A photograph of a female cougar standing in a forest at night. She is the central focus, looking towards the camera. In the background, two smaller cougar cubs are visible, one slightly behind and to the left of the adult. The scene is dimly lit, with some foliage and tree trunks visible in the dark background.

Population Dynamics and Carrying Capacity



1. The Florida Panther's Struggle for Survival



What are some of the ecological challenges that the panther population has experienced from human impacts?

Source: Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 6-7). National Geographic.



3. Graph the Florida Panther Population (Model)

History of the Florida Panther Population

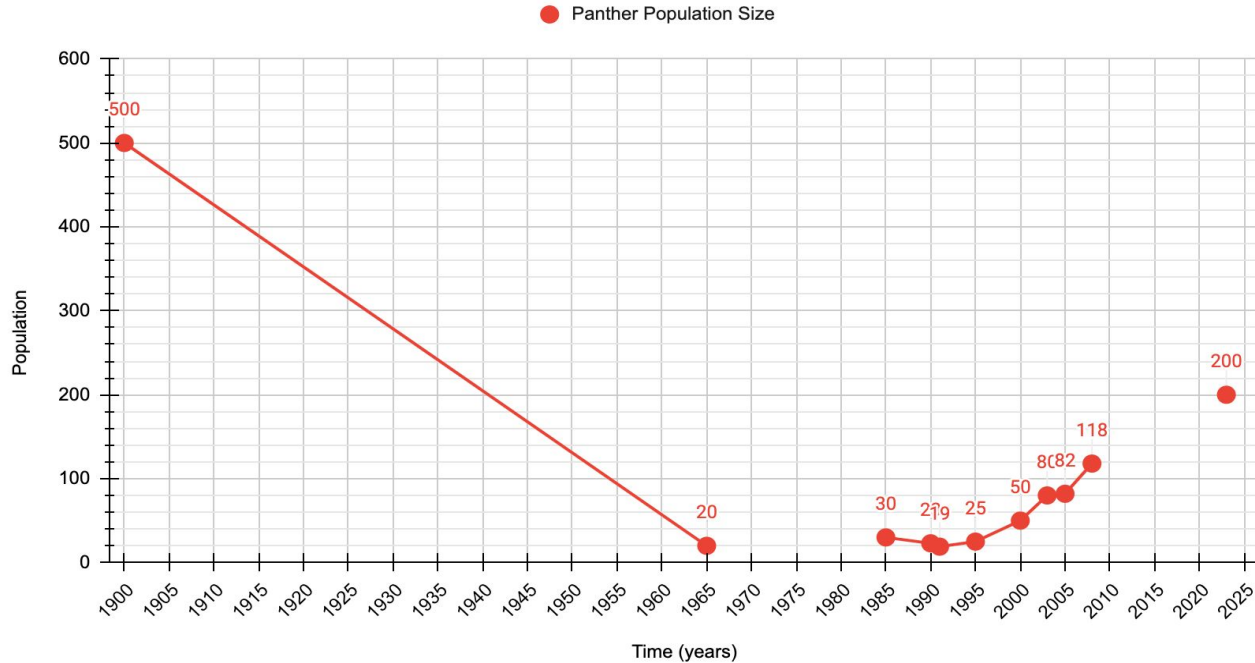
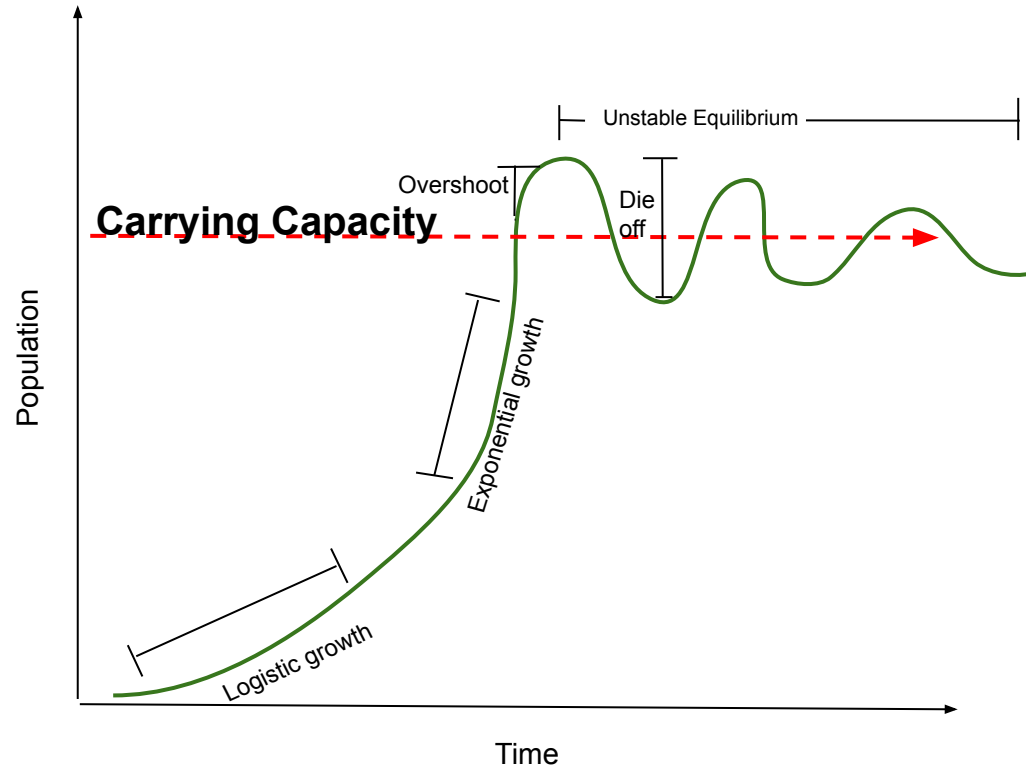


