

NOTES: POPULATION DYNAMICS

POPULATION ECOLOGY

DEMOGRAPHICS

LIFE TABLE

POPULATION

LIFE HISTORY PATTERNS

R-STRATEGY

K-STRATEGY

POPULATION DENSITY

PROS & CONS OF POPULATION DENSITY

POPULATION RESEARCH METHODS

1. SAMPLING METHOD

A. PROBABILITY SAMPLING

B. NON-PROBABILITY SAMPLING

2. QUADRAT METHOD

MEASURING POPULATION DENSITY

FORMULA

EXAMPLE

POPULATION GROWTH

NATALITY

MORTALITY

IMMIGRATION

EMIGRATION

FORMULA

REPRODUCTIVE POTENTIAL

BIOTIC POTENTIAL

REPRODUCTIVE POTENTIAL

SAMPLING USING MARK-RELEASE-RECAPTURE

FORMULA

LIMITATIONS

EXAMPLE

POPULATION DISPERSION

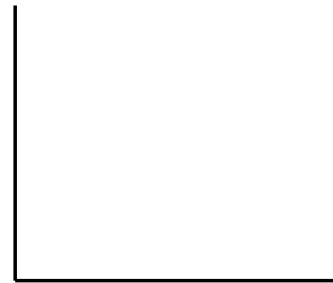
CLUMPED

RANDOM

UNIFORM

POPULATION GROWTH

1. EXPONENTIAL GROWTH



2. LOGISTIC GROWTH



CARRYING CAPACITY



LIMITING FACTORS

LIMITS OF TOLERANCE

OPTIMUM RANGE

ZONE OF PHYSIOLOGICAL STRESS

ZONE OF INTOLERANCE

FACTORS THAT AFFECT DENSITY

1. DENSITY-DEPENDENT FACTORS

2. DENSITY-INDEPENDENT FACTORS

COMPETITION AMONG POPULATIONS

2 TYPES:

1. INTRASPECIES COMPETITION

2. INTERSPECIES COMPETITION

PRINCIPLE OF COMPETITIVE EXCLUSION

COMPETITIVE EXCLUSION VS CO-EXISTENCE



SURVIVORSHIP CURVES

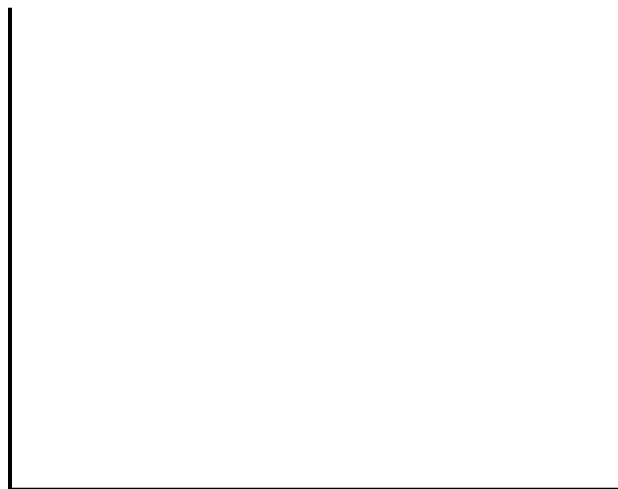
TYPE I SURVIVORSHIP CURVE



TYPE II SURVIVORSHIP CURVE



TYPE III SURVIVORSHIP CURVE



POPULATION PYRAMIDS

RAPID GROWTH



SLOW GROWTH



ZERO GROWTH

