

<b>Implementing a composite indicator approach for prioritizing activated sludge-based wastewater treatment plants at large spatial scale</b> G. Sabia (Bologna, Italy), S. De Gisi (Bari, Italy) and R. Farina (Bologna, Italy).....	1
<b>Corrigendum to “Drought impact assessment on rural livelihood systems in Iran” [Ecol. Indic. 69 (2016) 850–858]</b> M. Khayyati and M. Aazami (Hamedan, Iran).....	19
<b>Assessment of the uncertainty of trace metal and nitrogen concentrations in mosses due to sampling, sample preparation and chemical analysis based on the French contribution to ICP-Vegetation</b> E. Lequy (Paris, France), S. Sauvage (Douai, France), X. Laffray (Créteil, France), S. Gombert-Courvoisier (Pessac, France), A. Pascaud (Douai, France), L. Galsomiès (Paris, France) and S. Leblond (Paris, France) .....	20
<b>Initiating events, functional remediation, and assessment of risk to ecological resources</b> J. Burger and M. Gochfeld (Piscataway, NJ, USA).....	32
<b>Dispersal based climate change sensitivity scores for European species</b> F. Hellmann, R. Alkemade and O.M. Knol (Bilthoven, The Netherlands).....	41
<b>Assessing stress in Western Hudson Bay polar bears using hair cortisol concentration as a biomarker</b> P. Mislán, A.E. Derocher, V.L. St. Louis, E. Richardson, N.J. Lunn (Edmonton, Canada) and D.M. Janz (Saskatoon, Canada) .....	47
<b>Water-related ecosystem services in Western Siberian lowland basins—Analysing and mapping spatial and seasonal effects on regulating services based on ecohydrological modelling results</b> B. Schmalz, M. Kruse, J. Kiesel, F. Müller and N. Fohrer (Kiel, Germany).....	55
<b>Suitable sediment fraction for paleoenvironmental reconstruction and assessment of contaminated coastal areas based on benthic foraminifera: A case study from Augusta Harbour (Eastern Sicily, Italy)</b> L. Bergamin and E. Romano (Rome, Italy) .....	66
<b>The need of hypothesis-driven designs and conceptual models in impact assessment studies: An example from the free-living marine nematodes</b> G. Fonseca and F. Gallucci (Brazil) .....	79
<b>A graph-based approach to defend agro-ecological systems against water vole outbreaks</b> J.-C. Foltête (Besançon, France), G. Couval (Besançon cedex, France and Ecole-Valentin, France), M. Fontanier (Ecole-Valentin, France), G. Vuidel (Besançon, France) and P. Giraudoux (Besançon cedex, France).....	87
<b>Can China achieve its 2020 carbon intensity target? A scenario analysis based on system dynamics approach</b> B. Xiao, D. Niu and X. Guo (Beijing, China) .....	99
<b>Stress responses and specific metal exclusion on mine soils based on germination and growth studies by Australian golden wattle</b> R. Nirola (Australia), M. Megharaj (Australia and Newcastle, Australia), R. Aryal (Australia), P. Thavamani (Newcastle, Australia), K. Ramdass (Australia), B. Sarkar (Australia and Bloomington, IN, USA) and C. Saint (Australia) .....	113
<b>Seeing the forest for its multiple ecosystem services: Indicators for cultural services in heterogeneous forests</b> I.J. Sutherland (Ste. Anne-de-Bellevue, Canada), S.E. Gergel (Vancouver, Canada) and E.M. Bennett (Ste. Anne-de-Bellevue, Canada).....	123
<b>An index to evaluate the fluvial habitat degradation in lowland urban streams</b> J. Cocheró (La Plata, Argentina), A. Cortelezzi (Argentina), A.S. Tarda and N. Gómez (La Plata, Argentina) ..	134

