

September 2014

esa

Volume 95 No. 9

ECOLOGY

A PUBLICATION OF THE ECOLOGICAL SOCIETY OF AMERICA



Reports

Plant functional traits as determinants of population stability

Concepts and Synthesis

Disturbance, productivity, and species diversity: empiricism vs. logic in ecological theory

Articles

Consequences of alternative dispersal strategies in a putatively amphidromous fish
Spatially explicit structural equation modeling

CONTENTS

Reports

2369

Plant functional traits as determinants of population stability • MARIA MÁJEKOVÁ, FRANCESCO DE BELLO, JIŘÍ DOLEŽAL, AND JAN LEPS

2375

Reduced wind strengthens top-down control of an insect herbivore • BRANDON T. BARTON

Concepts and Synthesis

2382

Disturbance, productivity, and species diversity: empiricism vs. logic in ecological theory • MICHAEL A. HUSTON

Articles

2397

Consequences of alternative dispersal strategies in a putatively amphidromous fish • J. DEREK HOGAN, MICHAEL J. BLUM, JAMES F. GILLIAM, NATE BICKFORD, AND PETER B. MCINTYRE

2409

Ontogenetic specialism in predators with multiple niche shifts prevents predator population recovery and establishment • A. VAN LEEUWEN, M. HUSS, A. GÅRDMARK, AND A. M. DE ROOS

2423

Demographic and phenotypic responses of juvenile steelhead trout to spatial predictability of food resources • MATTHEW R. SLOAT AND GORDON H. REEVES

2434

Spatially explicit structural equation modeling • ERIC G. LAMB, KERRIE L. MENGERSSEN, KATHERINE J. STEWART, UDAYANGA ATTANAYAKE, AND STEVEN D. SICILIANO

2443

Height and clonality traits determine plant community responses to fertilization • TIMOTHY L. DICKSON, GARY G. MITTELBACH, HEATHER L. REYNOLDS, AND KATHERINE L. GROSS

2453

Is the growth of birch at the upper timberline in the Himalayas limited by moisture or by temperature? • ERYUAN LIANG, BINOD DAWADI, NEIL PEDERSON, AND DIETER ECKSTEIN

2466

Complex effects of fragmentation on remnant woodland plant communities of a rapidly urbanizing biodiversity hotspot • CRISTINA E. RAMALHO, ETIENNE LALIBERTÉ, PIETER POOT, AND RICHARD J. HOBBS

2479

Tropical tree diversity enhances light capture through crown plasticity and spatial and temporal niche differences • JURGIS SAPIJANSKAS, ALAIN PAQUETTE, CATHERINE POTVIN, NORBERT KUNERT, AND MICHEL LOREAU

2493

Conspecific negative density-dependent mortality and the structure of temperate forests • DANIEL J. JOHNSON, NORMAN A. BOURG, ROBERT HOWE, WILLIAM J. MCSHEA, AMY WOLF, AND KEITH CLAY

2504

A fire-driven shift from forest to non-forest: evidence for alternative stable states? • MICHAEL SHAWN FLETCHER, SAM W. WOOD, AND SIMON G. HABERLE

2514

Sapling performance along resource gradients drives tree species distributions within and across tropical forests • F. STERCK, L. MARKESTEIJN, M. TOLEDO, F. SCHIEVING, AND L. POORTER

2526

Environmental correlates of temporary emigration for female Weddell seals and consequences for recruitment • GLENN E. STAUFFER, JAY J. ROTELLA, ROBERT A. GARROTT, AND WILLIAM L. KENDALL

2537

Responses of cavity-nesting birds to fire: testing a general model with data from the Northern Flicker • KAREN L. WIEBE