Fig. 1



5. Graph the Florida Panther Population

Fig. 2
Exponential
Growth of
Population
Size Over Time





Compare Wolves and Panthers



6. Gray Wolf Population's Carrying Capacity



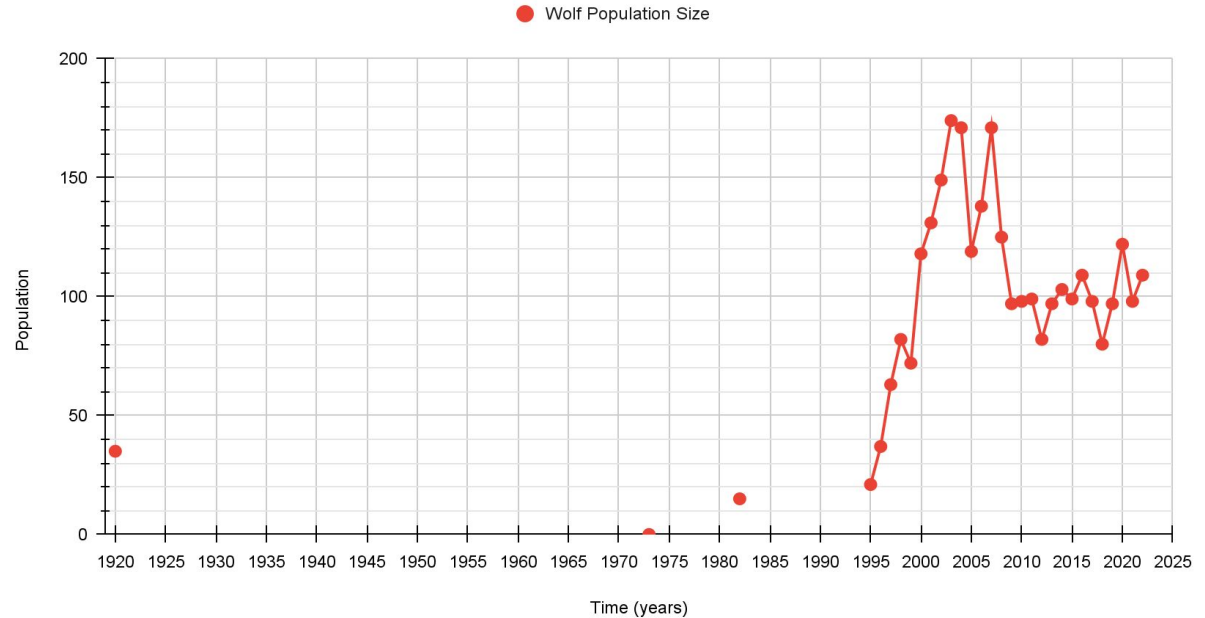
Source: Arizona
Historical Society /
PBS.org



7. Gray Wolf Population's Carrying Capacity

History of the Wolf Population in Yellowstone National Park

Unconnected data points (1925-1963, 1982-1995) represent incomplete population counts.

