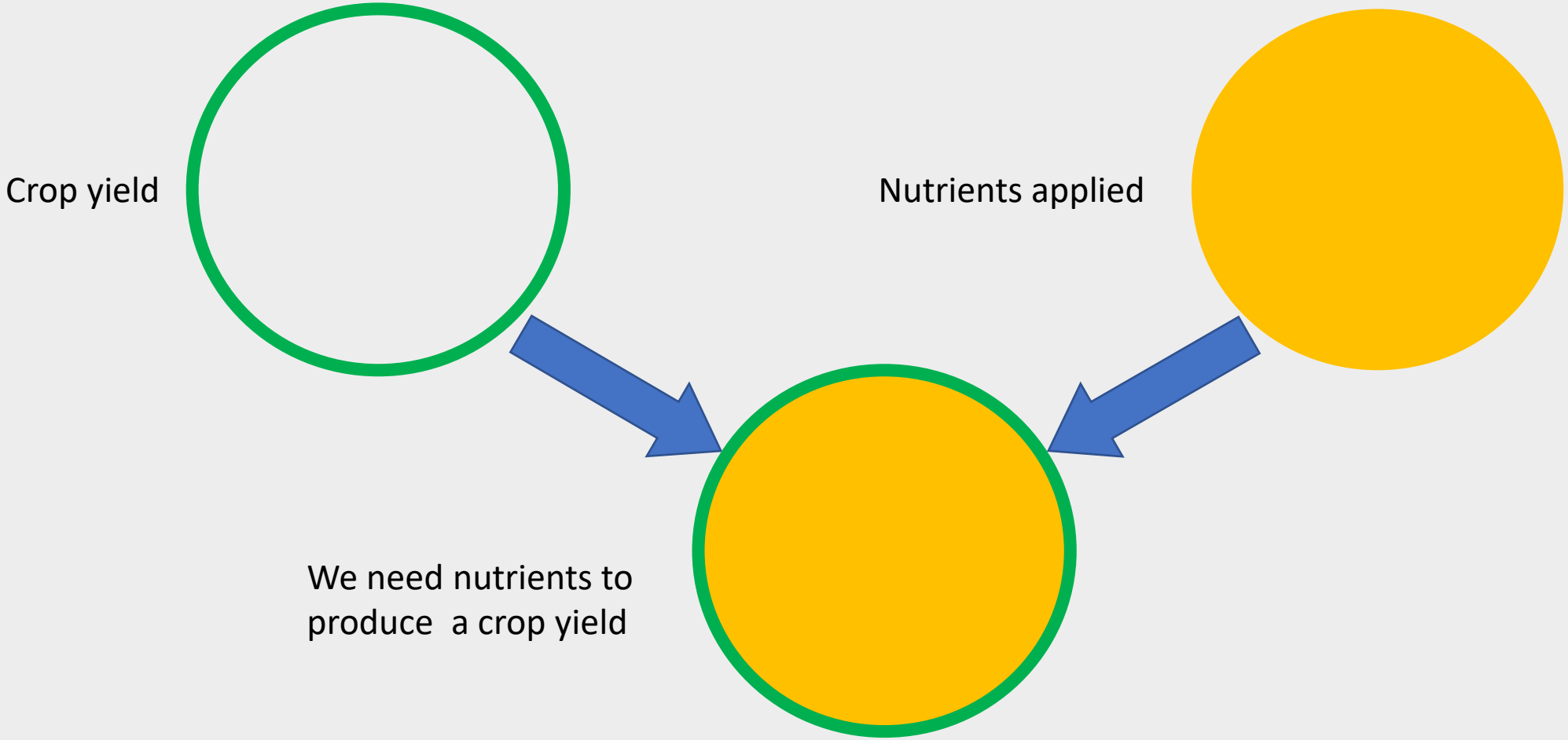
Long term yield trends attract nutrient applications

