

UNIT 6: Exploitation

Outline

Introduction

- Balance and equilibrium

- Tendency to oscillate

Models

- More detailed models

Equilibrium and balance

- Reciprocal control

- More detailed models

- Who controls whom?

Examples

- Oscillation

- Harvesting examples

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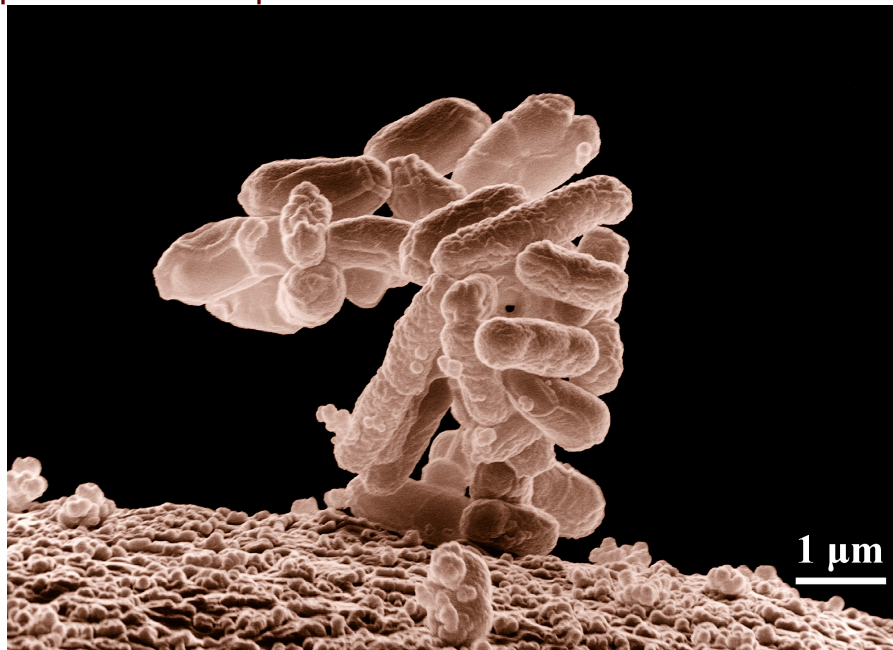
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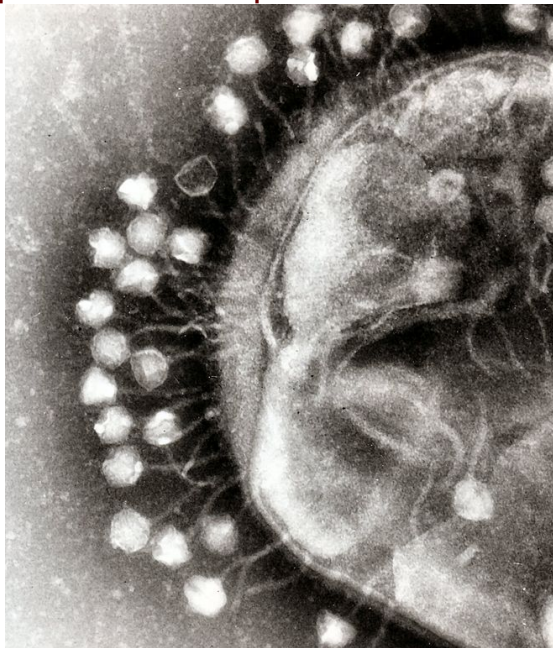
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Subsection 1

