



Reproductive Values

effect of adding an individual to the initial population
on the asymptotic population size.

"present value of future offspring"

↓
at a
given
age class

depends on

- amount of future reproduction
- probability of surviving
- age of that future reproduction

eigenvectors \rightarrow = "right" eigenvector

"left" eigenvector

\rightarrow = eigenvector of transpose

\rightarrow "normalize" to first age class.

Sensitivity

$$\frac{d\lambda}{dz} \rightarrow \text{of growth rate}$$
$$\rightarrow \text{a given parameter}$$

additive effect

v = vector of Reproductive values

w = vector of stable age distribution

sensitivity \rightarrow

$$s_{ij} = \frac{v_i w_j}{v \cdot w}$$

position in projection matrix \leftarrow

scalar \leftarrow