Development of Florida's Citrus Forecast

Mark Hudson

Florida State Statistician

USDA United States Department of Agriculture
National Agricultural Statistics Service

Forecasting Model Direct Expansion (D.E.) =

$$\text{Number of Bearing Trees} \times \frac{\text{Fruit per Tree} \times \text{Harvest Percent}}{\text{Number of Fruit per Box}}$$

The forecasting model has 4 components.

Surveys are designed to represent the 5 growing areas and 5 age groups of Florida citrus.

The number of samples required is determined by the desired confidence interval.

Full-time staff members, assisted by OPS employees, collect and update data year round.

Forecasting Model Direct Expansion (D.E.) =

Tree Inventory ↓

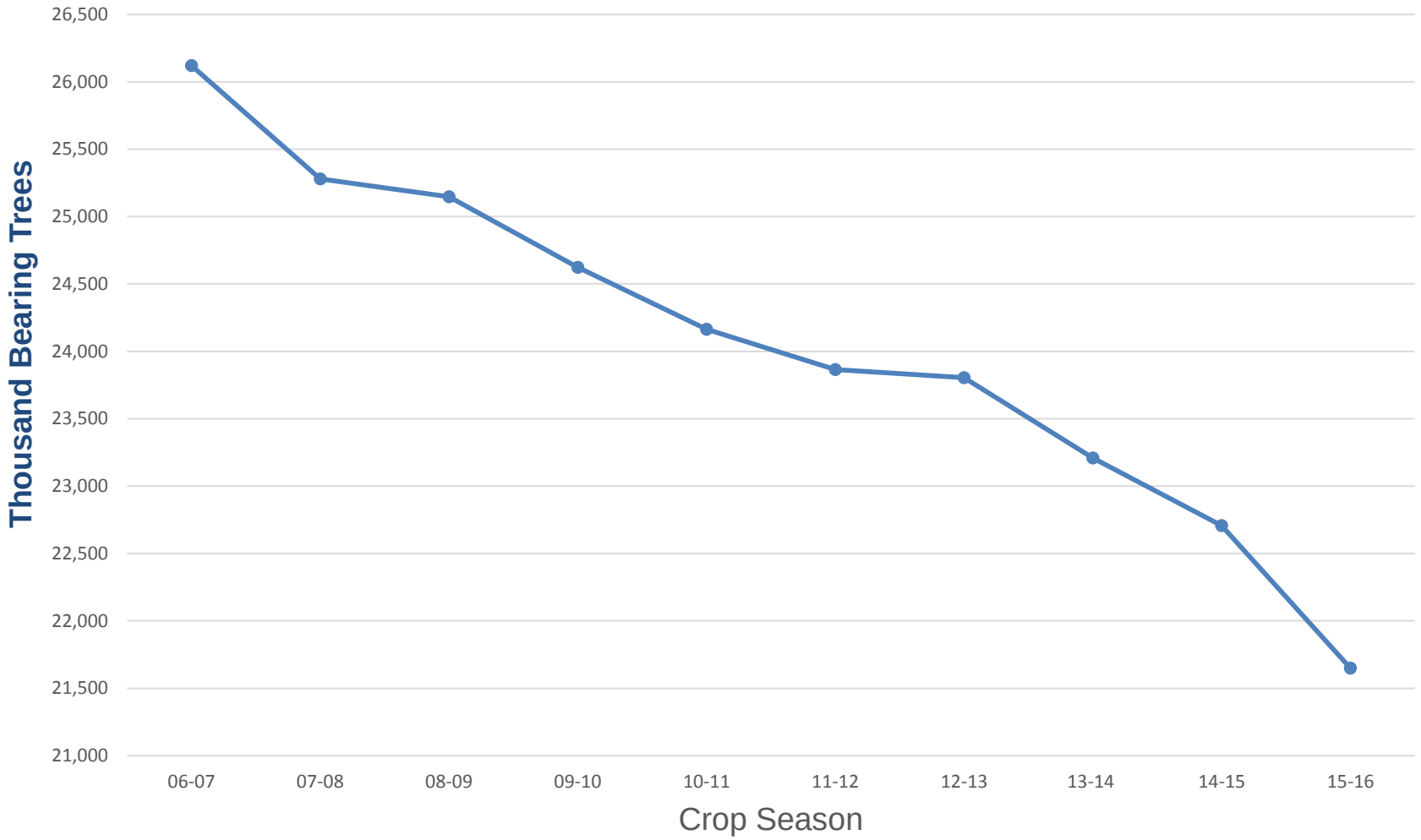
Limb Count Survey ↓

Drop Survey ↓

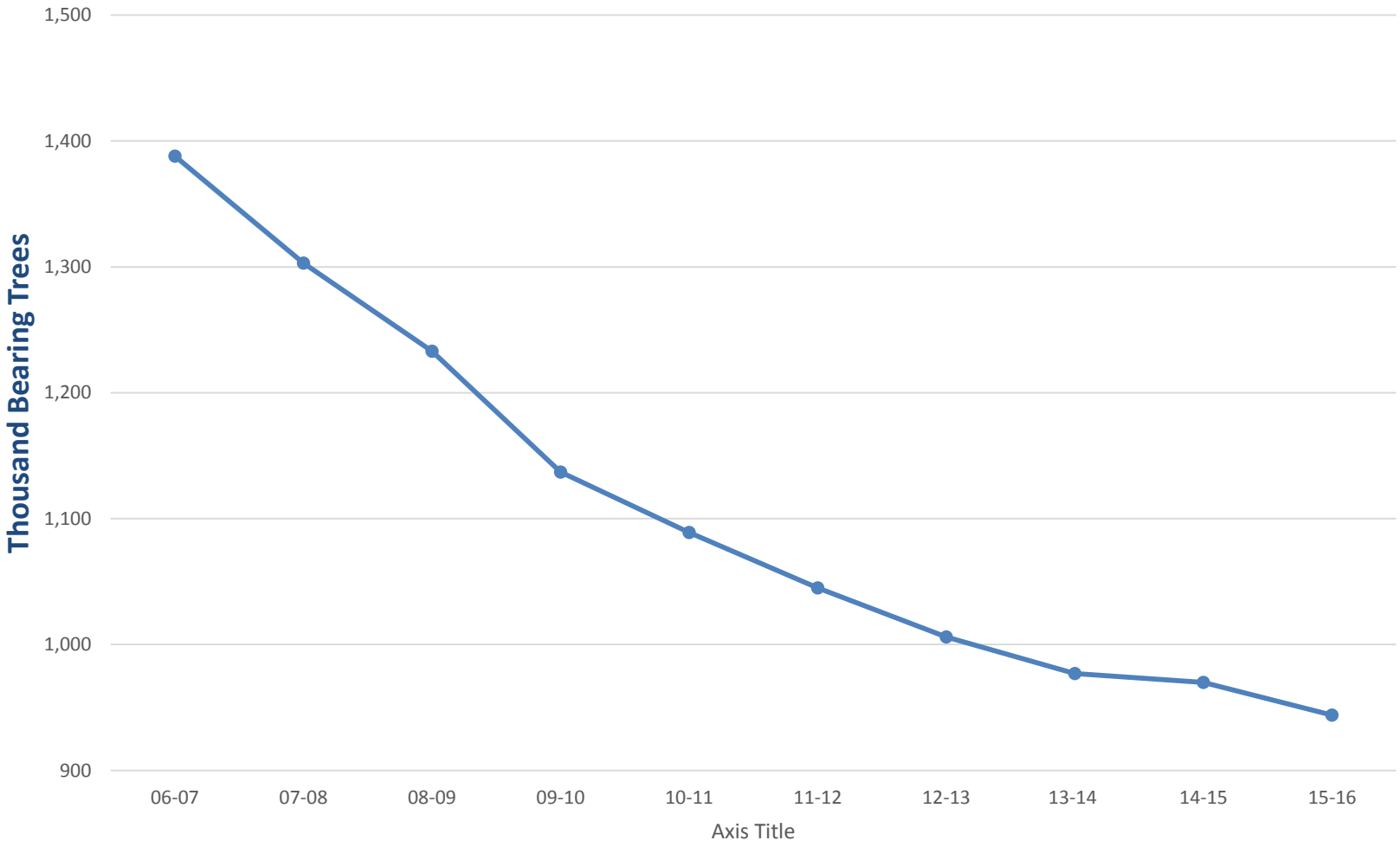
$$\text{Number Of Bearing Trees} \times \frac{\text{Fruit per Tree} \times \text{Harvest Percent}}{\text{Number of Fruit per Box}}$$