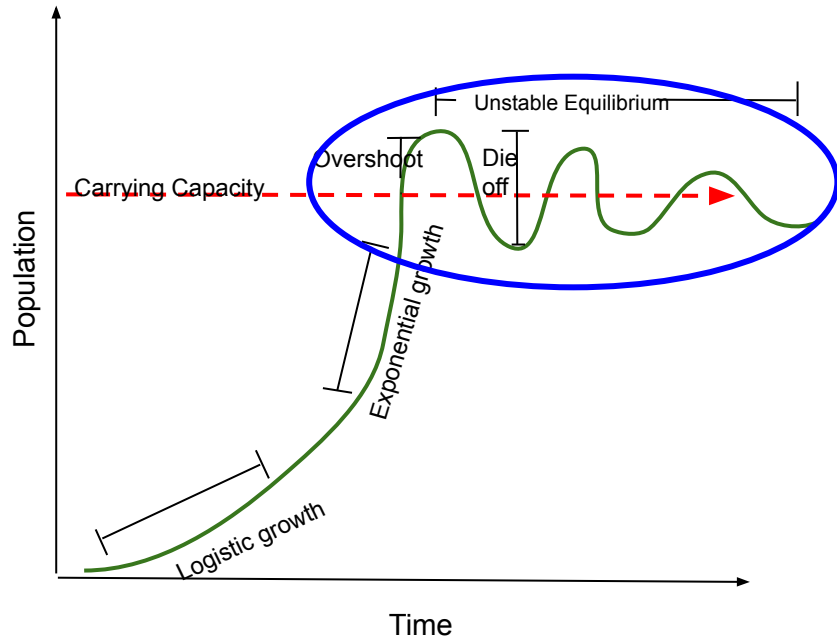


Data Source:
<https://wolf.org/wolf-info/gray-wolf-population-trends-in-the-contiguous-untied-states/>