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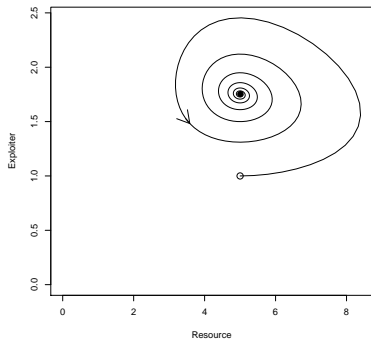
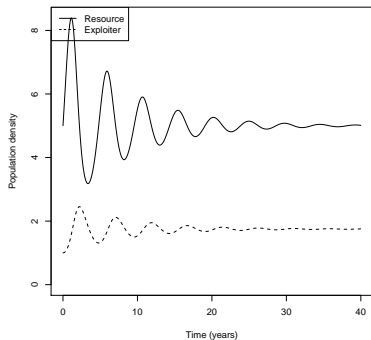
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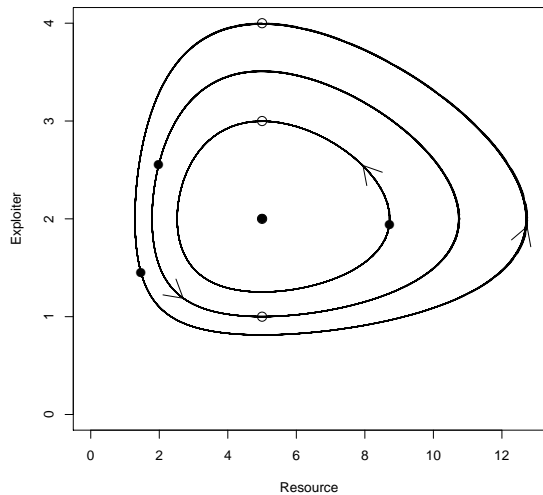
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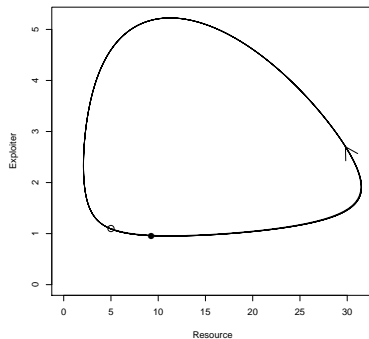
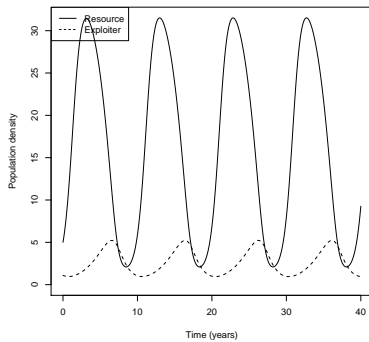
Damped oscillations



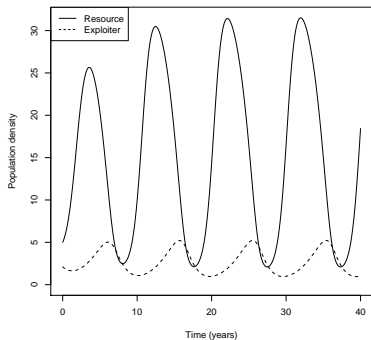
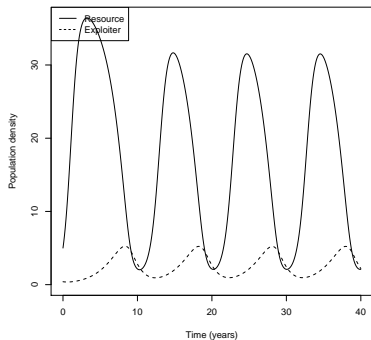
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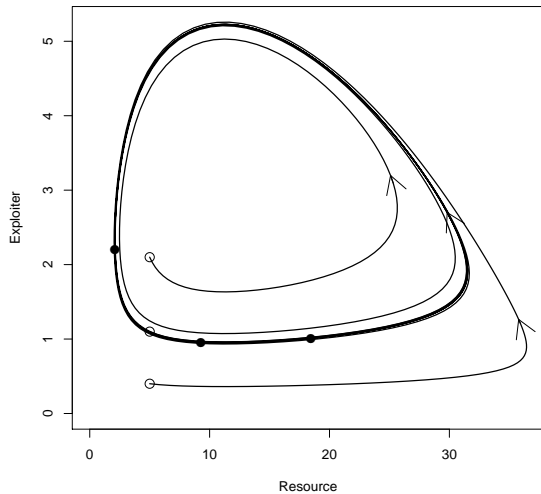
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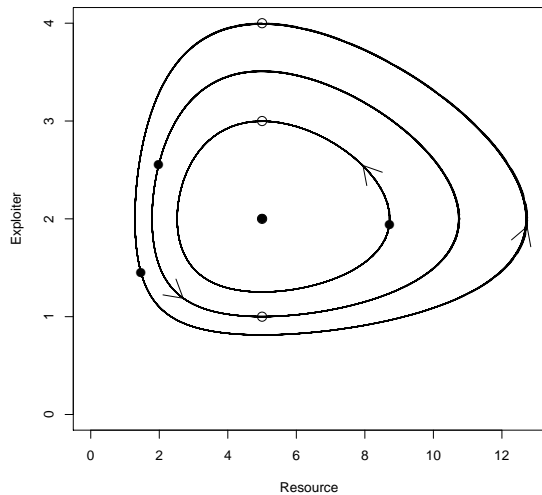
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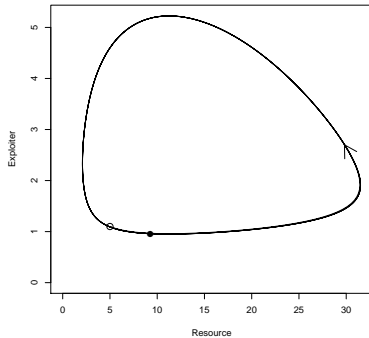
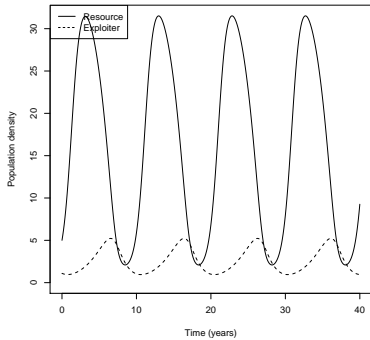
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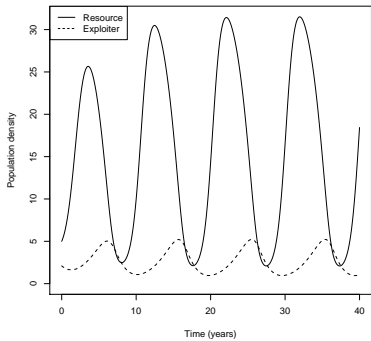
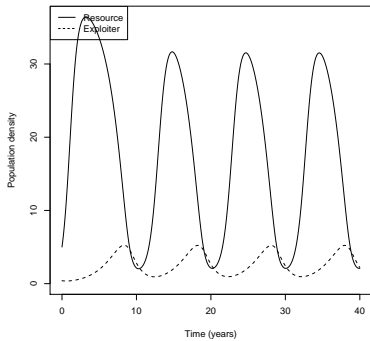
Neutral oscillations