↑ Size Survey

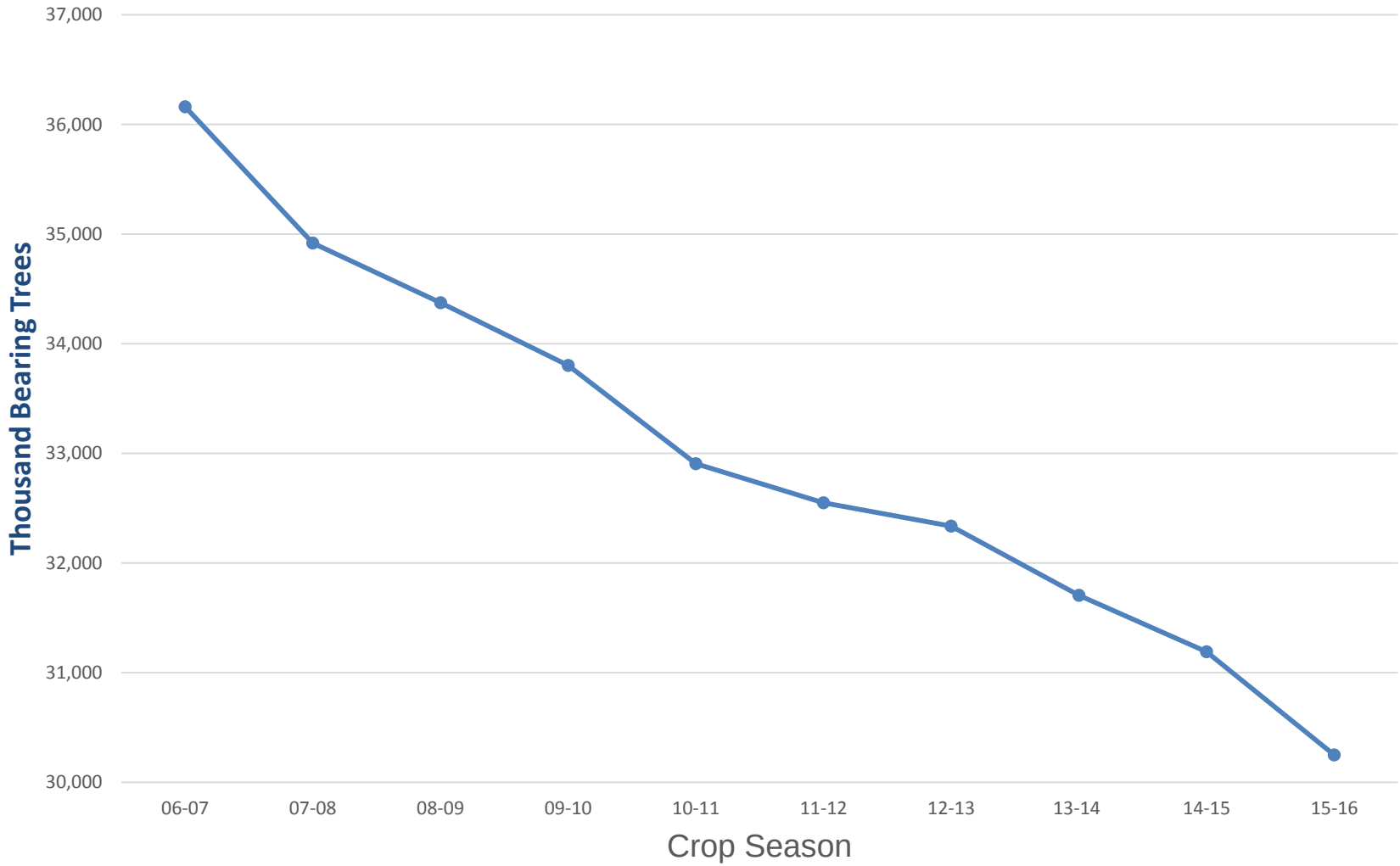
Early - Mid Oranges Thousand Bearing Trees

