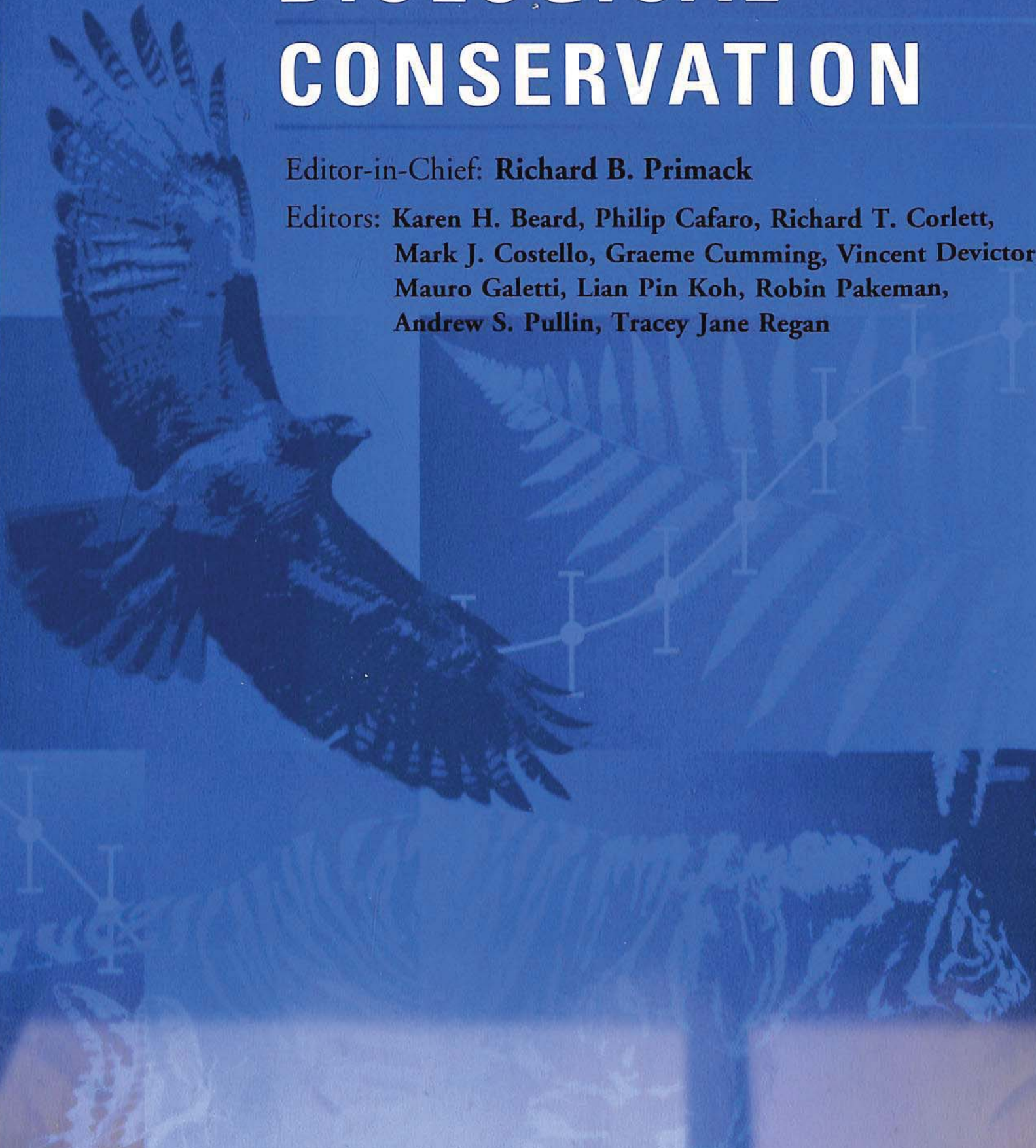


BIOLOGICAL CONSERVATION

Editor-in-Chief: **Richard B. Primack**

Editors: **Karen H. Beard, Philip Cafaro, Richard T. Corlett,
Mark J. Costello, Graeme Cumming, Vincent Devictor,
Mauro Galetti, Lian Pin Koh, Robin Pakeman,
Andrew S. Pullin, Tracey Jane Regan**



BIOLOGICAL CONSERVATION

Volume 181 2015

Editorial

- 90 You should publish your article in *Biological Conservation*
R.B. PRIMACK, M.J. COSTELLO

Reviews

- 111 The ecological significance of giant clams in coral reef ecosystems
M.L. NEO, W. ECKMAN, K. VICENTUAN, S.L.-M. TEO, P.A. TODD (Singapore)
- 133 Indigenous biocultural knowledge in ecosystem science and management: Review and insight from Australia
E.J. ENS, P. PERT, P.A. CLARKE, M. BUDDEN, L. CLUBB, B. DORAN, C. DOURAS (Australia), J. GAIKWAD (Germany), B. GOTT (Germany, Australia), S. LEONARD, J. LOCKE, J. PACKER, G. TURPIN, S. WASON (Australia)

Perspective

- 54 Real-world progress in overcoming the challenges of adaptive spatial planning in marine protected areas
M. MILLS, R. WEEKS, R.L. PRESSEY (Australia), M.G. GLEASON (USA), R.-L. EISMA-OSORIO (Philippines), A.T. LOMBARD, J.M. HARRIS (South Africa), A.B. KILLMER, A. WHITE (USA), T.H. MORRISON (Australia)

Regular Papers

- 1 The relative effectiveness of protected areas, a logging ban, and sacred areas for old-growth forest protection in southwest China
J.S. BRANDT, V. BUTSIC, B. SCHWAB (United States), T. KUEMMERLE (Germany), V.C. RADELOFF (United States)
- 9 The reintroduction of a flagship ungulate *Capra pyrenaica*: Assessing sustainability by surveying woody vegetation
R. PEREA (USA, Spain), R. PEREA-GARCÍA-CALVO, C.G. DÍAZ-AMBRONA, A. SAN MIGUEL (Spain)
- 18 Escaping captivity: The biological invasion risk from vertebrate species in zoos
P. CASSEY, C.J. HOGG (Australia)
- 27 Manipulating size, amount and appearance of food inputs to optimize supplementary feeding programs for European vultures
R. MORENO-OPO, A. TRUJILLANO, Á. ARREDONDO, L.M. GONZÁLEZ (Spain), A. MARGALIDA (Spain, Switzerland)
- 36 Differing effects of fallow type and landscape structure on the occurrence of plants, pollinators and birds on environmental fallows in Finland
M. TOIVONEN, I. HERZON, M. KUUSSAARI (Finland)
- 44 Underreporting of wildlife-vehicle collisions does not hinder predictive models for large ungulates
N.P. SNOW, W.F. PORTER, D.M. WILLIAMS (USA)
- 64 Distribution and conservation of orchid species richness in China
Z. ZHANG, Y. YAN, Y. TIAN, J. LI, J.-S. HE, Z. TANG (China)
- 73 Assessing the importance of multiple threats to an endangered globose cactus in Mexico: Cattle grazing, looting and climate change
C. MARTORELL, D.M. MONTAÑANA, C. URETA, M.C. MANDUJANO (Mexico)
- 82 Quantifying the effect of boat disturbance on bottlenose dolphin foraging activity
E. PIROTTA (UK), N.D. MERCHANT (USA, UK), P.M. THOMPSON, T.R. BARTON, D. LUSSEAU (UK)
- 91 Indirect detection of genetic dispersal (movement and breeding events) through pedigree analysis of dugong populations in southern Queensland, Australia
R.C. COPE, P.K. POLLETT, J.M. LANYON, J.M. SEDDON (Australia)
- 102 Uncertainty analysis of crowd-sourced and professionally collected field data used in species distribution models of Taiwanese moths
Y.-P. LIN (Taiwan), D. DENG (The Netherlands, Taiwan), W.-C. LIN (Taiwan), R. LEMMENS (The Netherlands), N.D. CROSSMAN (Australia), K. HENLE (Germany), D.S. SCHMELLER (Germany, France)
- 124 Incorporating movement behavior into conservation prioritization in fragmented landscapes: An example of western hoolock gibbons in Garo Hills, India
D. VASUDEV (USA, India), R.J. FLETCHER JR. (USA)

Continued on inside back cover

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica; Embase; Geo Abstracts; Science Citation Index; Scopus. Full text available on ScienceDirect)



BIOLOGICAL CONSERVATION

Volume 181 2015

CONTENTS—Continued from outside back cover

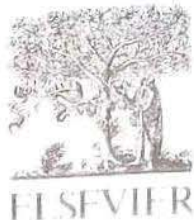
- 150 Rapid multi-nation distribution assessment of a charismatic conservation species using open access ensemble model GIS predictions: Red panda (*Ailurus fulgens*) in the Hindu-Kush Himalaya region
K. KANDEL (Nepal), F. HUETTMANN (USA), M.K. SUWAL, G. RAM REGMI (Nepal), V. NIJMAN, K.A.I. NEKARIS (UK), S.T. LAMA, A. THAPA, H.P. SHARMA, T.R. SUBEDI (Nepal)
- 162 Citizen science and field survey observations provide comparable results for mapping Vancouver Island White-tailed Ptarmigan (*Lagopus leucura saxatilis*) distributions
M.M. JACKSON, S.E. GERGEL, K. MARTIN (Canada)
- 173 Prioritizing West African medicinal plants for conservation and sustainable extraction studies based on market surveys and species distribution models
T.R. VAN ANDEL, S. CROFT, E.E. VAN LOON, D. QUIROZ, A.M. TOWNS, N. RAES (The Netherlands)
- 182 Implementing backcasting for conservation: Determining multiple policy pathways for retaining future targets of endangered woodlands in Sydney, Australia
A. GORDON (Australia)
- 190 The trade in sharks and their products in the United Arab Emirates
R.W. JABADO, S.M. AL GHAI, W. HAMZA (United Arab Emirates), A.C. HENDERSON (Turks, Caicos Islands), J.L.Y. SPAET (Saudi Arabia), M.S. SHIVJI (USA), R.H. HANNER (Canada)
- 206 Restricting new forests to conservation lands severely constrains carbon and biodiversity gains in New Zealand
F.E. CARSWELL, N.W.H. MASON, J.M. OVERTON, R. PRICE, L.E. BURROWS, R.B. ALLEN (New Zealand)
- 219 Environmental and visitor management in a thousand protected areas in China
L. ZHONG (China), R.C. BUCKLEY (China, Australia), C. WARDLE (Australia), L. WANG (China)
- 226 Pelagic marine protected areas protect foraging habitat for multiple breeding seabirds in the central Pacific
H.S. YOUNG, S.M. MAXWELL, M.G. CONNERS, S.A. SHAFFER (USA)
- 236 Global change and local solutions: Tapping the unrealized potential of citizen science for biodiversity research
E.J. THEOBALD, A.K. ETTINGER, H.K. BURGESS, L.B. DEBEY, N.R. SCHMIDT, H.E. FROELICH, C. WAGNER, J. HILLERISLAMBERS, J. TEWKSBURY, M.A. HARSCH, J.K. PARRISH (USA)

Short Communication

- 199 Synthesising bushmeat research effort in West and Central Africa: A new regional database
G. TAYLOR, J.P.W. SCHARLEMANN, M. ROWCLIFFE, N. KÜMPEL, M.B.J. HARFOOT, J.E. FA, R. MELISCH, E.J. MILNER-GULLAND, S. BHAGWAT (UK), K.A. ABERNETHY (Gabon, UK), A.S. AJONINA (Cameroon), L. ALBRECHTSEN, S. ALLEBONE-WEBB (UK), E. BROWN (The Democratic Republic of Congo), D. BRUGIERE (France), C. CLARK (USA), M. COLELL (Spain), G. COWLISHAW (UK), D. CROOKES (UK, South Africa), E. DE MERODE (UK), J. DUPAIN (The Democratic Republic of Congo, Belgium), T. EAST (UK), D. EDDERAI (Cameroon), P. ELKAN, D. GILL, E. GREENGRASS, C. HODGKINSON (UK), O. ILAMBU (The Democratic Republic of Congo), P. JEANMART (Gabon), J. JUSTE (Spain), J.M. LINDER (USA), D.W. MACDONALD (UK), A.J. NOSS (USA), P.U. OKORIE (Nigeria), V.J.J. OKOUYI (Gabon), S. PAILLER (USA), J.R. POULSEN (USA), M. RIDDELL (UK), J. SCHLEICHER, B. SCHULTE-HERBRÜGGEN, M. STARKEY, N. VAN VLIET, C. WHITHAM, A.S. WILLCOX, D.S. WILKIE, J.H. WRIGHT, L.M. COAD (UK)

Book Review

- 245 Recent Books on Species Extinction
P. CAFARO (United States)



BIOLOGICAL CONSERVATION

Volume 182 2015

Letters to the Editor

- 13 Response to Pimm (2014): Misogynist metaphors don't belong in scholarly discourse
A.G. STANLEY (USA)

Review

- 233 Remote sensing change detection for ecological monitoring in United States protected areas
K.S. WILLIS (USA)

Perspective

- 102 Improving policy efficiency and effectiveness to save more species: A case study of the megadiverse country Australia
J.A. MCDONALD, J. CARWARDINE (Australia), L.N. JOSEPH (Australia, USA), C.J. KLEIN, T.M. ROUT (Australia), J.E.M. WATSON (USA, Australia), S.T. GARNETT, M.A. MCCARTHY, H.P. POSSINGHAM (Australia)
- 173 Free and open-access satellite data are key to biodiversity conservation
W. TURNER (USA), C. RONDININI (Italy), N. PETTORELLI (UK), B. MORA (The Netherlands), A.K. LEIDNER (USA), Z. SZANTOI (Italy), G. BUCHANAN (UK), S. DECH (Germany), J. DWYER (USA), M. HEROLD (The Netherlands), L.P. KOH (Australia), P. LEIMGRUBER (USA), H. TAUBENBOECK, M. WEGMANN, M. WIKELSKI (Germany), C. WOODCOCK (USA)