Feedback on relationships is being collected

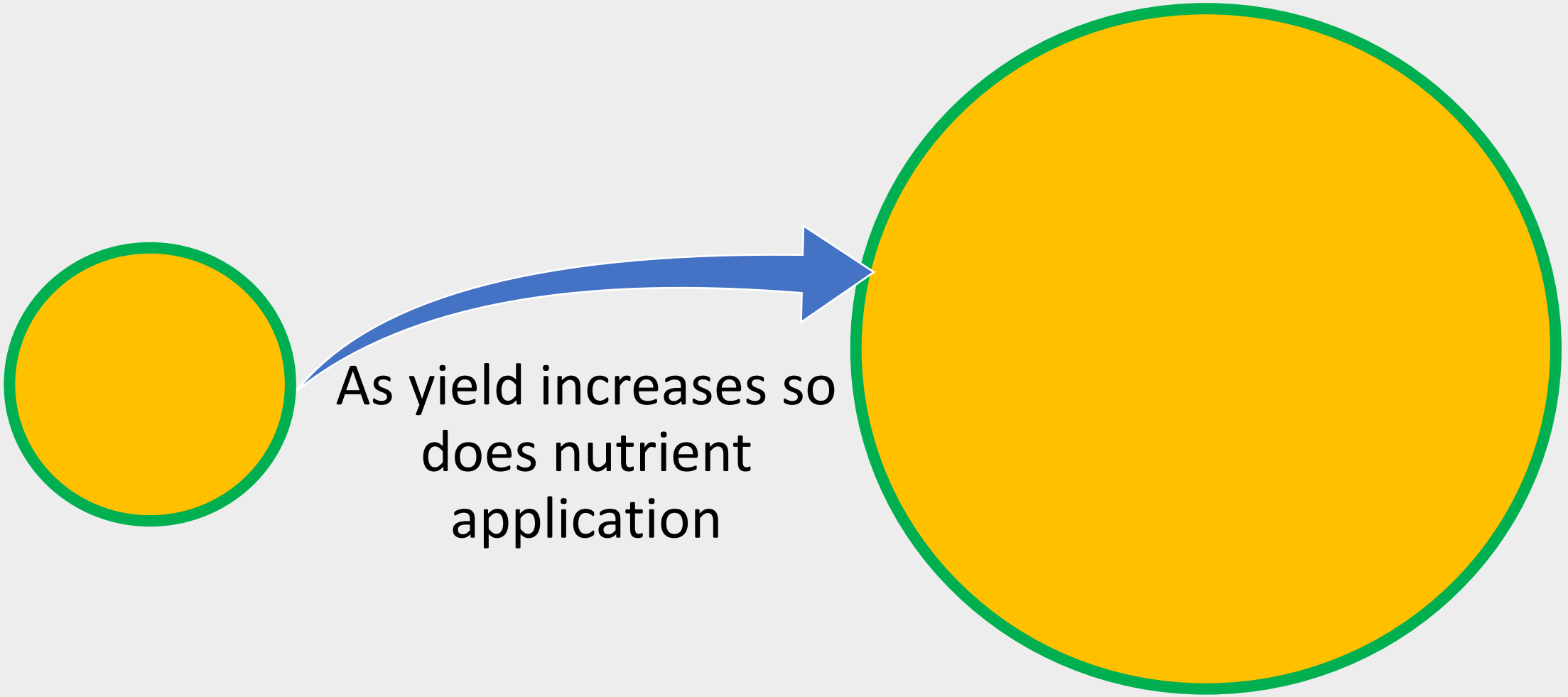
This will be incorporated into long term trends

