

# Eastern North Pacific Gray Whale Calf Count

ACTIVITY: Students use real data to create graphs, charts, look for trends, and practice other math skills.

GRADE LEVEL(S): 2nd to 6th



OVERVIEW: Gray whales are an important example of conservation. Scientists continue to monitor how many calves are born every year to be sure the populations remain stable and strong.

DISCIPLINES: Science, math, visual arts

OBJECTIVES: Students will be able to:

- Practice math skills
- Discuss how, if, and why the number of calves observed changes over the years.
- Recognize that the data is a small portion of the actual gray whale population and the number scientists observed over a few week period.
- Compare and contrast the numbers from week to week or year to year.
- Identify increases and decreases in numbers from week to week or year to year.
- Recognize that counts may vary from week to week or year to year due to visibility, slight variations in the start of the whales' northward migration or other causes.
- Estimate how many cow/calf pairs scientists might find this year's weekly counts based previous years or trends students notice.

MATERIALS: • Photocopy of the whale counts students will use for math activities.  
• paper, pencils, calculators

## WHAT TO DO:

Use the data or pull the numbers to create new sets of data to help your students practice the math skills at their grade level.

Possible activities include:

- Addition/subtraction
- Creating graphs or charts
- Observing trends
- Comparing and contrasting numbers from week to week or year to year
- Comparing numbers to weather patterns along the coast of California during the same year
- Determining the percentage of observed adult female whales (cows) to the total estimated gray whale population of 18,000 to 20,000.
- Discussing how, if, and why the number of calves observed might change over the years.
- Estimate how many cow/calf pairs scientists might find this year's weekly counts based previous years or trends students notice.

## Eastern North Pacific Gray Whale Calf Count

**Total count: 255 Cow/Calf Pairs**

Counts for this season began on March 28 and were completed on May 27. Watches were held during daylight hours and good weather conditions, Monday through Friday:

Total counts for week 9 (May 23 to 29)

Cow/calf pairs - 2  
total cow calf pairs of season to date - 255

Total counts for week 8 (May 16 to 22)

Cow/calf pairs - 14  
total cow calf pairs of season to date - 253

Total counts for week 7 (May 8 to 15)

Cow/calf pairs - 63  
Total cow/calf pairs of season to date - 239

Total counts for week 6 (May 2 to 8)

Adults offshore - 8  
Cow/calf pairs - 58  
Total cow/calf pairs of season to date - 176

Total counts for week 5 (April 25-May 1)

Adults offshore - 10  
Cow/calf pairs - 71  
Total cow/calf pairs of season to date - 118

Total counts for week 4 (April 18-April 24)

Adults offshore - 9  
Cow/calf pairs - 31  
Total cow/calf pairs of season to date - 47

Total counts for week 3 (April 10-17)

Adults offshore - 34  
Cow/Calf pairs - 14  
Total cow/calf pairs of season to date - 16

Total counts for week 2 (April 02- 9/)

Adults offshore - 114  
Cow/Calf pairs - 2  
Total cow/calf pairs to date - 2

Total counts for week 1 (March 28- April 1)