Regular Papers

- 1 Trade in tigers and other wild cats in Mong La and Tachilek, Myanmar – A tale of two border towns
V. NIJMAN, C.R. SHEPHERD (UK, Malaysia)
- 14 Citizen science reveals trends in bat populations: The National Bat Monitoring Programme in Great Britain
K.E. BARLOW, P.A. BRIGGS, K.A. HAYSOM, A.M. HUTSON, N.L. LECHIARA, P.A. RACEY, A.L. WALSH, S.D. LANGTON (UK)
- 27 Education and access to fish but not economic development predict chimpanzee and mammal occurrence in West Africa
J. JUNKER, C. BOESCH, R. MUNDRY, C. STEPHENS (Germany), M. LORMIE (Liberia), C. TWEH (Germany, Liberia), H.S. KÜHL (Germany)
- 36 Low impact of chytridiomycosis on frog recruitment enables persistence in refuges despite high adult mortality
B.C. SCHEELE, D.A. HUNTER, L.F. SKERRATT, L.A. BRANNELLY, D.A. DRISCOLL (Australia)
- 44 A novel modeling approach to evaluate the ecological effects of timing and location of grassland conservation measures
K. JOHST, M. DRECHSLER, M. MEWES, A. STURM, F. WÄTZOLD (Germany)
- 53 Accounting for detectability when surveying for rare or declining reptiles: Turning rocks to find the Grassland Earless Dragon in Australia
T. MCGRATH, G. GUILLERA-ARROITA, J.J. LAHOZ-MONFORT, W. OSBORNE, D. HUNTER, S.D. SARRE (Australia)
- 63 Nature reserve requirements for landscape-dependent ungulates: The case of endangered takin (*Budorcas taxicolor*) in Southwestern China
T. GUAN (China), F. WANG (USA, China), S. LI (China), W.J. MCSHEA (USA)
- 72 An assessment of South China tiger reintroduction potential in Hupingshan and Houhe National Nature Reserves, China
Y. QIN, P.J. NYHUS, C.L. LARSON, C.J.W. CARROLL, J. MUNTIFERING (USA), T.D. DAHMER (Hong Kong), L. JUN (People's Republic of China), R.L. TILSON (USA)
- 87 Rich lizards: How affluence and land cover influence the diversity and abundance of desert reptiles persisting in an urban landscape
J.W. ACKLEY, J. WU, M.J. ANGILLETTA JR., S.W. MYINT, B. SULLIVAN (United States)
- 93 Climate change threatens giant panda protection in the 21st century
R. LI (China), M. XU (USA), M.H.G. WONG, S. QJU, X. LI (China), D. EHRENFELD (USA), D. LI (China)
- 109 Non-naturalized alien plants receive fewer flower visits than naturalized and native plants in a Swiss botanical garden
M. RAZANAJATOVO (Germany), C. FÖHR, M. FISCHER, D. PRATI (Switzerland), M. VAN KLEUNEN (Germany)
- 117 Post-fire spatial heterogeneity alters ground-dwelling arthropod and small mammal community patterns in a desert landscape experiencing a novel disturbance regime
H.L. HULTON VANTASSEL, C.W. BARROWS, K.E. ANDERSON (United States)

Continued on inside back cover

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica; Embase; Geo Abstracts; Science Citation Index; Also covered in the abstract and citation database Scopus. Full text available on ScienceDirect)



0006-3207(201502)182:1-7



BIOLOGICAL CONSERVATION

Volume 182 2015

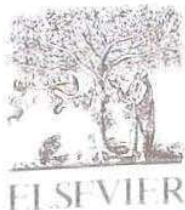
CONTENTS—Continued from outside back cover

- 126 Revealing the hidden niches of cryptic bumblebees in Great Britain: Implications for conservation
J.J. SCRIVEN, L.C. WOODALL, M.C. TINSLEY, M.E. KNIGHT, P.H. WILLIAMS (United Kingdom), J.C. CAROLAN (Ireland), M.J.F. BROWN, D. GOULSON (United Kingdom)
- 134 Rewilding with large herbivores! The importance of grazing refuges for sapling establishment and wood-pasture formation
C. SMIT, J.L. RUIFROK, R. VAN KLINK, H. OLFF (The Netherlands)
- 148 Contrasting impacts of pesticides on butterflies and bumblebees in private gardens in France
A. MURATET, B. FONTAINE (France)
- 155 Colonization credit of post-agricultural forest patches in NE Germany remains 130–230 years after reforestation
T. NAAF, J. KOLK (Germany)
- 164 Herb layer extinction debt in highly fragmented temperate forests – Completely paid after 160 years?
J. KOLK, T. NAAF (Germany)
- 177 Habitat disturbance effects on the physiological stress response in resident Kenyan white-bearded wildebeest (*Connochaetes taurinus*)
J.A. STABACH, R.B. BOONE (USA), J.S. WORDEN (Kenya), G. FLORANT (USA)
- 187 Is anthropogenic cougar mortality compensated by changes in natural mortality in Utah? Insight from long-term studies
M.L. WOLFE, D.N. KOONS, D.C. STONER, P. TERLETZKY, E.M. GESE, D.M. CHOATE, L.M. AUBRY (USA)
- 197 Marine protection is needed for Magellanic penguins in Argentina based on long-term data
P. DEE BOERSMA, G.A. REBSTOCK, P. GARCÍA-BORBOROGLU (USA, Argentina)
- 205 Fur seal activity moderates the effects of an Australian marine sanctuary on temperate reef fish
B.P. KELAHER, M. TAN, W.F. FIGUEIRA, B.M. GILLANDERS, S.D. CONNELL, S.D. GOLDSWORTHY, N. HARDY, M.A. COLEMAN (Australia)
- 215 Managing habitats on English farmland for insect pollinator conservation
J.M. HOLLAND, B.M. SMITH, J. STORKEY, P.J.W. LUTMAN, N.J. AEBISCHER (UK)
- 223 Resource selection by wolves at dens and rendezvous sites in Algonquin park, Canada
J.F. BENSON, K.J. MILLS, B.R. PATTERSON (Canada)
- 243 Disturbance in dry coastal dunes in Denmark promotes diversity of plants and arthropods
A.K. BRUNBJERG, G.P. JØRGENSEN, K.M. NIELSEN, M.L. PEDERSEN, J.-C. SVENNING, R. EJRNÆS (Denmark)
- 254 A century of *Batrachochytrium dendrobatidis* in Illinois amphibians (1888–1989)
B.L. TALLEY, C.R. MULETZ, V.T. VREDENBURG, R.C. FLEISCHER, K.R. LIPS (USA)
- 262 Future challenge for endangered arable weed species facing global warming: Low temperature optima and narrow moisture requirements
A.T. RÜHL, R. L. ECKSTEIN, A. OTTE, T.W. DONATH (Germany)
- 270 Declining use of wild resources by indigenous peoples of the Ecuadorian Amazon
C.L. GRAY, M. BOZIGAR, R.E. BILSBORROW (USA)

Short Communications

- 8 Local fishing influences coral reef fish behavior inside protected areas of the Indo-Pacific
F.A. JANUCHOWSKI-HARTLEY (Australia, UK), N.A.J. GRAHAM, J.E. CINNER, G.R. RUSS (Australia)
- 143 Adult and juvenile European seabirds at risk from marine plundering off West Africa
D. GREMILLET (France, South Africa), C. PERON (France, Australia), P. PROVOST, A. LESCROEL (France)

Contents continued on last page of this issue



Available online at www.sciencedirect.com

ScienceDirect



BIOLOGICAL CONSERVATION

Volume 183 2015

Special Issue: Environmental DNA: A powerful new tool for biological conservation

- 1 Moving environmental DNA methods from concept to practice for monitoring aquatic macroorganisms
C.S. GOLDBERG, K.M. STRICKLER, D.S. PILLIOD (United States)
- 4 Environmental DNA – An emerging tool in conservation for monitoring past and present biodiversity
P.F. THOMSEN, E. WILLERSLEV (Denmark)
- 19 Using eDNA to develop a national citizen science-based monitoring programme for the great crested newt (*Triturus cristatus*)
J. BIGGS, N. EWALD (United Kingdom), A. VALENTINI, C. GABORIAUD, T. DEJEAN (France), R.A. GRIFFITHS, J. FOSTER, J.W. WILKINSON, A. ARNELL, P. BROTHERTON, P. WILLIAMS, F. DUNN (United Kingdom)
- 29 Characterizing the distribution of an endangered salmonid using environmental DNA analysis
M.B. LARAMIE, D.S. PILLIOD, C.S. GOLDBERG (USA)
- 38 Using environmental DNA methods to improve detectability in a hellbender (*Cryptobranchus alleganiensis*) monitoring program
S.F. SPEAR, J.D. GROVES, L.A. WILLIAMS, L.P. WAITS (USA)
- 46 Monitoring the near-extinct European weather loach in Denmark based on environmental DNA from water samples
E.E. SIGSGAARD, H. CARL, P.R. MØLLER, P.F. THOMSEN (Denmark)
- 53 Choice of capture and extraction methods affect detection of freshwater biodiversity from environmental DNA
K. DEINER, J.-C. WALSER, E. MÄCHLER, F. ALTERMATT (Switzerland)
- 64 Effects of sample processing on the detection rate of environmental DNA from the Common Carp (*Cyprinus carpio*)
T. TAKAHARA, T. MINAMOTO, H. DOI (Japan)
- 70 The effect of dilution and the use of a post-extraction nucleic acid purification column on the accuracy, precision, and inhibition of environmental DNA samples
A.M. MCKEE, S.F. SPEAR, T.W. PIERSON (USA)
- 77 Quantification of eDNA shedding rates from invasive bighead carp *Hypophthalmichthys nobilis* and silver carp *Hypophthalmichthys molitrix*
K.E. KLYMUS, C.A. RICHTER, D.C. CHAPMAN, C. PAUKERT (USA)
- 85 Quantifying effects of UV-B, temperature, and pH on eDNA degradation in aquatic microcosms
K.M. STRICKLER, A.K. FREMIER, C.S. GOLDBERG (USA)
- 93 Fish environmental DNA is more concentrated in aquatic sediments than surface water
C.R. TURNER, K.L. UY, R.C. EVERHART (USA)

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica/Embase; Geo Abstracts; Science Citation Index). Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®



0006-3207(201503)183:C;1-X



BIOLOGICAL CONSERVATION

Volume 184 2015

Letters to the Editor

- 465 Population structure integral to seed collection guidelines: A response to Hoban and Schlarbaum (2014)
E.O. GUERRANT JR., K. HAVENS, P. VITT, P.L. FIEDLER, D.A. FALK (USA), K. DIXON (Australia)
- 467 Genetic diversity is a significant but not the only consideration for effective *ex situ* plant conservation: Response to Hoban and Schlarbaum
L.K. GUJA, L.M. BROADHURST, A.H.D. BROWN, D. BUSH, A. COCHRANE, D.J. MERRITT, C.A. OFFORD, M. ROSSETTO, M.J. WALLACE, J. WOOD (Australia)
- 469 Developing quantitative seed sampling protocols using simulations: A reply to comments from Guja et al. and Guerrant et al.
S. HOBAN, A. STRAND, N. FRAGA, C. RICHARDS, S. SCHLARBAUM (United States)
- 471 Power lines, reindeer and UV
E. REIMERS, K. FLYDAL, L. KORSLUND, S. EFTESTØL, J.E. COLMAN, D. TSEGAYE (Norway)
- 472 Power lines, reindeer and UV: A reply to Reimers et al.
N. TYLER, K.-A. STOKKAN (Norway), C. HOGG (UK), C. NELLEMAN, A.-I. VISTNES (Norway), G. JEFFERY (UK)

Reviews

- 163 Chinese market responses to overexploitation of sharks and sea cucumbers
H. ERIKSSON (Malaysia, Australia), S. CLARKE (Japan, Federated States of Micronesia)
- 229 Making decisions for managing ecosystem services
M.J. MARTINEZ-HARMS, B.A. BRYAN (Australia), P. BALVANERA (Mexico), E.A. LAW, J.R. RHODES (Australia), H.P. POSSINGHAM (Australia, UK), K.A. WILSON (Australia)
- 365 Biological effects, conservation potential, and research priorities of shark diving tourism
A.J. GALLAGHER (USA), G.M.S. VIANNA (Australia), Y.P. PAPASTAMATIOU (UK), C. MACDONALD (USA), T.L. GUTTRIDGE (UK, Bahamas), N. HAMMERSCHLAG (USA)

Perspectives

- 209 Fear of failure in conservation: The problem and potential solutions to aid conservation of extremely small populations
M.H. MEEK, C. WELLS, K.M. TOMALTY, J. ASHANDER, E.M. COLE, D.A. GILLE, B.J. PUTMAN, J.P. ROSE, M.S. SAVOCA, L. YAMANE, J.M. HULL, D.L. ROGERS, E.B. ROSENBLUM, J.F. SHOGREN, R.R. SWAISGOOD, B. MAY (United States)
- 320 Reconciling ecological and social justice to promote biodiversity conservation
E. SHOREMAN-OUIMET (United States), H. KOPNINA (Netherlands)
- 439 Linking place-based citizen science with large-scale conservation research: A case study of bird-building collisions and the role of professional scientists
S.R. LOSS, S.S. LOSS, T. WILL, P.P. MARRA (USA)

Regular Papers

- 1 Can habitat surrogates predict the response of target species to landscape change?
J.C. PIERSON, P.S. BARTON, P.W. LANE, D.B. LINDENMAYER (Australia)
- 11 Conservation implications of change in antipredator behavior in fragmented habitat: Boreal rodent, the bank vole, as an experimental model
M. HAAPAKOSKI, J. SUNDELL, H. YLÖNEN (Finland)
- 18 Conserving tigers in Malaysia: A science-driven approach for eliciting conservation policy change
D.M. RAYAN (Malaysia, United Kingdom), M. LINKIE (United Kingdom, Singapore)
- 27 Autonomous sound monitoring shows higher use of Amazon old growth than secondary forest by parrots
L. FIGUEIRA (Brazil), J.L. TELLA (Spain), U.M. CAMARGO (Finland), G. FERRAZ (Brazil)

Contents continued on inside back cover

Abstracted/indexed in AGRICOLA database
Biological and Agricultural Index Elsevier BIO
BASE/Current Awareness in Biological Sciences
Cambridge Scientific Abstracts Current Advances
in Ecological Sciences Current Contents
Agriculture Biology & Environmental Sciences
Energy Information Abstracts Environmental
Periodicals Bibliography Excerpta Medica
Embase Geo Abstracts Science Citation Index
Also covered in the abstract and citation database
scopus Full text available on ScienceDirect