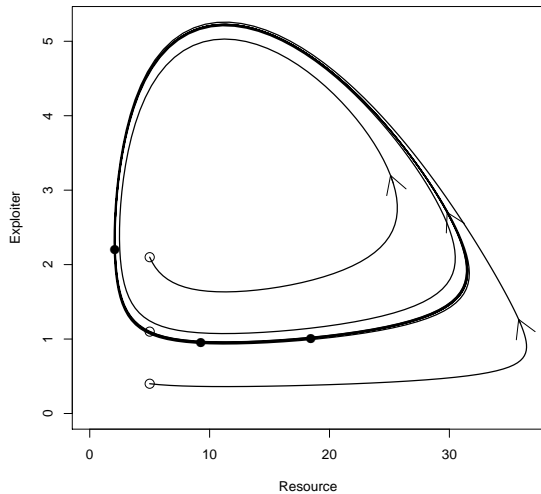
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Subsection 1

More detailed models

How do populations affect their own growth rates?



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Introduction

Balance and equilibrium

Tendency to oscillate

Models

More detailed models

Equilibrium and balance

Reciprocal control

More detailed models

Who controls whom?

Examples

Oscillation

Harvesting examples

Subsection 1

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People and the ocean



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Subsection 2

More detailed models

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Subsection 3

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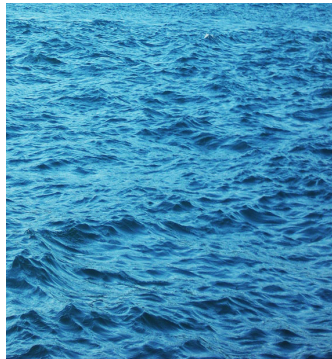
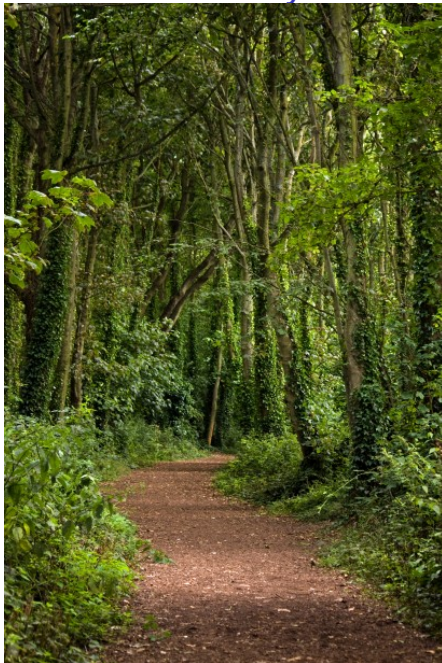
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Outline