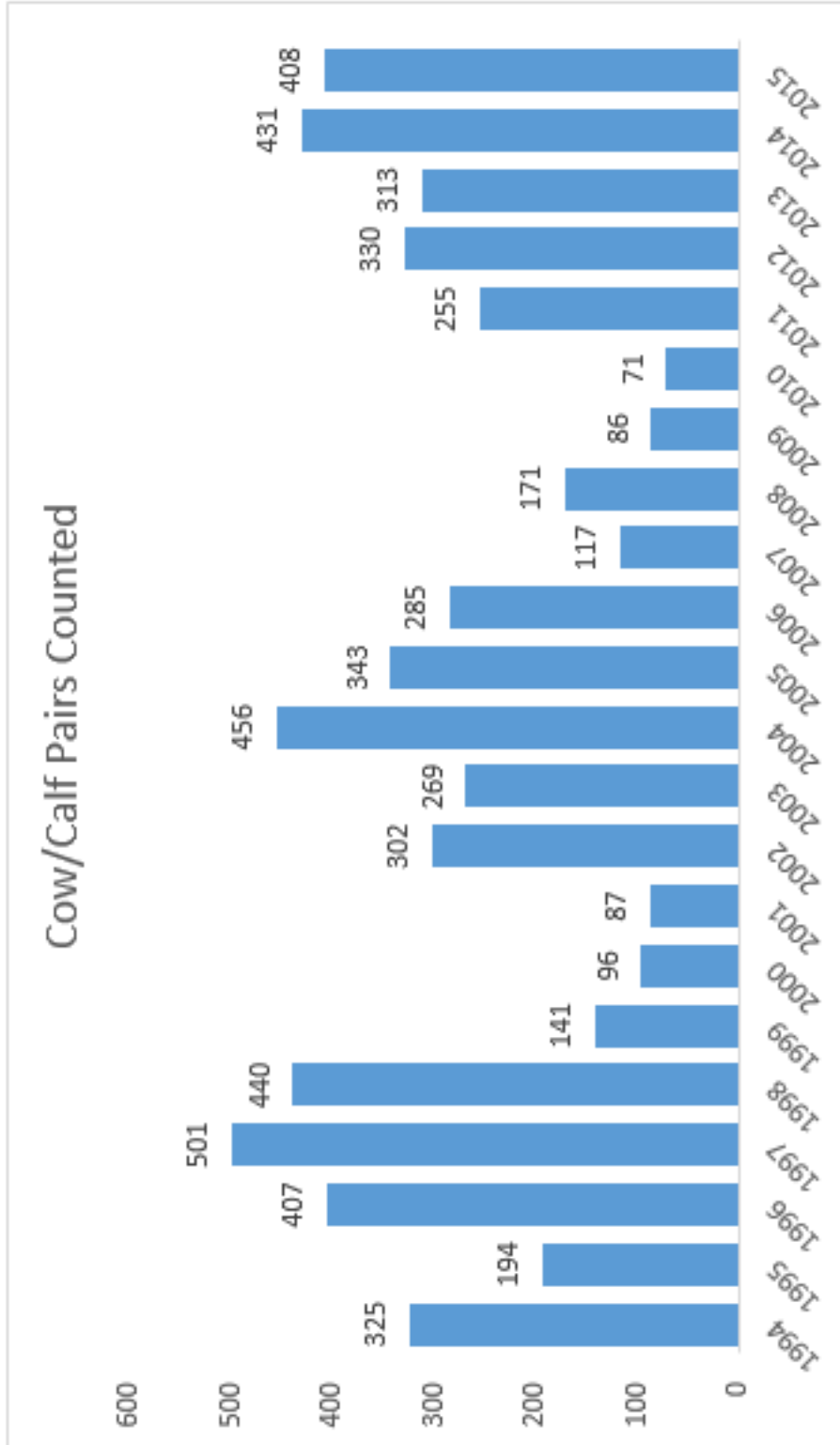
Adults offshore - 207  
Cow/Calf pairs - 0  
Total cow/calf pairs to date - 0

The above information is real data from the 2011 Field Season collected by the science team from the Southwest Fisheries Science Center, Protected Resources Division, NOAA