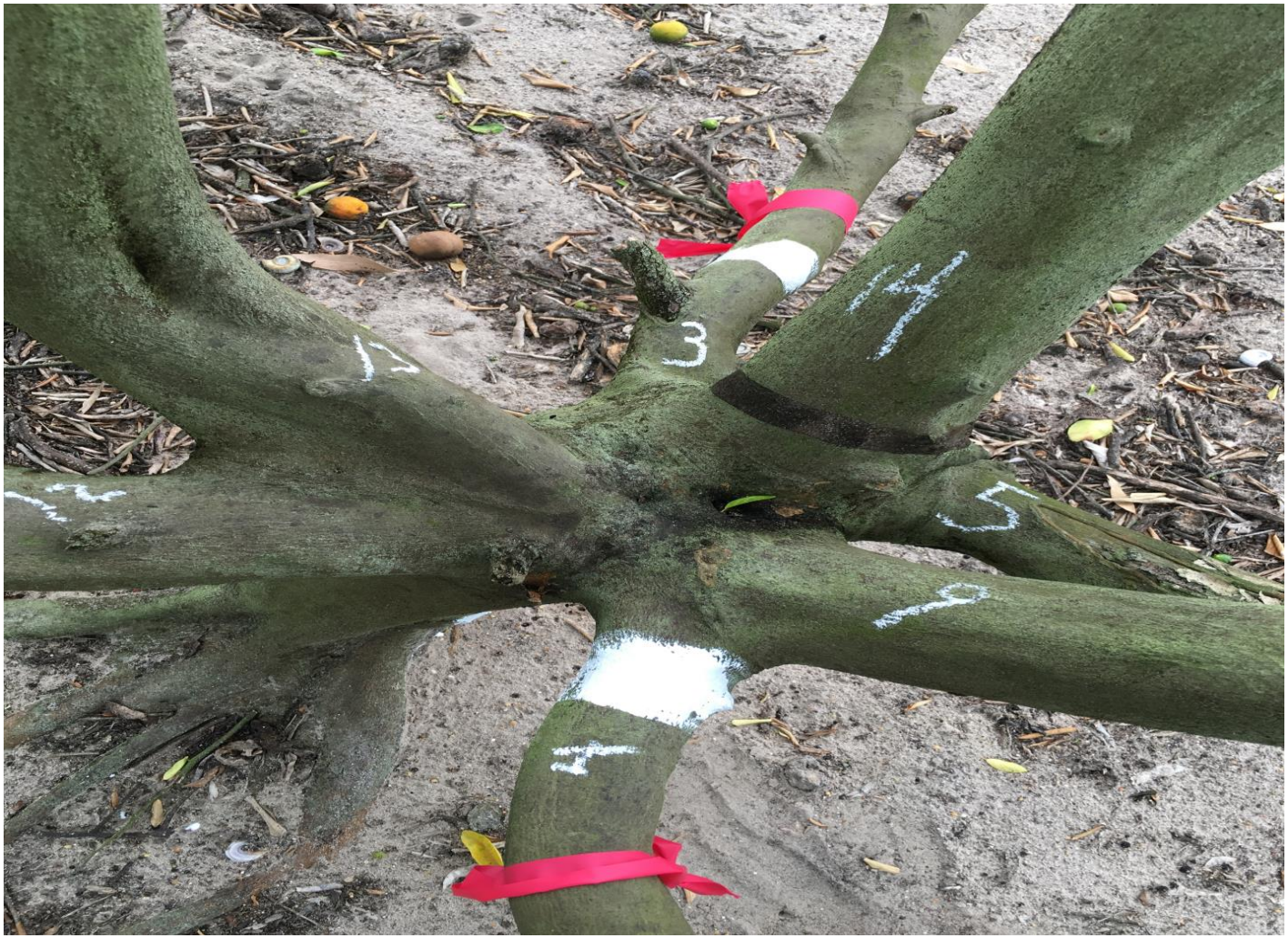


Navel Oranges in Thousand Bearing Trees

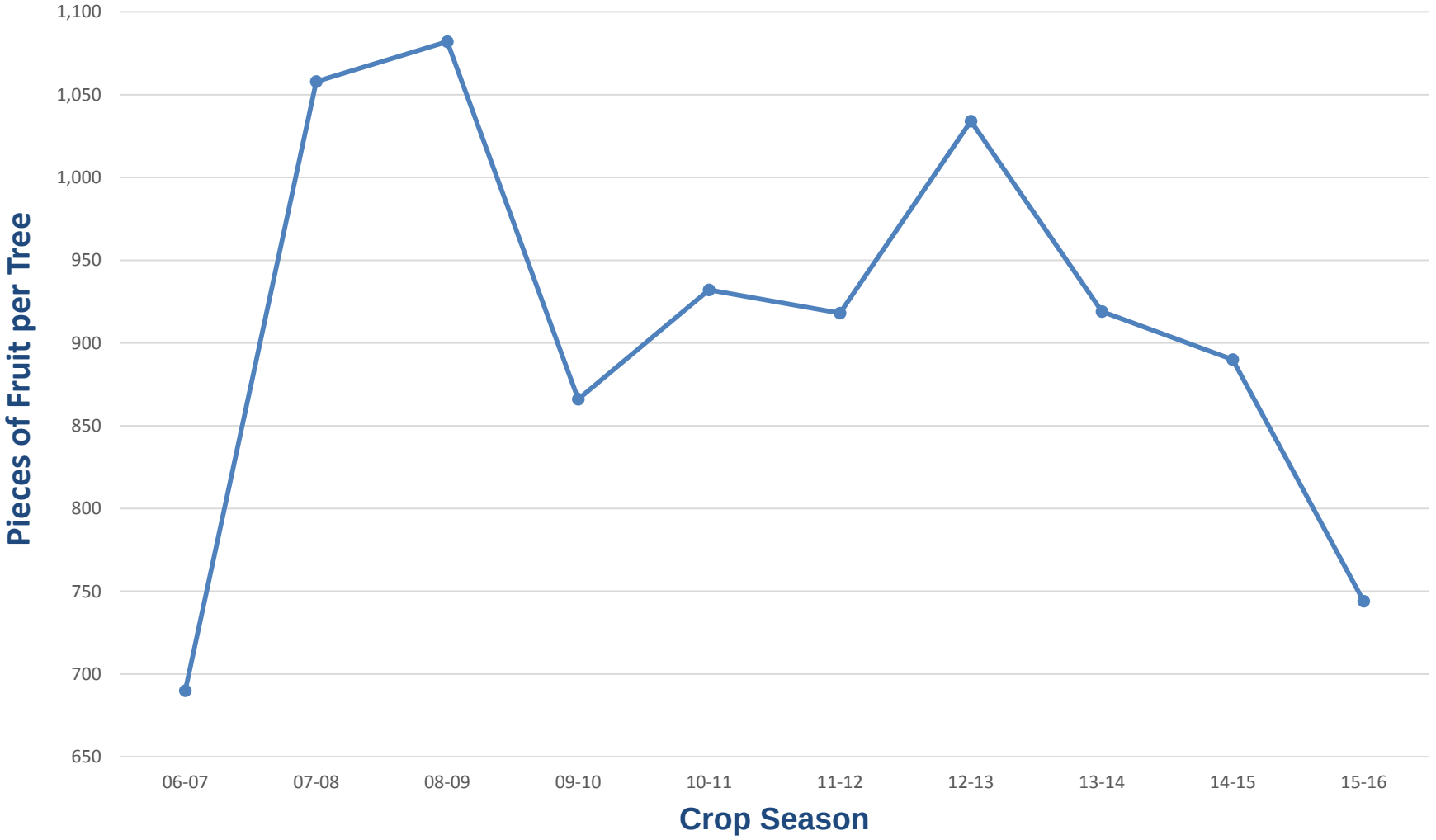


Valencia Oranges in Thousand Bearing Trees

