

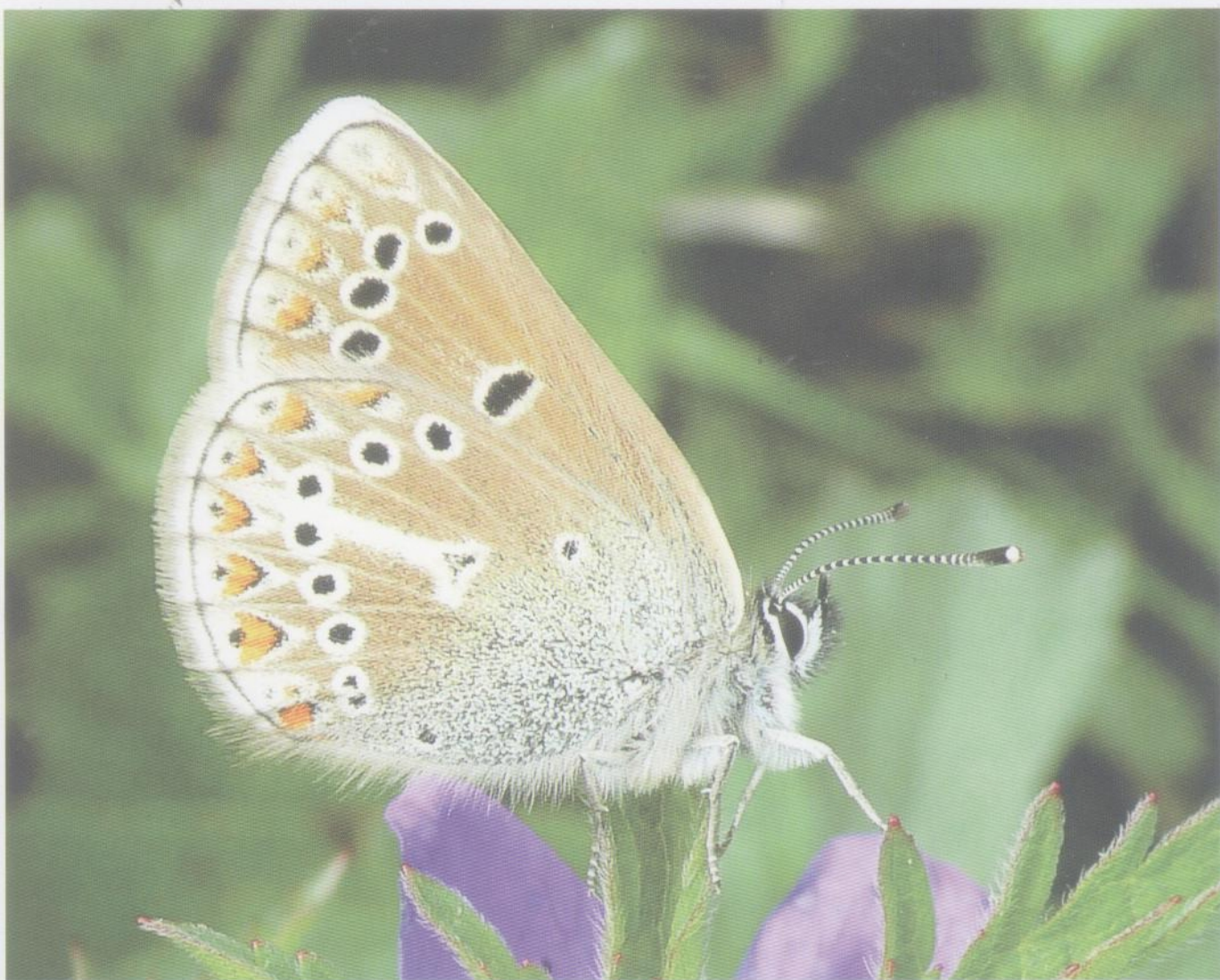
August 2013

esa

Volume 94 No. 8

ECOLOGY

A PUBLICATION OF THE ECOLOGICAL SOCIETY OF AMERICA



Concepts & Synthesis

Sensitivity of grassland plant community composition to spatial vs. temporal variation in precipitation