<http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=211&id=17174>

# Gray Whale Cow/calf Pairs Counted 1994 to 2015

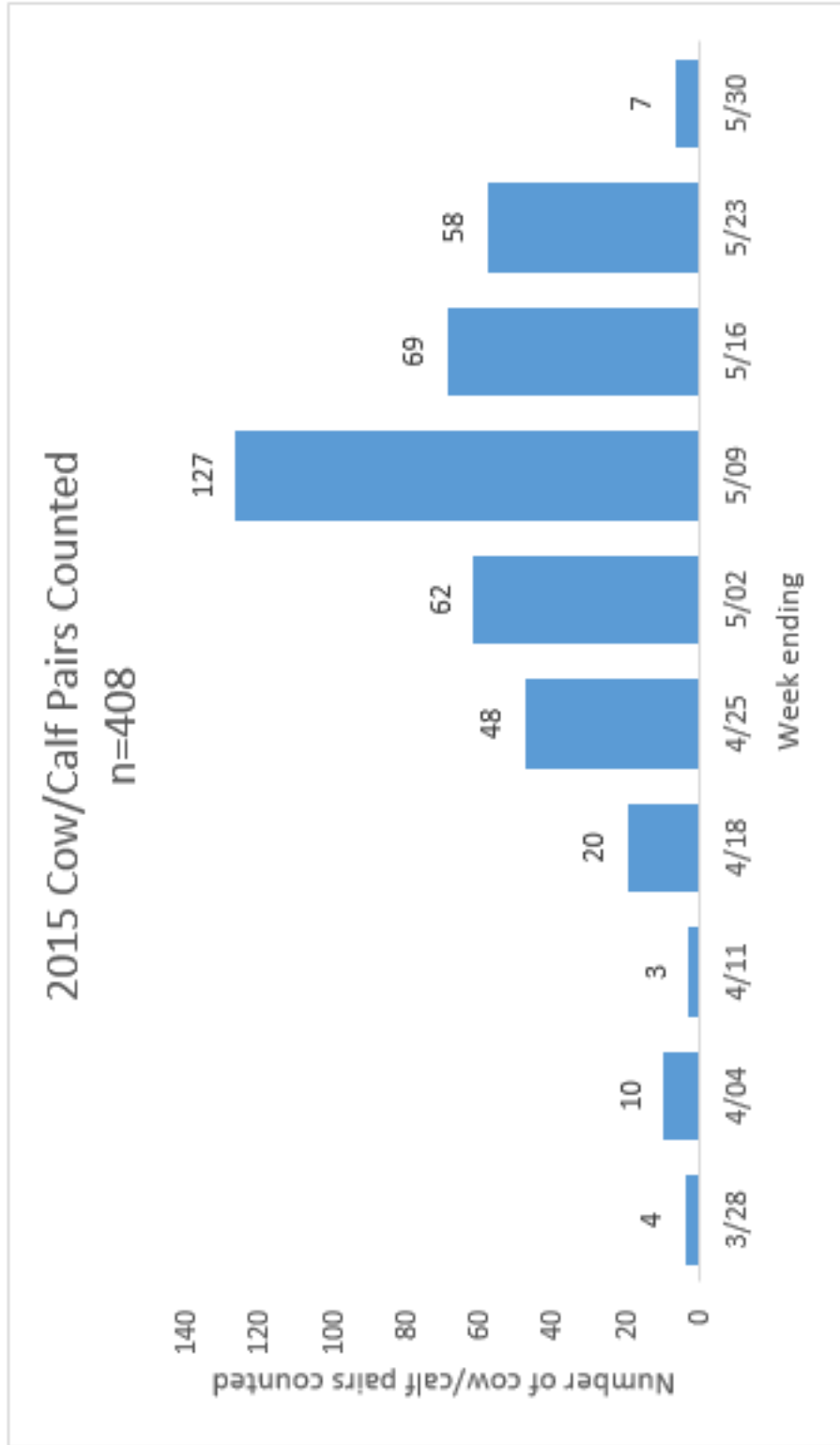
Celebration of Conservation: Gray Whales  
WhaleTimes Virtual Team Member Activity



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<http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=211&id=17174>

