

UNIT 4: Life history

Outline

Introduction

Tradeoffs

The r vs. K metaphor

Bet hedging

Sex ratios

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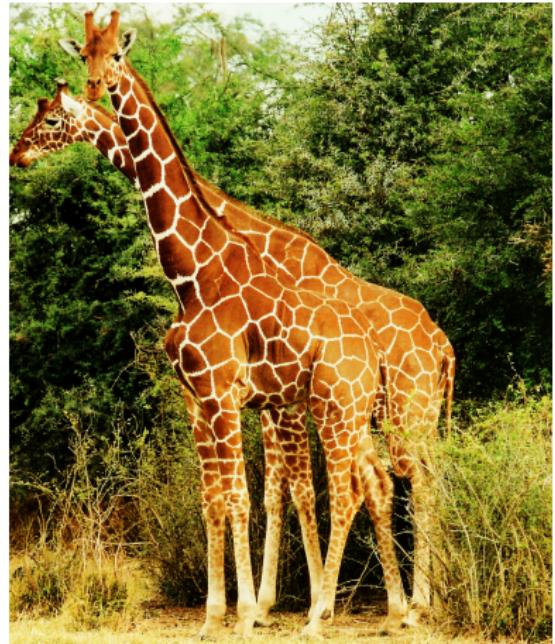
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Between populations



