## PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

Volume 372 | Issue 1734 | 19 November 2017

**BIOLOGICAL SCIENCES** 

## **Contents**

## Theme issue: Wild clocks: integrating chronobiology and ecology to understand timekeeping in free-living animals

	Article ID		Article ID
PREFACE  WJ Schwartz, B Helm and MP Gerkema	20170211	Keeping time without a spine: what can the insect clock teach us about seasonal adaptation?  DL Denlinger, DA Hahn, C Merlin, CM Holzapfel and WE Bradshaw	20160257
ARTICLES  Two sides of a coin: ecological and chronobiological perspectives of timing in the wild  B Helm, ME Visser, W Schwartz, N Kronfeld-Schor, M Gerkema, T Piersma and G Bloch	20160246	Timing avian long-distance migration: from internal clock mechanisms to global flights S Åkesson, M Ilieva, J Karagicheva, E Rakhimberdiev, B Tomotani and B Helm	20160252
Methods in field chronobiology D Dominoni, S Åkesson, R Klaassen, K Spoelstra and M Bulla	20160247	Timing as a sexually selected trait: the right mate at the right moment M Hau, D Dominoni, S Casagrande, CL Buck, G Wagner, D Hazlerigg, T Greives and RA Hut	20160249
Sleep research goes wild: new methods and approaches to investigate the ecology, evolution and functions of sleep NC Rattenborg, HO de la Iglesia, B Kempenaers, JA Lesku, P Meerlo and MF Scriba	20160251	Chronobiology of interspecific interactions in a changing world N Kronfeld-Schor, ME Visser, L Salis and Jan A. van Gils	20160248
Flexible clock systems: adjusting the temporal programme DR van der Veen, SJ Riede, PD Heideman, M Hau, V van der Vinne and RA Hut	20160254	Time is honey: circadian clocks of bees and flowers and how their interactions may influence ecological communities G Bloch, N Bar-Shai, Y Cytter and R Green	20160256
Seasonal reproductive tactics: annual timing and the capital-to-income breeder continuum  CT Williams, M Klaassen, BM Barnes, CL Buck, W Arnold, S Giroud, SG Vetter and T Ruf	20160250	Marine biorhythms: bridging chronobiology and ecology M Bulla, T Oudman, Al Bijleveld, T Piersma and CP Kyriacou	20160253