## Gray Whale Cow/calf Pairs Counted in 2015

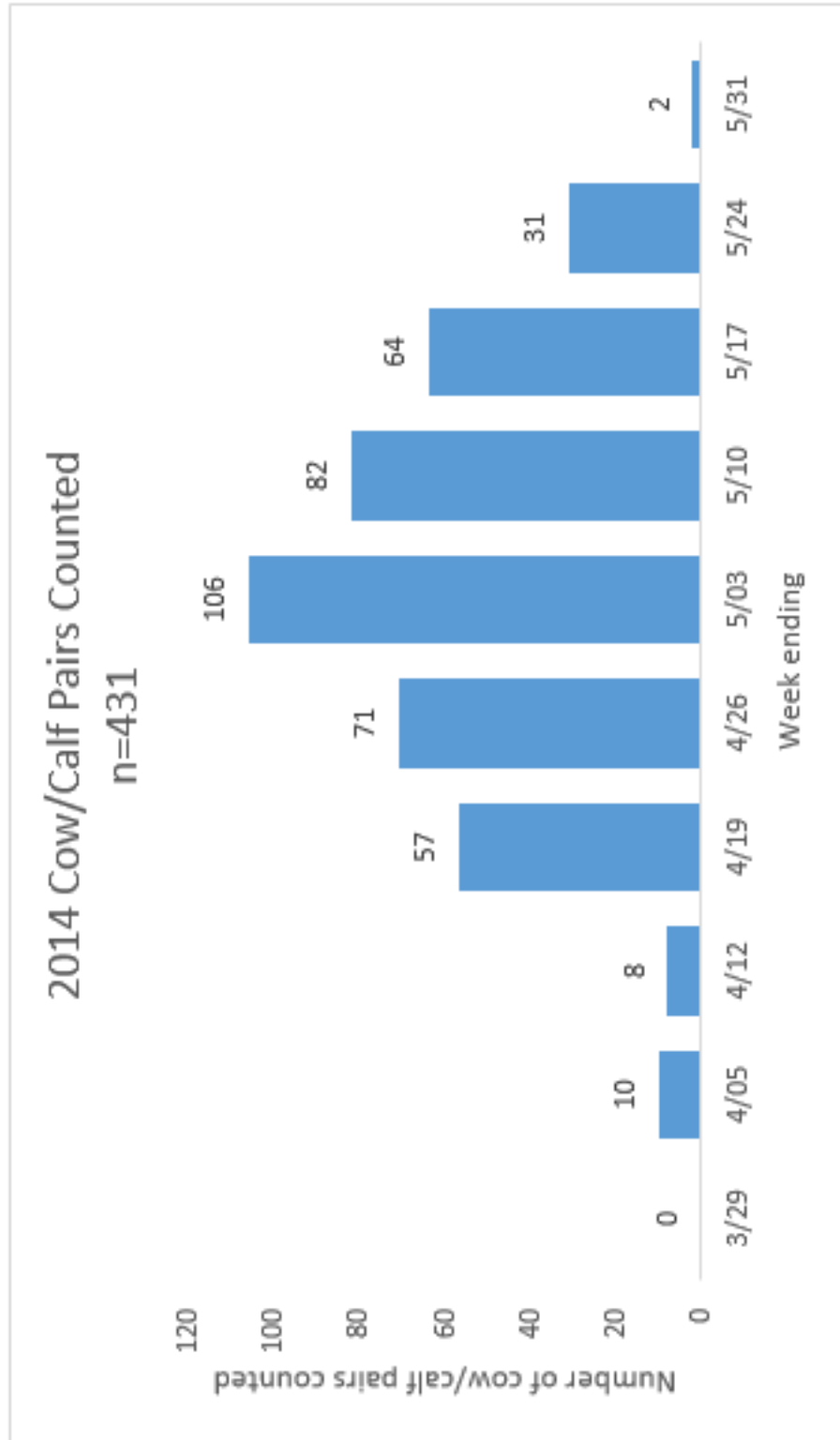
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