

June 2013

esa

Volume 94 No. 6

ECOLOGY

A PUBLICATION OF THE ECOLOGICAL SOCIETY OF AMERICA



Reports

Successional changes in functional composition contrast for dry and wet tropical forest

Forum

Ecological change and migratory ungulates

Articles

1

8

6

andscape-scale eco-evolutionary dynamics: selection by seed predators and fire determine a major reproductive strategy

imating probability of presence from use–availability or presence–absence data

CONTENTS

Reports

1211

Successional changes in functional composition contrast for dry and wet tropical forest

• MADELON LOHBECK, LOURENS POORTER, EDWIN LEBRIJA-TREJOS, MIGUEL MARTÍNEZ-RAMOS, JORGE A. MEAVE, HORACIO PAZ, EDUARDO A. PÉREZ-GARCÍA, I. EUNICE ROMERO-PÉREZ, ALEJANDRA TAURO, AND FRANS BONGERS

1217

Emergent fungal entomopathogen does not alter density dependence in a viral competitor

• ANDREW M. LIEBHOLD, RUTH PLYMALE, JOSEPH S. ELKINTON, AND ANN E. HAJEK

1223

Native congeners provide biotic resistance to invasive *Potentilla* through soil biota • RAGAN M. CALLAWAY, DANIEL MONTESINOS, KIMBERLYN WILLIAMS, AND JOHN L. MARON

1230

Carry-over effects from breeding modulate the annual cycle of a long-distance migrant: an experimental demonstration • PAULO CATRY, MARIA P. DIAS, RICHARD A. PHILLIPS, AND JOSÉ P. GRANADEIRO

1236

Vegetation context influences the strength and targets of pollinator-mediated selection in a deceptive orchid • NINA SLETVOLD, JOHN MAGNE GRINDELAND, AND JON ÅGREN

Forum—Ecological Change and Migratory Ungulates

1243

Human-induced reversal of fortunes for migratory ungulates? • MARCO FESTA-BIANCHET

1245

Animal migration amid shifting patterns of phenology and predation: lessons from a Yellowstone elk herd • ARTHUR D. MIDDLETON, MATTHEW J. KAUFFMAN, DOUGLAS E. MCWHIRTER, JOHN G. COOK, RACHEL C. COOK, ABIGAIL A. NELSON, MICHAEL D. JIMENEZ, AND ROBERT W. KLAVER

1257

Ungulate migration, plant phenology, and large carnivores: The times they are a-changin' • ATLE MYSTERUD

1261

Assessing fitness consequences of migratory tactics requires long-term individually based monitoring • JEAN-MICHEL GAILLARD

1264

Do irrigation and predator control reduce the productivity of migratory ungulate herds?

• CHRISTOPHER C. WILMERS AND TAAL LEVI

1271

Will central Wyoming elk stop migrating to Yellowstone, and should we care? • JACK MASSEY, SARAH CUBAYNES, AND TIM COULSON

1274

Environmental change and the evolution of migration • J. M. FRYXELL AND R. D. HOLT

1280

Rejoinder: challenge and opportunity in the study of ungulate migration amid environmental change

• ARTHUR D. MIDDLETON, MATTHEW J. KAUFFMAN, DOUGLAS E. MCWHIRTER, JOHN G. COOK, RACHEL C. COOK, ABIGAIL A. NELSON, MICHAEL D. JIMENEZ, AND ROBERT W. KLAVER

Articles

1287

Fitness consequences of dispersal: Is leaving home the best of a bad lot? • PETER M. WASER, K. M. NICHOLS, AND J. D. HADFIELD

1296

Constant properties of plant-frugivore networks despite fluctuations in fruit and bird communities in space and time • MICHAELA PLEIN, LAURA

LÄNGSFELD, EIKE LENA NEUSCHULZ, CHRISTINA SCHULTHEIS, LILI INGMANN, TILL TÖPFER, KATRIN BÖHNING-GAESE, AND MATTHIAS SCHLEUNING

1307

Landscape-scale eco-evolutionary dynamics: Selection by seed predators and fire determine a major reproductive strategy • MATT V. TALLUTO AND CRAIG W. BENKMAN

1317

Broadening the ecological context of ungulate-ecosystem interactions: the importance of space, seasonality, and nitrogen • BRYAN D. MURRAY, CHRISTOPHER R. WEBSTER, AND JOSEPH K. BUMP