

Almond-Survey-2020-

Analysis of Almond Survey results. This repository contains my survey dataset and analysis of the response data.

Summary

The purpose of this repository is to provide a guideline for the Almond Survey Results and Analyses report. This repository contains the raw survey dataset along with processed datasets that were cleaned for clarity and ease of use.

The analysis goals of the Almond Survey Results dataset are to examine the relationships between respondent demographics and cover crop adoption. Cover crop is one of several bee-friendly practices that can be implemented on almond orchards to protect and support managed honey bee health. Evaluating factors that may affect cover crop adoption will provide greater insight into the barriers almond producers and farm managers are facing regarding the implementation of bee-friendly practices on their farms.

The following research questions will inform the analysis goals:

- Where are the respondents' almond orchards located?
- Which demographic factors affect whether or not respondents have planted cover crop in the last 5 years?
- How does region affect whether or not the respondents have planted cover crop in the last 5 years?
- How does respondent role in the almond operation affect whether or not the respondents have planted cover crop in the last 5 years?
- How does respondent age affect whether or not the respondents have planted cover crop in the last 5 years?
- How does the size of the almond operation affect whether or not the respondents have planted cover crop in the last 5 years?

Investigators

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Keywords

*Cover crop: Temporary forage planted between tree rows

*Region: The location of the respondent's almond orchard(s)

*Role in Operation: Respondent could select 'Owner, not responsible for day-to-day management', 'Owner/Operator', or 'Farm Manager (not owner)' to describe the role he or she has in the almond operation.

Database Information

This dataset contains response data from a survey that was distributed to almond producers and farm managers throughout California. The survey was launched on December 10th, 2019 and was closed on February 5th, 2020. Data were collected using Qualtrics.

csv files were saved as 'Almond_Survey_Results_raw.csv', 'Almond_Survey_Data_Project_Processed.csv', and 'Almond_Survey_Numeric_Answers_Processed.csv'

Folder structure, file formats, and naming conventions

Data/Processed: This folder contains datasets that were processed from the raw dataset as csv files

Data/Raw: This folder contains the raw survey dataset as a csv file

Output: This folder contains output information from the analyses

Code: This folder contains the code used for the analyses

What does this ^^ mean??

Files are named according to the following naming convention: `dbname_datatype_details_stage.format`, where:

dbname refers to the database from where the data originated

datatype is a description of data

details are additional descriptive details, particularly important for processed data

stage refers to the stage in data management pipelines (e.g., raw, cleaned, or processed)

format is a non-proprietary file format (e.g., .csv, .txt)

Metadata

Almond Survey Results Dataset

Column	Description
End Date	Date the respondent completed submitted the survey
Role in Operation	Respondent's role in operation ('owner, not responsible for day-to-day management' , 'owner/operator', 'farm manager (not owner)')
County	County the almond orchard(s) was located (Counties in California)
Regions	Region in which the county was located (Sacramento Valley, Delta, San Joaquin Basin, Tulare Basin)
Total Yield Bearing Acreage	Total amount of acreage with almonds that are mature enough to produce nuts (total acres)

Column	Description
Pollinator Manager	The person in charge of pollination management decisions (Farm manager, owner, independent PCA, affiliated PCA, beekeeper, beebroker, pesticide applicator)
Cover Crop Grown	Whether or not the respondent has grown cover crop in the last 5 years (Yes or No)
Cover Crop Seeds	Description of how the respondent acquired cover crop seed (Private cost-share program, CCA/PCA/Crop Consultant, Directly from seed company, Federal cost-share program)
Cover Crop Satisfaction	Respondent's level of satisfaction with cover crop (Not satisfied, Somewhat satisfied, Very satisfied)
Cover Crop Interest	Respondent's level of interest in planting cover crop if he/she had not grown cover crop in the last 5 years (Yes, No, Not sure)
Cover Crop Concerns	Respondent's concerns with planting/maintaining cover crop

Column	Description
Cover Crop Incentives	Possible incentives that may assist respondent in planting cover crop
Water Source	The water source used to irrigate the respondent's almond orchard(s) (Groundwater, Surface water, Combination of groundwater and surface water)
PPH Grown	Whether or not the respondent has permanent pollinator habitat around or near the almond orchard(s) (Yes, No, Not sure)
PPH Satisfaction	Respondent's level of satisfaction with permanent pollinator habitat (Not satisfied, Somewhat satisfied, Very satisfied)
PPH Interest	Respondent's level of interest in planting permanent pollinator habitat if he/she does not have the habitat around or near almond orchard(s) (Yes, No, Not sure)
PPH Concerns	Respondent's concerns with plant-ing/maintaining permanent pollinator habitat

Column	Description
PPH Incentives	Possible incentives that may assist respondent in planting permanent pollinator habitat
Pollination	How the respondent pollinated his/her almond orchard in 2019 (Our orchards were not mature enough, We rented all our bees, We rented some bees and supplied some of our own, Prefer not to answer)
Beekeeper Location	Where the bee hives came from if the respondent rented honey bees in 2019 (Out of state, Near your orchard, California but not neighboring county, Prefer not to answer)
Rental Price	Highest rental fee/ per bee hive the respondent paid in 2019 (\$)
Age	The age range of the respondent

Scripts and code

Quality assurance/quality control

<https://www.dataone.org/best-practices/develop-quality-assurance-and-quality-control-plan> <https://www.dataone.org/best-practices/ensure-basic-quality-control> <https://www.dataone.org/best-practices/communicate-data-quality> <https://www.dataone.org/best-practices/identify-outliers> <https://www.dataone.org/best-practices/identify-values-are-estimated>