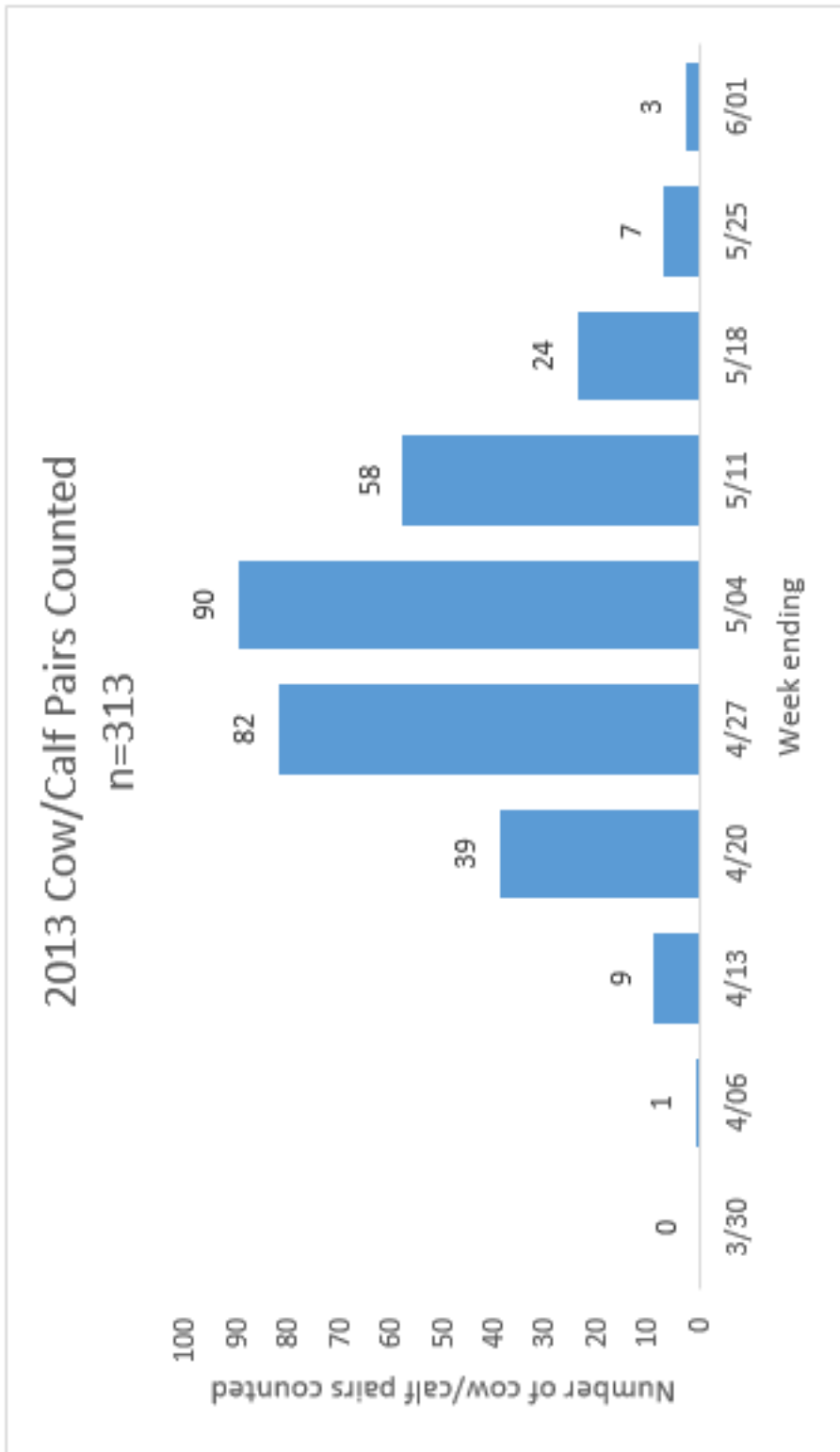
## Gray Whale Cow/calf Pairs Counted in 2014