Introduction

Balance and equilibrium

Tendency to oscillate

Models

More detailed models

Equilibrium and balance

Reciprocal control

More detailed models

Who controls whom?

Examples

Oscillation

Harvesting examples

Subsection 1

Oscillation

Simplest model

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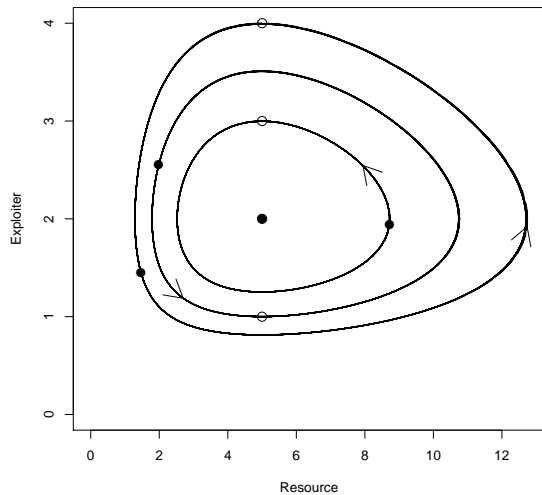
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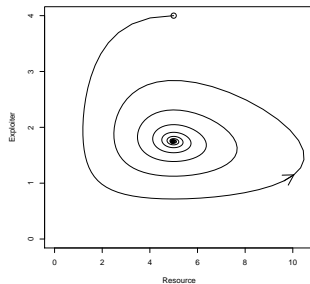
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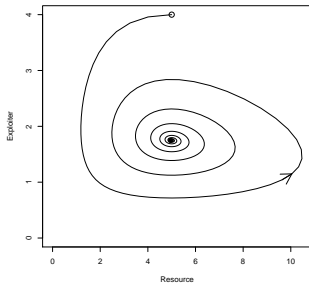
Prey density dependence

- Reduces prey reproduction the most when prey numbers are highest



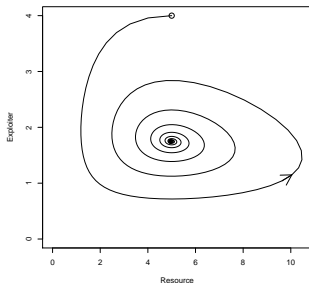
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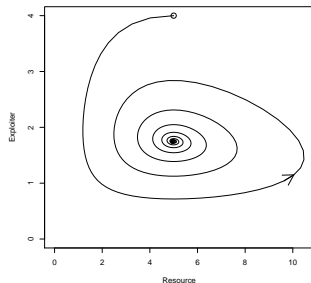
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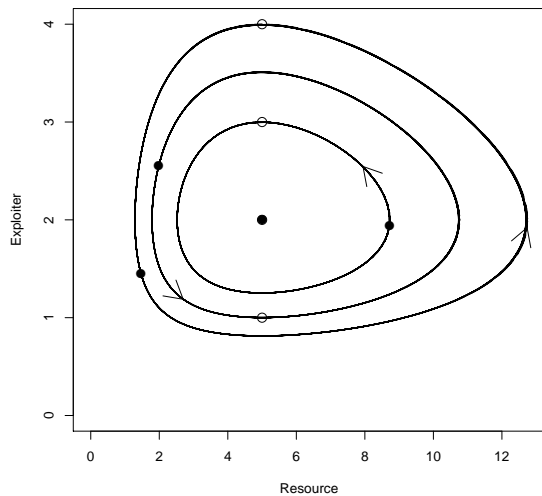


