

# Conservation at Population and Species Level

- No population is infinite. Changing climatic conditions, succession, some diseases and some rare events increase the risk of extinction for every population.

- The best protection plan for threaten species must cover some characteristics;
  - The protection area should be as large as possible
  - Habitat should be at high quality
  - Contain as many individuals as possible

# Minimum Viable Population (MVP)

- The minimum number of individuals that was sufficient to sustain 99% probability of population persistence in 100 years (Shaffer 1981).

Factors that cause decrease in population numbers and local extinction on small populations;

- Genetic drift
- Random changes in birth and death rates that cause population fluctuations
- Increase in number of predators, competition, outbreaks, food shortage, natural disasters

- Factors that define effective population size

Effective population size is the population size that is calculated according to the number of reproductive individuals

- Change in number of new borns
- Unequality in sex ratios
- Smaller effective population size than total population size

# Extinction whirlpool