

Genetic Rescue

By IAS Toppers | 2024-03-22 15:20:00



Key Facts

Genetic Rescue

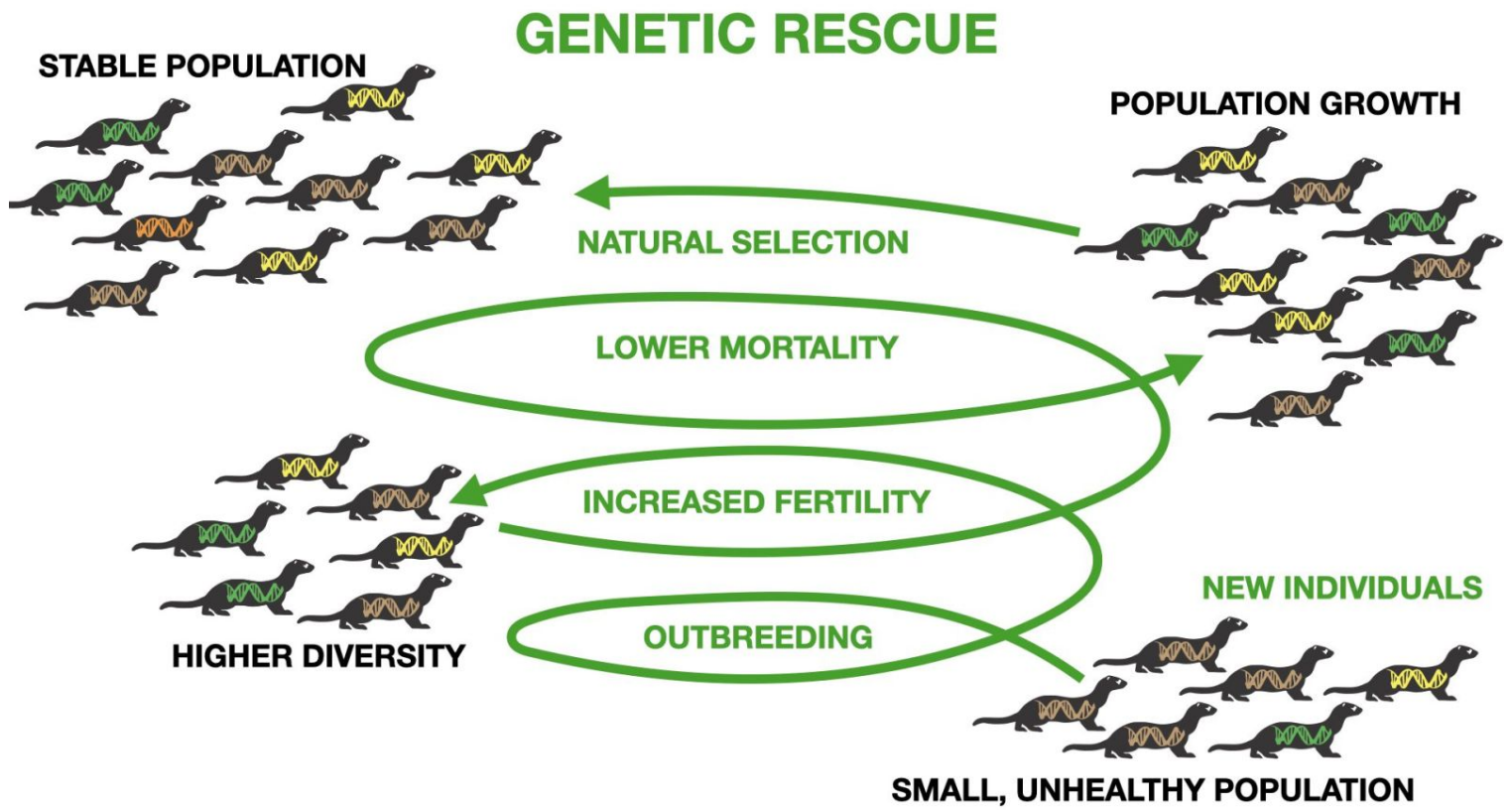
A recent study has highlighted the importance of **genetic rescue** to mitigate the impacts of **inbreeding depression** in **tiger populations** of Ranthambore National Park by recommending its use to restore **genetic diversity** and reduce **extinction risks**.



[ref-wwf]

About the Genetic rescue:

- The **Genetic rescue** involves wildlife managers moving individuals from a larger, healthier population to a smaller one to introduce new **genetic variation** and bolster the population size, aiming to offset **inbreeding** and **lost genetic variation**.
- While it can yield positive outcomes by overcoming risks of **genetic load** and enhancing the population of **endangered species**.
- The technique's effectiveness depends upon several factors, including the **magnitude and duration of gene flow**, along with both **genetic** and **non-genetic factors** affecting population dynamics, indicating that it can lead to both **beneficial** and **disastrous effects**.



[ref-revive and restore]