Honey Production In The USA (1998-2012)

Group: PythonCamp
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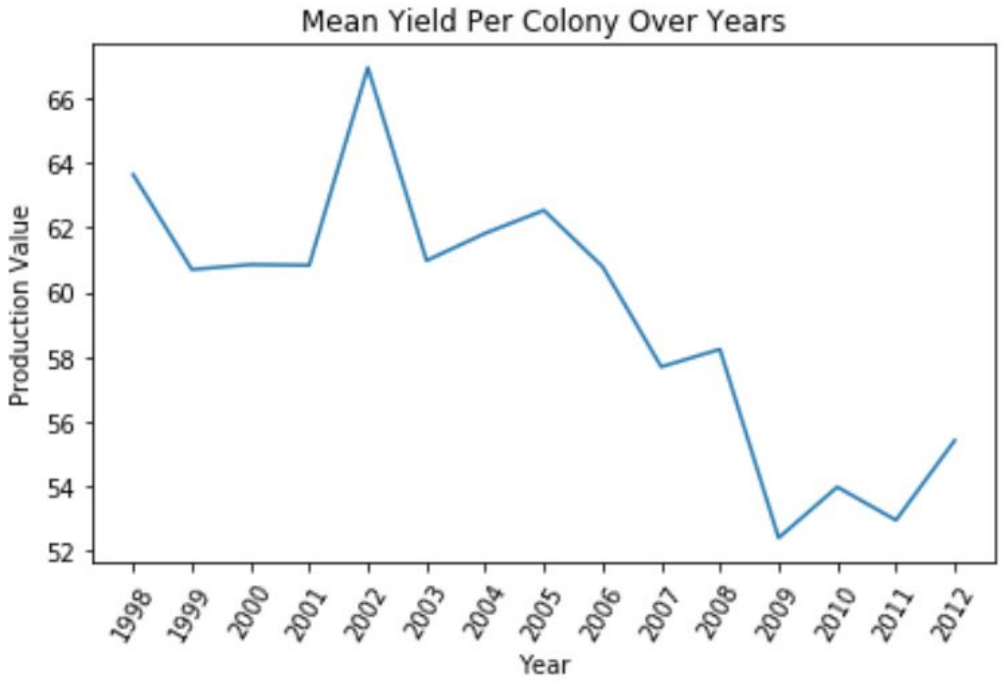
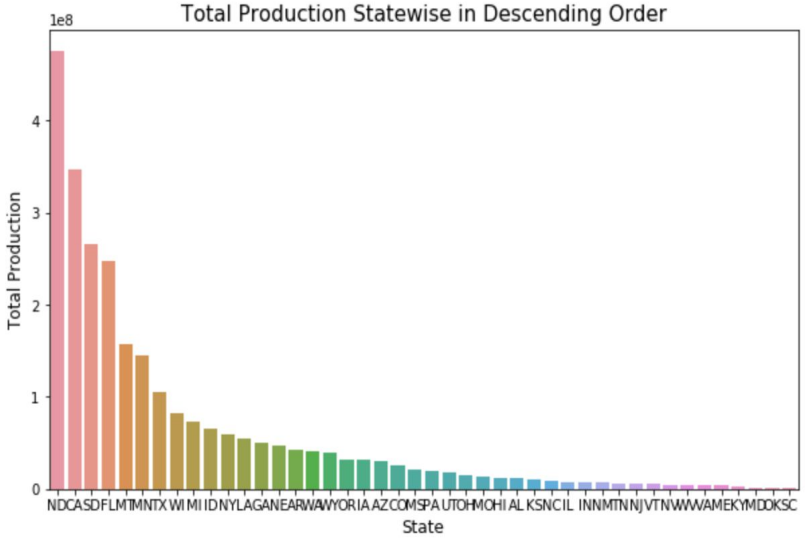
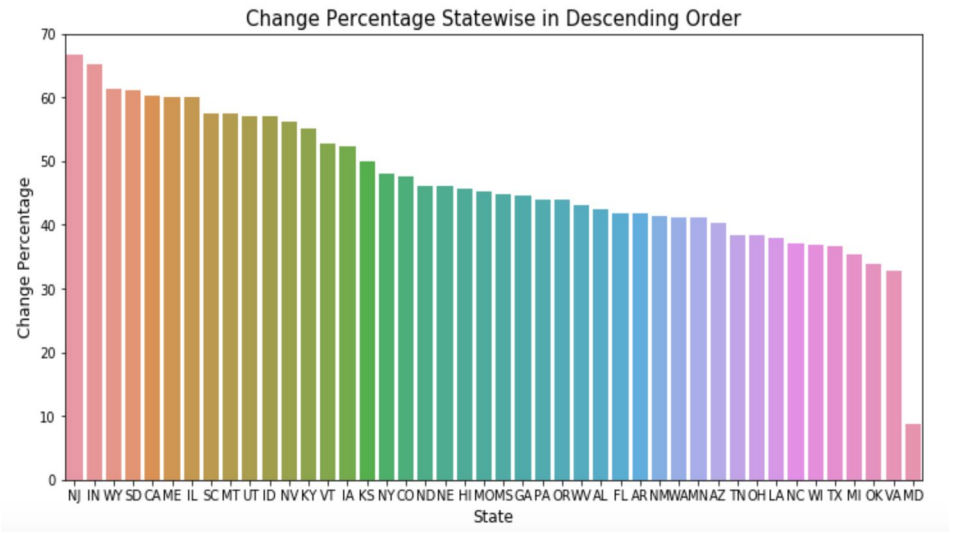
How has honey production yield changed from 1998 to 2012?