Why crop yields matter

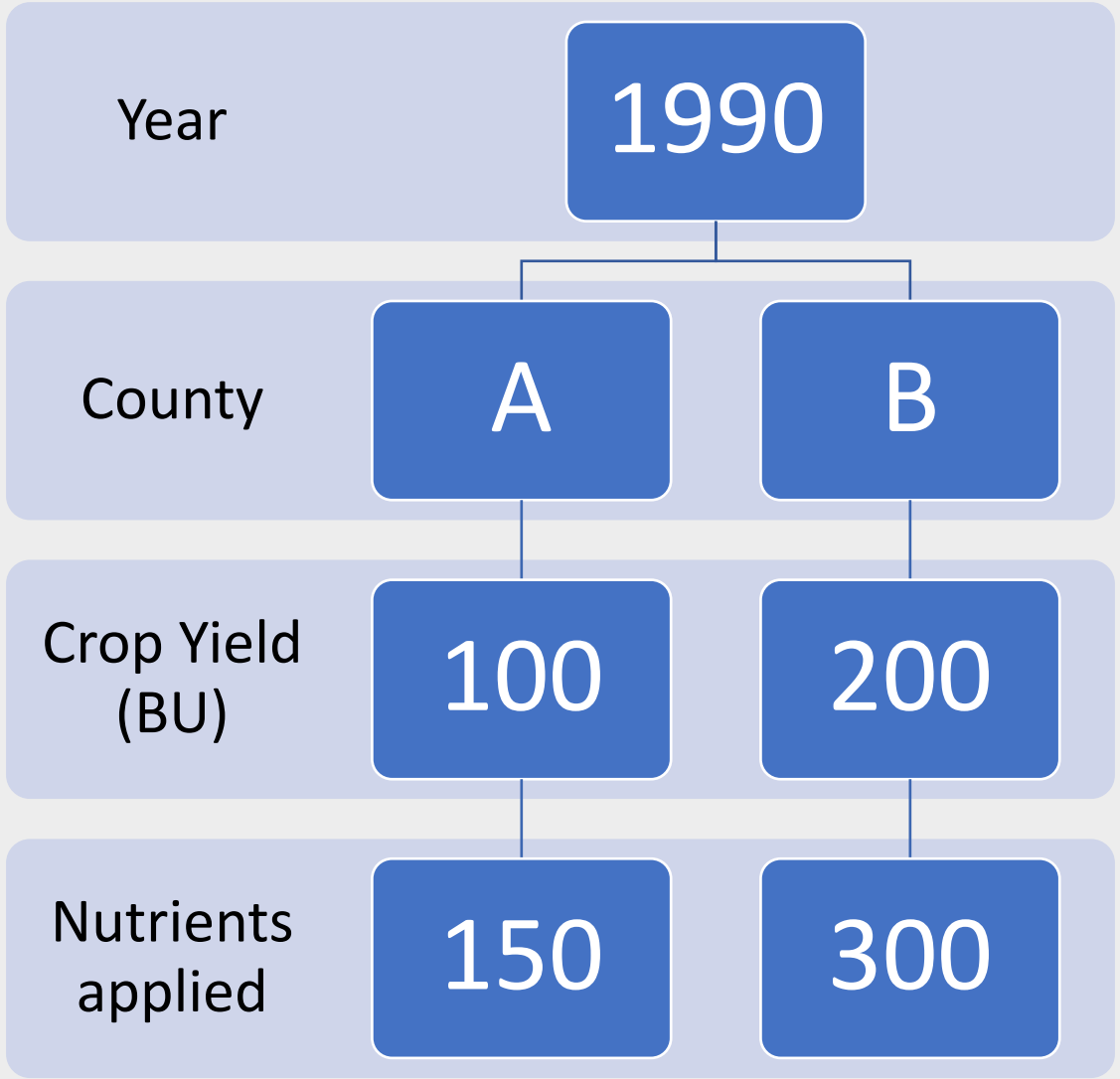
- Yields and nutrient applications are tied together

