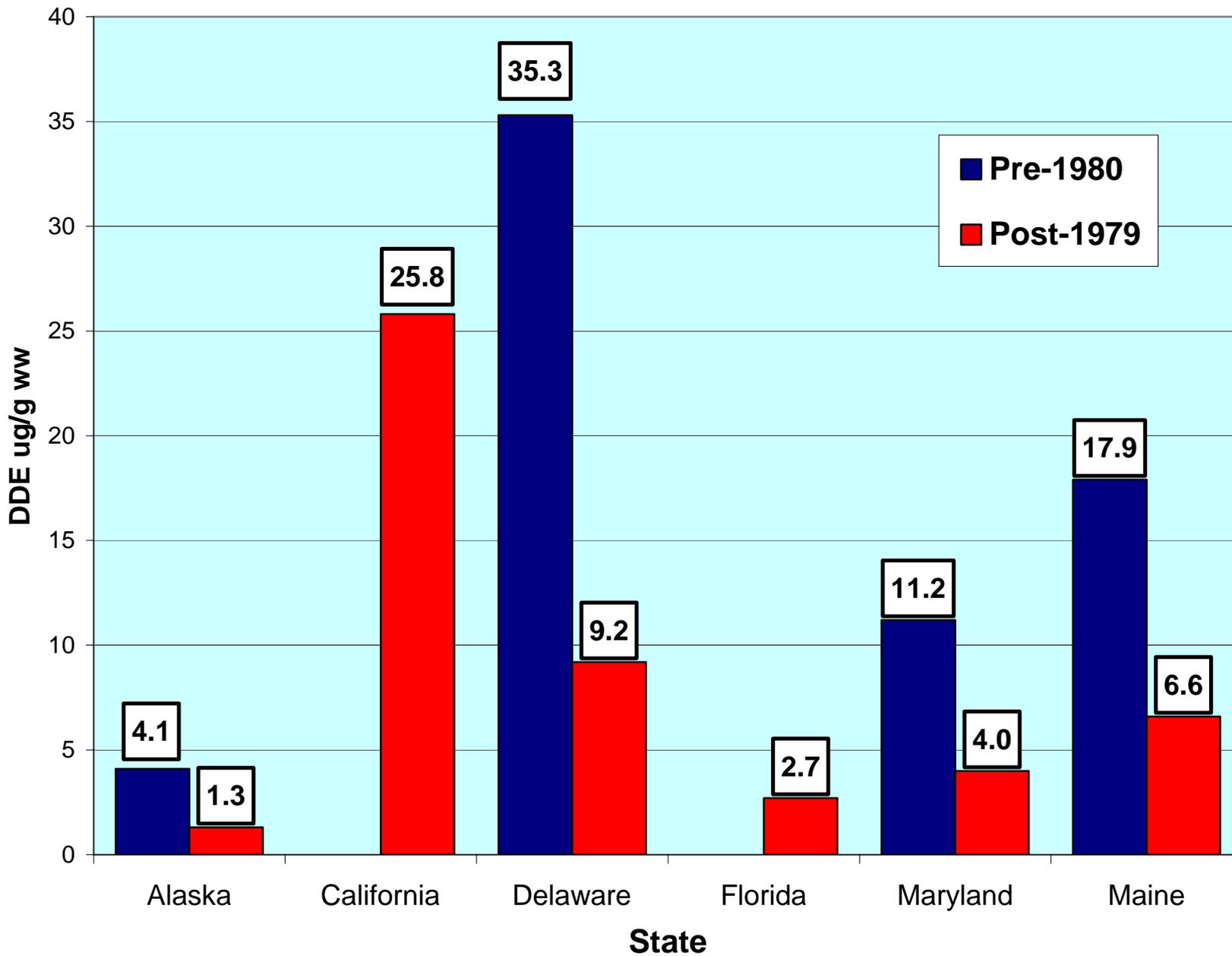


# DDE in Bald Eagle eggs by State and Year



## USGS Data Exploration Unit: Bald Eagle Activity 2 Student Workbook

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### Table of results

Follow the directions given for Bald Eagle Activity 2 and fill in your results in the table below.

State	DDE Pre-1980 (ug/g ww)	DDE Post-1979 (ug/g ww)
Alaska	4.1	1.3
California	XXX	25.8
Delaware	35.3	9.2
Florida	XXX	2.7
Maryland	11.2	4.0
Maine	17.9	6.6

### Discussion Questions

Refer to the workbook, graph, and datasheet from bald eagle Activity 2 and answer the following questions. You may add additional sheets of paper as needed.

1. What differences do you notice between states?
  - *In general, AK has much lower DDE concentrations than other states.*
  - *All states for which data is available both pre-1980 and post-1979 show a significant decrease in DDE concentrations post-1979.*
  - *CA is the only state with extremely high DDE concentrations post-1979.*
2. Why might Alaska have lower DDE concentrations than states in the continental U.S.?

*AK is isolated and there is not a large agriculture industry in AK.*

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3. What state has the highest DDE concentration post-1979? Are the data records for this state from multiple locations throughout the state? What might explain such high DDE concentrations post-1980?

*CA has the highest DDE concentration post-1979. All CA records are from Santa Catalina. Perhaps Santa Catalina is unusually contaminated.*

4. What differences do you notice in N values for different state/year groups? How might these differences affect the accuracy of the averages calculated for each state/year group?

*N values are not equal. Some averages are only based on 2 individuals. These are not likely to be accurate.*

5. Think of 2 new hypotheses you would like to investigate based on the insights you uncovered by looking at the Bald Eagle data by state and by year. For each hypothesis, describe the data you would need to test it.

*Any hypothesis based on the insights they discovered such as hypotheses that explore these ideas with respect to bald eagle eggs:*

- *DDE concentrations in isolated states such as Alaska and Hawaii are lower than DDE concentrations in the continental US.*
- *DDE concentrations in states with large agriculture industries are likely to be higher than DDE concentrations in states with little agriculture activity.*
- *DDE concentrations are unusually high on Santa Catalina Island.*