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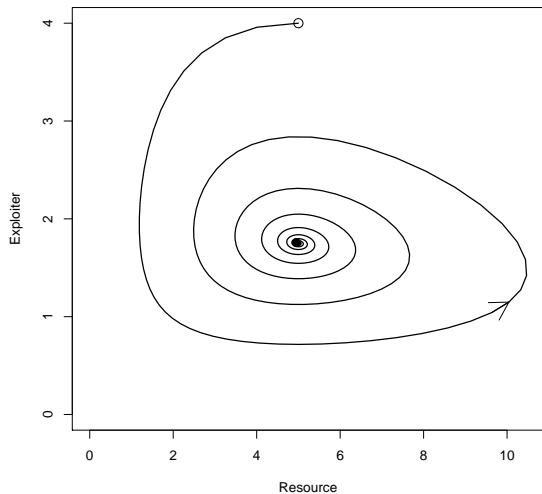
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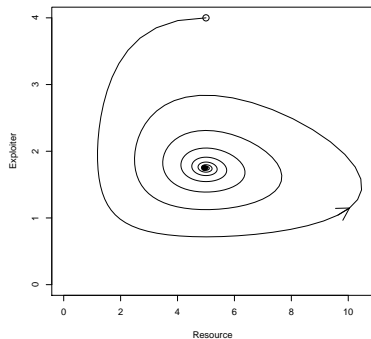
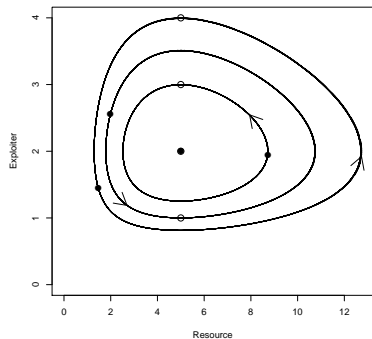
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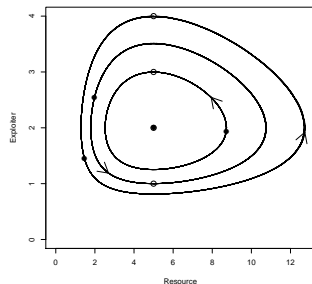


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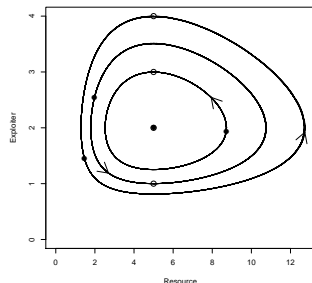
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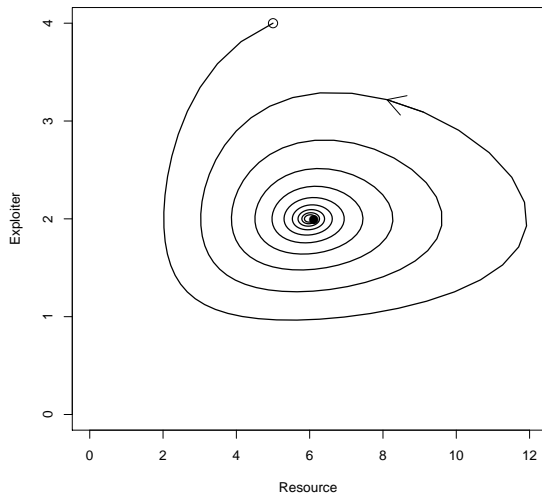


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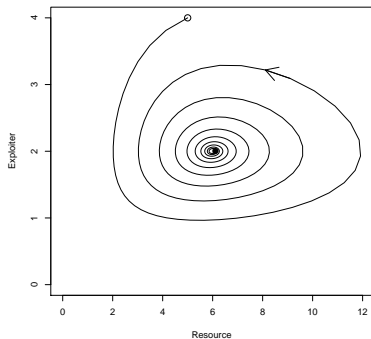
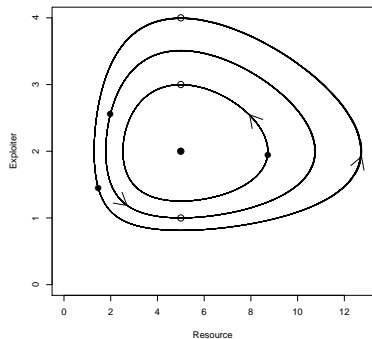
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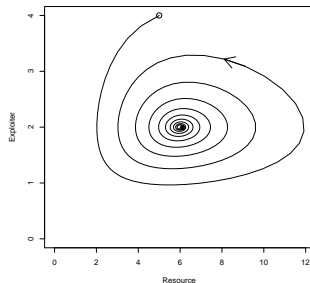


