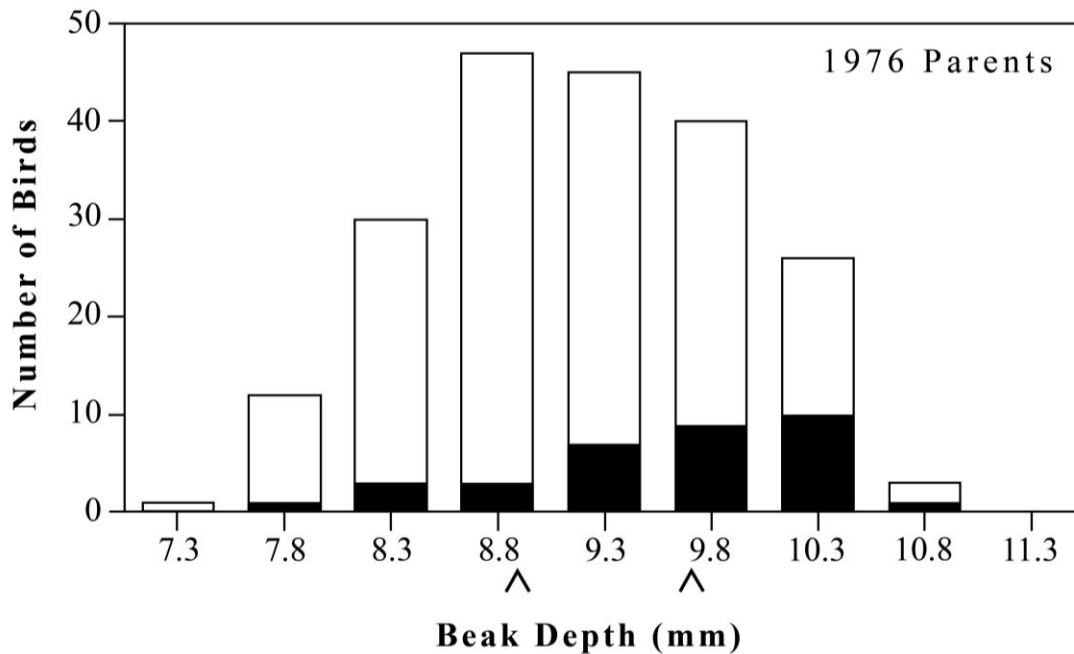




## Effects of Natural Selection on Finch Beak Size



**Caption:** Distribution of beak depths in the breeding population of medium ground finches (*Geospiza fortis*) on the island of Daphne Major in 1976 (white bars) and of the survivors of the 1977 drought (black bars). The means of the two populations are indicated by the carets.

### BACKGROUND INFORMATION

Rosemary and Peter Grant performed a series of long-term studies on the finches living on the island of Daphne Major in the Galápagos Islands. With its short, blunt beak, the medium ground finch (*Geospiza fortis*) is adapted to picking up seeds from the ground. In 1976, seeds on the island were diverse and plentiful. However, during a drought in 1977, seeds became more scarce. Once the finches had eaten all the small and medium-sized seeds, they had to turn to larger, spiny seeds that are hard to crack open. The graph above shows the distribution of beak depths of the finch population before the drought (white bars) and after the drought (black bars).