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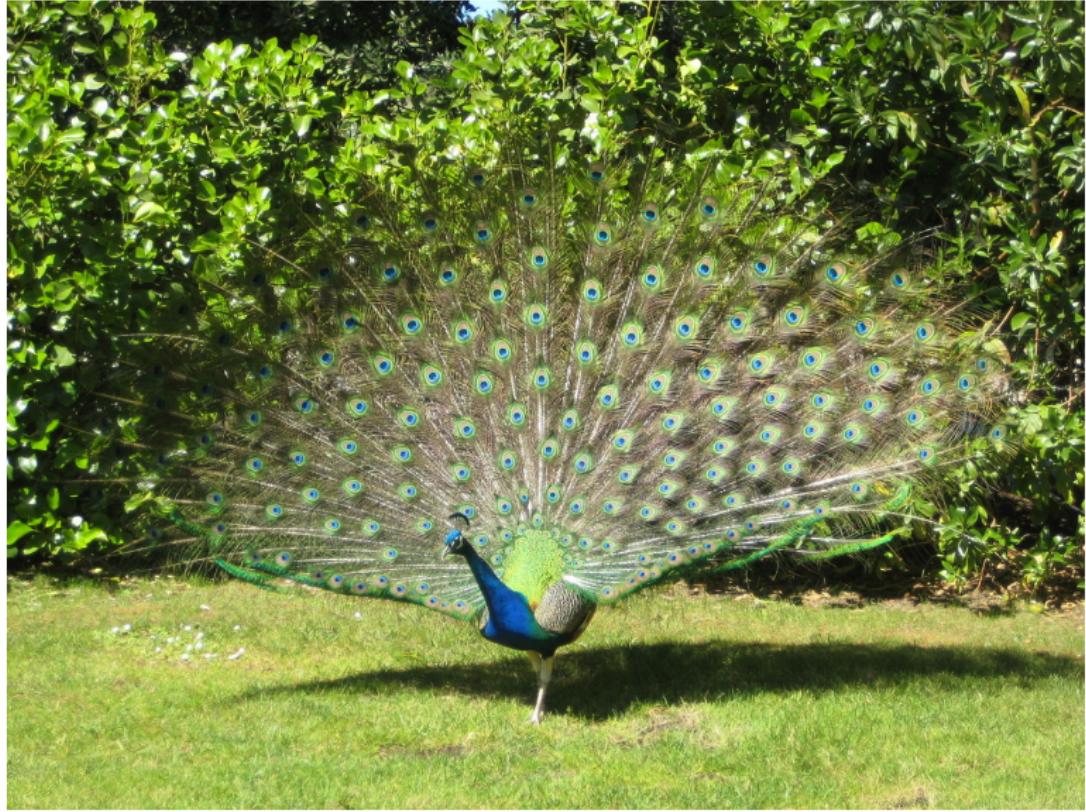
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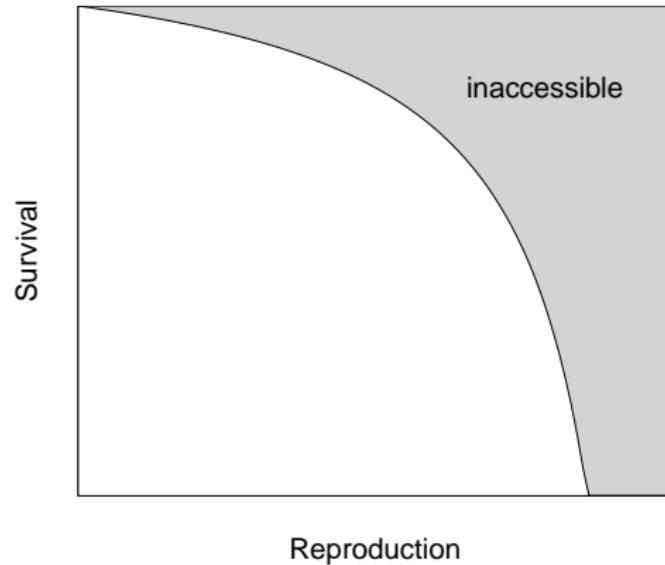
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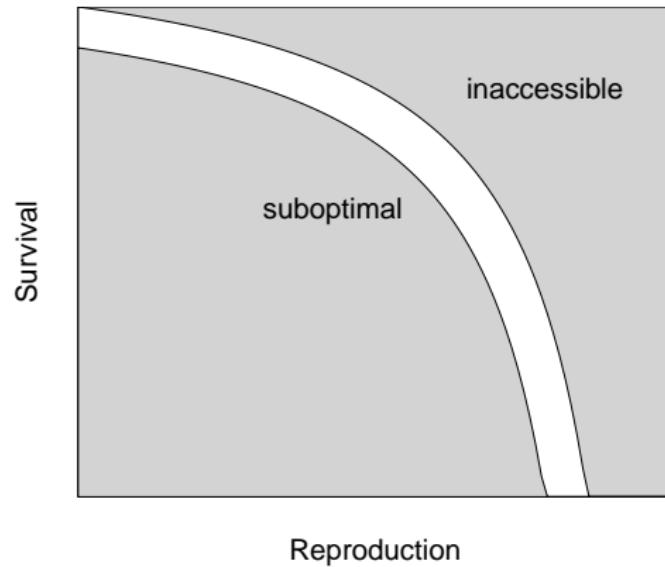
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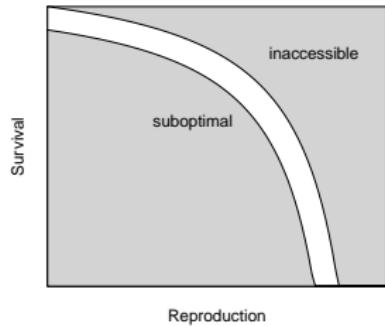


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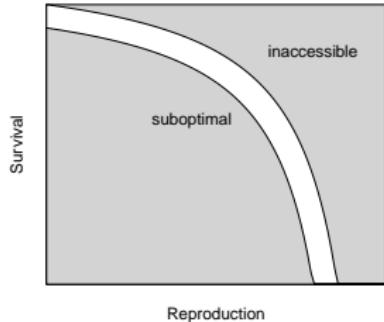
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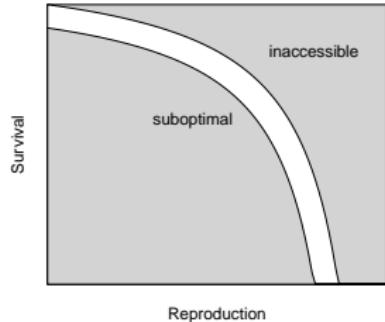
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Cole's paradox