Celebration of Conservation: Gray Whales  
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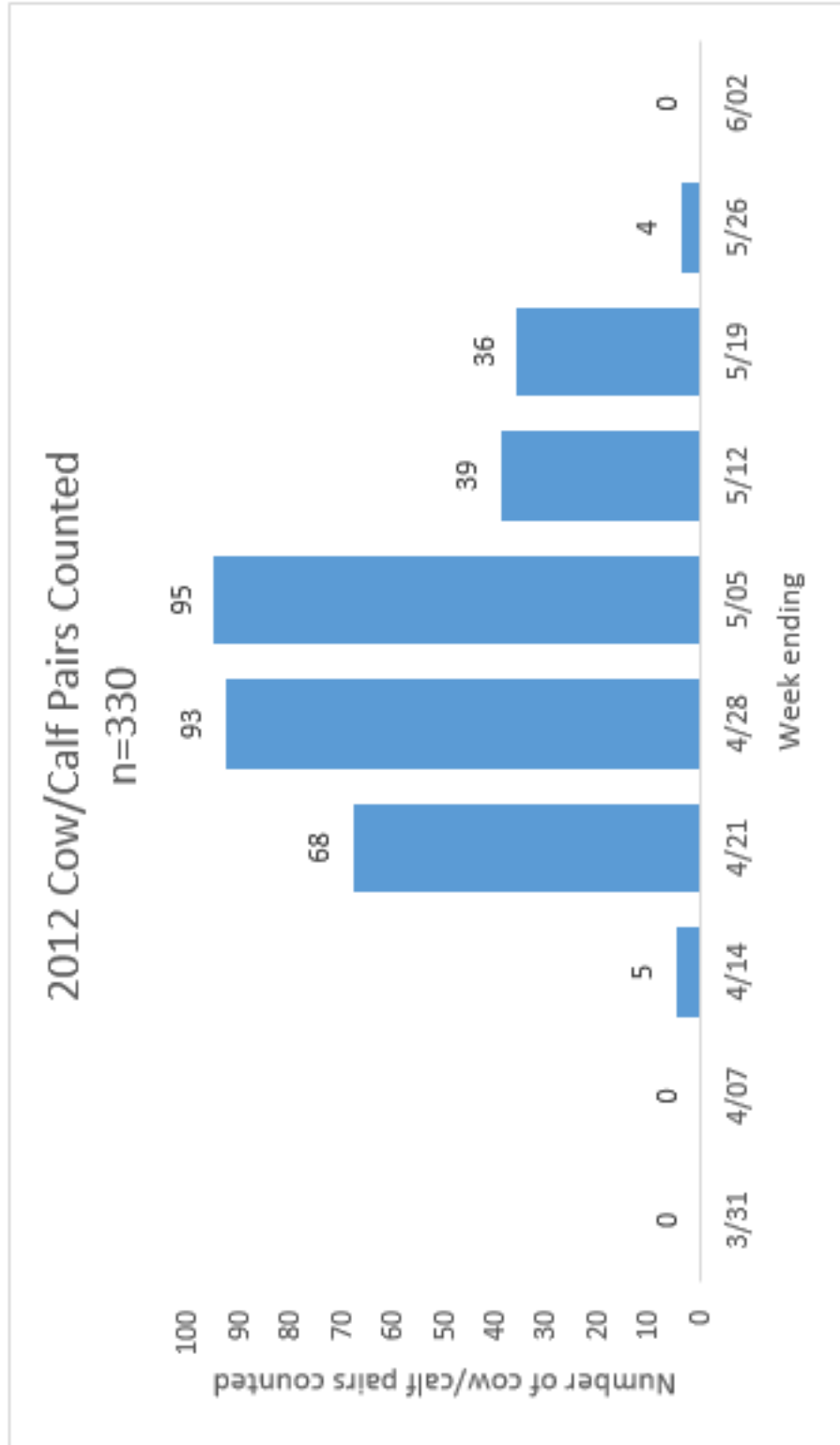
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## Gray Whale Cow/calf Pairs Counted in 2013