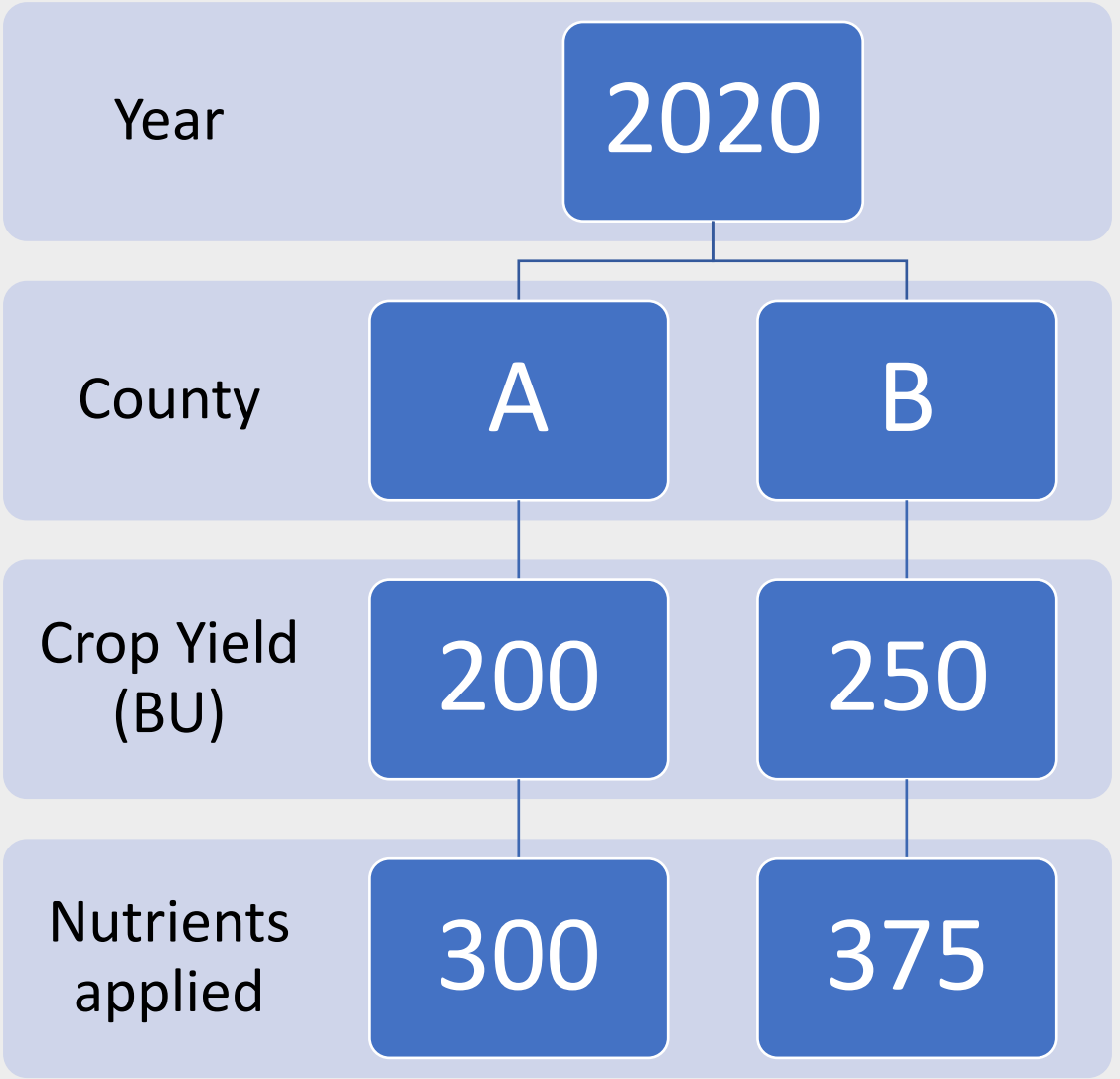


Think like a balloon



Example of Nutrient applications



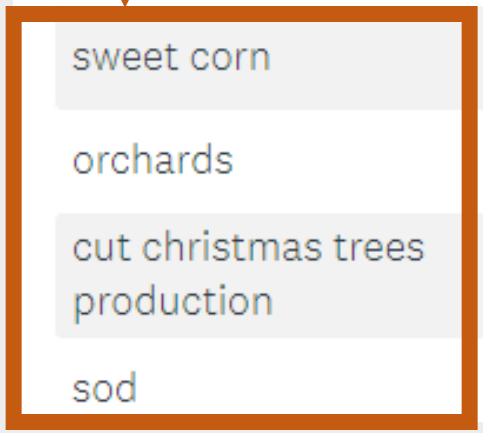


Action Items:

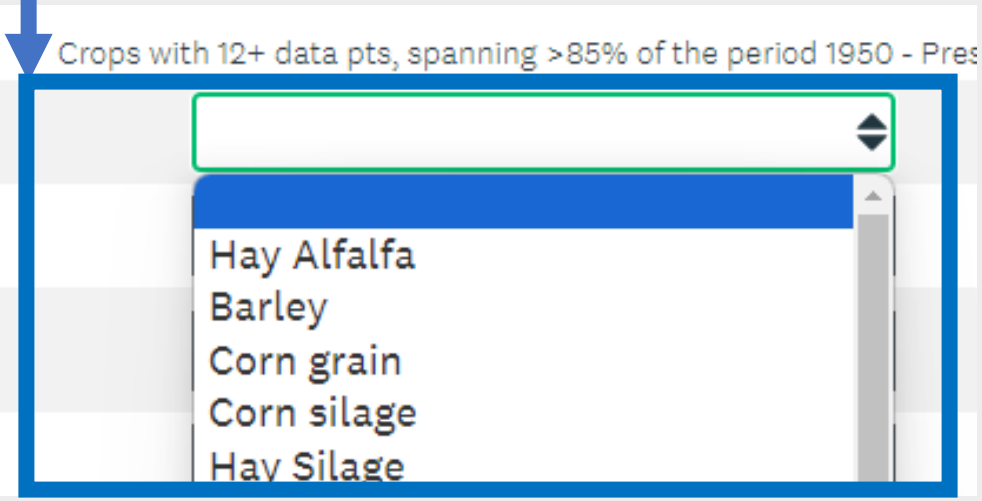
- Data call
  - Any additional information on crop yields
- Relating crops
  - Voting member survey (~5 minutes)
    - Select the crop with data that you feel shares yield trends with the crop lacking yield data

