Course introduction

Michael Noonan

July 2, 2021

Biol 417: Evolutionary Ecology

Table of contents

Course Overview

About Me

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Course Website: https://noonanm.github.io/Biol417/index.html

Why Me?

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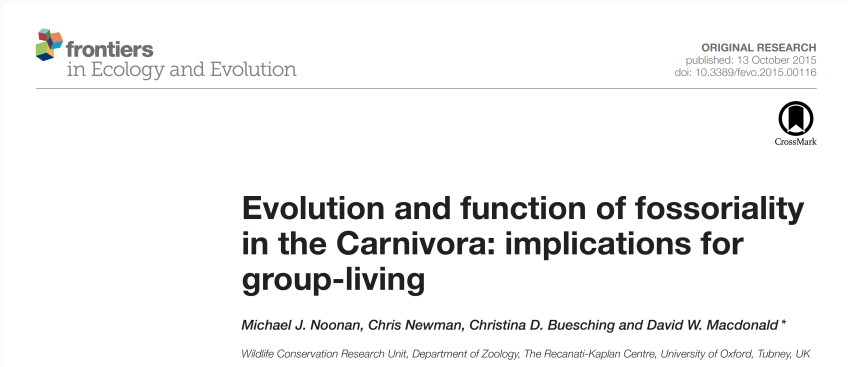

frontiers in Ecology and Evolution

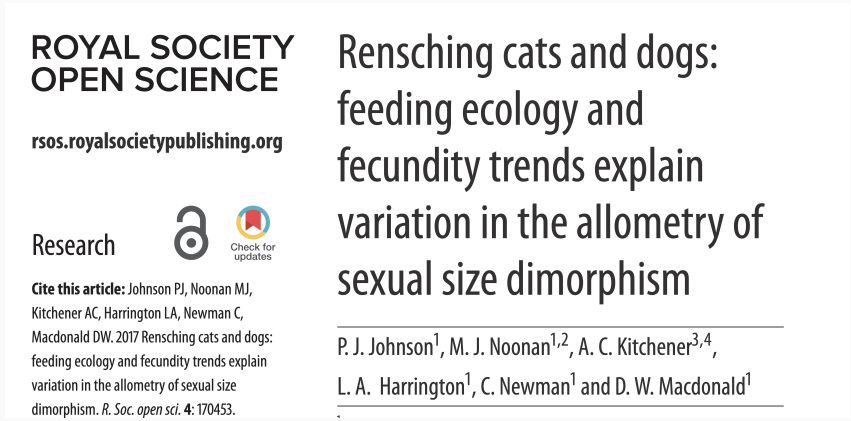
ORIGINAL RESEARCH
published: 13 October 2015
doi: 10.3389/fevo.2015.00116

CrossMark

Evolution and function of fossoriality in the Carnivora: implications for group-living

*Michael J. Noonan, Chris Newman, Christina D. Buesching and David W. Macdonald **

Wildlife Conservation Research Unit, Department of Zoology, The Recanati-Kaplan Centre, University of Oxford, Tubney, UK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Research

Check for updates

Cite this article: Johnson PJ, Noonan MJ, Kitchener AC, Harrington LA, Newman C, Macdonald DW. 2017 Rensching cats and dogs: feeding ecology and fecundity trends explain variation in the allometry of sexual size dimorphism. *R. Soc. open sci.* **4**: 170453.

Rensching cats and dogs: feeding ecology and fecundity trends explain variation in the allometry of sexual size dimorphism

P. J. Johnson[1], M. J. Noonan[1,2], A. C. Kitchener[3,4], L. A. Harrington[1], C. Newman[1] and D. W. Macdonald[1]


Received: 22 July 2016 | Revised: 17 August 2016 | Accepted: 18 August 2016

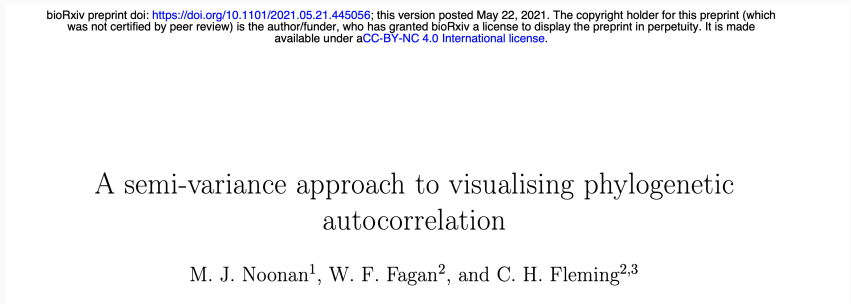
DOI: 10.1002/ece3.2480

ORIGINAL RESEARCH

WILEY Ecology and Evolution Open Access

Sexual size dimorphism in musteloids: An anomalous allometric pattern is explained by feeding ecology

Michael J. Noonan[1] | Paul J. Johnson[1] | Andrew C. Kitchener[2,3] | Lauren A. Harrington[1] | Chris Newman[1] | David W. Macdonald[1]



A semi-variance approach to visualising phylogenetic autocorrelation

M. J. Noonan[1], W. F. Fagan[2], and C. H. Fleming[2,3]

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- We will learn about the tools that ecologists use to study evolutionary processes.