0006-3207(201504)184:1;1-V



BIOLOGICAL CONSERVATION

Volume 184 2015



CONTENTS—Continued from outside back cover

- 36 Identification of key marine areas for conservation based on satellite tracking of post-nesting migrating green turtles (*Chelonia mydas*)
M. BAUDOIN, B. DE THOISY, P. CHAMBAULT, R. BERZINS, M. ENTRAYGUES, L. KELLE (France), A. TURNY (Suriname), Y. LE MAHO, D. CHEVALLIER (France)
- 42 Dynamics of the global trade in live reptiles: Shifting trends in production and consequences for sustainability
J.E. ROBINSON, R.A. GRIFFITHS, F.A.V. ST. JOHN, D.L. ROBERTS (UK)
- 51 Sown flower strips in southern Sweden increase abundances of wild bees and hoverflies in the wider landscape
A.M. JÖNSSON, J. EKROOS, J. DÄNHARDT, G.K.S. ÅNDRERSSON, O. OLSSON, H.G. SMITH (Sweden)
- 59 Impact of habitat loss on distributions of terrestrial vertebrates in a high-biodiversity region in Mexico
F. BOTELLO (Mexico), S. SARKAR (United States), V. SÁNCHEZ-CORDERO (Mexico)
- 68 Integrating citizen-science data with movement models to estimate the size of a migratory golden eagle population
A.J. DENNHARDT, A.E. DUERR, D. BRANDES, T.E. KATZNER (USA)
- 79 Landowner conservation awareness across rural-to-urban gradients in Massachusetts
D.B. KITTREDGE, A.G. SHORT GIANOTTI, L.R. HUTYRA, D.R. FOSTER, J.M. GETSON (United States)
- 90 Activity-specific ecological niche models for planning reintroductions of California condors (*Gymnogyps californianus*)
J. D'ELIA, S.M. HAIG, M. JOHNSON, B.G. MARCOT, R. YOUNG (USA)
- 100 Historic hay cutting dates from Sweden 1873–1951 and their implications for conservation management of species-rich meadows
O. ERIKSSON, K. BOLMGREN, A. WESTIN, T. LENNARTSSON (Sweden)
- 108 Factors influencing red wolf–coyote hybridization in eastern North Carolina, USA
J.H. BOHLING, L.P. WAITS (USA)
- 117 Impact of landscape composition and configuration on forest specialist and generalist bird species in the fragmented Lacandona rainforest, Mexico
E. CARRARA, V. ARROYO-RODRÍGUEZ, J.H. VEGA-RIVERA, J.E. SCHONDUBE (Mexico), S.M. DE FREITAS, L. FAHRIG (Canada)
- 127 Natural regeneration of forest vegetation on legacy seismic lines in boreal habitats in Alberta's oil sands region
C.K. VAN RENSEN, S.E. NIELSEN, B. WHITE, T. VINGE, V.J. LIEFFERS (Canada)
- 136 What drives the use of scientific evidence in decision making? The case of the South African Working for Water program
P. NTSHOTSHO, H.E. PROZESKY, K.J. ESLER, B. REYERS (South Africa)
- 145 Genetic pollution of a threatened native crested newt species through hybridization with an invasive congener in the Netherlands
W.R.M. MEILINK (The Netherlands, Belgium, United Kingdom), J.W. ARNTZEN, J.J.C.W. VAN DELFT (The Netherlands), B. WIELSTRA (The Netherlands, United Kingdom)
- 154 Spatial mismatch between marine protected areas and dugongs in New Caledonia
C. CLEGUER (Australia New Caledonia), A. GRECH (Australia), C. GARRIGUE (New Caledonia), H. MARSH (Australia)
- 174 Reptile abundance, but not species richness, increases with regrowth age and spatial extent in fragmented agricultural landscapes of eastern Australia
C.A. MCALPINE, M.E. BOWEN, G.C. SMITH, G. GRAMOTNEV, A.G. SMITH, A. LO CASCIO, W. GOULDING, M. MARON (Australia)
- 182 Integrating hydrological features and genetically validated occurrence data in occupancy modelling of an endemic and endangered semi-aquatic mammal, *Galemys pyrenaicus*, in a Pyrenean catchment
A. CHARBONNEL, L. BUISSON, M. BIFFI, F. D'AMICO, A. BESNARD, S. AULAGNIER, F. BLANC (France), F. GILLET (France, Belgium), V. LACAZE (France), J.R. MICHAUX (Belgium), M. NÉMOZ, C. PAGÉ, J.M. SANCHEZ-PEREZ, S. SAUVAGE, P. LAFFAILLE (France)
- 193 Cavity characteristics, but not habitat, influence nest survival of cavity-nesting birds along a gradient of human impact in the subtropical Atlantic Forest
K.L. COCKLE (USA, Argentina, Canada), A. BODRATI (Argentina), M. LAMMERTINK (Argentina, USA), K. MARTIN (Canada)

Contents continued on last page of this issue



Available online at www.sciencedirect.com

ScienceDirect

CONTENTS—Continued from inside back cover

- 201 Diversity patterns of wild bees and wasps in managed boreal forests: Effects of spatial structure, local habitat and surrounding landscape
D. RUBENE, M. SCHROEDER, T. RANIUS (Sweden)
- 218 Genetic population structure of Peninsular bighorn sheep (*Ovis canadensis nelsoni*) indicates substantial gene flow across US–Mexico border
M.R. BUCHALSKI, A.Y. NAVARRO, W.M. BOYCE, T. WINSTON VICKERS, M.W. TOBLER, L.A. NORDSTROM (United States), J.A. GARCÍA (Mexico), D.A. GILLE, M.C.T. PENEDO, O.A. RYDER, H.B. ERNEST (United States)
- 239 Population genetic SNP analysis of marble and brown trout in a hybridization zone of the Adriatic watershed in Slovenia
S. SUŠNIK BAJEC, G. PUSTOVRH, D. JESENŠEK, A. SNOJ (Slovenia)
- 251 Snow leopard predation in a livestock dominated landscape in Mongolia
Ö. JOHANSSON (Sweden, USA), T. MCCARTHY (USA), G. SAMELIUS (Sweden, USA), H. ANDRÉN (Sweden), L. TUMURSUKH (Mongolia), C. MISHRA (USA, India)
- 259 Crop wild relatives of pigeonpea [*Cajanus cajan* (L.) Millsp.]: Distributions, ex situ conservation status, and potential genetic resources for abiotic stress tolerance
C.K. KHOURY (Colombia, The Netherlands), N.P. CASTAÑEDA-ALVAREZ (Colombia, UK), H.A. ACHICANOY, C.C. SOSA (Colombia), V. BERNAU (Colombia, USA), M.T. KASSA (Canada), S.L. NORTON (Australia), L.J.G. VAN DER MAESEN (The Netherlands), H.D. UPADHYAYA (India, USA, Australia), J. RAMÍREZ-VILLEGAS (Colombia, UK), A. JARVIS (Colombia), P.C. STRUIK (The Netherlands)
- 271 Effectiveness of Community Forest Management at reducing deforestation in Madagascar
R.A. RASOLOFOSON (Denmark, UK), P.J. FERRARO (USA), C.N. JENKINS (Brazil), J.P.G. JONES (UK)
- 278 Ghosts of glaciers and the disjunct distribution of a threatened California moth (*Euproserpinus euterpe*)
D. RUBINOFF, M. SAN JOSE, P. JOHNSON, R. WELLS, K. OSBORNE (United States), J.J. LE ROUX (South Africa)
- 290 Using null models to identify under-represented species in protected areas: A case study using European amphibians and reptiles
D. SÁNCHEZ-FERNÁNDEZ, P. ABELLÁN (Spain)
- 300 Are wildlife overpasses of conservation value for birds? A study in Australian sub-tropical forest, with wider implications
S. PELL, D. JONES (Australia)
- 310 The use of habitat and dispersal models in protecting European black poplar (*Populus nigra* L.) from genetic introgression in Slovenia
M. DEBELJAK, A. FICKO, R. BRUS (Slovenia)
- 327 Energy development and avian nest survival in Wyoming, USA: A test of a common disturbance index
M.G. HETHCOAT, A.D. CHALFOUN (USA)
- 335 Projected impact of climate change on the effectiveness of the existing protected area network for biodiversity conservation within Yunnan Province, China
R.J. ZOMER, J. XU, M. WANG (China), A. TRABUCCO (Italy), Z. LI (China)
- 346 Inundation requirements for persistence and recovery of river red gums (*Eucalyptus camaldulensis*) in semi-arid Australia
K. CATELOTTI, R.T. KINGSFORD, G. BINO, P. BACON (Australia)
- 357 Effects of inbreeding and parental incubation on captive breeding success in Hawaiian crows
P.E.A. HOECK (USA), M.E. WOLAK (United Kingdom), R.A. SWITZER, C.M. KUEHLER, A.A. LIEBERMAN (USA)
- 380 Chytrid fungus infections in laboratory and introduced *Xenopus laevis* populations: assessing the risks for U.K. native amphibians
R.C. TINSLEY, P.G. COXHEAD, L.C. STOTT, M.C. TINSLEY, M.Z. PICCINNI, M.J. GUILLE (UK)
- 389 Reversible effects of fertilizer use on population trends of waterbirds in Europe
A.P. MØLLER (France), K. LAURSEN (Denmark)
- 396 Anthropogenic impact on macrobenthic communities and consequences for shorebirds in Northern France: A complex response
C. ROLET (France), N. SPILMONT (France, Australia), D. DAVOULT, E. GOBERVILLE, C. LUCZAK (France)
- 405 One size does not fit all: Importance of adjusting conservation practices for endangered hawksbill turtles to address local nesting habitat needs in the eastern Pacific Ocean
M.J. LILES (USA, El Salvador), M.J. PETERSON, J.A. SEMINOFF (USA), E. ALTAMIRANO (Nicaragua), A.V. HENRÍQUEZ (El Salvador), A.R. GAOS (USA), V. GADEA, J. URTEAGA, P. TORRES (Nicaragua), B.P. WALLACE (USA), T.R. PETERSON (USA, Sweden)
- 414 Protected areas in Borneo may fail to conserve tropical forest biodiversity under climate change
S.A. SCRIVEN, J.A. HODGSON, C.J. MCCLEAN, J.K. HILL (UK)
- 424 Factors influencing public participation in conservation activities in urban areas: A case study in Yokohama, Japan
R. SAKURAI, H. KOBORI, M. NAKAMURA, T. KIKUCHI (Japan)

Contents continued on previous page

CONTENTS—Continued from next page

- 431 The world's largest wilderness protection network after 50 years: An assessment of ecological system representation in the U.S. National Wilderness Preservation System
M.S. DIETZ, R.T. BELOTE, G.H. APLET, J.L. AYCRIGG (USA)
- 446 Scenarios of future land use change around United States' protected areas
S. MARTINUZZI, V.C. RADELOFF (USA), L.N. JOPPA (UK), C.M. HAMILTON, D.P. HELMERS, A.J. PLANTINGA, D.J. LEWIS (USA)
- 456 Effectiveness of protected areas in the Western Caucasus before and after the transition to post-socialism
E.V. BRAGINA (USA, Russia), V.C. RADELOFF (USA), M. BAUMANN (Germany), K. WENDLAND (USA), T. KUEMMERLE (Germany), A.M. PIDGEON (USA)

Book Review

- 66 Countdown: Our Last, Best Hope for a Future on Earth? Alan Weisman. Little, Brown and Company (2013). xiii+513 pp., \$28.00, ISBN: 978-0-316-09775-8 (Hardback)
E. CRIST (USA)

BIOLOGICAL CONSERVATION

Volume 185 2015

Special Issue on Tropical Island Conservation: Rat Eradication for Species Recovery

- 1 Tropical island conservation: Rat eradication for species recovery
J.C. RUSSELL (New Zealand), N.D. HOLMES (USA)
- 8 Factors associated with rodent eradication failure
N.D. HOLMES, R. GRIFFITHS, M. POTT, A. ALIFANO, D. WILL, A.S. WEGMANN (USA), J.C. RUSSELL (New Zealand)
- 17 Best practice guidelines for rat eradication on tropical islands
B. KEITT, R. GRIFFITHS (United States), S. BOUDJELAS, K. BROOME (New Zealand), S. CRANWELL (Fiji), J. MILLETT (UK), W. PITT (United States), A. SAMANIEGO-HERRERA (Mexico, New Zealand)
- 27 Improving the odds: Assessing bait availability before rodent eradications to aid in selecting bait application rates
M. POTT, A.S. WEGMANN, R. GRIFFITHS (USA), A. SAMANIEGO-HERRERA (Mexico, New Zealand), R.J. CUTHBERT (United Kingdom), M.D.L. BROOKE (UK), W.C. PITT, A.R. BERENTSEN, N.D. HOLMES, G.R. HOWALD (USA), K. RAMOS-RENDÓN (Mexico), J.C. RUSSELL (New Zealand)
- 36 Non-target species mortality and the measurement of brodifacoum rodenticide residues after a rat (*Rattus rattus*) eradication on Palmyra Atoll, tropical Pacific
W.C. PITT, A.R. BERENTSEN, A.B. SHIELS, S.F. VOLKER, J.D. EISEMANN, A.S. WEGMANN (United States), G.R. HOWALD (Canada)
- 47 The next generation of rodent eradications: Innovative technologies and tools to improve species specificity and increase their feasibility on islands
K.J. CAMPBELL (USA, Australia), J. BEEK (USA), C.T. EASON, A.S. GLEN (New Zealand), J. GODWIN, F. GOULD, N.D. HOLMES, G.R. HOWALD, F.M. MADDEN, J.B. PONDER, D.W. THREADGILL, A.S. WEGMANN (USA), G.S. BAXTER (Australia)
- 59 Invasive rat interactions and over-invasion on a coral atoll
J.C. RUSSELL (New Zealand), S. CAUT (Spain), S.H. ANDERSON, M. LEE (New Zealand)
- 66 The response of black rats (*Rattus rattus*) to evergreen and seasonally arid habitats: Informing eradication planning on a tropical island
G.A. HARPER (New Zealand, Seychelles), M. VAN DINTHER (Seychelles), J.C. RUSSELL (New Zealand), N. BUNBURY (Seychelles)
- 75 Trophic roles of black rats and seabird impacts on tropical islands: Mesopredator release or hyperpredation?
D. RINGLER (France), J.C. RUSSELL (New Zealand), M. LE CORRE (France)
- 85 Seabird recovery and vegetation dynamics after Norway rat eradication at Tromelin Island, western Indian Ocean
M. LE CORRE (France), D.K. DANCKWERTS (France, South Africa), D. RINGLER, M. BASTIEN, S. ORLOWSKI, C. MOREY RUBIO, D. PINAUD, T. MICOL (France)

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica/Embase; Geo Abstracts; Science Citation Index). Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®



0006-3207(201505)185:C;1-T



BIOLOGICAL CONSERVATION

Volume 186 2015

Perspective

- 143 What constitutes a 'native' species? Insights from the Quaternary faunal record
J.J. CREES, S.T. TURVEY (UK)

