

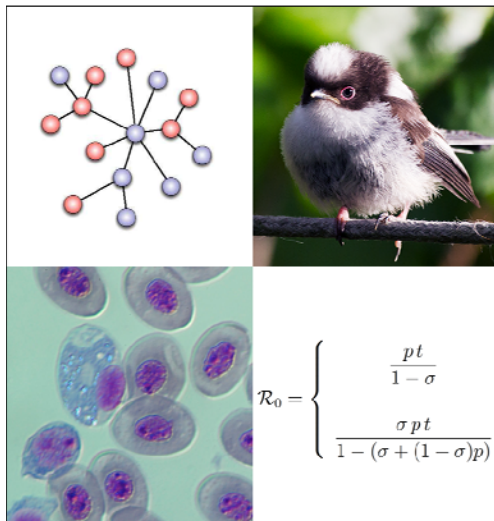
Inclusive fitness: 50 years on

Compiled and edited by **Andy Gardner and Stuart A. West**

Published online: **31 March 2014**

Published in print: **May 2014**

Special offer price for print issue: £35.00 (usual price: £59.50)



In 1964, W. D. Hamilton showed that natural selection leads the organism to appear designed as if to maximize her inclusive fitness: her combined impact upon the reproductive success of all her relatives, each increment being weighted by her genetic relatedness to the recipient. This topic has blossomed into one of the most successful programmes of evolutionary research, boasting a healthy interplay of theory and empiricism, in fields as disparate as behavioural ecology, microbiology and agriculture.

On its 50th anniversary, we take stock, check the soundness of its foundations, showcase the most exciting current research, and contemplate the challenges for inclusive fitness research over the next 50 years.

Access content online at: bit.ly/1bOYEBA

The print issue is available at the specially reduced price shown above. To place an order, either visit the above web page, click on the purchasing link and enter the code **TB 1642** when prompted or, quoting the same code, contact Portland Customer Services at:

Portland Customer Services, Commerce Way, Colchester CO2 8HP, UK
tel: +44 (0)1206 796351 email: sales@portland-services.com

Contents

Introduction: Inclusive fitness: 50 years on

A Gardner and SA West

The genetical theory of social behaviour

L Lehmann and F Rousset

Quantitative genetic versions of Hamilton's rule with empirical applications

JW McGlothlin, JB Wolf, ED Brodie III and AJ Moore

Joint phenotypes, evolutionary conflict and the fundamental theorem of natural selection

DC Queller

Hamilton's inclusive fitness in finite-structured populations

PD Taylor and W Maciejewski

Evolutionary dynamics of n -player games played by relatives

H Ohtsuki

Inclusive-fitness logic of cooperative breeding with benefits of natal philopatry

G Wild and C Koykka

Hamilton's rule and the causes of social evolution

AFG Bourke

Helping in cooperatively breeding longtailed tits: a test of Hamilton's rule

BJ Hatchwell, PR Gullett and MJ Adams

Genetic conflict, kin and the origins of novel genetic systems

BB Normark and L Ross

War and peace: social interactions in infections

HC Leggett, SP Brown and SE Reece

First principles of Hamiltonian medicine

B Crespi, K Foster and F Úbeda

Inclusive fitness in agriculture

ET Kiers and RF Denison

How Darwinian is cultural evolution?

N Claidière, TC Scott-Phillips and D Sperber