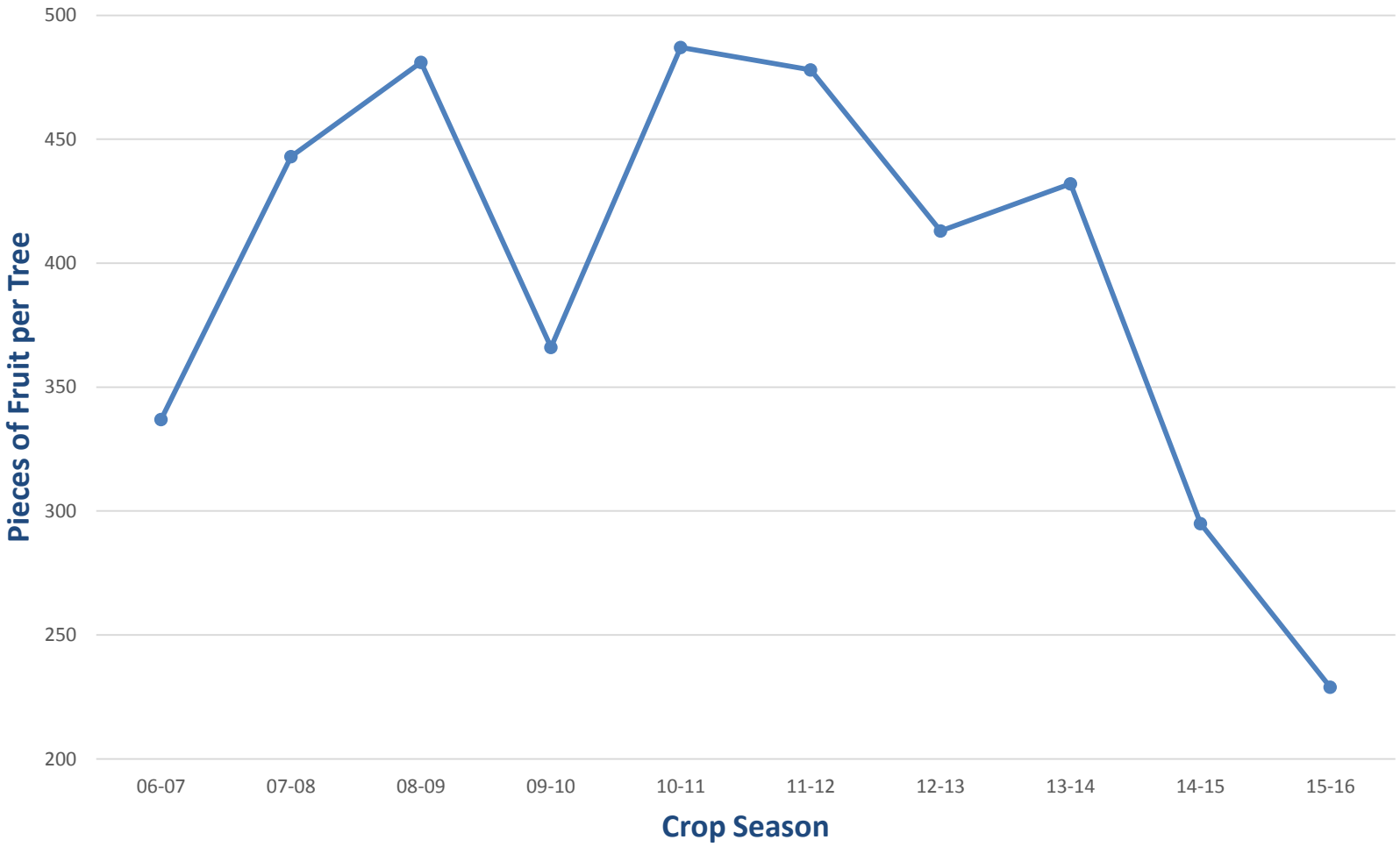



3
4
5
1

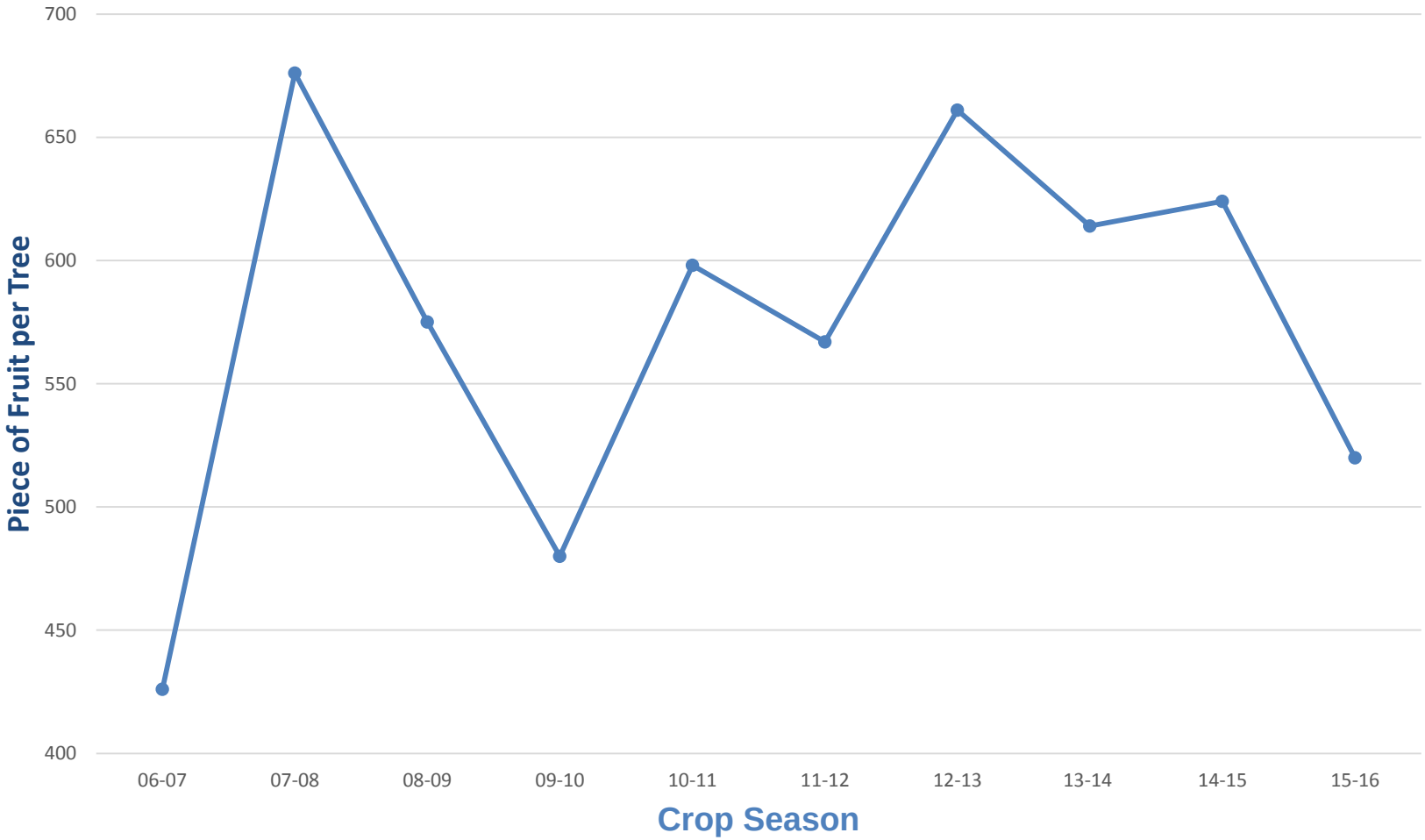
Early - Mid Oranges Fruit per Tree