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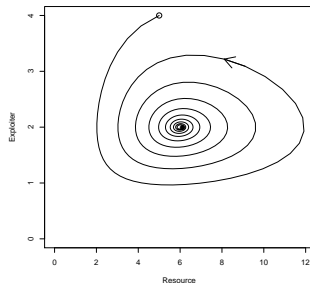
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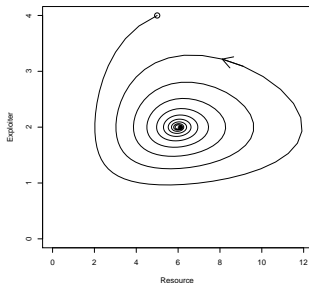
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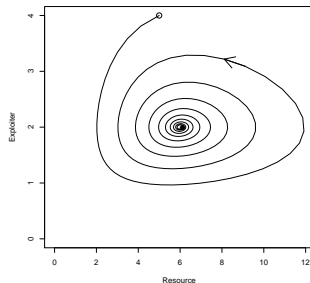
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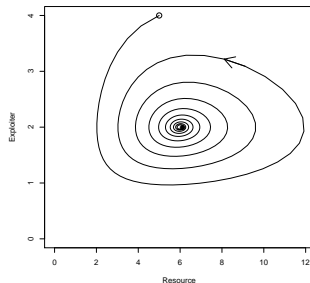
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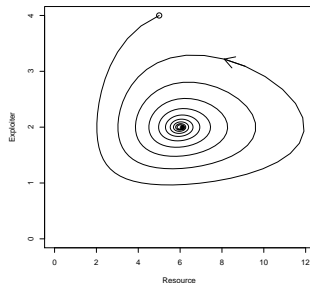
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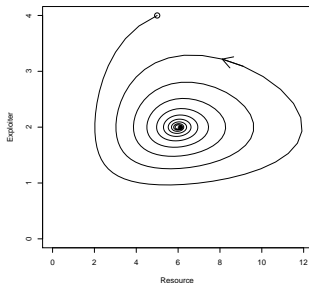
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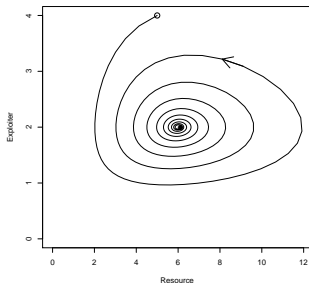
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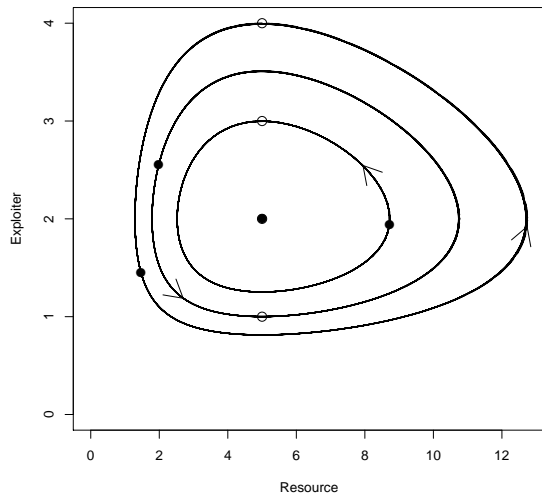
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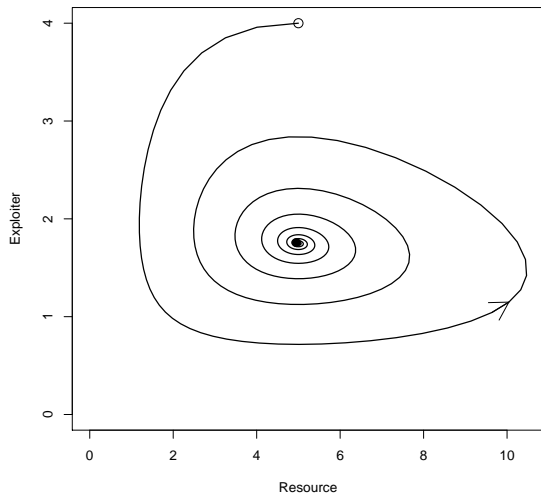
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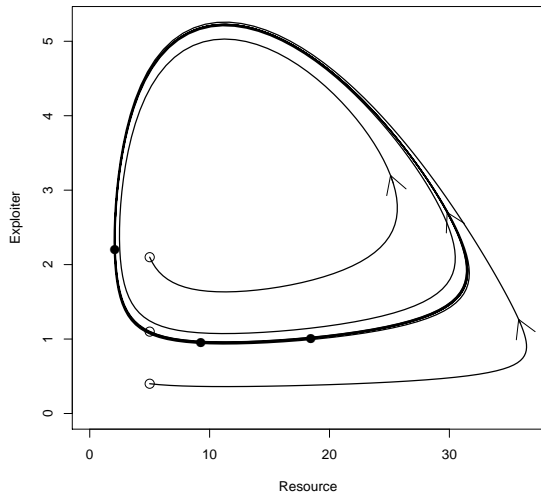
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Subsection 2