Regular Papers

- 1 Plantations, not farmlands, cause biotic homogenisation of ground-active beetles in south-eastern Australia
N. SWEANEY, D.A. DRISCOLL, D.B. LINDENMAYER, N. PORCH (Australia)
- 12 Environmental and anthropogenic factors structuring waterbird habitats of tropical coastal lagoons: Implications for management
D.C. TAVARES, D.L. GUADAGNIN (Brazil), J.F. DE MOURA (Germany), S. SICILIANO (Brazil), A. MERICO (Germany)
- 22 Reviewer recommendations and editors' decisions for a conservation journal: Is it just a crapshoot? And do Chinese authors get a fair shot?
A. CAMPOS-ARCEIZ (Malaysia), R.B. PRIMACK (USA), L.P. KOH (Australia)
- 28 Adult sex-ratio distortion in the native European polecat is related to the expansion of the invasive American mink
R. BARRIENTOS (Spain)
- 35 Consumption of bushmeat around a major mine, and matched communities, in Madagascar
V.C. RANDRIAMAMONJY (Madagascar), A. KEANE (UK), H.J. RAZAFIMANAHAKA (Madagascar), R.K.B. JENKINS, J.P.G. JONES (UK)
- 44 Combining information for monitoring at large spatial scales: First statewide abundance estimate of the Florida manatee
J. MARTIN, H.H. EDWARDS, C.J. FONNESBECK, S.M. KOSLOVSKY, C.W. HARMAK, T.M. DANE (USA)
- 52 Behavioural response to anthropogenic habitat disturbance: Indirect impact of harvesting on whinchat populations in Switzerland
M.U. GRÜEBLER, H. SCHULER, R. SPAAR, B. NAEF-DAENZER (Switzerland)
- 60 Predicting the effect of invertebrate regime shifts on wading birds: Insights from Poole Harbour, UK
K.M. BOWGEN, R.A. STILLMAN, R.J.H. HERBERT (UK)
- 69 High parasitoid diversity in remnant natural vegetation, but limited spillover into the agricultural matrix in South African vineyard agroecosystems
R. GAIGHER, J.S. PRYKE, M.J. SAMWAYS (South Africa)
- 75 A severe predator-induced population decline predicted for endangered, migratory swift parrots (*Lathamus discolor*)
R. HEINSOHN, M. WEBB (Australia), R. LACY (USA), A. TERAUDS, R. ALDERMAN, D. STOJANOVIC (Australia)
- 83 Long term thinning and logging in Australian cypress pine forest: Changes in habitat attributes and response of fauna
T.J. EYRE, D.J. FERGUSON, M. KENNEDY, J. ROWLAND, M. MARON (Australia)
- 97 Mobility explains the response of aerial insectivorous bats to anthropogenic habitat change in the Neotropics
E. BADER (Switzerland, Panama), K. JUNG (Germany), E.K.V. KALKO (Panama, Germany), R.A. PAGE (Panama), R. RODRIGUEZ (Panama, Colombia), T. SATTLER (Panama, Germany)
- 107 Use of restored habitat by rainforest birds is limited by spatial context and species' functional traits but not by their predicted climate sensitivity
A.N.D. FREEMAN, C.P. CATTERALL, K. FREEBODY (Australia)
- 115 Juvenile invasive red-eared slider turtles negatively impact the growth of native turtles: Implications for global freshwater turtle populations
S.H. PEARSON, H.W. AVERY, J.R. SPOTILA (USA)
- 123 Resource selection and connectivity reveal conservation challenges for reintroduced brown bears in the Italian Alps
W. PETERS, M. HEBBLEWHITE (Italy, USA), M. CAVEDON, L. PEDROTTI, A. MUSTONI, F. ZIBORDI, C. GROFF, M. ZANIN, F. CAGNACCI (Italy)
- 134 Age and residency duration of loggerhead turtles at a North Pacific bycatch hotspot using skeletochronology
C.N. TURNER TOMASZEWICZ, J.A. SEMINOFF, L. AVENS, L.R. GOSHE, S.H. PECKHAM (USA), J.M. RGUEZ-BARON (Mexico), K. BICKERMAN, C.M. KURLE (USA)

Contents continued on inside back cover

Abstracted/indexed in: AGRICOLA database, Biological and Agricultural Index, Elsevier BIOBASE/Current Awareness in Biological Sciences, Cambridge Scientific Abstracts, Current Advances in Ecological Sciences, Current Contents: Agriculture, Biology & Environmental Sciences, Energy Information Abstracts, Environmental Periodicals Bibliography, Excerpta Medica, Embase, Geo Abstracts, Science Citation Index. Also covered in the abstract and citation database scopus. Full text available on ScienceDirect.



0006-3207(201506)186:0;1-R

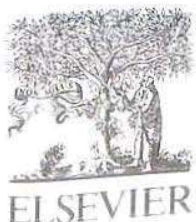
BIOLOGICAL CONSERVATION

Volume 186 2015

CONTENTS—Continued from outside back cover

- 149 Mitigation of vessel-strike mortality of endangered Bryde's whales in the Hauraki Gulf, New Zealand
R. CONSTANTINE (New Zealand), M. JOHNSON (United Kingdom), L. RIEKKOLA, S. JERVIS, L. KOZMIAN-LEDWARD, T. DENNIS (New Zealand), L.G. TORRES (USA), N. AGUILAR DE SOTO (New Zealand, Spain)
- 158 Evaluation of ecosystem-based marine management strategies based on risk assessment
G.J. PIET, R.H. JONGBLOED (The Netherlands), A.M. KNIGHTS (UK), J.E. TAMIS, A.J. PAIJMANS, M.T. VAN DER SLUIS, P. DE VRIES (The Netherlands), L.A. ROBINSON (UK)
- 167 Impacts of extractive forest uses on bird assemblages vary with landscape context in lowland Nepal
B.R. DAHAL, C.A. MCALPINE, M. MARON (Australia)
- 176 Witnessing extinction – Cumulative impacts across landscapes and the future loss of an evolutionarily significant unit of woodland caribou in Canada
C.J. JOHNSON, L.P.W. EHLERS, D.R. SEIP (Canada)
- 187 Re-structuring hedges: Rejuvenation management can improve the long term quality of hedgerow habitats for wildlife in the UK
J.T. STALEY, S.R. AMY, N.P. ADAMS, R.E. CHAPMAN, J.M. PEYTON, R.F. PYWELL (UK)
- 197 Sea-trout habitat fragmentation affects threatened freshwater pearl mussel
E. MARTIN ÖSTERLING, H. SÖDERBERG (Sweden)
- 204 Climate oscillations and conservation measures regulate white-faced capuchin population growth and demography in a regenerating tropical dry forest in Costa Rica
F.A. CAMPOS (Canada), K.M. JACK (USA), L.M. FEDIGAN (Canada)
- 214 A comparison of wintering duck numbers among European rice production areas with contrasting flooding regimes
C.A. PERNOLLET, A. GUELMAMI (France), A.J. GREEN, A. CURCÓ MASIP, B. DIES (Spain), G. BOGLIANI, F. TESIO (Italy), A. BROGI, M. GAUTHIER-CLERC, M. GUILLEMAIN (France)
- 225 Home in the heat: Dramatic seasonal variation in home range of desert golden eagles informs management for renewable energy development
M. BRAHAM, T. MILLER, A.E. DUERR, M. LANZONE, A. FESNOCK, L. LAPRE, D. DRISCOLL, T. KATZNER (USA)
- 233 Looking beyond rare species as umbrella species: Northern Bobwhites (*Colinus virginianus*) and conservation of grassland and shrubland birds
A.D. CROSBY, R.D. ELMORE, D.M. LESLIE JR., R.E. WILL (USA)
- 241 The realized niche of captive-hatched Houbara Bustards translocated in Morocco meets expectations from the wild
A.-C. MONNET (France, Morocco), Y. HINGRAT (Morocco, United Arab Emirates), F. JIGUET (France)
- 251 Shifts in indigenous culture relate to forest tree diversity: A case study from the Tsimane', Bolivian Amazon
M. GUËZE, A.C. LUZ, J. PANEQUE-GÁLVEZ, M.J. MACÍA, M. ORTA-MARTÍNEZ, J. PINO, V. REYES-GARCÍA (Spain)
- 260 Hunting bamboo: Foraging patch selection and utilization by giant pandas and implications for conservation
W. WEI, Y. NIE, Z. ZHANG, Y. HU, L. YAN, D. QI, X. LI, F. WEI (China)
- 268 Natura 2000 – Solution for Eastern Europe or just a good start? The Šumava National Park as a test case
Z. KRĚNOVÁ, P. KINDLMANN (Czech Republic)
- 276 Better land-use allocation outperforms land sparing and land sharing approaches to conservation in Central Kalimantan, Indonesia
E.A. LAW (Australia), E. MEIJAARD (Indonesia, Brunei Darussalam), B.A. BRYAN, T. MALLAWAARACHCHI, L.P. KOH, K.A. WILSON (Australia)
- 287 Using lightweight unmanned aerial vehicles to monitor tropical forest recovery
R.A. ZAHAWI (Costa Rica), J.P. DANDOIS, K.D. HOLL, D. NADWODNY, J.L. REID, E.C. ELLIS (USA)
- 296 "Invisible" wildlife trades: Southeast Asia's undocumented illegal trade in wild ornamental plants
J. PHELPS (Indonesia, Singapore), E.L. WEBB (Singapore)

Contents continued on last page of this issue



Available online at www.sciencedirect.com

ScienceDirect



CONTENTS—Continued from inside back cover

- 306 Trade-offs between bird diversity and abundance, yields and revenue in smallholder oil palm plantations in Sumatra, Indonesia
M. TEUSCHER, M. VORLAUFER, M. WOLLNI, U. BROSE (Germany), Y. MULYANI (Indonesia), Y. CLOUGH (Sweden, Germany)
- 319 Shared resources between giant panda and sympatric wild and domestic mammals
F. WANG, W.J. MCSHEA (USA), D. WANG, S. LI (China)
- 326 Evaluation and optimisation of underwater visual census monitoring for quantifying change in rocky-reef fish abundance
T. JONES, R.J. DAVIDSON, J.P.A. GARDNER, J.J. BELL (New Zealand)
- 337 Fire frequency matters more than fire size: Testing the pyrodiversity–biodiversity paradigm for at-risk small mammals in an Australian tropical savanna
A.D. GRIFFITHS, S.T. GARNETT, B.W. BROOK (Australia)
- 347 Seabird–wind farm interactions during the breeding season vary within and between years: A case study of lesser black-backed gull *Larus fuscus* in the UK
C.B. THAXTER, V.H. ROSS-SMITH (UK), W. BOUTEN (The Netherlands), N.A. CLARK, G.J. CONWAY, M.M. REHFISCH, N.H.K. BURTON (UK)
- 359 Intermediate disturbance promotes invasive ant abundance
M. VONSHAK, D.M. GORDON (USA)

Book Review

- 122 The Sounding of the Whale, D. Graham Burnett. The University of Chicago Press (2012). 793 pp. Cloth \$45.00, ISBN: 9780226081304, Paper \$30.00, ISBN: 9780226100579
S. CRIPPS (United Kingdom)

BIOLOGICAL CONSERVATION

Volume 187 2015

Letters to the Editors

- 279 Data collected using the randomised response technique must be analysed using specialised statistical methods
A.M. KEANE, A. NUNO, F.A.V. ST JOHN (UK)
- 281 Statistical approaches for analyzing randomized response technique data
F.J. BREIDT, M.C. GAVIN, S.G. LEWIS (United States)

Regular Papers

- 1 Human wildlife conflict involving large carnivores in Qilianshan, China and the minimal paw-print of snow leopards
J. ALEXANDER, P. CHEN, P. DAMERELL, W. YOUKUI (China), J. HUGHES (UK), K. SHI (China), P. RIORDAN (China, UK)
- 10 Action on multiple fronts, illegal poisoning and wind farm planning, is required to reverse the decline of the Egyptian vulture in southern Spain
A. SANZ-AGUILAR, J.A. SÁNCHEZ-ZAPATA, M. CARRETE, J.R. BENÍTEZ, E. ÁVILA, R. ARENAS, J.A. DONÁZAR (Spain)
- 19 Spatial patterns of mammal occurrence in forest strips surrounded by agricultural crops of the Chaco region, Argentina
M.M. NÚÑEZ-REGUEIRO, L. BRANCH, R.J. FLETCHER JR. (United States), G.A. MARÁS, E. DERLINDATI, A. TÁLAMO (Argentina)
- 27 Traffic noise masks acoustic signals of freshwater stream fish
D.E. HOLT, C.E. JOHNSTON (United States)
- 41 A cross-taxon analysis of the impact of climate change on abundance trends in central Europe
D.E. BOWLER, P. HAASE, I. KRÖNCKE, O. TACKENBERG, H.G. BAUER, C. BRENDEL (Germany), R.W. BROOKER (UK), M. GERISCH, K. HENLE, T. HICKLER, C. HOF, S. KLOTZ, I. KÜHN (Germany), S. MATESANZ (Spain), R. O'HARA, D. RUSSELL, O. SCHWEIGER (Germany), F. VALLADARES (Spain), E. WELK, M. WIEMERS, K. BÖHNING-GAESE (Germany)
- 51 Using market data and expert opinion to identify overexploited species in the wild bird trade
J.B.C. HARRIS, J.M.H. GREEN (USA), D.M. PRAWIRADILAGA (Indonesia), X. GIAM (USA), GIYANTO, D. HIKMATULLAH, C.A. PUTRA (Indonesia), D.S. WILCOVE (USA)
- 61 Predicting local extinctions of Amazonian vertebrates in forest islands created by a mega dam
M. BENCHIMOL (UK, Brazil), C.A. PERES (UK)
- 74 Local-scale disturbances can benefit an endangered, fire-adapted plant species in Western Mediterranean heathlands in the absence of fire
M. PANIW (Spain), R. SALGUERO-GÓMEZ (Australia, Germany, Ireland), F. OJEDA (Spain)
- 82 Population viability analysis and the effects of light availability and litter on populations of *Cirsium pitcheri*, a rare, monocarpic perennial of Great Lakes shorelines
C.L. JOLLS, J.E. MARIK, S.I. HAMZÉ, K. HAVENS (United States)
- 91 Skin bacteria provide early protection for newly metamorphosed southern leopard frogs (*Rana sphenoccephala*) against the frog-killing fungus, *Batrachochytrium dendrobatidis*
W.M. HOLDEN, S.M. HANLON, D.C. WOODHAMS, T.M. CHAPPELL, H.L. WELLS, S.M. GLISSON, V.J. MCKENZIE, R. KNIGHT, M.J. PARRIS, L.A. ROLLINS-SMITH (USA)
- 103 Climate change modifies risk of global biodiversity loss due to land-cover change
C.S. MANTYKA-PRINGLE (Australia, Canada), P. VISCONTI (UK, Italy), M. DI MARCO (Italy), T.G. MARTIN (Australia), C. RONDININI (Italy), J.R. RHODES (Australia)
- 112 Relative importance of pasture size and grazing continuity for the long-term conservation of European dung beetles
J. BUSE (Germany), M. ŠLACHTA, F.X.J. SLADECEK (Czech Republic), M. PUNG, T. WAGNER, M.H. ENTLING (Germany)
- 120 Pollinator-friendly management does not increase the diversity of farmland bees and wasps
T.J. WOOD, J.M. HOLLAND, D. GOULSON (UK)
- 127 Relative sensitivity to climate change of species in northwestern North America
M.J. CASE, J.J. LAWLER, J.A. TOMASEVIC (United States)
- 134 How well do protected area networks support taxonomic and functional diversity in non-target taxa? The case of Iberian freshwaters
S. GUARESCHI (Spain), D.T. BILTON (UK), J. VELASCO, A. MILLÁN (Spain), P. ABELLÁN (Spain, USA)

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica/Embase; Geo Abstracts; Science Citation Index) Also covered in the abstract and citation database Scopus. Full text available on ScienceDirect.