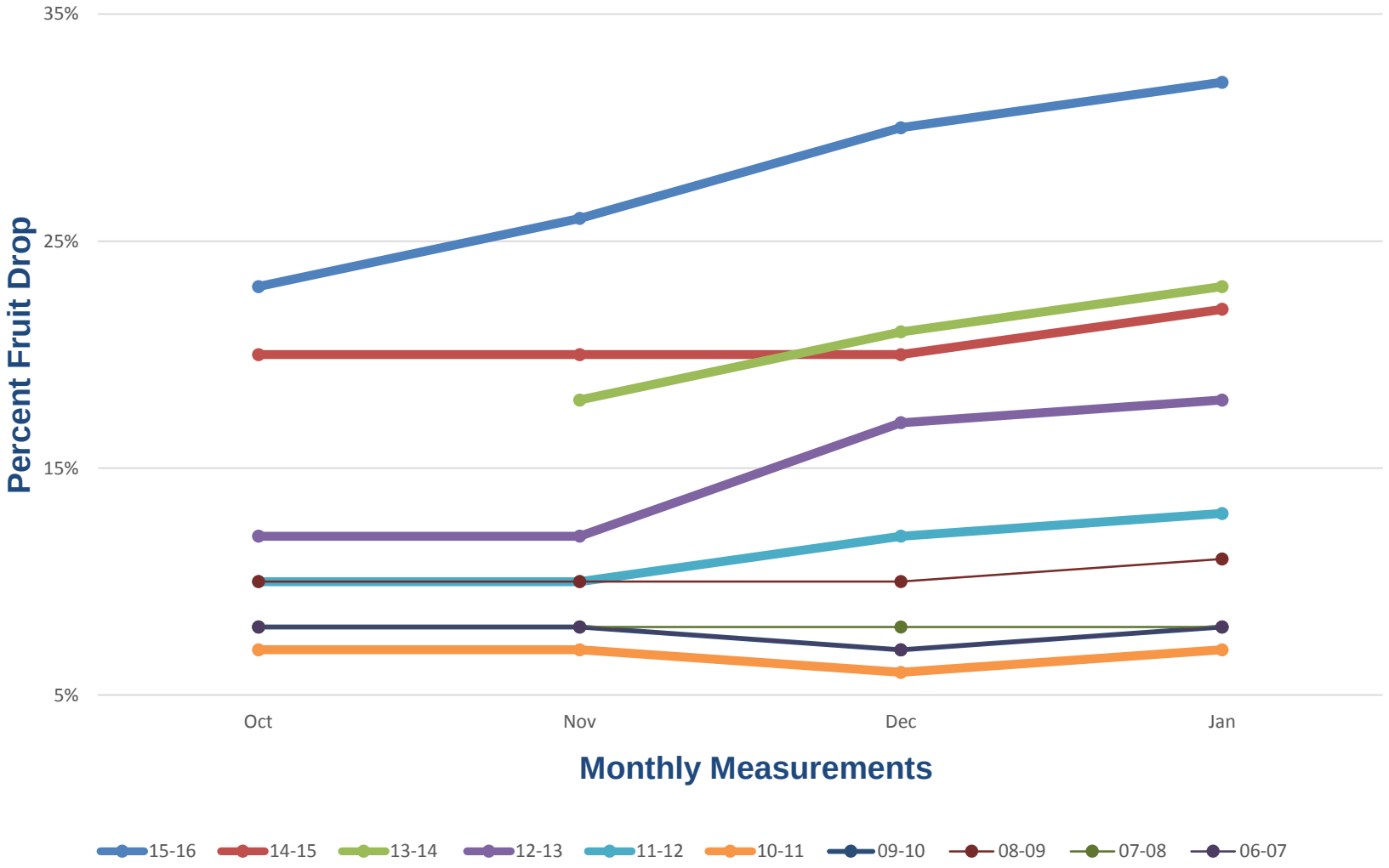
Navel Fruit per Tree



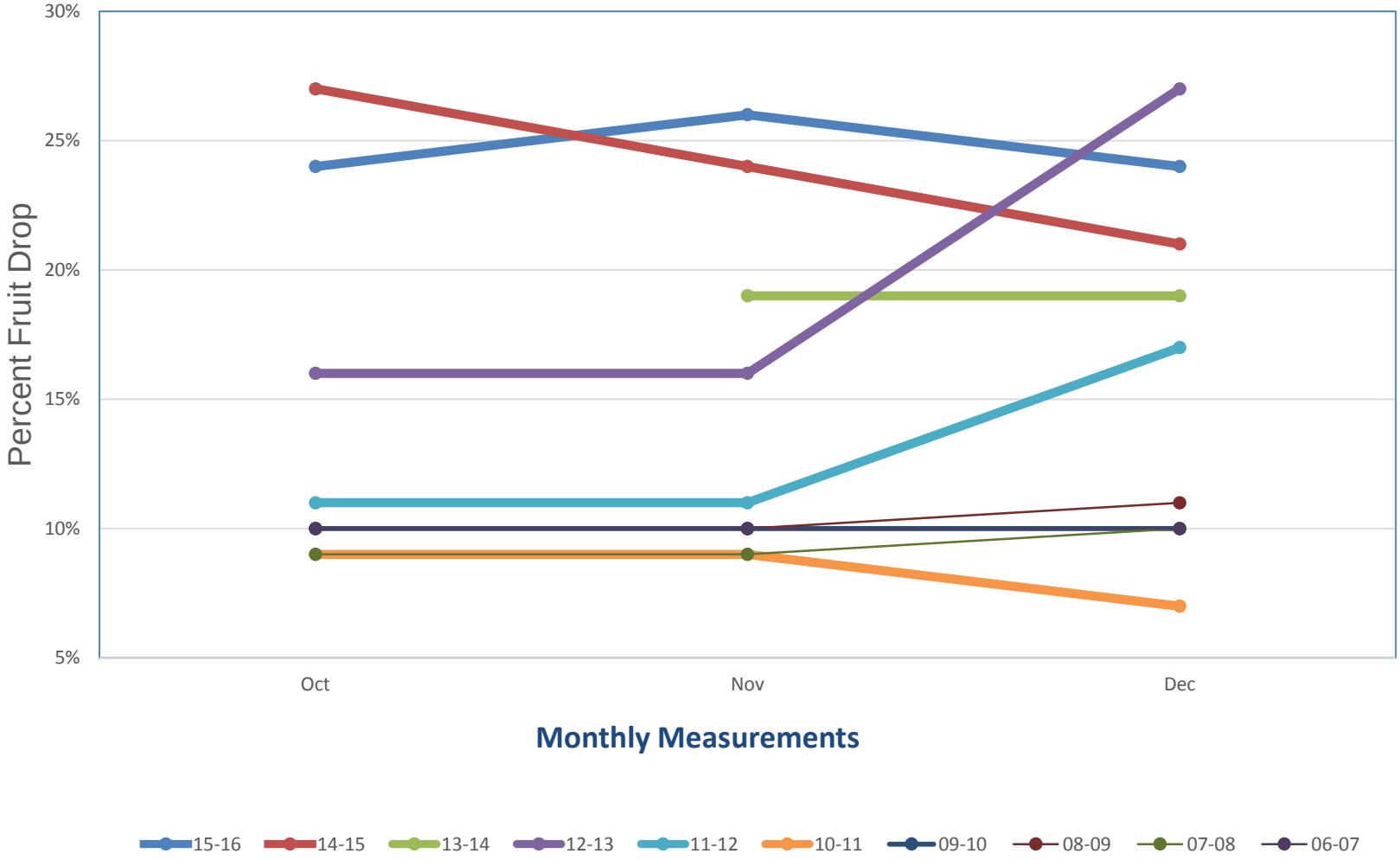
Valencia Orange Fruit per Tree



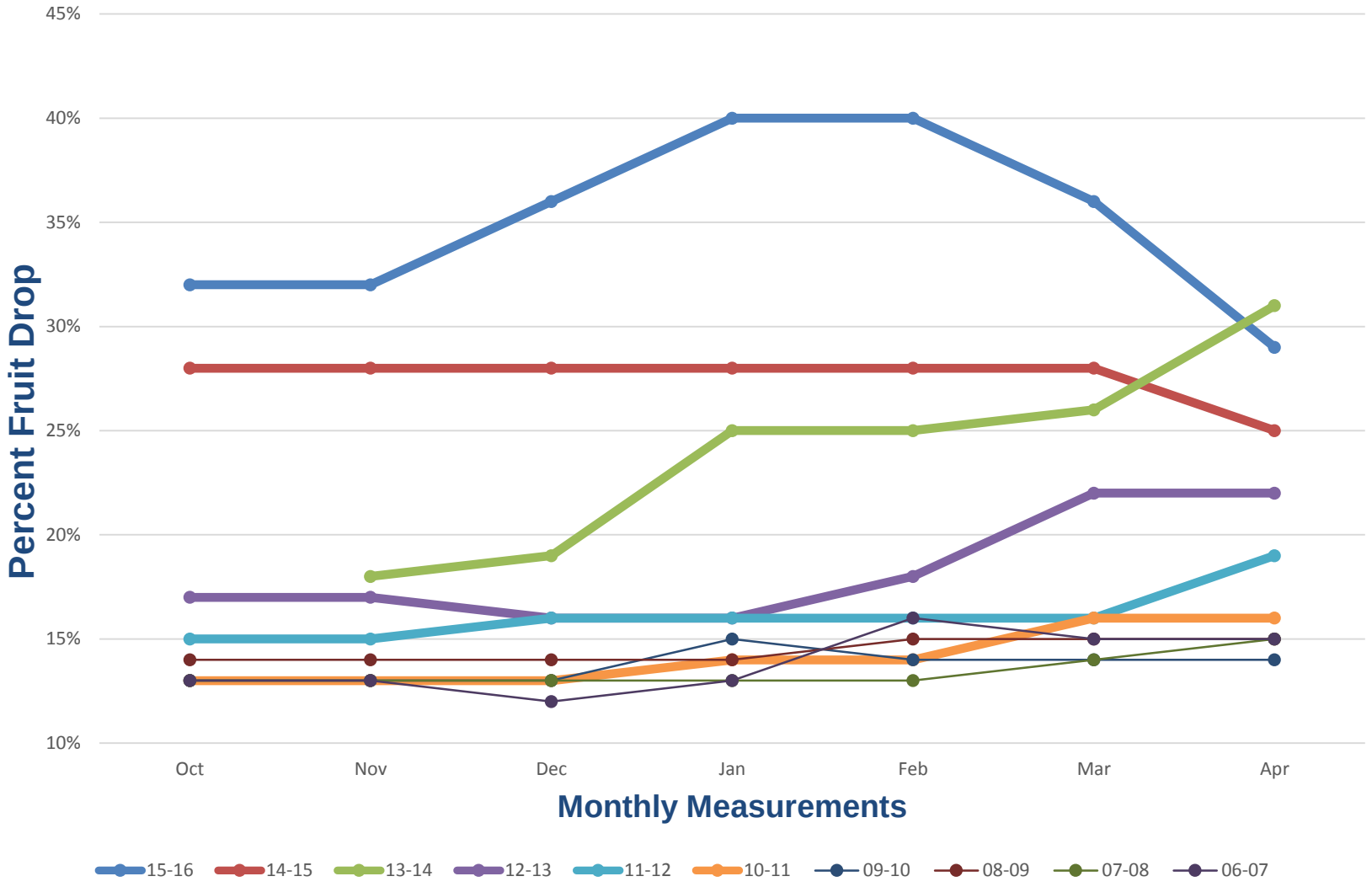
