Chapter 1

Introduction

Johnstone and Earn "Game Theory for Biologists"

Version of August 20, 2017 @ 12:20

This book deals with the morphology, behaviour and life histories of living organisms.

Biologists study animal behaviour in two distinct ways. In the ***proximate*** approach, we seek to identify the physiological or molecular mechanisms that produce a behaviour of interest. In contrast, in the ***ultimate*** or ***functional*** approach we seek to identify the selective pressures that favour evolution of different behaviours.

In the rest of this book, we will explore how formal models can contribute to the functional approach.

1.1 Notes and Further Reading

Game theory was invented by John von Neumann and Oskar Morgenstern and made famous in their landmark book "Theory of Games and Economic Behavior"

http://www.amazon.ca/Theory-Games-Economic-Behavior-Neumann/dp/0691130612/

Some more recent books on game theory, especially evolutionary game theory, are listed in the bibliography below.

Bibliography

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