Ag Modeling Team Voting members	
Affiliation	Primary
Chair	Zach Easton, VT
Delaware	Chris Brosch (DDA)
Maryland	Alisha Mulkey (MDA)
New York	Cassie Davis (NYS DEC)
Pennsylvania	Scott Heidel (PA DEP)
Virginia	Tim Larson (VA DCR)
West Virginia	Dave Montali (Tetratech)
U.S. Environmental Protection Agency	Jeff Sweeney (EPA)
At Large	Ken Staver, UMD
At Large	Tamie Veith, USDA-ARS
At Large	Candiss Williams, USDA-NRCS
At Large	Alex Soroka, USGS

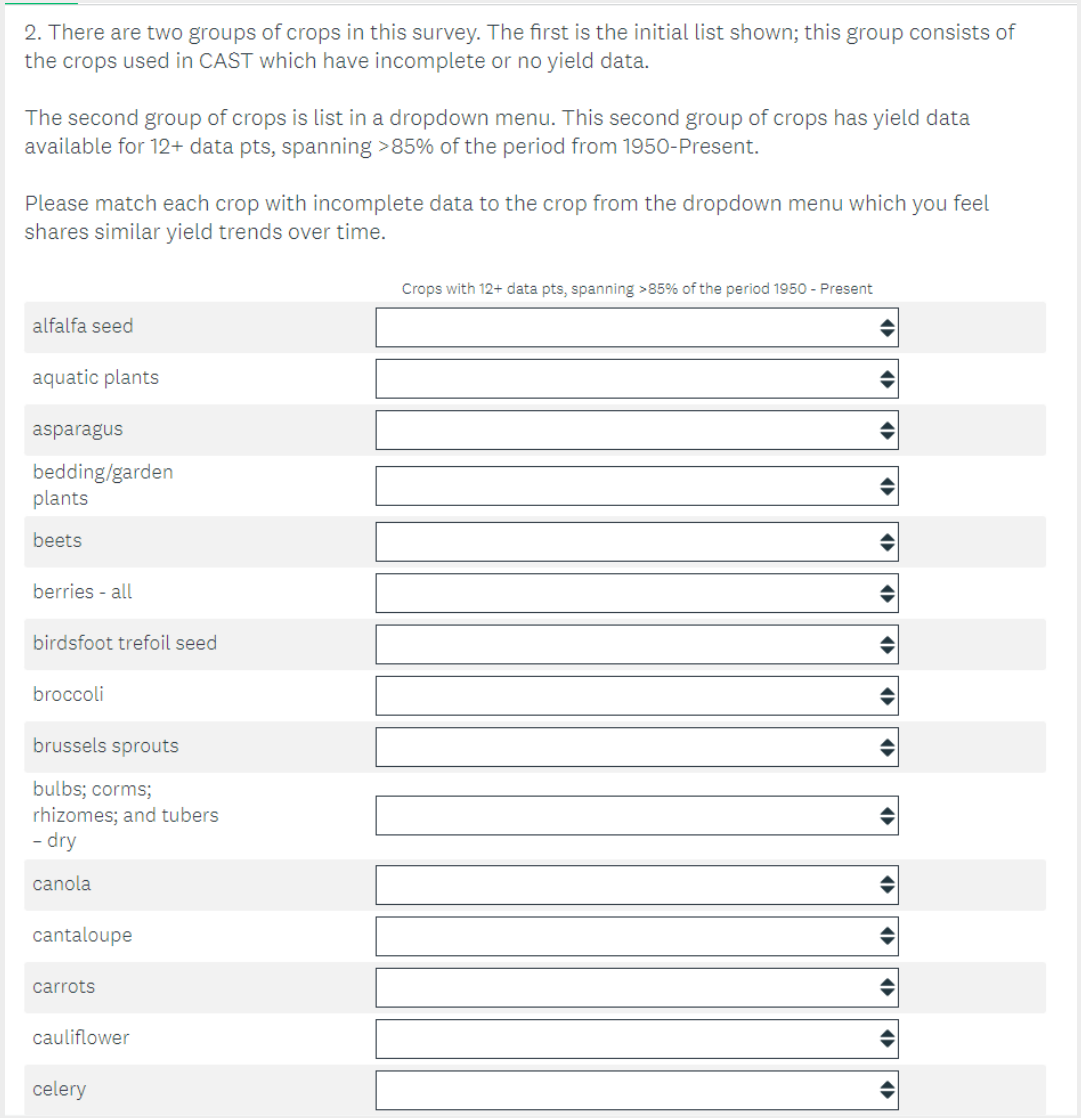
Crops with no or incomplete data



Crops with 12 + data points spanning 85% of the period 1950 – Present



Survey walkthrough:



2. There are two groups of crops in this survey. The first is the initial list shown; this group consists of the crops used in CAST which have incomplete or no yield data.

The second group of crops is list in a dropdown menu. This second group of crops has yield data available for 12+ data pts, spanning >85% of the period from 1950-Present.