Non-Valencia Drop, Jan is Final



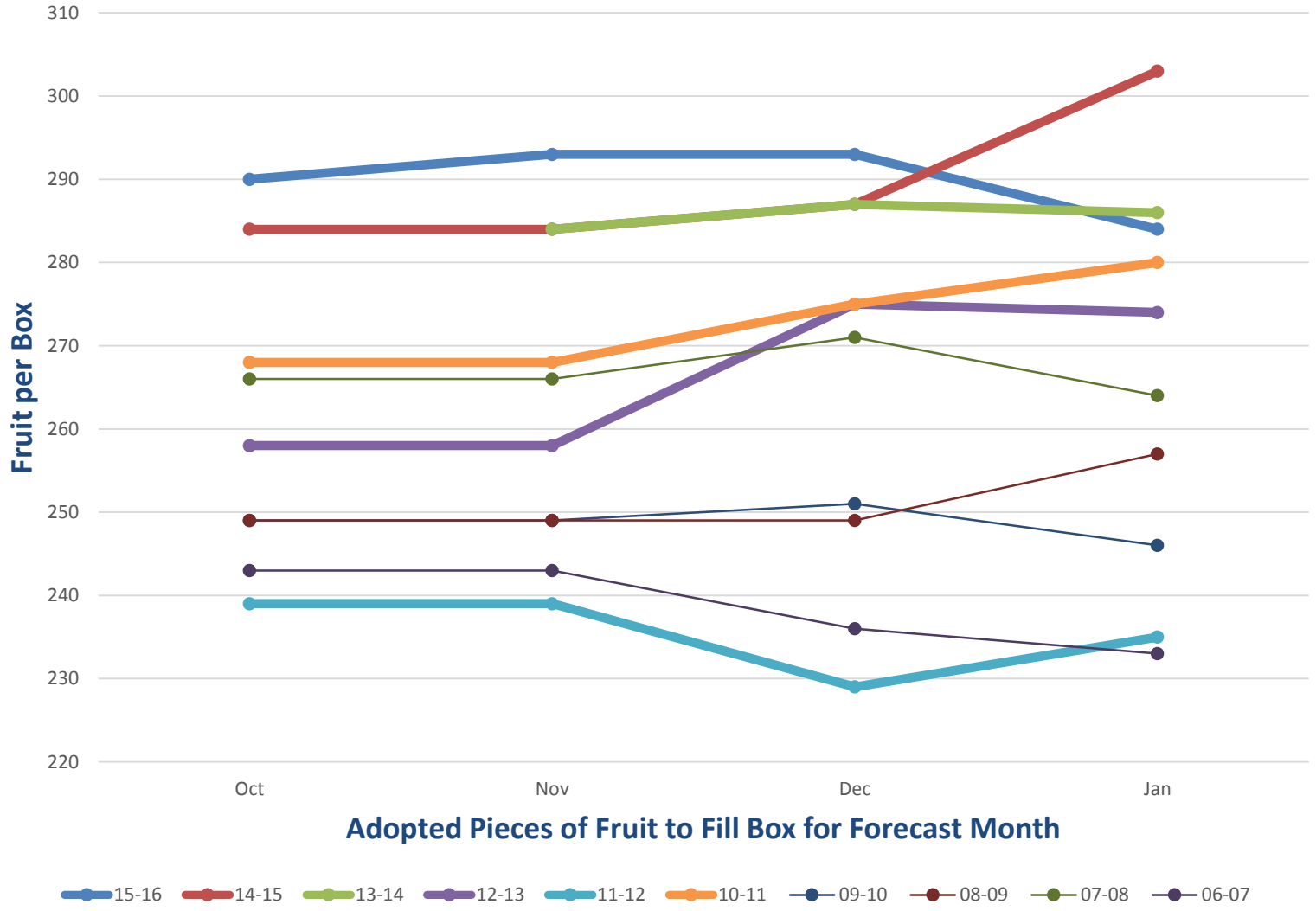
Navel Fruit Drop Percent, Dec is Final



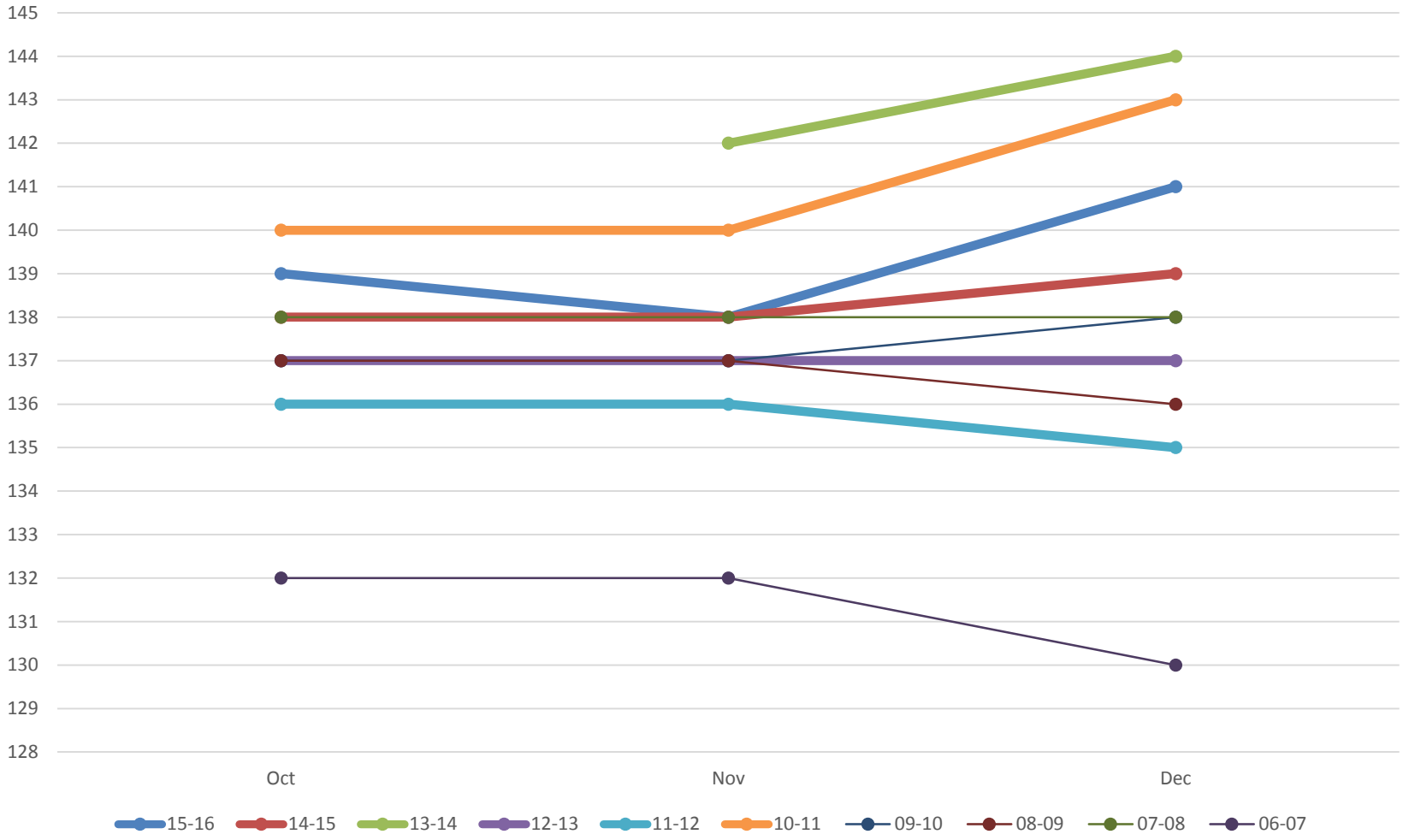