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- Basic statistics (concepts like means, medians, variances, probability distributions, regression should be familiar to you).

Course Evaluation

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Grading: Each essay will be graded out of 10 based on the rubric that is provided on Canvas and the course website, and will be worth a total of 6% of your final grade. Without a valid excuse, late essays will have 10% deducted per day that they are overdue.

Essay rubric

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Student: Essay:

	Category	RATINGS 1	2	3	4
Mechanics (3 pts)	Spelling/ grammar	Incomprehensible due to numerous spelling, punctuation, or grammatical errors	Many spelling, punctuation, or grammatical errors	Few spelling, punctuation, or grammatical errors	No spelling, punctuation, or grammatical errors
	Sentence craft & Style	Vague and abstract language; many words misused; monotonous and/or choppy sentences throughout	Vague and abstract language; some words misused; some sentences have simple/akward structure	Adequate use of language, some words were vague or imprecise; some sentences have simple/akward structure	Excellent use of language; precisely chosen words, complex and varied sentence structure throughout
	Formatting	No consistent formatting style, major formatting issues	Major formatting issues	Some minor formatting issues	Essay well formatted throughout
	References	No references	References listed inappropriately	Some minor issues with the references	References formatted appropriately throughout
Content/Organisation (7 pts)	Title effectiveness	No title	Title provided, but the subject and/or thesis are unclear	Title includes both subject and a hint about the point of view	Engaging title that prepares the reader for the essay
	Essay matches topic	Some parts of the topic addressed	The topic was adequately addressed	Essay addressed the topic completely	Topic addressed completely and placed into greater context
	Organisation	Many points left out; essay was disorganised	Many points glossed over, difficult to follow due to organisation	Many points covered in depth; some key points unclear; some organisational issues	All points explained clearly; essay well organised
	Balance	Introduction/conclusion missing or too much time on these	Intro/conclusion are present but a little bit too long/short	Balanced introduction and conclusion	Very effective and balanced introduction and conclusion
	Structure/Logic	Arguments incoherent due to a lack of logic/structure	Some paragraphs are well structured, but logic and flow issues throughout	Paragraphs are well structured, but some flow issues	All paragraphs are well structured and good logical flow used throughout
	Introduction	No useful introduction	Minimally relevant introduction	Essay began with a relevant introduction	Very effective introduction
	Body	Essay includes only a few weak arguments	A number of valid arguments/points included, little connection between them	Many strong arguments covered in depth; some key points unclear	Strong, interconnected arguments used throughout, all points explained clearly
	Conclusions/ take home messages	No concluding remarks and arguments not used to any effect	Opinions on the topic, but not supported by the essay's arguments	Superficial conclusions with limited support from the arguments	Valid conclusions supported by the essay's arguments
	Sources and support	Few to no sources used to support the essay.	Key statements are supported by appropriate sources.	All statements are backed up by appropriate sources.	All statements are backed up by appropriate sources beyond the reading list.

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Grading: This report will be marked on composition (i.e., spelling and grammatical competence), comprehension & logic, clarity, and coverage of points from the presentation.

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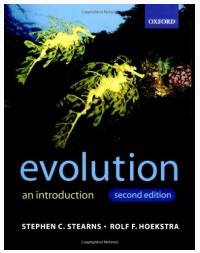

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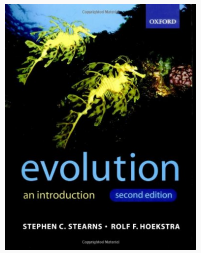

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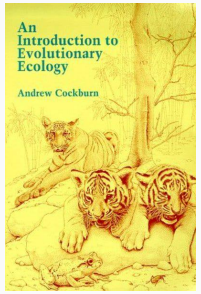

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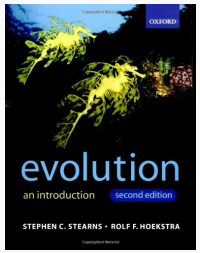

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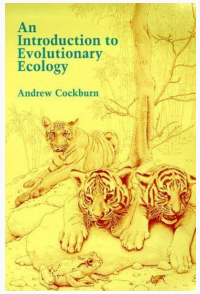
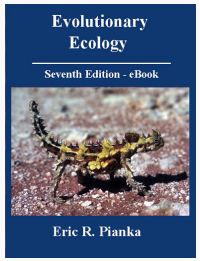


- Pianka, E. R. (1999). Evolutionary ecology. Benjamin Cummings. ISBN 0321042883. $\sim$ \$60 on Amazon or through UBC libraries.



Lecture outline

Week/Dates	Lecture Topics
1 – Jan 10-16	Course intro; Scope of Evol. Ecol; Selection and Adaptation
2 – Jan 17-23	TBD
3 – Jan 24-30	TBD
4 – Jan 31-Feb 6	TBD
5 – Feb 7-13	TBD
6 – Feb 14-20	TBD
7 – Feb 21-27	TBD
8 – Feb 28-Mar 6	TBD
9 – Mar 7-13	TBD
10 – Mar 14-20	TBD
11 – Mar 21-27	TBD
12 – Mar 28-Apr3	TBD
13 – Apr 4-10	TBD
14 – Apr 11-17	TBD