Contents continued on inside back cover



0006-3207(201507)187:C;1-P



BIOLOGICAL CONSERVATION

Volume 187 2015

CONTENTS—Continued from outside back cover

- 145 The fire ant *Solenopsis saevissima* and habitat disturbance alter ant communities
A. DEJEAN, R. CÉRÉGHINO (France), M. LEPONCE (Belgium), V. ROSSI (Cameroun), O. ROUX, A. COMPIN (France), J.H.C. DELABIE (Brazil), B. CORBARA (France)
- 154 Biodiversity collision blackspots in Poland: Separation causality from stochasticity in roadkills of butterflies
P. SKÓRKA, M. LENDA, D. MOROŃ, R. MARTYKA, P. TRYJANOWSKI (Poland), W.J. SUTHERLAND (United Kingdom)
- 164 Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States
H.E. JOHNSON, S.W. BRECK, S. BARUCH-MORDO, D.L. LEWIS, C.W. LACKEY, K.R. WILSON, J. BRODERICK, J.S. MAO, J.P. BECKMANN (USA)
- 173 Interactive effects of deer, earthworms and non-native plants on rare forest plant recruitment
A. DÁVALOS, V. NUZZO, B. BLOSSEY (USA)
- 182 Ex situ seed collections will benefit from considering spatial sampling design and species' reproductive biology
S. HOBAN, A. STRAND (United States)
- 192 Individual traits and extrinsic factors influence survival of the threatened pin-tailed sandgrouse (*Pterocles alchata*) in Europe
A. BENÍTEZ-LÓPEZ, F. CASAS, F. MOUGEOT, J.T. GARCÍA, C.A. MARTÍN (Spain), L. TATIN, A. WOLFF (France), J. VIÑUELA (Spain)
- 201 Perceptions of priority issues in the conservation of biodiversity and ecosystems in India
V. VARMA, J. RATNAM, V. VISWANATHAN, A.M. OSURI (India), J.C. BIESMEIJER (The Netherlands), M.D. MADHUSUDAN (India), M. SANKARAN (India, UK), M. KRISHNADAS (India, USA), D. BARUA (India), M. BUDRUK (USA), K. ISVARAN, R. JAYAPAL, J. JOSHI (India), K.K. KARANTH (USA, India), J. KRISHNASWAMY, R. KUMAR, S. MUKHERJEE, H. NAGENDRA, M. NIPHADKAR (India), N. OWEN (UK), N. PAGE, S. PRASAD, S. QUADER, R. NANDINI, V.V. ROBIN (India), S.M. SAIT (UK), M.A. SHAH, H. SOMANATHAN, U. SRINIVASAN, B. SUNDARAM (India)
- 212 Reliable monitoring of elephant populations in the forests of India: Analytical and practical considerations
D. JATHANNA (India), K.U. KARANTH (India, United States), N.S. KUMAR, V.R. GOSWAMI, D. VASUDEV (India), K.K. KARANTH (India, United States)
- 221 Protected areas as elicitors of human well-being in a developed region: A new synthetic (socioeconomic) approach
F.J. BONET-GARCÍA, A.J. PÉREZ-LUQUE, R.A. MORENO-LLORCA, R. PÉREZ-PÉREZ, C. PUERTA-PIÑERO, R. ZAMORA (Spain)
- 230 Urban land use does not limit weaver bird movements between wetlands in Cape Town, South Africa
J.-L. CALDER, G.S. CUMMING, K. MACIEJEWSKI, H.D. OSCHADLEUS (South Africa)
- 240 The conservation value of urban green space habitats for Australian native bee communities
C.G. THRELFALL, K. WALKER, N.S.G. WILLIAMS, A.K. HAHS (Australia), L. MATA (Spain, Australia), N. STORK, S.J. LIVESLEY (Australia)
- 249 Understanding markets to conserve trade-threatened species in CITES
D.W.S. CHALLENGER, S.R. HARROP, D.C. MACMILLAN (UK)
- 260 Trends in Rocky Mountain amphibians and the role of beaver as a keystone species
B.R. HOSSACK, W.R. GOULD, D.A. PATLA, E. MUTHS, R. DALEY, K. LEGG, P.S. CORN (USA)
- 270 Analysis of combined data sets yields trend estimates for vulnerable spruce-fir birds in northern United States
J. RALSTON, D.I. KING, W.V. DELUCA, G.J. NIEMI, M.J. GLENNON, J.C. SCARL, J.D. LAMBERT (USA)
- Short Communication**
- 34 Distribution, relative abundance, and conservation status of Asian elephants in Karnataka, southern India
M.D. MADHUSUDAN, N. SHARMA, R. RAGHUNATH, N. BASKARAN, C.M. BIPIN, S. GUBBI, A.J.T. JOHNSINGH, J. KULKARNI, H.N. KUMARA, P. MEHTA (India), R. PILLAY (India, USA), R. SUKUMAR (India)
- Book Review**
- 73 Tidal Marsh Restoration: A Synthesis of Science and Management, Charles T. Roman, David M. Burdick (Eds.). Island Press (2012). 406 pp., Hardback \$100, ISBN: 9781597265751, Paper \$50, ISBN: 9781597265758. Ecology, Conservation, and Restoration of Tidal Marshes: The San Francisco Estuary, Arnas Palaima (Ed.). University of California Press (2012). 265 pp., Hardback £75, ISBN: 9780520274297
A. GRANT (United Kingdom)



Available online at www.sciencedirect.com

ScienceDirect

BIOLOGICAL CONSERVATION

Volume 188 2015

Special Issue: Ecology and Conservation of Avian Insectivores of the Rainforest Understory: A Pan-Tropical Perspective

- 1 Ecology and conservation of avian insectivores of the rainforest understory: A pantropical perspective
L.L. POWELL (Brazil, USA), N.J. CORDEIRO (USA), J.A. STRATFORD (Brazil, USA)
- 11 Ongoing changes in the avifauna of La Selva Biological Station, Costa Rica: Twenty-three years of Christmas Bird Counts
W.A. BOYLE, B.J. SIGEL (USA)
- 22 Increased abundance, but reduced nest predation in the chestnut-backed antbird in Costa Rican rainforest fragments: surprising impacts of a pervasive snake species
D.M. VISCO, T.W. SHERRY (USA)
- 32 Can habitat specialization patterns of Neotropical birds highlight vulnerable areas for conservation in the Atlantic rainforest, southern Brazil?
L. DOS ANJOS (Brazil), C.D. COLLINS, R.D. HOLT (United States), G.H. VOLPATO, E.V. LOPES, G.M. BOCHIO (Brazil)
- 41 Severe declines of understory birds follow illegal logging in Upper Guinea forests of Ghana, West Africa
N. ARCILLA (UK, USA), L.H. HOLBECH (Ghana), S. O'DONNELL (USA)
- 50 Importance of Ethiopian shade coffee farms for forest bird conservation
E.R. BUECHLEY (USA), Ç.H. ŞEKERCIOĞLU (USA, Turkey), A. ATICKEM (Norway), G. GEBREMICHAEL (Ethiopia), J.K. NDUNGU (Kenya), B.A. MAHAMUED (United Kingdom), T. BEYENE (Ethiopia), T. MEKONNEN (Norway, Ethiopia), L. LENS (Belgium)
- 61 Forest fragmentation in an African biodiversity hotspot impacts mixed-species bird flocks
N.J. CORDEIRO (USA), L. BORGHEISIO (Italy), M.P. JOHO (Tanzania), T.J. MONOSKI (USA), V.J. MKONGEWA (Tanzania), C.J. DAMPF (USA)
- 72 Response of mixed-species flocks to habitat alteration and deforestation in the Andes
G.J. COLORADO ZULUAGA (USA, Colombia), A.D. RODEWALD (USA)
- 82 Impacts of selective logging on insectivorous birds in Borneo: The importance of trophic position, body size and foraging height
K.C. HAMER, R.J. NEWTON, F.A. EDWARDS (UK), S. BENEDICK (Malaysia), S.H. BOTTRELL, D.P. EDWARDS (UK)
- 89 Integrating life history traits and forest structure to evaluate the vulnerability of rainforest birds along gradients of deforestation and fragmentation in eastern Australia
D.C. PAVLACKY JR., H.P. POSSINGHAM, A.W. GOLDIZEN (Australia)
- 100 Heterogeneous movement of insectivorous Amazonian birds through primary and secondary forest: A case study using multistate models with radiotelemetry data
L.L. POWELL, J.D. WOLFE, E.I. JOHNSON (Brazil, USA), J.E. HINES, J.D. NICHOLS (USA), P.C. STOUFFER (Brazil, USA)
- 109 Forest fragmentation alters microhabitat availability for Neotropical terrestrial insectivorous birds
J.A. STRATFORD (USA, Brazil), P.C. STOUFFER (Brazil, USA)
- 116 Absence of microclimate selectivity in insectivorous birds of the Neotropical forest understory
H.S. POLLOCK, Z.A. CHEVIRON, T.J. AGIN, J.D. BRAWN (USA)

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica; Embase; Geo Abstracts; Science Citation Index) Also covered in the abstract and citation database Scopus. Full text available on ScienceDirect.



0006-3207(201508)188:0:1-N

BIOLOGICAL CONSERVATION

Volume 189 2015

Special Issue: Detecting and Understanding Non-compliance with Conservation Rules

- 1 Detecting and understanding non-compliance with conservation rules
J.N. SOLOMON, M.C. GAVIN, M.L. GORE (USA, New Zealand)
- 5 How to ask sensitive questions in conservation: A review of specialized questioning techniques
A. NUNO, F.A.V. ST JOHN (United Kingdom)
- 16 Quantifying illegal hunting: A novel application of the quantitative randomised response technique
A. CONTEH (New Zealand), M.C. GAVIN (New Zealand, USA), J. SOLOMON (USA)
- 24 Estimating non-compliance among recreational fishers: Insights into factors affecting the usefulness of the Randomized Response and Item Count Techniques
A.S. THOMAS (New Zealand), M.C. GAVIN (New Zealand, USA), T.L. MILFONT (New Zealand)
- 33 Mobile decision-tree tool technology as a means to detect wildlife crimes and build enforcement networks
H.E. KRETSER (USA), R. WONG (China), S. ROBERTON (Vietnam), C. PERSHYN (USA), J. HUANG, F. SUN, A. KANG (China), P. ZAHLER (USA)
- 39 Preventing illegal, unreported and unregulated (IUU) fishing: A situational approach
G.A. PETROSSIAN (USA)
- 49 Local perceptions of risk associated with poaching of wildlife implicated in human-wildlife conflicts in Namibia
J.S. KAHLER, M.L. GORE (USA)
- 59 Tolerance of wolves in Wisconsin: A mixed-methods examination of policy effects on attitudes and behavioral inclinations
C. BROWNE-NUÑEZ, A. TREVES, D. MACFARLAND, Z. VOYLES, C. TURNG (USA)
- 72 Bags and tags: Randomized response technique indicates reductions in illegal recreational fishing of red abalone (*Haliotis rufescens*) in Northern California
S.G. LEWIS (USA)
- 78 Coping with illegal fishing: An institutional account of success and failure in Namibia and South Africa
M. SJÖSTEDT, A. SUNDSTRÖM (Sweden)
- 86 Evaluating deterrents of illegal behaviour in conservation: Carnivore killing in rural Taiwan
F.A.V. ST. JOHN (United Kingdom), C.-H. MAI, K.J.-C. PEI (Taiwan)

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica; Embase; Geo Abstracts; Science Citation Index) Also covered in the abstract and citation database Scopus. Full text available on ScienceDirect.



0006-3207(201509)189:C;1-I

BIOLOGICAL CONSERVATION

Volume-190 2015

Letters to the Editor

- 188 A response to Gray et al. about the decline of hunting by indigenous peoples in Ecuadorian Amazonia
A.H. SIRÉN (Finland)
- 189 Both extensive and intensive study designs are needed to understand wild resource harvesting: A reply to Sirén
C.L. GRAY, M. BOZIGAR, R.E. BILSBORROW (USA)

Review

- 179 A unifying framework for the underlying mechanisms of avian avoidance of wind turbines
R.F. MAY (Norway)

Perspectives

- 60 Multiple threats, or multiplying the threats? Interactions between invasive predators and other ecological disturbances
T.S. DOHERTY, C.R. DICKMAN, D.G. NIMMO, E.G. RITCHIE (Australia)
- 70 Wood-pastures of Europe: Geographic coverage, social-ecological values, conservation management, and policy implications
T. PLIENINGER (Denmark), T. HARTEL (Romania), B. MARTÍN-LÓPEZ (Denmark, Spain), G. BEAUFOY (UK), E. BERGMEIER (Germany), K. KIRBY (UK), M.J. MONTERO, G. MORENO (Spain), E. OTEROS-ROZAS (Denmark, Spain), J. VAN UYTVANCK (Belgium)