Valencia Fruit Drop Percent, Apr is Final



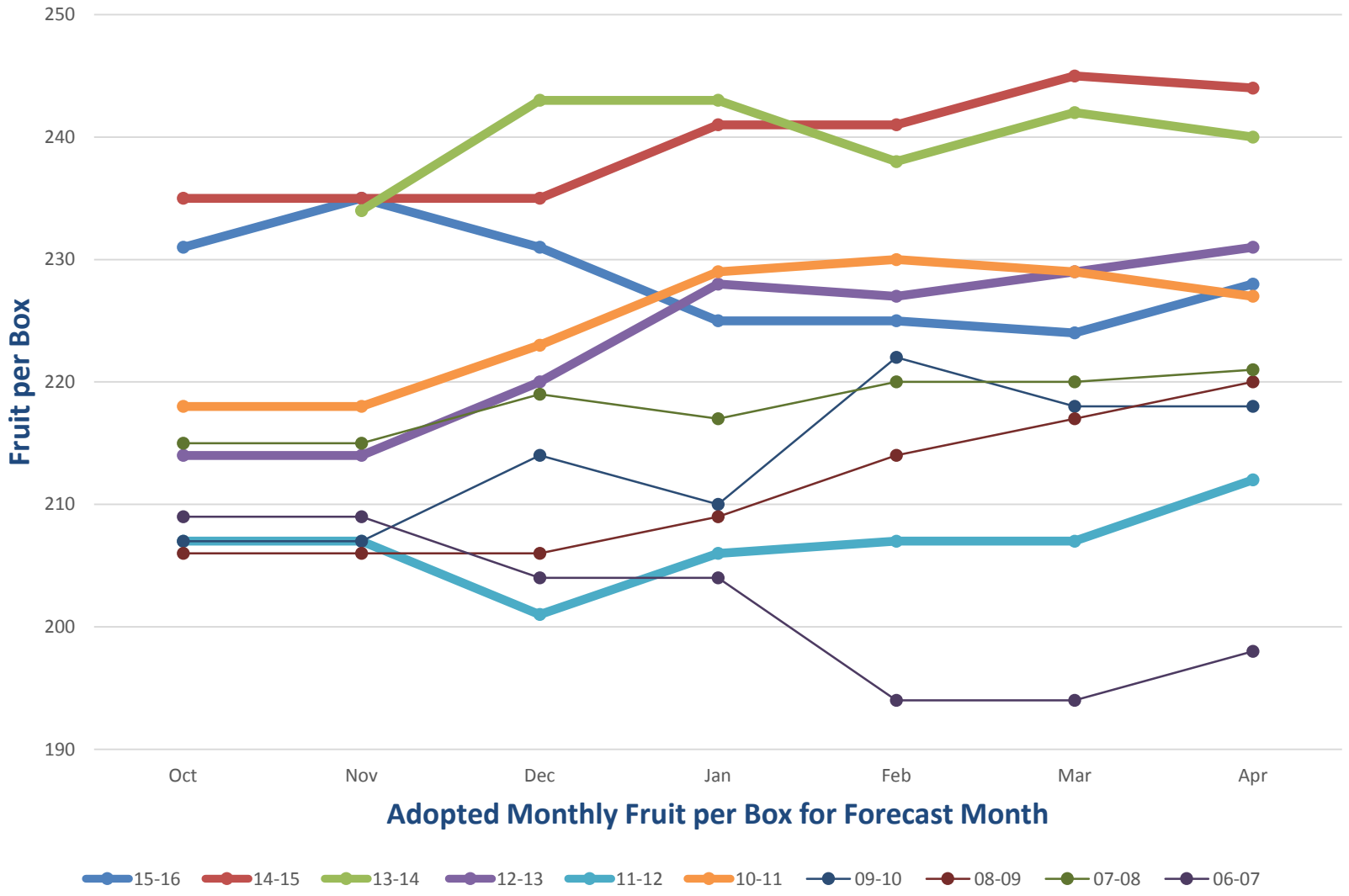
Pieces of Fruit per Box Non-Valencia Oranges, Jan is Final



