



# Turkey Population Data Sheet 1

In 1935, Wyoming biologists released 46 wild turkeys.

1. Using the assumptions and data in Chart A, compute the size of the turkey population for 5 years.

### Assumptions:

- None of the turkeys left the general area in the first 5 years.
- There was no disease or shortage of habitat that limited the population.
- There were equal numbers of males and females released.
- All turkeys that were released were 1 year old and sexually mature.
- All sexually mature females hatched a clutch of 10 eggs each year.
- No turkeys reproduced until they had completed more than 1 year of life.
- All turkeys died during the winter after their fifth year of life (after hatching their fourth clutch).
- There are equal numbers of males and females in each hatch.

### Chart A

| Year   | 1   | 2   | 3   | 4 | 5  | 6   |
|--|-----|-----|-----|---|----|-----|
| 1. Beginning population                      | 46  | 276 | 506 |   |    |     |
| 2. – 5-year-olds                             | 0   | 0   | 0   | 0 | 46 | 230 |
| 3. – last year's hatch<br>(not yet breeding) | 0   | 230 | 230 |   |    |     |
| 4. = Breeding population                     | 46  | 46  | 276 |   |    |     |
| 5. Breeding pairs (#4 ÷ 2)                   | 23  | 23  |     |   |    |     |
| 6. Offspring (#5 x 10 eggs/clutch)           | 230 | 230 |     |   |    |     |
| + breeding population (#4)                   | 46  | 46  |     |   |    |     |
| + last year's hatch (#3)                     | 0   | 230 |     |   |    |     |
| 7. = Total population                        | 276 | 506 |     |   |    |     |

2. Once the data table has been completed, graph the total turkey population for Years 1-6. Be sure to appropriately label the axes. What type of population growth curve does the data reflect?