Please match each crop with incomplete data to the crop from the dropdown menu which you feel shares similar yield trends over time.

	Crops with 12+ data pts, spanning >85% of the period 1950 - Present
alfalfa seed	
aquatic plants	
asparagus	
bedding/garden plants	
beets	
berries - all	
birdsfoot trefoil seed	
broccoli	
brussels sprouts	
bulbs; corms; rhizomes; and tubers – dry	
canola	
cantaloupe	
carrots	
cauliflower	
celery	

Survey walkthrough:

Crops with little or no yield data available

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Crops with 12+ data pts, spanning >85% of the period 1950 - Present

Click on the dropdown

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Survey walkthrough:

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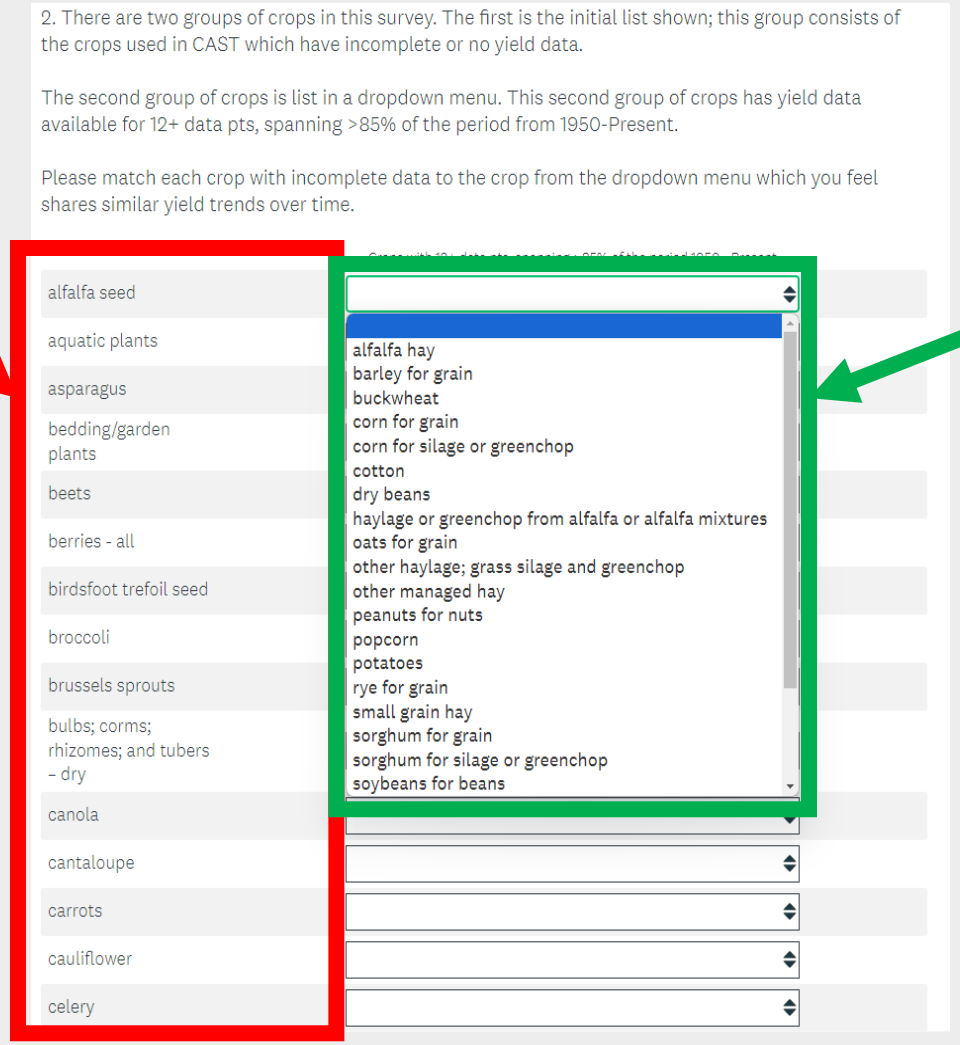
Crops with data, 12 + points spanning >85% of the period from 1980 to present