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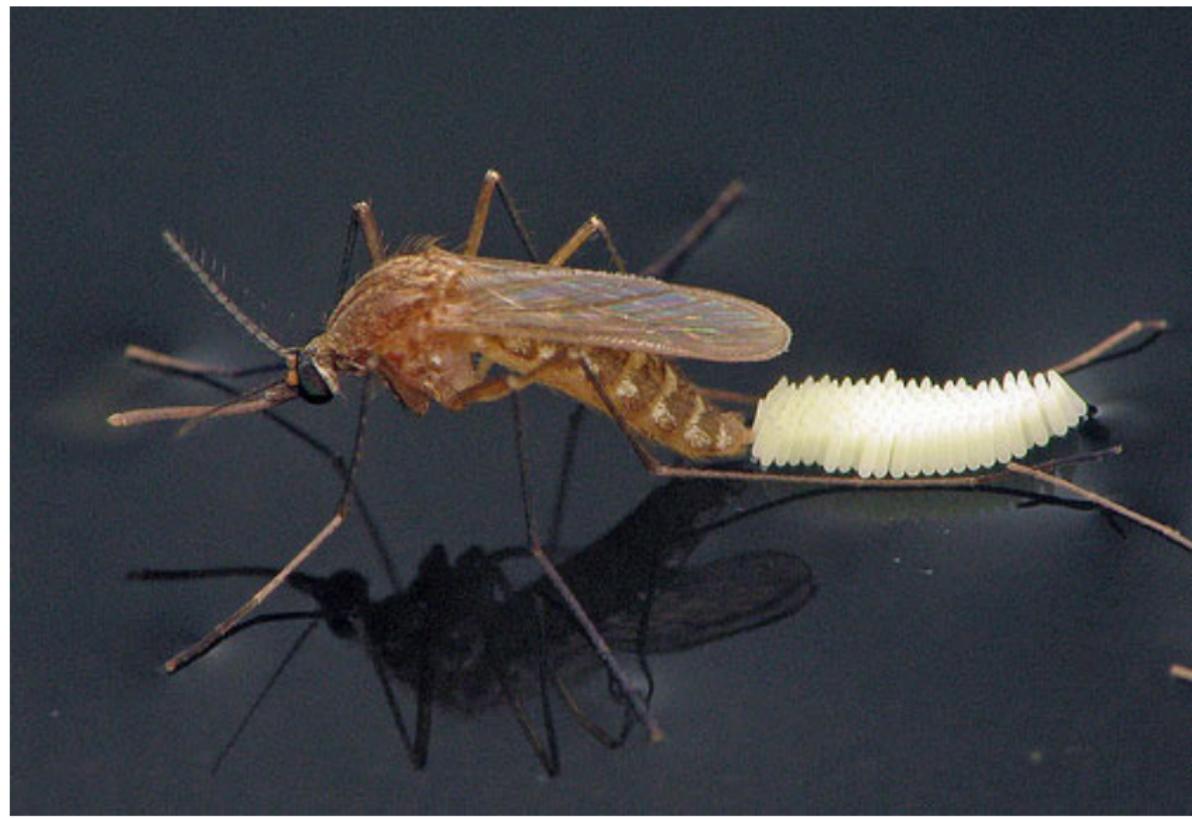
Tradeoff example: many offspring vs. high-quality offspring

- ▶ Apart from how much energy to put into offspring now vs. later, organisms can make many or few offspring, using a given amount of energy
- ▶ What is a vivid example of ecologically similar organisms that produce wildly different numbers of offspring?
 - ▶ * Oaks vs. pines
 - ▶ * Tsetses vs. mosquitoes
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How many offspring?