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## Gray Whale Cow/calf Pairs Counted in 2012

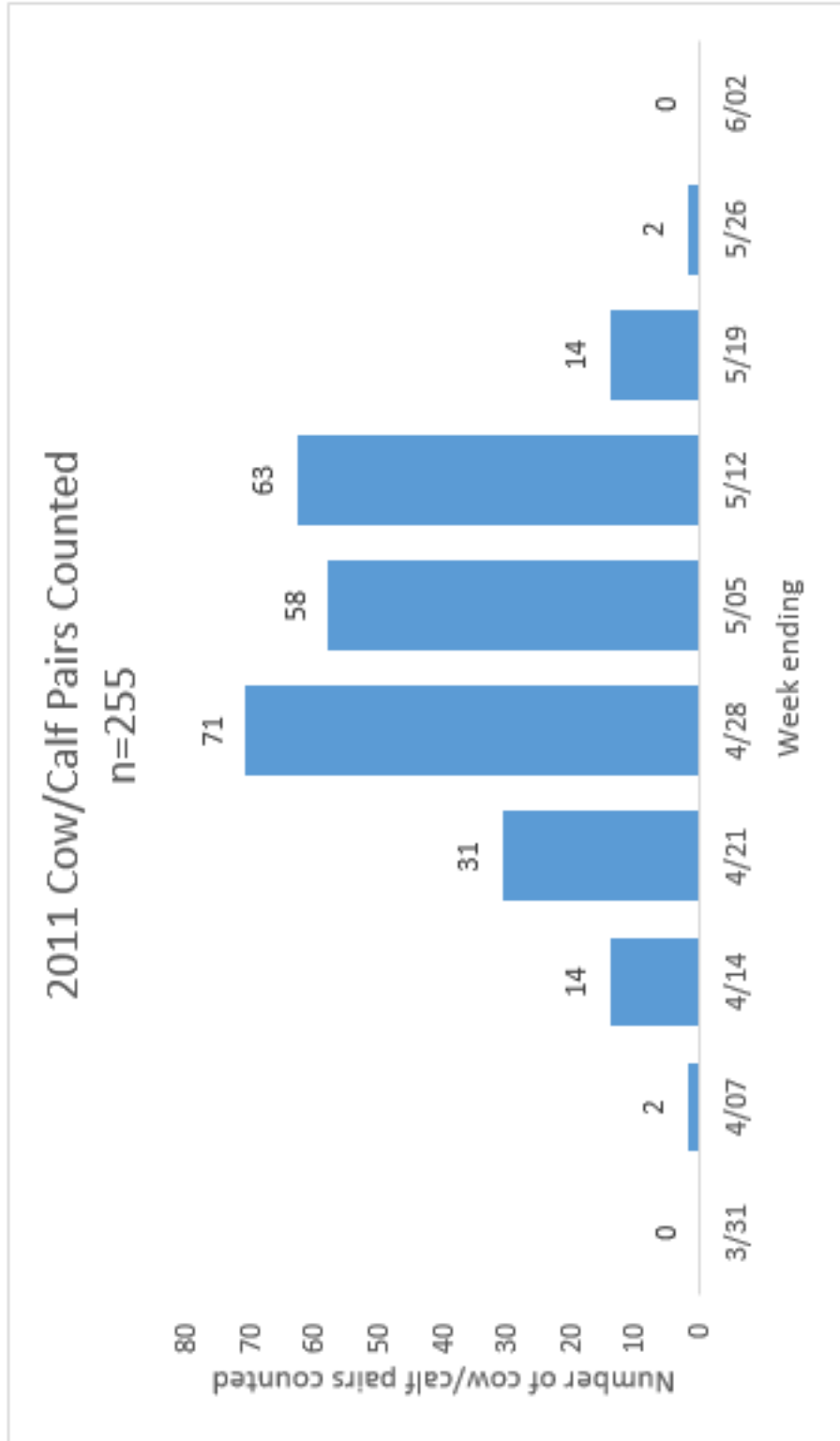


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## Gray Whale Cow/calf Pairs Counted in 2011

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