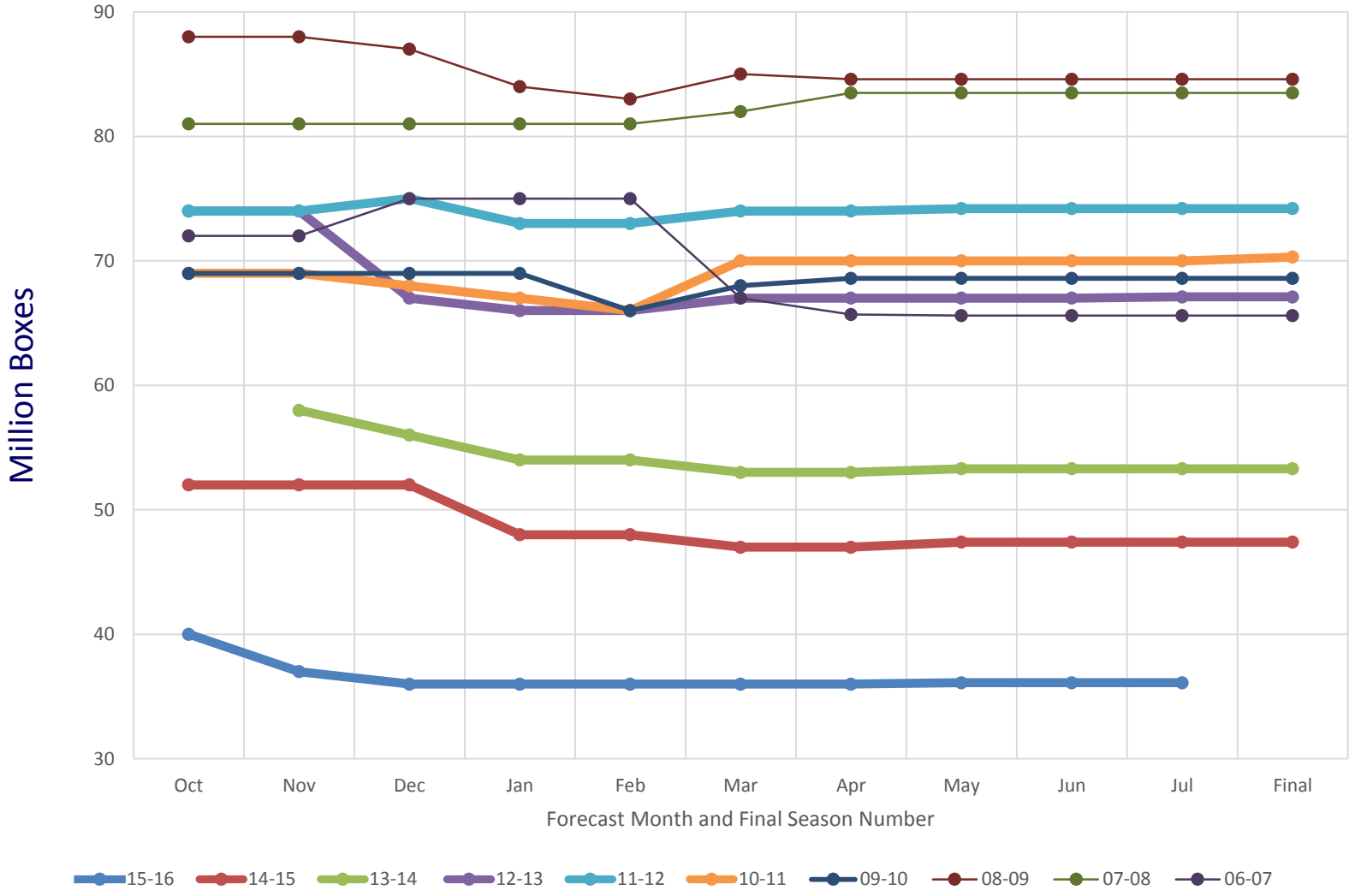
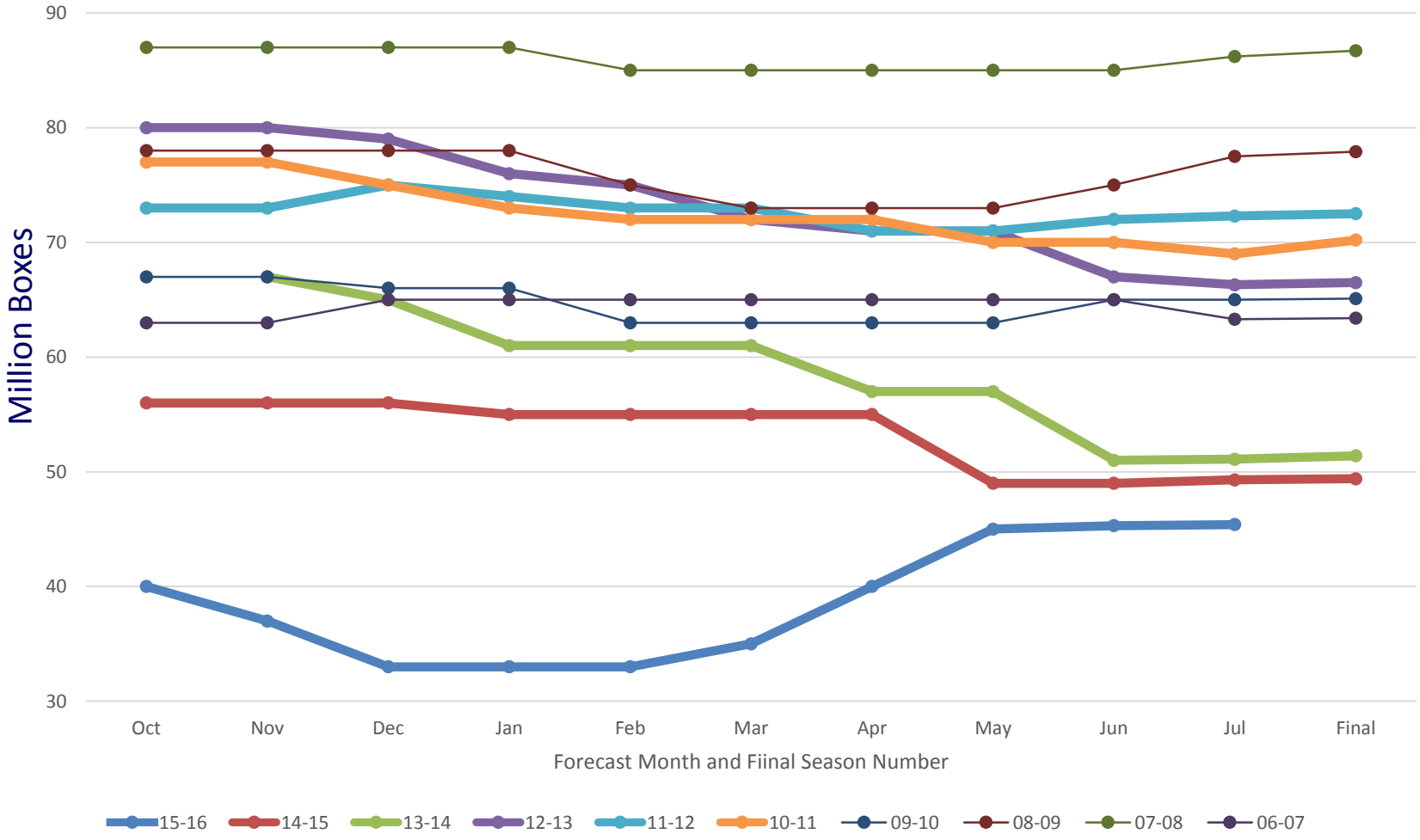
Pieces of Fruit per Box Navels, Dec is Final



Pieces of Fruit per Box Valencias, April is Final



Florida Non-Valencia Orange Forecasts



Florida Valencia Orange Forecasts