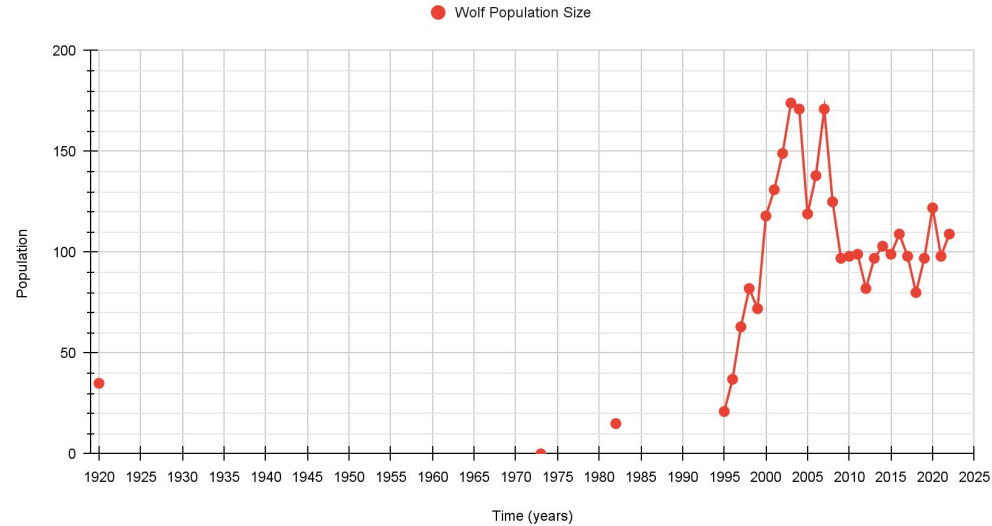


8. Gray Wolf Population's Carrying Capacity

Fig. 2 Exponential Growth of Population Size Over Time



History of the Wolf Population in Yellowstone National Park



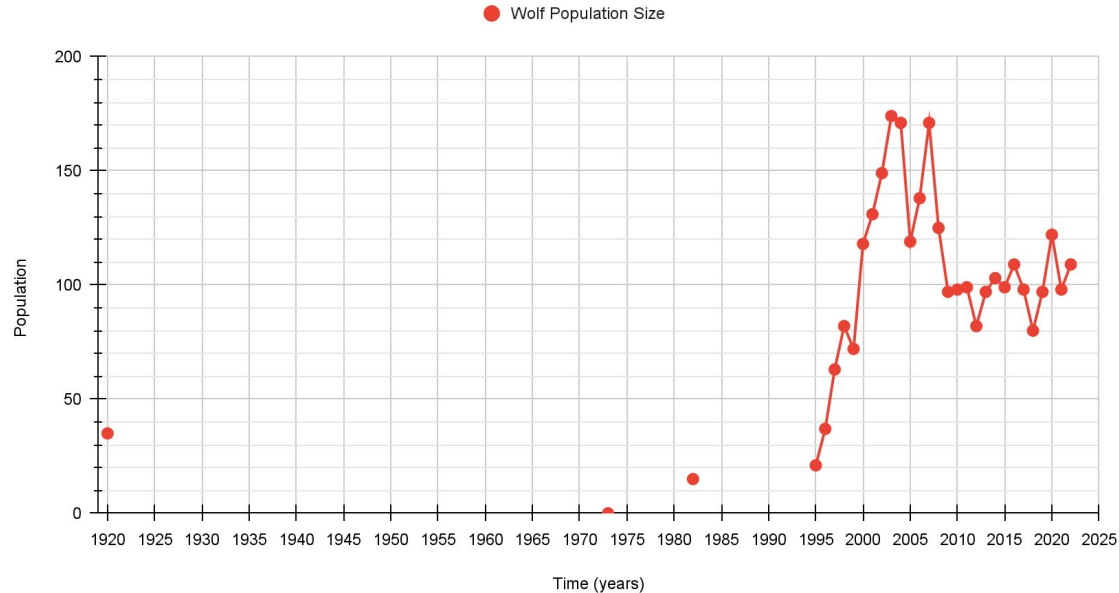
Data Source: <https://wolf.org/wolf-info/gray-wolf-population-trends-in-the-contiguous-united-states/>



8. Gray Wolf Population's Carrying Capacity

Support or refute the claim: *The gray wolf in Yellowstone National Park has successfully recovered.*

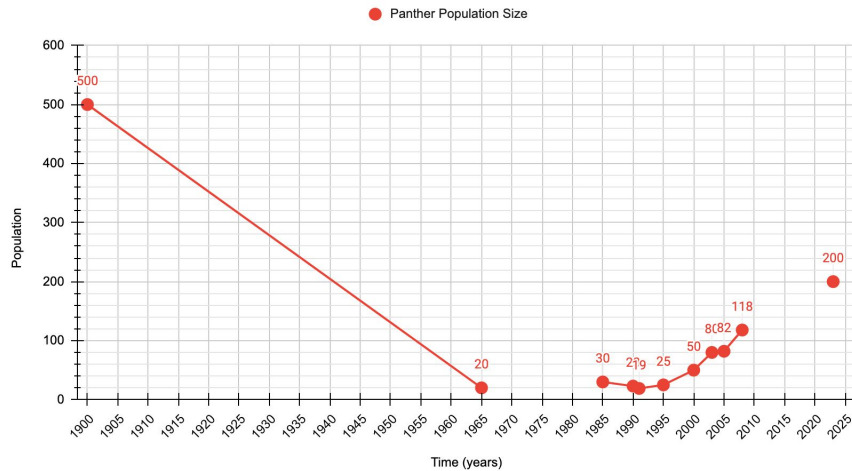
History of the Wolf Population in Yellowstone National Park



9. Gray Wolf Population's Carrying Capacity

Do you think the Florida panther population will reach carrying capacity? If yes, how? If no, why not?

History of the Florida Panther Population



History of the Wolf Population in Yellowstone National Park