The mean yield per colony in 2002 sharply increased and came to the highest level from 1998 to 2012. Starting from 2005, the mean yield per colony had a overall downward trend. It decreased from 62 to 52 among these 4 years and reached to the lowest level in 2009. Not until 2011 did the mean yield per colony rise again.

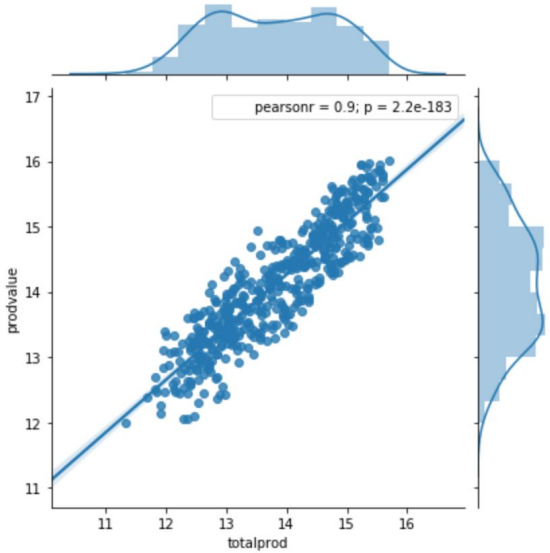
Over time, which states produce the most honey? Which produce the least? Which have experienced the most change in honey yield?



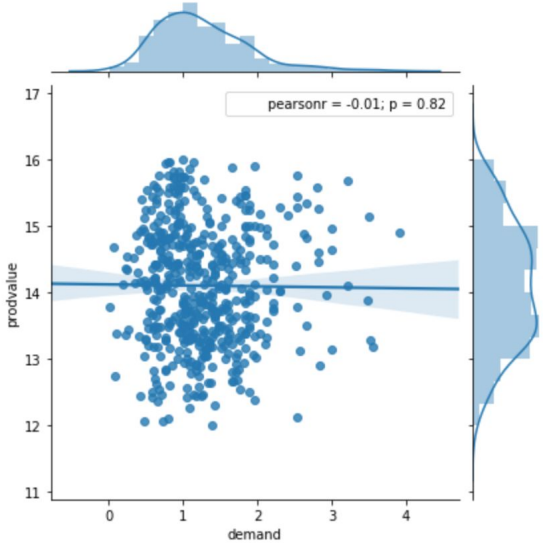


ND, which means North Dakota produced the most honey. SC, which means South Carolina produced the least. New Jersey has experienced the most change in honey yield.

Are there any patterns between total honey production and value of production every year? How has value of production related to demand over years?



The total honey production has a positive linear relationship with the total value of production. The total value of production will increase when the total honey production increase.



The value of production has no linear relationship with demand. Therefore, the value of production doesn't change as the demand does. It changes with the total honey production.

Data Modeling

Model 1: How total production is affected by stocks and average price per pound?

	coef
Intercept	5.3611
stocks	0.6836
priceperlb	-0.0926

Stocks ⬆ Total Production ⬆

Price per lb ⬇ Total production ⬆

Model 2: How stocks is affected by number of colony, yield per colony and average price per pound?

Number of colony ⬆ Stocks ⬆

Yield per colony ⬆ Stocks ⬆

Average price ⬇ Stocks ⬆

	coef
Intercept	1.7317
numcol	1.0901
yieldpercol	0.0079
priceperlb	-0.1987