Regular Papers

- 2 Defaunation affects the populations and diets of rodents in Neotropical rainforests
M. GALETTI (Brazil), R. GUEVARA (Mexico), C.L. NEVES, R.R. RODARTE, R.S. BOVENDORP, M. MOREIRA (Brazil), J.B. HOPKINS III (USA, China), J.D. YEAKEL (USA)
- 14 Going the extra mile: Ground-based monitoring of olive ridley turtles reveals Gabon hosts the largest rookery in the Atlantic
K. METCALFE (UK), P.D. AGAMBOUÉ, E. AUGOWET, F. BOUSSAMBA, F. CARDIEC, J.M. FAY, A. FORMIA, J.R. KEMA KEMA, C. KOUEREY, B.D.K. MABERT (Gabon), S.M. MAXWELL (USA), G. MINTON, G.A. MOUNGUENGUI MOUNGUENGUI, C. MOUSSOUNDA, N. MOUKOUMOU, J.C. MANFOUMBI, A.M. NGUEMA, J. NZEGOUÉ, R.J. PARNELL, P. DU PLESSIS, G.-P. SOUNGUET (Gabon), D. TILLEY (UK), S. VERHAGE, W. VIJJOEN, L. WHITE (Gabon), M.J. WITT, B.J. GODLEY (UK)
- 23 Mesopredator spatial and temporal responses to large predators and human development in the Santa Cruz Mountains of California
Y. WANG, M.L. ALLEN, C.C. WILMERS (United States)
- 34 Land cover mapping and data availability in critical terrestrial ecoregions: A global perspective with Landsat thematic mapper and enhanced thematic mapper plus data
L. YU (China), Y. SHI (Switzerland, UK), P. GONG (China)
- 43 Climate change challenges the current conservation strategy for the giant panda
G. SHEN (China), S.L. PIMM (USA), C. FENG, G. REN, Y. LIU, W. XU, J. LI, X. SI, Z. XIE (China)
- 51 Successful translocation of the threatened Clouded Apollo butterfly (*Parnassius mnemosyne*) and metapopulation establishment in southern Finland
M. KUUSSAARI, R.K. HEIKKINEN, J. HELIÖLÄ, M. LUOTO, M. MAYER, S. RYTTERI, P. VON BAGH (Finland)
- 80 Heterogeneity in consumer preferences for orchids in international trade and the potential for the use of market research methods to study demand for wildlife
A. HINSLEY (UK), D. VERISSIMO (UK, United States), D.L. ROBERTS (UK)
- 87 Consistent foraging areas and commuting corridors of the critically endangered Balearic shearwater *Puffinus mauretanicus* in the northwestern Mediterranean
R.E. MEIER, R.B. WYNN, S.C. VOTIER (UK), M. MCMINN GRIVÉ, A. RODRÍGUEZ (Spain), L. MAURICE (UK), E.E. VAN LOON (Netherlands), A.R. JONES, L. SUBERG (UK), J.M. ARCOS (Spain), G. MORGAN, S.A. JOSEY, T. GUILFORD (UK)
- 98 Taxonomic relatedness does not reflect coherent ecological response of fish to protection
L. THIAULT (France), S. BEVILACQUA, A. TERLIZZI (Italy), J. CLAUDET (France)

Contents continued on inside back cover

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica; Embase; Geo Abstracts; Science Citation Index; Also covered in the abstract and citation database Scopus; Full text available on ScienceDirect)



ELSEVIER



0006-3207(201510)190:0:1-X

BIOLOGICAL CONSERVATION

Volume 190 2015

CONTENTS—Continued from outside back cover

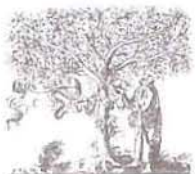
- 107 The importance of natural habitats to Brazilian free-tailed bats in intensive agricultural landscapes in the Winter Garden region of Texas, United States
N. DAVIDAI, J.K. WESTBROOK (United States), J.-P. LESSARD (United States, Canada), T.G. HALLAM, G.F. MCCrackEN (United States)
- 115 National emphasis on high-level protection reduces risk of biodiversity decline in tropical forest reserves
C.J.A. BRADSHAW, I. CRAIGIE, W.F. LAURANCE (Australia)
- 123 Cuckoo and biodiversity: Testing the correlation between species occurrence and bird species richness in Europe
F. MORELLI (Czech Republic), F. JIGUET (France), J. REIF (Czech Republic), S. PLEXIDA (Greece), A.S. VALLI (San Marino), P. INDYKIEWICZ (Poland), P. ŠÍMOVÁ (Czech Republic), M. TICHIT (France), M. MORETTI (Switzerland), P. TRYJANOWSKI (Poland)
- 133 Recent declines and range changes of orchids in Western Europe (France, Belgium and Luxembourg)
H. VOGT-SCHILB (France), F. MUNOZ (France, India), F. RICHARD, B. SCHATZ (France)
- 142 Interactive effects of climate change and fire on metapopulation viability of a forest-dependent frog in south-eastern Australia
T.D. PENMAN, D.A. KEITH, J. ELITH, M.J. MAHONY, R. TINGLEY, J.B. BAUMGARTNER, T.J. REGAN (Australia)
- 154 Effects of woodland restoration and management on the community of surface-active arthropods in the metropolitan Chicago region
M.A. MCCARY, J.-C. MARTÍNEZ, L. UMEK, L. HENEGHAN, D.H. WISE (USA)
- 167 Integrating climate change vulnerability assessments from species distribution models and trait-based approaches
S.G. WILLIS (UK), W. FODEN (South Africa), D.J. BAKER, E. BELLE, N.D. BURGESS, J.A. CARR, N. DOSWALD (UK), R.A. GARCIA (Spain, Portugal, Denmark), A. HARTLEY (UK), C. HOF (Germany), T. NEWBOLD (UK), C. RAHBK (Denmark), R.J. SMITH, P. VISCONTI (UK), B.E. YOUNG (Costa Rica), S.H.M. BUTCHART (UK)

Short Communication

- 8 Does livestock benefit or harm snow leopards?
R.K. SHARMA (India), Y.V. BHATNAGAR, C. MISHRA (India, USA)

Book Reviews

- 1 Elephants and Savanna Woodland Ecosystems: A Study from Chobe National Park, Botswana, Christina Skarpe, Johan du Toit and Stein Moe (Eds.). Wiley Blackwell (2014). 304 pp. \$112.65 ISBN: 978-0-470-67176-4 (hardcover)
I. MARTIN (United Kingdom)
- 69 The Edge of Extinction: Travels with Enduring People in Vanishing Lands, Jules Pretty. Cornell University Press (2014). 220 pp. ISBN: 978-0-8014-5330-4, \$27.95 (hardback)
J. BENNETT (United Kingdom)



BIOLOGICAL CONSERVATION

Volume 191 2015

Editorials

- 809 Frugivore downsizing and the collapse of seed dispersal by fish
R. COSTA-PEREIRA, M. GALETTI (Brazil)
- 839 Conservation biologists have a powerful new ally
P. CAFARO (United States)

Letters to the Editor

- 842 The Iberian guillemot population crash: A plea for action at the margins
I. MUNILLA, A. VELANDO (Spain)
- 843 Are edge bird populations doomed to extinction: A response to Munilla et al.
A.M. ABRAÍN (Spain)

Reviews

- 10 Mitigating the anthropogenic spread of bee parasites to protect wild pollinators
D. GOULSON, W.O.H. HUGHES (United Kingdom)
- 117 Patterns and causes of understory bird declines in human-disturbed tropical forest landscapes: a case study from Central America
D.M. Visco (USA), N.L. MICHEL (Canada), W. ALICE BOYLE, B.J. SIGEL, S. WOLTMANN, T. SHERRY (USA)
- 139 Experimental studies of dead-wood biodiversity – A review identifying global gaps in knowledge
S. SEIBOLD, C. BÄSSLER, R. BRANDL, M. M. GOSSNER, S. THORN (Germany), M.D. ULYSHEN (USA), J. MÜLLER (Germany)
- 408 Mammals of South America Volume 2, Rodents
D.M. ARMSTRONG (USA)
- 459 Man swarm: How overpopulation is killing the wild world
J.T. HEINEN (USA)

Perspective

- 198 Searching for the place of biodiversity in the ecosystem services discourse
K. JAX, U. HEINK (Germany)

Regular Papers

- 1 Governing nature by numbers – EU subsidy regulations do not capture the unique values of woody pastures
S. JAKOBSSON, R. LINDBORG (Sweden)
- 20 Exploring stakeholder perceptions of conservation outcomes from alternative income generating activities in Tanzanian villages adjacent to Eastern Arc mountain forests
SAINSBURY, K. (UK), BURGESS, N.D. (USA, Denmark), SABUNI, F. (Tanzania), HOWE, C. (UK), PUIS, E., KILLENGA, R. (Tanzania), MILNER-GULLAND, E.J. (UK)
- 29 A riparian conservation network for ecological resilience
A.K. FREMIER, M. KIPARSKY, S. GMUR, J. AYCRIGG, R.K. CRAIG, L.K. SVANCARA, D.D. GOBLE, B. COSENS, F.W. DAVIS, J. MICHAEL SCOTT (United States)
- 38 A novel citizen science approach for large-scale standardised monitoring of bat activity and distribution, evaluated in eastern England
S.E. NEWSON, H.E. EVANS, S. GILLINGS (United Kingdom)
- 50 Releasing of pheasants for shooting in the UK alters woodland invertebrate communities
J.L. NEUMANN, G.J. HOLLOWAY, R.B. SAGE, A.N. HOODLESS (UK)
- 60 Marsupial response to matrix conversion: Results of a large-scale long-term 'natural experiment' in Australia
A. MORTELLITI, M. CRANE, S. OKADA, D.B. LINDENMAYER (Australia)

Contents continued on inside back cover

(Abstracted/indexed in: AGRICOLA database; Biological and Agricultural Index; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Current Advances in Ecological Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Energy Information Abstracts; Environmental Periodicals Bibliography; Excerpta Medica/Embase; Geo Abstracts; Science Citation Index). Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®



0006 3207(201511)191C:1-#

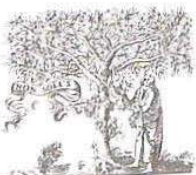
BIOLOGICAL CONSERVATION

Volume 191 2015

CONTENTS—Continued from outside back cover

- 67 Hotspots of predation persist outside marine reserves in the historically fished Mediterranean Sea
J. BOADA (Spain), R. ARTHUR (India), S. FARINA (Spain, Italy), Y. SANTANA, O. MASCARÓ, J. ROMERO (Spain),
T. ALCOVERRO (Spain, India)
- 75 Mechanisms of the impact of a weed (grader grass, *Themeda quadrivalvis*) on reptile assemblage structure in a tropical savannah
R. ABOM, W. VOGLER, L. SCHWARZKOPF (Australia)
- 83 Mapping seasonal European bison habitat in the Caucasus Mountains to identify potential reintroduction sites
B. BLEYHL (Germany), T. SIPKO, S. TREPET (Russia), E. BRAGINA (USA, Russia), P.J. LEITÃO (Germany), V.C. RADELOFF (USA),
T. KUEMMERLE (Germany)
- 93 Landscape-scale factors determine occupancy of the critically endangered central rock-rat in arid Australia: The utility
of camera trapping
P.J. McDONALD, A.D. GRIFFITHS, C.E.M. NANO, C.R. DICKMAN, S.J. WARD, G.W. LUCK (Australia)
- 101 Slow recovery of bryophyte assemblages in middle-aged boreal forests regrown after clear-cutting
M. DYNESIUS (Sweden)
- 110 Electrocutation threatens the viability of populations of the endangered Bonelli's eagle (*Aquila fasciata*) in Southern Europe
A. HERNÁNDEZ-MATÍAS, J. REAL, F. PARÉS (Spain), R. PRADEL (France)
- 130 Effect of landscape fires on the demography of the endangered New Caledonian conifer *Callitris sulcata*
C. HAVERKAMP (France, New Caledonia), L.D. PRIOR (Australia), B. FOGLIANI, L. L'HUILLIER, M. ANQUEZ (New Caledonia),
Q. HUA, D.M.J.S. BOWMAN (Australia)
- 150 Land use and management affects the demography and conservation of an intensively harvested Cerrado fruit tree species
A.B. GIROLDO, A. SCARIOT (Brazil)
- 159 Overfishing disrupts an ancient mutualism between frugivorous fishes and plants in Neotropical wetlands
S.B. CORREA (USA), J.K. ARAUJO, J.M.F. PENHA, C.N. DA CUNHA (Brazil), P.R. STEVENSON (Colombia), J.T. Anderson (USA)
- 168 Gene flow counteracts the effect of drift in a Swiss population of snow voles fluctuating in size
V. GARCÍA-NAVAS, T. BONNET, D. WALDVOGEL, P. WANDELER, G. CAMENISCH, E. POSTMA (Switzerland)
- 178 Did the *Prestige* oil spill compromise bird reproductive performance? Evidences from long-term data on the Kentish Plover
(*Charadrius alexandrinus*) in NW Iberian Peninsula
M. VIDAL, J. DOMÍNGUEZ (Spain)
- 185 Comparing spatial capture–recapture modeling and nest count methods to estimate orangutan densities in the Wehea Forest,
East Kalimantan, Indonesia
S.N. SPEHAR (USA), B. LOKEN (Canada, USA), Y. RAYADIN (Indonesia), J.A. ROYLE (USA)
- 206 Mosaic of grasslands and woodlands is more effective than habitat connectivity to conserve butterflies in French farmland
A. VILLEMÉY, I. VAN HALDER, A. OUIN, L. BARBARO, J. CHENOT, P. TESSIER, F. CALATAYUD, H. MARTIN, P. ROCHE,
F. ARCHAUX (France)
- 216 Statistical guidelines for assessing marine avian hotspots and coldspots: A case study on wind energy development in the U.S.
Atlantic Ocean
E.F. ZIPKIN, B.P. KINLAN, A. SUSSMAN, D. RYPKEMA, M. WIMER, A.F. O'CONNELL (United States)
- 224 Opportunities for improving the foraging potential of urban waterways for bats
P.R. LINTOTT, N. BUNNEFELD, K.J. PARK (UK)
- 234 Vertebrate road-kill patterns in Mediterranean habitats: Who, when and where
M. D'AMICO, J. ROMÁN, L. DE LOS REYES, E. REVILLA (Spain)
- 243 Vegetation burning for game management in the UK uplands is increasing and overlaps spatially with soil carbon and protected
areas
D.J.T. DOUGLAS, G.M. BUCHANAN, P. THOMPSON, A. AMAR, D.A. FIELDING, S.M. REDPATH, J.D. WILSON (UK)

Contents continued on last page of this issue



ELSEVIER



Available online at www.sciencedirect.com

ScienceDirect

- 197 Brilliant Green. The Surprising History and Science of Plant Intelligence
M. HOLDEN (United States)
- 555 An Introduction to Ecological Economics
R.L. CHAPMAN (USA)
- 557 Forests in our changing world: new principles for conservation and management
C.H. SNELGROVE (USA)
- 587 Simple Living in History: Pioneers of the Deep Future
K.D. BLACK (UK)
- 728 Chasing the Red Queen: The Evolutionary Race Between Agricultural Pests and Poisons
I. MARTIN (United Kingdom)
- 787 New York City and Our Last Best Hope for a Sustainable Future
S. FATTORINI (Portugal)
- 788 Early Years in Modern Conservation Biology
R. MARRS (United Kingdom)

