

CONTENTS Volume 76 2005

Volume 76 No 1 October 2005

S. FIEDLER, B.S. HÖLL & H.F. JUNGKUNST / Methane budget of a Black Forest spruce ecosystem considering soil pattern	1–20
ELIZABETH H. BURROWS, JILL L. BUBIER, ANDREW MOSEDALE, GEORGE W. COBB & PATRICK M. CRILL / Net ecosystem exchange of carbon dioxide in a temperate poor fen: a comparison of automated and manual chamber techniques	21–45
STEPHEN P. OPSAHL / Organic carbon composition and oxygen metabolism across a gradient of seasonally inundated limesink and riparian wetlands in the southeast Coastal Plain, USA	47–68
PETER M. VAN BODEGOM, ROB BROEKMAN, JERRY VAN DIJK, CHRIS BAKKER & RIEN AERTS / Ferrous iron stimulates phenol oxidase activity and organic matter decomposition in waterlogged wetlands	69–83
LAREINA G. WALL, JENNIFER L. TANK, TODD V. ROYER & MELODY J. BERNOT / Spatial and temporal variability in sediment denitrification within an agriculturally influenced reservoir	85–111
NATACHA RYCKELYNCK, HILMAR A. STECHER III & CLARE E. REIMERS / Understanding the anodic mechanism of a seafloor fuel cell: interactions between geochemistry and microbial activity	113–139
W. BORKEN & F. BEESE / Control of nitrous oxide emissions in European beech, Norway spruce and Scots pine forests	141–159
JAMES B. SHANLEY, BERNHARD MAYER, MYRON J. MITCHELL, ROBERT L. MICHEL, SCOTT W. BAILEY & CAROL KENDALL / Tracing sources of streamwater sulfate during snowmelt using S and O isotope ratios of sulfate and ³⁵ S activity	161–185

- MARTIN NOVÁK, MELANIE A. VILE, SIMON H. BOTTRELL,
MARKÉTA ŠTĚPÁNOVÁ, IVA JAČKOVÁ, FRANTIŠEK
BUZEK, EVA PŘECHOVÁ & ROBERT J. NEWTON /
Isotope systematics of sulfate-oxygen and sulfate-sulfur in
six European peatlands 187–213
- MAE SEXAUER GUSTIN & JELENA STAMENKOVIC / Effect
of watering and soil moisture on mercury emissions from soils 215–232
- JEFFREY M. MORRIS, DAVID A. NIMICK, AÍDA M. FARAG &
JOSEPH S. MEYER / Does biofilm contribute to diel cycling
of Zn in High Ore Creek, Montana? 233–259
- K. LAJTHA, S.E. CROW, Y. YANO, S.S. KAUSHAL,
E. SULZMAN, P. SOLLINS & J.D.H. SPEARS / Detrital
controls on soil solution N and dissolved organic matter in
soils: a field experiment 261–281
- JINJU GENG, XIAOJUN NIU, XIANGCAN JIN, XIAORONG
WANG, XIAOHONG GU, MARC EDWARDS & DIETMAR
GLINDEMANN / Simultaneous monitoring of phosphine and
of phosphorus species in Taihu Lake sediments and
phosphine emission from lake sediments 283–298
- FRED WORRALL & ANDREA LANCASTER / The release of
CO₂ from riverwaters – the contribution of excess CO₂ from
groundwater 299–317
- STEPHEN E. CABANISS, GREG MADEY, LAURA LEFF,
PATRICIA A. MAURICE & ROBERT WETZEL / A stochastic
model for the synthesis and degradation of natural organic
matter. Part I. Data structures and reaction kinetics 319–347
- HELMUT FISCHER, FRANK KLOEP, SABINE WILZCEK &
MARTIN T PUSCH / A river's liver – microbial processes
within the hyporheic zone of a large lowland river 349–371
- TUIJA MATTSSON, PIIRKKO KORTELAINEEN & ANTTI
RÄIKE / Export of DOM from boreal catchments: impacts of
land use cover and climate 373–394

Volume 76 No 3 December 2005

DMITRI CHATSKIKH, JØRGEN E. OLESEN, JØRGEN BERNTSEN, KRISTIINA REGINA & SIRWAN YAMULKI / Simulation of effects of soils, climate and management on N ₂ O emission from grasslands	395–419
JILL R. WELTER, STUART G. FISHER & NANCY B. GRIMM / Nitrogen transport and retention in an arid land watershed: influence of storm characteristics on terrestrial–aquatic linkages	421–440
JENNIFER L. FUNK / <i>Hedychium gardnerianum</i> invasion into Hawaiian montane rainforest: interactions among litter quality, decomposition rate, and soil nitrogen availability	441–451
ISABELLE PROVIDOLI, HARALD BUGMANN, ROLF SIEGWOLF, NINA BUCHMANN & PATRICK SCHLEPPI / Flow of deposited inorganic N in two Gleysol-dominated mountain catchments traced with ¹⁵ NO ₃ [−] and ¹⁵ NH ₄ ⁺	453–475
P. CASALS, J. ROMANYA & V.R. VALLEJO / Short-term nitrogen fixation by legume seedlings and resprouts after fire in Mediterranean old-fields	477–501
PETER ROSÉN / Total organic carbon (TOC) of lake water during the Holocene inferred from lake sediments and near-infrared spectroscopy (NIRS) in eight lakes from northern Sweden	503–516
ERICA A.H. SMITHWICK, MICHELLE C. MACK, MONICA G. TURNER, F. STUART CHAPIN III, JUN ZHU & TERI C. BALSER / Spatial heterogeneity and soil nitrogen dynamics in a burned black spruce forest stand: distinct controls at different scales	517–537
CRISTIAN TEODORU & BERNHARD WEHRLI / Retention of sediments and nutrients in the Iron Gate I Reservoir on the Danube River	539–565
ROBINSON W. FULWEILER & SCOTT W. NIXON / Export of nitrogen, phosphorus, and suspended solids from a southern New England watershed to Little Narragansett Bay	567–593
Instructions for authors	595–602
Author index	603–604
Volume contents	605–607