Articles

1 Ecological cues drive an apparent trade-off between freezing tolerance and growth in the family Salicaceae

8 Extinction cascades partially estimate herbivore losses in a complete Lepidoptera-plant food web

6 Geographic coupling of juvenile and adult habitat shapes spatial population dynamics of a coral reef fish

CONTENTS

Reports

1667

Synergistic effects of algal overgrowth and coral-livory on Caribbean reef-building corals

• ALEXANDER T. WOLF AND MAGGY M. NUGUES

1675

Parsing handling time into its components: implications for responses to a temperature gradient

• A. SENTIS, J.-L. HEMPTINNE, AND J. BRODEUR

1681

The role of transient dynamics in stochastic population growth for nine perennial plants

• MARTHA M. ELLIS AND ELIZABETH E. CRONE

Concepts and Synthesis

1687

Sensitivity of grassland plant community composition to spatial vs. temporal variation in precipitation • ELSA E. CLELAND, SCOTT L. COLLINS,

TIMOTHY L. DICKSON, EMILY C. FARRER, KATHERINE L. GROSS, LAUREANO A. GHERARDI, LAUREN M. HALLETT, RICHARD J. HOBBS, JOANNA S. HSU, LAURA TURNBULL, AND KATHARINE N. SUDING

Articles

1697

Biodiversity simultaneously enhances the production and stability of community biomass, but the effects are independent • BRADLEY J. CARDINALE,

KEVIN GROSS, KEITH FRITSCHIE, PEDRO FLOMBAUM, JEREMY W. FOX, CHRISTIAN RIXEN, JASPER VAN RUIJVEN, PETER B. REICH, MICHAEL SCHERER-LORENZEN, AND BRIAN J. WILSEY

1708

Phenological cues drive an apparent trade-off between freezing tolerance and growth in the family Salicaceae • JESSICA A. SAVAGE AND

JEANNINE CAVENDER-BARES

1718

Landscape-scale density-dependent recruitment of oaks in planted forests: More is not always better

• EFRAT SHEFFER, CHARLES D. CANHAM, JAIME KIGEL, AND AVI PEREVOLOTSKY

1729

Fire-mediated pathways of stand development in Douglas-fir/western hemlock forests of the Pacific Northwest, USA • ALAN J. TEPLY, FREDERICK J. SWANSON, AND THOMAS A. SPIES

1744

Comparison of plant preference hierarchies of male and female moths and the impact of larval rearing hosts • GUNDA THÖMING, MATTIAS C.

LARSSON, BILL S. HANSSON, AND PETER ANDERSON

1753

Insect herbivores change the outcome of plant competition through both inter- and intraspecific processes • TANIA N. KIM, NORA UNDERWOOD, AND BRIAN D. INOUE

1764

Insect herbivores, chemical innovation, and the evolution of habitat specialization in Amazonian trees • PAUL V. A. FINE, MARGARET R. METZ, JOHN

LOKVAM, ITALO MESONES, J. MILAGROS AYARZA ZUÑIGA, GREG P. A. LAMARRE, MAGNO VÁSQUEZ PILCO, AND CHRISTOPHER BARALOTO

1776

Testing the stress gradient hypothesis in herbivore communities: facilitation peaks at intermediate nutrient levels • ELISABETH S. BAKKER, IOANA DOBRESCU, DIETMAR STRAILE, AND MILENA HOLMGREN

1785

Extinction cascades partially estimate herbivore losses in a complete Lepidoptera-plant food web

• IAN S. PEARSE AND FLORIAN ALTERMATT

1795

Context-dependent amphibian host population response to an invading pathogen • BENJAMIN J.

DODDINGTON, JAIME BOSCH, JOAN A. OLIVER, NICHOLAS C. GRASSLY, GERARDO GARCIA, BENEDIKT R. SCHMIDT, TRENTON W. J. GARNER, AND MATTHEW C. FISHER