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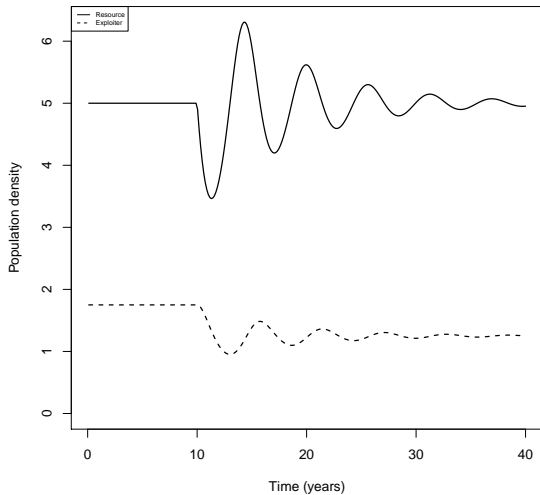
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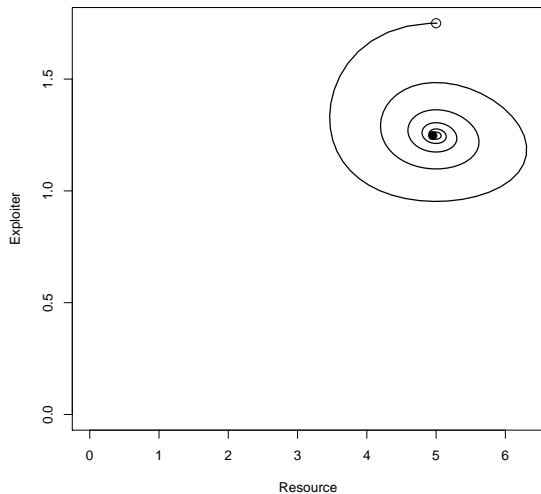
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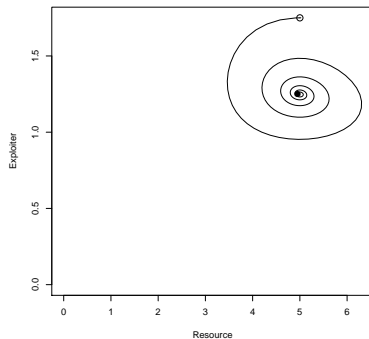
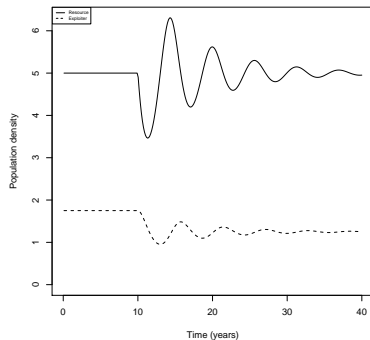
Harvesting dynamics



