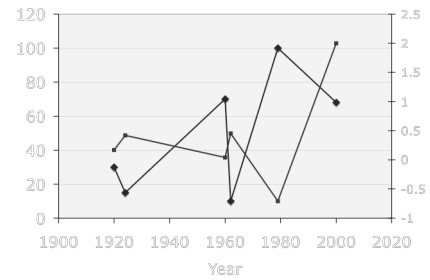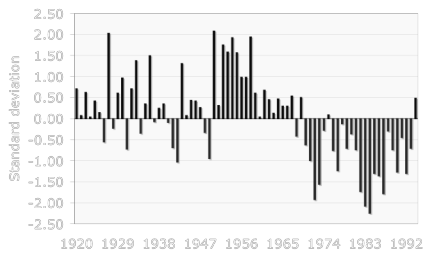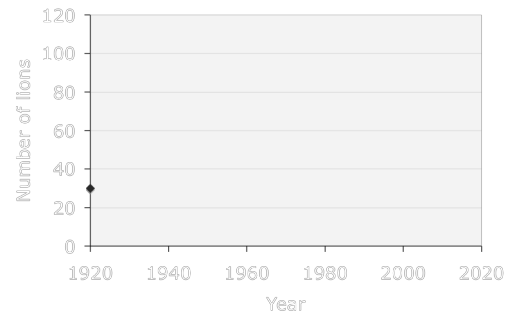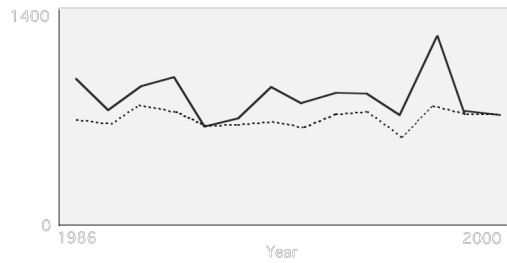# Lions of Ngorongoro

What conditions are best?

Tanzania

- Food supply, recommended FAO

- Access to safe drinking water

- Food supply: 143%
- Access to safe drinking water: 100%

1961-62. The total population of 70 lions was reduced to 9 females and 1 male. Assuming that a recessive gene results in susceptibility to *Stomoxys* bites, what is the frequency of this gene in the population?

- Total population: 70
- Homozygous recessive:
- $q^2 =$
- $q =$
- $p =$

By 1979, there were 100 lions in the Crater and the population has remained fairly constant. In 2000-2001, heavy rains again favored breeding of the *Stomoxys* fly. In 2001, sick and dying lions were reported. How many of the 100 lions do you expect to die?