

EDITORIAL

- 173 What are we thinking?

OPINION & COMMENT

- 174 Correspondence: Is there memory in precipitation?

FEATURE

- 176 News Feature: Eco-fashion hits the high street

Elisabeth Jeffries

INTERVIEW

- 179 Waves on the horizon

Interview with Peter Talling

ANALYSIS

- 180 Policy Watch: Help for innovators

Sonja van Renssen

RESEARCH HIGHLIGHTS

- 182 Our choice from the recent literature

NEWS & VIEWS

- 183 Biological oceanography: Plastic plankton prosper

David A. Hutchins

- 184 Biogeochemistry: Limits on carbon uptake by plants

Pamela H. Templer

REVIEW ARTICLE

- 187 Greenhouse-gas emissions from soils increased by earthworms

Ingrid M. Lubbers, Kees Jan van Groenigen, Steven J. Fonte, Johan Six, Lijbert Brussaard and Jan Willem van Groenigen

- 195 The impact of lower sea-ice extent on Arctic greenhouse-gas exchange

Frans-Jan W. Parmentier, Torben R. Christensen, Lise Lotte Sørensen, Søren Rysgaard, A. David McGuire, Paul A. Miller and Donald A. Walker

LETTERS

- 203 Climate change may cause severe loss in the economic value of European forest land

Marc Hanewinkel, Dominik A. Cullmann, Mart-Jan Schelhaas, Gert-Jan Nabuurs and Niklaus E. Zimmermann

- 208 Mitigation of nitrous oxide emissions from soils by *Bradyrhizobium japonicum* inoculation

Manabu Itakura, Yoshitaka Uchida, Hiroko Akiyama, Yuko Takada Hoshino, Yumi Shimomura, Sho Morimoto, Kanako Tago, Yong Wang, Chihiro Hayakawa, Yusuke Uetake, Cristina Sánchez, Shima Eda, Masahito Hayatsu and Kiwamu Minamisawa

- 213 Hydroclimatic shifts driven by human water use for food and energy production**
Georgia Destouni, Fernando Jaramillo and Carmen Prieto
- 218 Water-quality impacts from climate-induced forest die-off**
Kristin M. Mikkelsen, Eric R. V. Dickenson, Reed M. Maxwell, John E. McCray and Jonathan O. Sharp
- 223 Drought alters the structure and functioning of complex food webs**
Mark E. Ledger, Lee E. Brown, François K. Edwards, Alexander M. Milner and Guy Woodward
- 228 Food-chain length alters community responses to global change in aquatic systems**
Lars-Anders Hansson, Alice Nicolle, Wilhelm Granéli, Per Hallgren, Emma Kritzberg, Anders Persson, Jessica Björk, P. Anders Nilsson and Christer Brönmark
- 234 Predicted habitat shifts of Pacific top predators in a changing climate**
Elliott L. Hazen, Salvador Jorgensen, Ryan R. Rykaczewski, Steven J. Bograd, David G. Foley, Ian D. Jonsen, Scott A. Shaffer, John P. Dunne, Daniel P. Costa, Larry B. Crowder and Barbara A. Block
- 239 Focus on poleward shifts in species' distribution underestimates the fingerprint of climate change**
Jeremy Van Der Wal, Helen T. Murphy, Alex S. Kutt, Genevieve C. Perkins, Brooke L. Bateman, Justin J. Perry and April E. Reside
- 244 Evolutionary response of the egg hatching date of a herbivorous insect under climate change**
Margriet van Asch, Lucia Salis, Leonard J. M. Holleman, Bart van Lith and Marcel E. Visser
- 249 Climate-change impacts on understorey bamboo species and giant pandas in China's Qinling Mountains**
Mao-Ning Tuanmu, Andrés Viña, Julie A. Winkler, Yu Li, Weihua Xu, Zhiyun Ouyang and Jianguo Liu
- 254 Shrinking of fishes exacerbates impacts of global ocean changes on marine ecosystems**
William W. L. Cheung, Jorge L. Sarmiento, John Dunne, Thomas L. Frölicher, Vicky W.Y. Lam, M.L. Deng Palomares, Reg Watson and Daniel Pauly
- 259 Excess algal symbionts increase the susceptibility of reef corals to bleaching**
Ross Cunning and Andrew C. Baker
- 263 Long-term responses of North Atlantic calcifying plankton to climate change**
Gregory Beaugrand, Abigail McQuatters-Gollop, Martin Edwards and Eric Goerville
- 268 Dolomite-rich coralline algae in reefs resist dissolution in acidified conditions**
M.C. Nash, B.N. Opdyke, U. Troitzsch, B.D. Russell, W.H. Adey, A. Kato, G. Diaz-Pulido, C. Brent, M. Gardner, J. Prichard and D.I. Kline
- 273 Biogeochemical plant-soil-microbe feedback in response to climate warming in peatlands**
Luca Bragazza, Julien Parisod, Alexandre Buttler and Richard D. Bardgett
- 278 Decade-long soil nitrogen constraint on the CO₂ fertilization of plant biomass**
Peter B. Reich and Sarah E. Hobbie
→N&V p184

- 283 **Carbon emissions from forest conversion by Kalimantan oil palm plantations**
Kimberly M. Carlson, Lisa M. Curran, Gregory P. Asner, Alice McDonald Pittman, Simon N. Trigg and J. Marion Adeney
- 288 **Increased greenhouse-gas intensity of rice production under future atmospheric conditions**
Kees Jan van Groenigen, Chris van Kessel and Bruce A. Hungate

ARTICLES

- 292 **Temperature as a potent driver of regional forest drought stress and tree mortality**
A. Park Williams, Craig D. Allen, Alison K. Macalady, Daniel Griffin, Connie A. Woodhouse, David M. Meko, Thomas W. Swetnam, Sara A. Rauscher, Richard Seager, Henri D. Grissino-Mayer, Jeffrey S. Dean, Edward R. Cook, Chandana Gangodagamage, Michael Cai and Nate G. McDowell
- 298 **Variation in plastic responses of a globally distributed picoplankton species to ocean acidification**
Elisa Schaum, Björn Rost, Andrew J. Millar and Sinéad Collins
→N&V p183