Discussions

- 790 Forensic timber identification: It's time to integrate disciplines to combat illegal logging
E.E. DORMONTT (Australia), M. BONER, B. BRAUN (Germany), G. BREULMANN (Japan), B. DEGEN (Germany),
E. ESPINOZA, S. GARDNER (USA), P. GUILLERY (Germany), J.C. HERMANSON (USA), G. KOCH (Germany), S.L. LEE
(Malaysia), M. KANASHIRO (Brazil), A. RIMBAWANTO (Indonesia), D. THOMAS (Singapore), A.C. WIEDENHOEFT (USA),
Y. YIN (China), J. ZAHNEN (Germany), A.J. LOWE (Australia)
- 799 Integrated cross-realm planning: A decision-makers' perspective
J.G. ÁLVAREZ-ROMERO, V.M. ADAMS, R.L. PRESSEY, M. DOUGLAS, A.P. DALE, A.A. AUGÉ, D. BALL, J. CHILDS, M.
DIGBY, R. DOBBS, N. GOBIUS, D. HINCHLEY, I. LANCASTER, M. MAUGHAN, I. PERDRISAT (Australia)
- 812 Understanding stakeholder conflict between conservation and hunting in Malta
D. VERÍSSIMO (UK, USA), B. CAMPBELL (UK)
- 819 Should biodiversity offsets help finance underfunded Protected Areas?
M. GITHIRU (Kenya), M.W. KING (USA), P. BAUCHE (Mexico), C. SIMON (USA, Mexico), J. BOLES, C. RINDTH
(Canada), R. VICTURINE (USA)
- 827 Shades of grey: Two forms of grey literature important for reviews in conservation
N.R. HADDAWAY (Sweden), H.R. BAYLISS (UK)
- 830 Wildlife restoration: Mainstreaming translocations to keep common species common
D.M. WATSON, M.J. WATSON (Australia)

Erratum

- 845 Erratum to "White-nose syndrome is likely to extirpate the endangered Indiana bat over large parts of its range" [Biol.
Conserv. 160 (2013) 162–172]
W.E. THOGMARTIN, C.A. SANDERS-REED, J.A. SZYMANSKI, P.C. MCKANN, L. PRUITT, R. KING, M.C. RUNGE,
R.E. RUSSELL (USA)

- 623 The impact of noise from open-cast mining on Atlantic forest biophony
M.H.L. DUARTE (Brazil), R.S. SOUSA-LIMA (Brazil, USA), R.J. YOUNG (UK), A. FARINA (Italy), M. VASCONCELOS, M. RODRIGUES (Brazil), N. PIERETTI (Italy)
- 632 Compensatory immigration counteracts contrasting conservation strategies of wolverines (*Gulo gulo*) within Scandinavia
V. GERVASI, H. BRØSETH, E.B. NILSEN (Norway), H. ELLEGREN (Sweden), Ø. FLAGSTAD, J.D.C. LINNELL (Norway)
- 640 Using pest monitoring data to inform the location and intensity of invasive-species control in New Zealand
J. RUFFELL (Australia), J. INNES, C. BISHOP, T. LANDERS, J. KHIN (New Zealand), R.K. DIDHAM (Australia)
- 650 Amphibian biodiversity congruence and conservation priorities in China: Integrating species richness, endemism, and threat patterns
Z. LUO, S. WEI, W. ZHANG, M. ZHAO, H. WU (China)
- 659 Influences of landscape structure on diversity of beetles associated with bracket fungi in Brazilian Atlantic Forest
L.S. ARAUJO (Brazil), A. KOMONEN (Finland), C. LOPES-ANDRADE (Brazil)
- 667 Risk evaluation of pesticide use to protected European reptile species
N. WAGNER, V. MINGO, U. SCHULTE, S. LÖTTERS (Germany)
- 674 Effects of road infrastructure on forest value across a tri-national Amazonian frontier
C. BARALOTO (USA, French Guiana), P. ALVERGA (Brazil), S.B. QUISPE (Peru), G. BARNES (USA), N.B. CHURA (Peru), I.B. DA SILVA, W. CASTRO (Brazil), H. DA SOUZA (Bolivia), I.E. DE SOUZA MOLL (Brazil), J. DEL ALCAZAR CHILO, H.D. LINARES, J.G. QUISPE (Peru), D. KENJI (Bolivia), M. MARSIK (USA), H. MEDEIROS (Brazil), S. MURPHY (French Guiana), C. ROCKWELL, G. SELAYA (USA), A. SHENKIN (USA, UK), M. SILVEIRA (Brazil), J. SOUTHWORTH (USA), G.H. VASQUEZ COLOMO (Bolivia), S. PERZ (USA)
- 682 Small differences in seasonal and thermal niches influence elevational limits of native and invasive Balsams
J. LAUBE (Germany), T.H. SPARKS (Germany, Poland, United Kingdom), C. BÄSSLER, A. MENZEL (Germany)
- 692 Changes in protected area management effectiveness over time: A global analysis
J. GELDMANN (Denmark), L. COAD (UK), M. BARNES, I.D. CRAIGIE (AUSTRALIA), M. HOCKINGS (UK, Australia), K. KNIGHTS, F. LEVERINGTON, I.C. CUADROS, C. ZAMORA (Australia), S. WOODLEY (Canada), N.D. BURGESS (Denmark, UK)
- 707 The value of forest fragments for maintaining amphibian diversity in Madagascar
J.C. RIEMANN (Germany), S.H. NDRIANTSOA, N.R. RAMINOSOA (Madagascar), M.-O. RÖDEL, J. GLOS (Germany)
- 716 Clear consideration of costs, condition and conservation benefits yields better planning outcomes
M.C. EVANS, A.I.T. TULLOCH, E.A. LAW, K.G. RAITER (AUSTRALIA), H.P. POSSINGHAM (Australia, UK), K.A. WILSON (Australia)
- 729 Use of multiple data sources and analytical approaches to derive a marine protected area for a breeding seabird
M.R. PERROW, A.J.P. HARWOOD, E.R. SKEATE, E. PRACA, S.M. EGLINGTON (United Kingdom)
- 739 One step ahead of the plow: Using cropland conversion risk to guide Sprague's Pipit conservation in the northern Great Plains
M.K. LIPSEY, K.E. DOHERTY, D.E. NAUGLE, S. FIELDS, J.S. EVANS (USA), S.K. DAVIS, N. KOPER (Canada)
- 750 Functional diversity and stability of litter-invertebrate communities following land-use change in Sumatra, Indonesia
S. MUMME, M. JOCHUM, U. BROSE (Germany), N.F. HANEDA (Indonesia), A.D. BARNES (Germany)
- 759 Implementation of a framework for multi-species, multi-objective adaptive management in Delaware Bay
C.P. MCGOWAN, D.R. SMITH, J.D. NICHOLS, J.E. LYONS, J. SWEKA, K. KALASZ, L.J. NILES, R. WONG, J. BRUST, M. DAVIS, B. SPEAR (United States)
- 770 Leveraging trans-boundary conservation partnerships: Persistence of Persian leopard (*Panthera pardus saxicolor*) in the Iranian Caucasus
M.S. FARHADINIA (Iran, UK), M. AHMADI, E. SHARBAFI, S. KHOSRAVI, H. ALINEZHAD (Iran), D.W. MACDONALD (UK)
- 779 Through the eye of a butterfly: Assessing biodiversity impacts of cashew expansion in West Africa
S. VASCONCELOS, P. RODRIGUES, L. PALMA, L.F. MENDES, A. PALMINHA, L. CATARINO, P. BEJA (Portugal)

Short Communication

- 700 Diver towed GPS to estimate densities of a critically endangered fish
T. LYNCH, M. GREEN, C. DAVIES (Australia)

Book Reviews

- 194 Review of Malthus: The Life and Legacies of an Untimely Prophet by Robert J. Mayhew
D. HARMON (United States)
- 195 Nature's conscience: The life and legacy of Derek Ratcliffe
R. MARRS (United Kingdom)

- 421 Apparent survival of North Atlantic right whales after entanglement in fishing gear
J. ROBBINS, A.R. KNOWLTON, S. LANDRY (United States)
- 428 Reintroduction of Tasmanian devils to mainland Australia can restore top-down control in ecosystems where dingoes have been extirpated
D.O. HUNTER, T. BRITZ, M. JONES, M. LETNIC (Australia)
- 436 Diptera species and functional diversity across tropical Australian countryside landscapes
T.J. SMITH, M.M. MAYFIELD (Australia)
- 444 Distribution of crop wild relatives of conservation priority in the UK landscape
S. JARVIS, H. FIELDER, J. HOPKINS, N. MAXTED, S. SMART (UK)
- 452 Effects of wind farms on Montagu's harrier (*Circus pygargus*) in southern Spain
J. HERNÁNDEZ-PLIEGO, M. DE LUCAS, A.-R. MUÑOZ, M. FERRER (Spain)
- 460 The usefulness of top predators as biodiversity surrogates indicated by the relationship between the reproductive outputs of raptors and other bird species
M. SENZAKI, Y. YAMAURA, F. NAKAMURA (Japan)
- 469 Implications of reserve size and forest connectivity for the conservation of wood-inhabiting fungi in Europe
N. ABREGO (Norway, Spain), C. BÄSSLER (Germany), M. CHRISTENSEN, J. HEILMANN-CLAUSEN (Denmark)
- 478 Co-benefits and trade-offs between agriculture and conservation: A case study in Northern Australia
N. STOECKL, T. CHAIECHI, M. FARR, D. JARVIS, J.G. ÁLVAREZ-ROMERO, M.J. KENNARD (Australia), V. HERMOSO (Australia, Spain), R.L. PRESSEY (Australia)
- 495 The reduction of genetic diversity in threatened vertebrates and new recommendations regarding IUCN conservation rankings
J.R.WILLOUGHBY, M. SUNDARAM, B.K. WIJAYAWARDENA, S.J.A. KIMBLE, Y. JI, N.B. FERNANDEZ, J.D. ANTONIDES, M.C. LAMB, N.J. MARRA, J.A. DEWOODY (USA)
- 504 Crop to wild gene flow and genetic diversity in a vulnerable *Macadamia* (Proteaceae) species in New South Wales, Australia
K. O'CONNOR, M. POWELL, C. NOCK, A. SHAPCOTT (Australia)
- 512 Trophic requirements beyond foraging habitats: The importance of prey source habitats in bat conservation
A. ARRIZABALAGA-ESCUADERO, I. GARIN, J.L. GARCÍA-MUDARRA, A. ALBERDI, J. AIHARTZA, U. GOITI (Spain)
- 520 Factors driving the distribution of an endangered amphibian toward an industrial landscape in Australia
J.W. VALDEZ, M.P. STOCKWELL, K. KLOP-TOKER, S. CLULOW, J. CLULOW, M.J. MAHONY (Australia)
- 529 Landscape scale habitat suitability modelling of bats in the Western Ghats of India: Bats like something in their tea
C.F.R.WORDLEY (United Kingdom), M. SANKARAN (United Kingdom, India), D. MUDAPPA (India), J.D. ALTRINGHAM (United Kingdom)
- 537 An ecological network is as good as a major protected area for conserving dragonflies
J.S. PRYKE, M.J. SAMWAYS (South Africa), K. DE SAEDELEER (Belgium)
- 546 Seasonal herding practices influence predation on domestic stock by African lions along a protected area boundary
T.R. KUIPER (South Africa, UK), A.J. LOVERIDGE (UK), D.M. PARKER (South Africa), P.J. JOHNSON, J.E. HUNT, B. STAPELKAMP, L. SIBANDA, D.W. MACDONALD (UK)
- 558 Single large or several small? Applying biogeographic principles to tree-level conservation and biodiversity offsets
D.S. LE ROUX, K. IKIN, D.B. LINDENMAYER, A.D. MANNING, P. GIBBONS (Australia)
- 567 Post-Soviet land-use change effects on large mammals' habitat in European Russia
A. SIEBER (Germany), N.V. UVAROV, L.M. BASKIN (Russia), V.C. RADELOFF, B.L. BATEMAN (USA), A.B. PANKOV (Russia), T. KUEMMERLE (Germany)
- 577 Medium-term dynamics of tree species composition in response to silvicultural intervention intensities in a tropical rain forest
A.L. DE AVILA (Germany), A.R. RUSCHEL, J.O.P. DE CARVALHO, L. MAZZEI, J.N.M. SILVA, J.D.C. LOPES, M.M. ARAUJO (Brazil), C.F. DORMANN, J. BAUHUS (Germany)
- 588 Altered herb assemblages in fragments of the Brazilian Atlantic forest
P.B. LIMA, L.F. LIMA, B.A. SANTOS, M. TABARELLI, C.S. ZICKEL (Brazil)
- 596 Indirect effects of bioinvasions in Yellowstone Lake: The response of river otters to declines in native cutthroat trout
J.R. CRAIT, E.V. REGEHR, M. BEN-DAVID (USA)
- 606 Long-term shifts in anthropogenic subsidies to gulls and implications for an imperiled fish
A.-M.K. OSTERBACK, D.M. FRECHETTE, S.A. HAYES, S.A. SHAFFER, J.W. MOORE (USA)
- 614 An assessment of socio-economic drivers of avian body parts trade in West African rainforests
F.A. ATUO, T.J. O'CONNELL (USA), P.U. ABANYAM (Nigeria)

