

I. Effects of Environmental Change on Populations of Species

A. Environmental change impacts populations in the following ways:

- of a species
- of a new species
- of a species
- of a species

B. Environmental changes can be **naturally occurring**:

- Droughts
- Earthquakes
- Hurricanes
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C. Environmental changes can be **anthropogenic**:

- (overfishing, overhunting, deforestation)
- Global climate change
- Pollution and use of fertilizers
-
- Introduction of

II. Emergence of New Species

A. - a population of organisms that have a similar appearance and that can (Modern Species Concept)

B. - the evolution of a from as result of limited or blocked

C. Speciation can be . ()

- Takes of years
- Transitional fossils (link).
Ex: Grand Canyon squirrels

D. It can be . ()

- Takes decades
- transitional link Ex: Stickleback fish in lake Loberg

III. Speciation occurs because of (when is .)

A. Reproductive Isolation can occur:

- Before fertilization ()
- After fertilization ()

B. Types of Pre-zygotic Isolation

- Isolation**- species cannot mate because they are separated by a
- Isolation**- same species with do not mate (calls or "dance")
- Isolation**- species breed at (time of day, season, or even different years)