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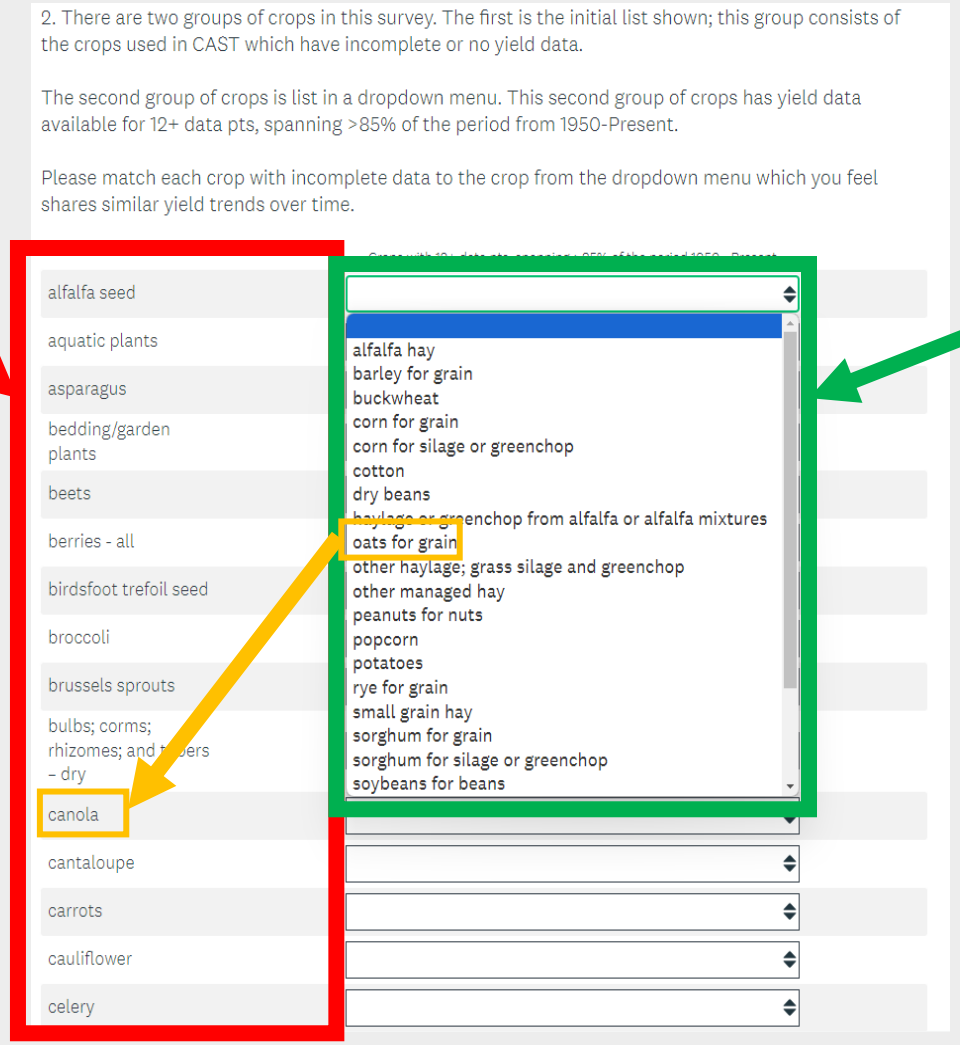

Crops with data, 12 + points spanning >85% of the period from 1980 to present

- Select a single crop from the column on the right for each column on the left.
- Matching should be on crops whose yields are similar.
  - Ex. Alfalfa seed yields is similar to alfalfa hay yield.

Questions?