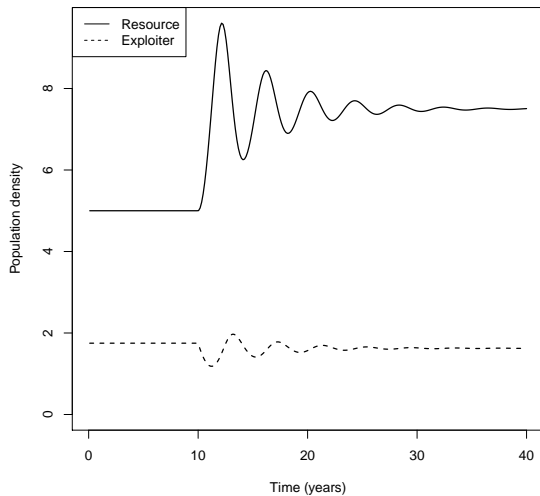
Harvesting dynamics



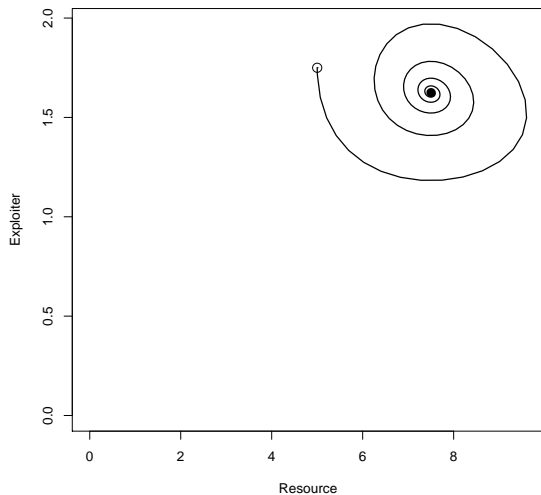
Harvesting dynamics



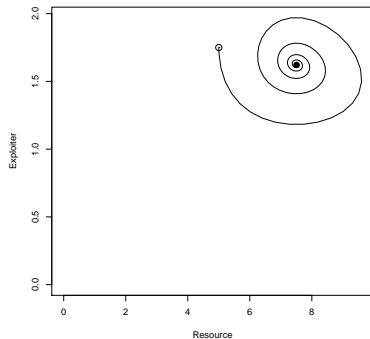
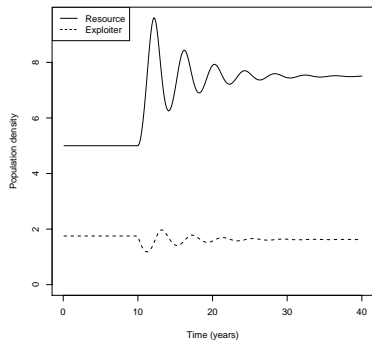
Harvesting dynamics



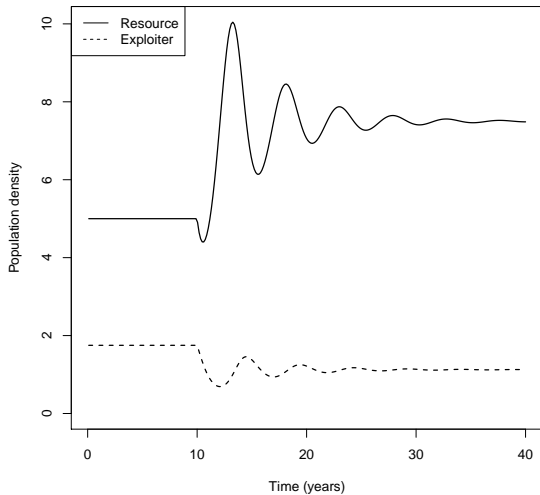
Harvesting dynamics



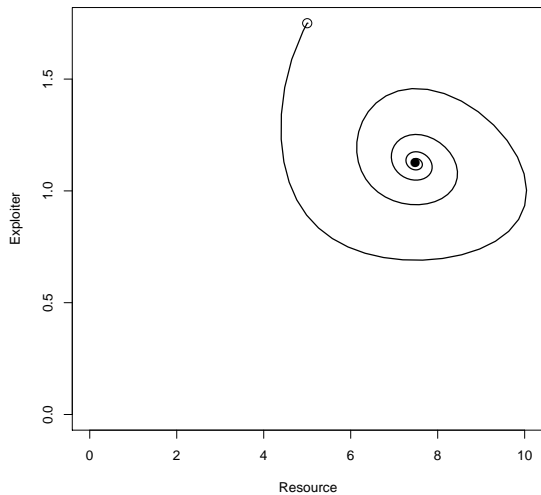
Harvesting dynamics



Harvesting dynamics



Harvesting dynamics



Harvesting dynamics

