

PM
C19/12

Canadian Journal of Zoology

Partial special issue on "Animal mitochondria"

Revue canadienne de zoologie

Numéro spécial partiel sur les « mitochondries
animales »

Volume 92

Number 7 / Numéro 7

July / Juillet

2014

An NRC Research
Press Journal

Une revue de
NRC Research
Press

www.nrcresearchpress.com



In cooperation with the
Canadian Society of Zoologists



Avec le concours de
la Société canadienne de zoologie

 **NRC
Research Press**

Canadian Journal of Zoology

Volume 92, Number 7, July 2014

Revue canadienne de zoologie

Volume 92, numéro 7, juillet 2014

Partial special issue containing invited papers arising from the symposium “Animal mitochondria: evolution, performance, and plasticity” held during the Canadian Society of Zoologists’ Annual Meeting, University of Guelph, 13–17 May 2013

Numéro spécial partiel renfermant des articles sollicités découlant du symposium sur l'évolution, la performance et la plasticité des mitochondries animales organisé dans le cadre du Congrès annuel de la Société canadienne de zoologie, à l'Université de Guelph, du 13 au 17 mai 2013

FOREWORD

Jeffrey G. Richards v–vi

AVANT-PROPOS

Animal mitochondria: evolution, performance, and plasticity

REVIEWS

K. Bremer, K.M. Kocha, T. Snider,
and C.D. Moyes 557–568

SYNTHÈSES

Energy metabolism and cytochrome oxidase activity:
linking metabolism to gene expression

Matthew E. Pamerter 569–589

Mitochondria: a multimodal hub of hypoxia tolerance

Pierre U. Blier, Hélène Lemieux,
and Nicolas Pichaud 591–601

Holding our breath in our modern world: will
mitochondria keep the pace with climate changes?

Ellen L. Robb, Casey A. Christoff,
Lucas A. Maddalena, and Jeffrey A. Stuart 603–613

Mitochondrial reactive oxygen species (ROS) in animal
cells: relevance to aging and normal physiology

Yongguo Li, David Lasar, Tobias Fromme,
and Martin Klingenspor 615–626

White, brite, and brown adipocytes: the evolution and
function of a heater organ in mammals

Continued on inside back cover / Suite au verso



Front cover: A female Eastern Hog-nosed Snake (*Heterodon platirhinos* Latreille, 1801) en route to her nesting site near Long Point, Ontario, Canada (photograph by C. Peet-Paré, Ottawa, Ontario).

Page couverture : Une femelle couleuvre à groin de l'est (*Heterodon platirhinos* Latreille, 1801) en route pour son site de ponte près de Long Point (Ontario), Canada (photographie de C. Peet-Paré, Ottawa (Ontario)).



Ecology

Écologie

ARTICLES

ARTICLES

**M.R.E. Aiken, A. Duarte, R.S. Luna,
D.M. Wolcott, and F.W. Weckerly**

637–642

Daytime declines in rumen–reticulum fill of male white-tailed deer (*Odocoileus virginianus*) from south Texas

**M.A. Ortiz, J.M. Boretto, C. Piantoni,
B.B. Álvarez, and N.R. Ibargüengoytía**

643–655

Reproductive biology of the Amazon Lava Lizard (*Tropidurus torquatus*) from the Wet Chaco of Corrientes (Argentina): congeneric comparisons of ecotypic and interspecific variations

Parasitology and pathology

Parasitologie et pathologie

ARTICLE

ARTICLE

**V. Aponte, S.A. Locke, M.-L. Gentes,
J.-F. Giroux, D.J. Marcogliese,
D. McLaughlin, and J. Verreault**

629–636

Effect of habitat use and diet on the gastrointestinal parasite community of an avian omnivore from an urbanized environment