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Tradeoff: direct investment vs. dispersal investment

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Outline

Introduction

Tradeoffs

The r vs. K metaphor

Bet hedging

Sex ratios

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Maples and marigolds



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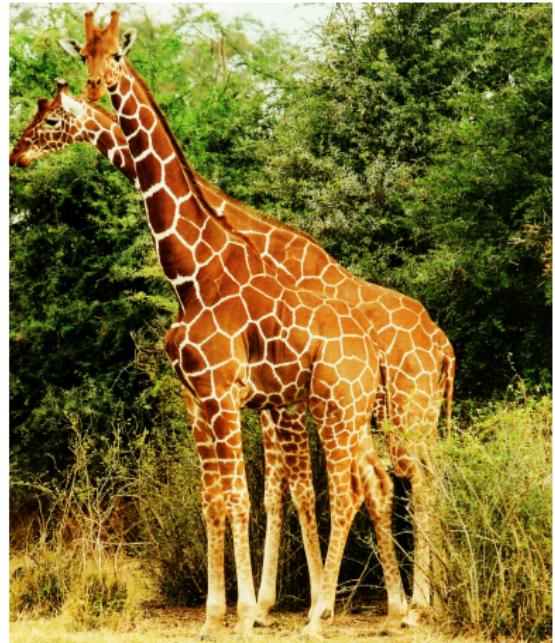
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Open environment



Stable environment



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Outline

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Tradeoffs

The r vs. K metaphor

Bet hedging

Sex ratios

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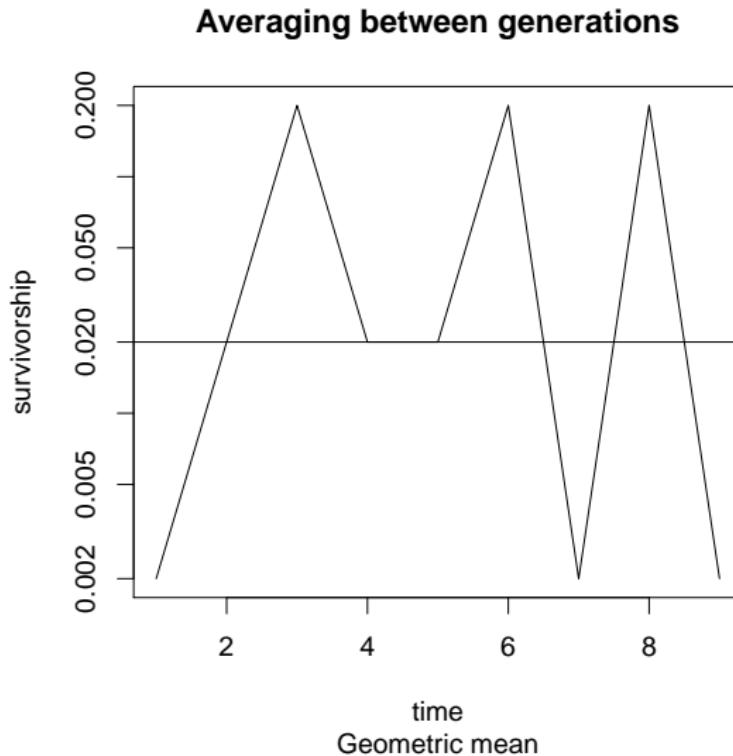
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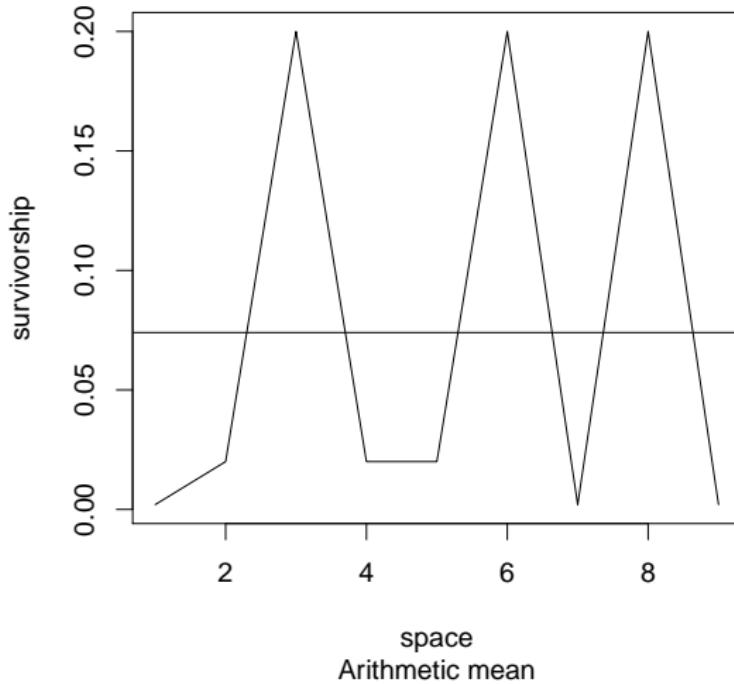
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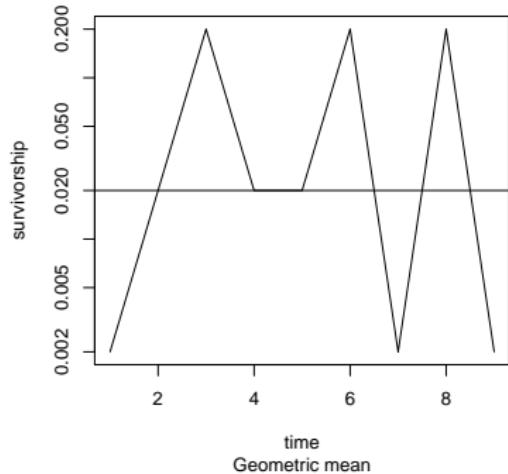
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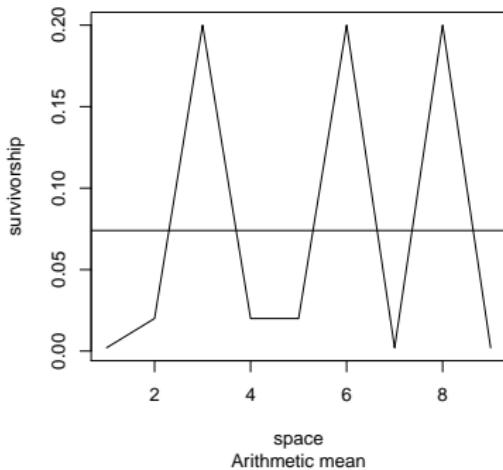