- 251 Ecological correlates of vulnerability to fragmentation in forest birds on inundated subtropical land-bridge islands
Y. WANG (China), D.H. THORNTON (United States of America), D. GE, S. WANG, P. DING (China)
- 258 Spatial distribution drivers of Amur leopard density in northeast China
J. QI, Q. SHI (China), G. WANG (USA), Z. LI, Q. SUN, Y. HUA, G. JIANG (China)
- 266 Conservation and conflict in the Democratic Republic of Congo: The impacts of warfare, mining, and protected areas on deforestation
V. BUTSIC (USA), M. BAUMANN (Germany), A. SHORTLAND (UK), S. WALKER (USA), T. KUEMMERLE (Germany)
- 274 *Rattus* management is essential for population persistence in a critically endangered passerine: Combining small-scale field experiments and population modelling
G. MAGGS, M. NICOLL (United Kingdom), N. ZUËL (Mauritius), P.J.C. WHITE (United Kingdom), E. WINFIELD, S. POONGAVANAN, V. TATAYAH (Mauritius), C.G. JONES (Mauritius, United Kingdom), K. NORRIS (United Kingdom)
- 282 Are artificial burrows efficient conservation tools for seabirds? A case study of two sympatric shearwaters on neighbouring islands and guidelines for improvement
K. BOURGEOIS (New Zealand, France), S. DROMZÉE (France), E. VIDAL (New Caledonia)
- 291 Eurasian lynx habitat selection in human-modified landscape in Norway: Effects of different human habitat modifications and behavioral states
Y. BOUYER, G. SAN MARTIN, P. PONCIN, R.C. BEUDELS-JAMAR (Belgium), J. ODDEN, J.D.C. LINNELL (Norway)
- 300 Independence and juvenile dispersal distances in wild and reintroduced Spanish imperial eagles
R. MURIEL, V. MORANDINI, M. FERRER, J. BALBONTÍN (Spain)
- 306 Acoustic indices for biodiversity assessments: Analyses of bias based on simulated bird assemblages and recommendations for field surveys
A. GASC (France), S. PAVOINE (France, UK), L. LELLOUCH, P. GRANDCOLAS, J. SUEUR (France)
- 313 Fire policy optimization to maximize suitable habitat for locally rare species under different climatic conditions: A case study of antelopes in the Kruger National Park
M. PACIFICI (Italy), P. VISCONTI (Italy, UK), E. SCEPI (Italy), A. HAUSMANN (South Africa), F. ATTORRE (Italy), R. GRANT (South Africa), C. RONDININI (Italy)
- 322 Will tropical mountaintop plant species survive climate change? Identifying key knowledge gaps using species distribution modelling in Australia
C.M. COSTION (Australia, USA), L. SIMPSON, P.L. PERT (Australia), M.M. CARLSEN, W. JOHN KRESS (USA), D. CRAYN (Australia)
- 331 Catastrophic cat predation: A call for predator profiling in wildlife protection programs
K.E. MOSEBY, D.E. PEACOCK, J.L. READ (Australia)
- 341 Tradeoffs among ecosystem services in restored wetlands
J. JESSOP, G. SPYREAS, G.E. POCIASK, T.J. BENSON, M.P. WARD, A.D. KENT, J.W. MATTHEWS (USA)
- 349 Relative contribution of local demography and immigration in the recovery of a geographically-isolated population of the endangered Egyptian vulture
N. LIEURY, M. GALLARDO, C. PONCHON, A. BESNARD, A. MILLON (France)
- 357 Conservation planning for freshwater ecosystems in Mexico
A. LIRA-NORIEGA, V. AGUILAR, J. ALARCÓN, M. KOLB, T. URQUIZA-HAAS, L. GONZÁLEZ-RAMÍREZ, W. TOBÓN, P. KOLEFF (Mexico)
- 367 Amphibian conservation, land-use changes and protected areas: A global overview
J. NORI (Argentina), P. LEMES (Brazil), N. URBINA-CARDONA (Colombia), D. BALDO, J. LESCANO (Argentina), R. LOYOLA (Brazil)
- 375 Legislative correlates of the size and number of protected areas in Canadian jurisdictions
S.J. LEROUX, C. BRIMACOMBE, S. KHAIR, J. BENIDICKSON, C.S. FINDLAY (Canada)
- 383 Paper-efficient multi-species conservation and management are not always field-effective: The status and future of Western Indian Ocean leatherbacks
L.R. HARRIS, R. NEL, H. OOSTHUIZEN, M. MEYER, D. KOTZE, D. ANDERS, S. MCCUE, S. BACHOO (South Africa)
- 391 Two decades of cumulative impacts to survivorship of endangered California condors in California
T.R. KELLY, B.A. RIDEOUT, J. GRANTHAM, J. BRANDT, L.J. BURNETT, K.J. SORENSON, D. GEORGE, A. WELCH, D. MOEN, J. RASICO, M. JOHNSON, C. BATTISTONE, C.K. JOHNSON (USA)
- 400 Anthropogenic disturbance and habitat loss for the red-listed Asiatic black bear (*Ursus thibetanus*): Using ecological niche modeling and nighttime light satellite imagery
L.E. ESCOBAR (USA), M.N. AWAN (Pakistan), H. QIAO (China)
- 409 Density-impact functions for terrestrial vertebrate pests and indigenous biota: Guidelines for conservation managers
G.L. NORBURY, R.P. PECH, A.E. BYROM, J. INNES (New Zealand)

BIOLOGICAL CONSERVATION

Volume 192 2015

Letters to the Editor

- 477 Both fire size and frequency matter—A response to Griffiths et al.
J. RUSSELL-SMITH, B.P. MURPHY, M.J. LAWES (Australia)
- 478 Fire frequency is relatively more important than fire size—A reply to Russell-Smith et al.
A.D. GRIFFITHS, S.T. GARNETT, B.W. BROOK (Australia)
- 479 Monitoring of animal abundance by environmental DNA – An increasingly obscure perspective: A reply to Klymus et al., 2015
L.L. Iversen, J. Kielgast, K. Sand-Jensen (Denmark)
- 481 A reply to Iversen et al.'s comment "Monitoring of animal abundance by environmental DNA – An increasingly obscure perspective"
K.E. KLYMUS, C.A. RICHTER, D.C. CHAPMAN, C. PAUKERT (USA)

Reviews

- 30 Review of status, threats, and conservation management options for the endangered Indus River blind dolphin
G.T. BRAULIK (TANZANIA, PAKISTAN), U. NOUREEN, M. ARSHAD (PAKISTAN), R.R. REEVES (Canada)
- 226 Conserving koalas: A review of the contrasting regional trends, outlooks and policy challenges
C. MCALPINE, D. LUNNEY, A. MELZER, P. MENKHORST, S. PHILLIPS, D. PHALEN, W. ELLIS, W. FOLEY, G. BAXTER, D. DE VILLIERS, R. KAVANAGH, C. ADAMS-HOSKING, C. TODD, D. WHISSON, R. MOLSHER, M. WALTER, I. LAWLER, R. CLOSE (Australia)
- 304 Synthesizing habitat fragmentation effects on plant–antagonist interactions in a phylogenetic context
M. CHÁVEZ-PESQUEIRA (Mexico), D. CARMONA (Canada), P. SUÁREZ-MONTES, J. NÚÑEZ-FARFÁN (Mexico), R. AGUILAR (Argentina)

Regular Papers

- 1 A long-term genetic study reveals complex population dynamics of multiple-source plant reintroductions
M. ZAVODNA (France, New Zealand), J. ABDELKRIM, V. PELLISSIER, N. MACHON (France)
- 11 Using the "placeholder" concept to reduce genetic introgression of an endangered carnivore
E.M. GESE, P.A. TERLETZKY (USA)
- 20 Reconstructing historical and contemporary disease dynamics: A case study using the California slender salamander
C.M. SETTE, V.T. VREDENBURG, A.G. ZINK (United States)
- 42 Effects of male targeted harvest regime on sexual segregation in mountain lion
J.R. KEEHNER, R.B. WIELGUS, B.T. MALETZKE, M.E. SWANSON (United Kingdom)
- 48 Niche and movement models identify corridors of introduced feral cats infringing ecologically sensitive areas in New Zealand
M.R. RECIO, P.J. SEDDON, A.B. MOORE (New Zealand)
- 57 Hunting performance of captive-born South China tigers (*Panthera tigris amoyensis*) on free-ranging prey and implications for their reintroduction
M.C. FÁBREGAS (South Africa, United Kingdom), G.T. FOSGATE (South Africa), G.M. KOEHLER (United Kingdom)
- 65 Using citizen science data for conservation planning: Methods for quality control and downscaling for use in stochastic patch occupancy modelling
L.J. GRAHAM (UK, USA), R.H. HAINES-YOUNG, R. FIELD (UK)
- 74 The case of the endangered Kootenai River white sturgeon (*Acipenser transmontanus*) highlights the importance of post-release genetic monitoring in captive and supportive breeding programs
A. SCHREIER (USA), S. STEPHENSON (Canada), P. RUST, S. YOUNG (USA)
- 82 Avoidance of unconventional oil wells and roads exacerbates habitat loss for grassland birds in the North American great plains
S.J. THOMPSON, D.H. JOHNSON, N.D. NIEMUTH, C.A. RIBIC (USA)

Contents continued on inside back cover

(Abstracted/indexed in AGRICOLA database, Biological and Agricultural Index, Elsevier BIOBASE/Current Awareness in Biological Sciences, Cambridge Scientific Abstracts, Current Advances in Ecological Sciences, Current Contents: Agriculture, Biology & Environmental Sciences, Energy Information Abstracts, Environmental Periodicals Bibliography, Excerpta Medica, Embase, Geo Abstracts, Science Citation Index, Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect.)



BIOLOGICAL CONSERVATION

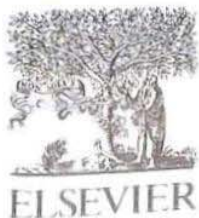
Volume 192 2015

CONTENTS—Continued from outside back cover

- 91 Regional extinction, rediscovery and rescue of a freshwater fish from a highly modified environment: The need for rapid response
M.P. HAMMER, T.S. GOODMAN, M. ADAMS, L.F. FAULKS, P.J. UNMACK, N.S. WHITEROD, K.F. WALKER (Australia)
- 101 Effects of male targeted harvest regimes on prey switching by female mountain lions: Implications for apparent competition on declining secondary prey
J.R. KEEHNER, R.B. WIELGUS, A.M. KEEHNER (USA)
- 109 Assessing relative resilience potential of coral reefs to inform management
J.A. MAYNARD (USA, Polynésie Française), S. MCKAGAN, L. RAYMUNDO, S. JOHNSON, G.N. AHMADIA, L. JOHNSTON, P. HOUK (USA), G.J. WILLIAMS (UK), M. KENDALL (USA), S.F. HERON (USA, Australia), R. VAN HOOIDONK, E. MCLEOD (USA), D. TRACEY (Australia), S. PLANES (Polynésie Française)
- 120 Testing the relevance of using spatial modeling to predict foraging habitat suitability around bat maternity: A case study in Mediterranean landscape
J. FONDERFLICK, C. AZAM, C. BROCHIER, E. COSSON, D. QUÉKENBORN (France)
- 135 An evaluation of environmental, institutional and socio-economic factors explaining successful conservation plan implementation in the north-central United States
S.K. CARTER, S.R. JANUCHOWSKI-HARTLEY, J.D. POHLMAN, T.L. BERGESON, A.M. PIDGEON, V.C. RADELOFF (USA)
- 145 Targeted management buffers negative impacts of climate change on the hihi, a threatened New Zealand passerine
D.L.P. CORREIA, A.L.M. CHAUVENET, J.M. ROWCLIFFE, J.G. EWEN (UK)
- 154 Effects of habitat management can vary over time during the recovery of an endangered bird species
S.A. HARTMANN, G. SEGELBACHER (GERMANY), M.E. JUIÑA (ECUADOR), H.M. SCHAEFER (Germany)
- 161 Responses of tropical forest herpetofauna to moderate anthropogenic disturbance and effects of natural habitat variation in Sulawesi, Indonesia
G.R. GILLESPIE (Australia), S. HOWARD (Singapore), J.T. STROUD (USA), A. UL-HASSANAH (Indonesia), M. CAMPLING (UK), B. LARDNER (USA), M.P. SCROGGIE (Australia), M. KUSRINI (Indonesia)
- 181 Conservation of northwest Atlantic harp seals: Past success, future uncertainty?
M.O. HAMMILL, G.B. STENSON, T. DONIOL-VALCROZE, A. MOSNIER (Canada)
- 192 Simple tools for the evaluation of protected areas for the conservation of grasshoppers
D. MATENAAR (Germany), C.S. BAZELET (South Africa), A. HOCHKIRCH (Germany)
- 200 Modelling potential success of conservation translocations of a specialist grassland butterfly
R.K. HEIKKINEN, J. PÖYRY, R. VIRKKALA (Finland), G. BOCEDI (UK), M. KUUSSAARI (Finland), O. SCHWEIGER, J. SETTELE (Germany), J.M.J. TRAVIS (UK)
- 207 Assessing the impact of road developments on connectivity across multiple scales: Application to Yunnan snub-nosed monkey conservation
C. CLAUZEL (France, China), D. XIQING, W. GONGSHENG (China), P. GIRAUDOUX (China, France), L. LI (China)
- 218 Landscape-scale vegetation patterns influence small-scale grazing impacts
E.K. MOORE, A.J. BRITTON, G. IASON, J. PEMBERTON, R.J. PAKEMAN (UK)
- 237 Spatiotemporally variable management by grazing and burning increases marsh diversity and benefits amphibians: A field experiment
B. MESTER, M. SZALAI (HUNGARY), T.O. MÉRŐ (SERBIA), M. PUKY (HUNGARY), S. LENGYEL (Hungary)
- 247 Temporal correlations in population trends: Conservation implications from time-series analysis of diverse animal taxa
D. KEITH (CANADA), H.R. AKÇAKAYA (USA), S.H.M. BUTCHART, B. COLLEN (UK), N.K. DULVY (CANADA), E.E. HOLMES (USA), J.A. HUTCHINGS (CANADA, NORWAY), D. KEINATH, M.K. SCHWARTZ, A.O. SHELTON, R.S. WAPLES (USA)



Contents continued on last page of this issue



Available online at www.sciencedirect.com

ScienceDirect

- 323 Bats: A world of science and mystery
P. CRYAN (USA)

Discussions

- 174 Potential pitfalls of private initiatives in conservation planning: A case study from Canada's boreal forest
D.L. MURRAY, Y.N. MAJCHRZAK, M.J.L. PEËRS, M. WEHTJE (Canada), C. FERREIRA (Canada, Germany),
R.S.A. PICKLES (Canada, USA), J.R. ROW (Canada), D.H. THORNTON (USA)
- 258 Native forest replacement by exotic plantations triggers changes in prey selection of mesocarnivores
D. MOREIRA-ARCE (CANADA, CHILE), P.M. VERGARA (CHILE), S. BOUTIN (CANADA), J.A. SIMONETTI, C. BRICEÑO,
G. ACOSTA-JAMETT (Chile)
- 394 Fitness decline and adaptation to novel environments in ex situ plant collections: Current knowledge and future perspectives
A. ENSSLIN, O. TSCHÖPE, M. BURKART, J. JOSHI (Germany)

SI: Biodiversity offsetting

- 483 When conservation challenges biodiversity offsetting
V. DEVICTOR (France)
- 485 Tell me where you come from, I will tell you who you are: A genealogy of biodiversity offsetting mechanisms in historical context
C. BONNEUIL (France)
- 492 Tracking the origins and development of biodiversity offsetting in academic research and its implications for conservation: A review
C. CORALIE, O. GUILLAUME, N. CLAUDE (France)
- 504 Locking in loss: Baselines of decline in Australian biodiversity offset policies
M. MARON (Australia), J.W. BULL (UK), M.C. EVANS, A. GORDON (Australia)
- 513 Towards strategic offsetting of biodiversity loss using spatial prioritization concepts and tools: A case study on mining impacts in Australia
H. KUJALA, A.L. WHITEHEAD, W.K. MORRIS, B.A. WINTLE (Australia)
- 522 Categories of flexibility in biodiversity offsetting, and their implications for conservation
J.W. BULL (UK), M.J. HARDY (Australia), A. MOILANEN (Finland), A. GORDON (Australia)
- 533 Biodiversity offsetting as a commodification process: A French case study as a concrete example
B. DAUGUET (France)
- 541 Bulldozing biodiversity: The economics of offsets and trading-in Nature
C.L. SPASH (Austria)
- 552 The true loss caused by biodiversity offsets
D. MORENO-MATEOS (Spain), V. MARIS, A. BÉCHET (France), M. CURRAN (Switzerland)