

Describe the Graph

What is the title of this graph?

What does the graph measure?

How many categories are in the graph?

What kind of graph is this?

What is represented on the y axis (vertical axis) represent?

What is represented on the x axis (horizontal axis)?

What is the increment of the y axis?

Read the Graph

Which group of animals counted has the greatest total? Which group has the least?

Which group of animals has a total of 780?

Which groups of animals have a total greater than 200?

Perform Calculations Using the Graph

How many more mammals were counted than reptiles?

How many more birds were counted than amphibians?

How many more fish than insects?

Add the totals of fish, insects, mammals, reptiles and amphibians together. Is the sum greater than, less than, or equal to the total number of birds counted?

Interpret the Graph

Compare the number of birds counted to all other groups counted. What do you notice? Why might this be?

Does the graph show all of the animals at the refuge or does it only show the number of animals observed and counted? What does this mean? Would the graph look different if it showed all of the animals at the refuge?

All the data used to create this graph were collected between 10:00 a.m. and 1:30 p.m. How would it look different if data were collected between 5:30 a.m. and 9:00 a.m.? What about 8:00 p.m. and 11:30 p.m.?

You were recently hired to be the Refuge Manager. That means you make decisions about how to protect the refuge and the animals that call it home. Use the data to decide which group of animals uses the refuge the most. As Refuge Manager, what would you do to make sure these animals have good habitat?

Describe the Graph Questions

What is different in the title of these two graphs?

What do these graphs measure?

How many months are represented in each graph?

What kind of graphs are these?

What do the numbers in the y axis (vertical axis) represent?

What is represented on the x axis (horizontal axis)?

What is the increment of the y axis (vertical axis)?

What is the increment of the x axis (horizontal axis)?

What do the different colors represent?

Read the Graph

Which species of swallow has the highest total count in April of 2014?

Was the total count of cliff swallows higher in June of 2014 or June of 2015?

Which species of swallow had a total count of 216 for one month? What month and year did this occur?

In May of 2015 which species of swallows had totals greater than 80?

In June of 2015 was the total number of tree swallows counted greater than or less than May of 2015?

Which species of swallow had the lowest total for one month? What month and year did this total occur?

Perform Calculations Using the Graph

Rounding to the nearest 10, how many more violet-green swallows were counted in April of 2015 than June of 2015?

Rounding to the nearest 10, how many more tree swallows were counted than Barn swallows in May of 2015?

Rounding to the nearest 10, how many tree swallows were counted in 2015?

Rounding to the nearest 10, how many swallows were counted in June of 2015?

Interpret the Graph

Does the graph show all of the swallows at the refuge or does it only show the number of swallows observed and counted? What does this mean? Would the graph look different if it showed all of the swallows at the refuge?

All the data used to create this graph were collected between 10:00 a.m. and 1:30 p.m. How would it look different if data were collected between 5:30 a.m. and 9:00 a.m.? What about 8:00 p.m. and 11:30 p.m.?

All the data used to create this graph were collected between April and June. How would the graph look different if it included every month of the year?

Compare the totals for cliff swallows of each month in 2014 with the totals for each month in 2015. What do you notice? What could this mean? What could you do to test your hypothesis?