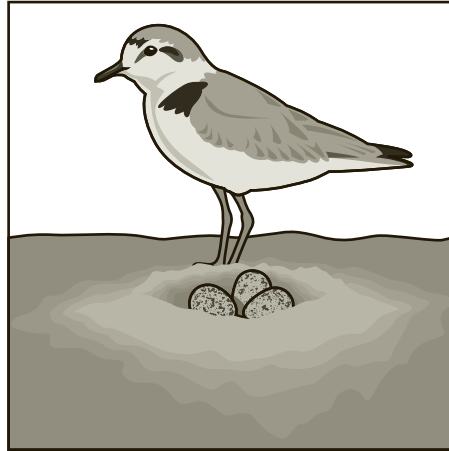


The western snowy plover is a small bird that makes its nest in the sand on ocean and river shores. The snowy plover's breeding season is from March to September. A plover typically lays three eggs each year. If disturbed, it will often abandon its nest. A snowy plover and its nest are shown below.



- a. Compare the birth rate (number of eggs hatched) to the death rate in a population of snowy plovers that is increasing in size.

In an initial population of 100 snowy plovers, there were 30 births and 20 deaths in one year.

- b. Based only on the birth and death rates, identify the expected size of the snowy plover population at the end of the year.

At the end of the year, there were actually 80 snowy plovers in the population.

- c. Assuming there were no additional births or deaths, explain why the actual population size differed from the expected population size.

Current efforts to conserve plover populations include building wire fences around their nests and making certain beaches off-limits to people during plover breeding season.

- d. Explain why making certain beaches off-limits during plover breeding season is a more effective conservation method than building fences around plover nests.