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Outline

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Tradeoffs

The r vs. K metaphor

Bet hedging

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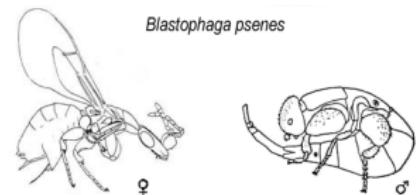
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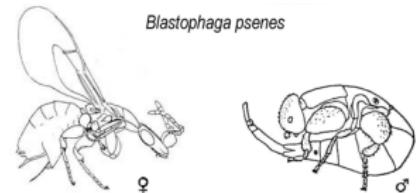
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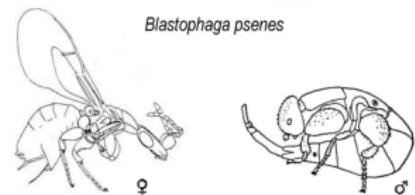
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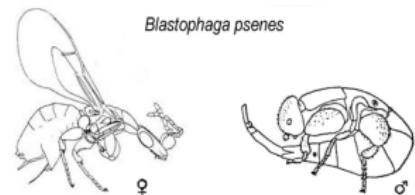
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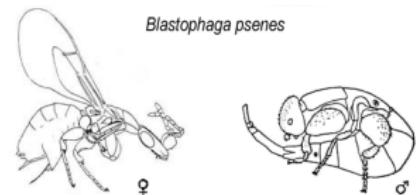
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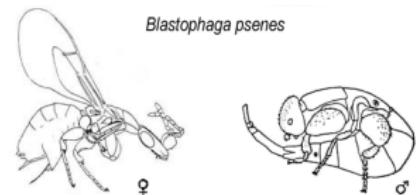


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Pregnant seahorse



Midshipman nest



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