An integrative index of Ecosystem Services provision based on remotely sensed data J.M. Paruelo (Buenos Aires, Argentina and Uruguay), M. Texeira, L. Staiano (Buenos Aires, Argentina), M. Mastrángelo (Balcarce, Argentina), L. Amdan (Buenos Aires, Argentina) and F. Gallego (Uruguay) . . . . .	145
Are Chironomidae (Diptera) good indicators of water scarcity? Dryland streams as a case study M. Cañedo-Argüelles (Spain), M.T. Bogan (Tucson, AZ, USA), D.A. Lytle (Corvallis, OR, USA) and N. Prat (Spain) . . .	155
Enhancing life cycle impact assessment from climate science: Review of recent findings and recommendations for application to LCA A. Levasseur (Québec, Canada), O. Cavalett (São Paulo, Brazil), J.S. Fuglestedt (Oslo, Norway), T. Gasser (Gif-sur-Yvette Cedex, France and Nogent-sur-Marne Cedex, France), D.J.A. Johansson (Gothenburg, Sweden), S.V. Jørgensen (Virum, Denmark), M. Raugei (Wheatley, UK), A. Reisinger (Palmerston North, New Zealand), G. Schivley (Pittsburgh, PA, USA), A. Strømman (Trondheim, Norway), K. Tanaka (Tsukuba, Japan) and F. Cherubini (Trondheim, Norway) . . . . .	163
Can stable isotopes be used to infer site fidelity of nekton in open coastal areas? C. Vinagre, C. Madeira, M. Dias, L. Narciso and V. Mendonça (Campo Grande, Portugal) . . . . .	175
Seasonal variations in macrobenthic taxonomic diversity and the application of taxonomic distinctness indices in Bohai Bay, northern China G. Hu and Q. Zhang (Tianjin, PR China) . . . . .	181
Radial growth response of <i>Populus xjrtyschensis</i> to environmental factors and a century-long reconstruction of summer streamflow for the Tuoshigan River, northwestern China R. Zhang (Urumqi, China and Lanzhou, China), L. Qin, Y. Yuan (Urumqi, China), X. Gou (Lanzhou, China), C. Zou, Q. Yang, H. Shang and Z. Fan (Urumqi, China) . . . . .	191
Identification of soil quality indicators for assessing the effect of different tillage practices through a soil quality index in a semi-arid environment F. Raiesi and V. Kabiri (Shahrekord, Iran) . . . . .	198
Development of a multimetric plant-based index of biotic integrity for assessing the ecological state of forested, urban and agricultural natural wetlands of Jimma Highlands, Ethiopia A. Moges (Jimma, Ethiopia and Debre-Birhane, Ethiopia), A. Beyene (Jimma, Ethiopia), E. Kelbessa (Addis Ababa, Ethiopia), S.T. Mereta and A. Ambelu (Jimma, Ethiopia) . . . . .	208
Regional environmental efficiency in China: Analysis based on a regional slack-based measure with environmental undesirable outputs J. Zhang, W. Zeng (Beijing, China) and H. Shi (Kowloon, Hong Kong) . . . . .	218
How to tell green from grey? Towards a methodological framework for evaluating the greening of national tax systems K. Bachus (Leuven, Belgium) . . . . .	229
Kamala tree as an indicator of the presence of Asian elephants during the dry season in the Shivalik landscape of northwestern India Y. Bi (Kunming, China, Beijing, China, Dehradun, India and Yunnan, China), A. Roy, D. Bhavsar (Dehradun, India), J. Xu, M. Wang (Kunming, China), T. Wang (Enschede, The Netherlands) and X. Yang (Kunming, China and Beijing, China) . . . . .	239
Emergy and exergy evaluation of a dike-pond project in the drawdown zone (DDZ) of the Three Gorges Reservoir (TGR) J. Yue, X. Yuan, B. Li, H. Ren and X. Wang (Chongqing, China) . . . . .	248
Assessing ecological integrity: A multi-scale structural and functional approach using Structural Equation Modeling V. Capmourteres and M. Anand (Guelph, Canada) . . . . .	258
Social sustainability in the supply chain: Construct development and measurement validation V. Mani (Bangalore, India), R. Agarwal (Roorkee, India), A. Gunasekaran (USA North Dartmouth, MA), T. Papadopoulos (Plymouth, UK), R. Dubey (New Nashik, India) and S.J. Childe (Plymouth, UK) . . . . .	270
Thermal acclimation in clownfish: An integrated biomarker response and multi-tissue experimental approach C. Madeira (Lisboa, Portugal), D. Madeira, M.S. Diniz (Caparica, Portugal), H.N. Cabral and C. Vinagre (Lisboa, Portugal) . . . . .	280
Random Forest model and TRIX used in combination to assess and diagnose the trophic status of Bizerte Lagoon, southern Mediterranean B. Béjaoui, Z. Armi (Tunisia), E. Ottaviani, E. Barelli (Genoa, Italy), E. Gargouri-Ellouz, R. Chérif (Tunis, Tunisia), S. Turki (Tunisia), C. Solidoro (Italy) and L. Aleya (France) . . . . .	293
Coastal-flood risk management in central Algarve: Vulnerability and flood risk indices (South Portugal) A.M. Martínez-Graña (Salamanca, Spain), T. Boski (Faro, Portugal), J.L. Goy (Salamanca, Spain), C. Zazo and C.J. Dabrio (Madrid, Spain) . . . . .	302
Determining critical light and hydrologic conditions for macrophyte presence in a large shallow lake: The ratio of euphotic depth to water depth X. Liu (Nanjing, China, Beijing, China and Boston, MA, USA), Y. Zhang, K. Shi (Nanjing, China), J. Lin (Boston, MA, USA), Y. Zhou (Nanjing, China and Beijing, China) and B. Qin (Nanjing, China) . . . . .	317
Bayesian belief networks to analyse trade-offs among ecosystem services at the regional scale D. Landuyt (Mol, Belgium, Ghent, Belgium and Melle-Gontrode, Belgium), S. Broekx (Mol, Belgium) and P.L.M. Goethals (Ghent, Belgium) . . . . .	327

Vegetation mapping and multivariate approach to indicator species of a forest ecosystem: A case study from the Thandiani sub Forests Division (TsFD) in the Western Himalayas W. Khan (Mansehra, Pakistan), S.M. Khan (Islamabad, Pakistan), H. Ahmad (Mansehra, Pakistan), Z. Ahmad (Islamabad, Pakistan) and S. Page (UK).....	336
How do 28 European Union Member States perform in agricultural greenhouse gas emissions? It depends on what we look at: Application of the multi-criteria analysis E. Dace and D. Blumberga (Riga, Latvia).....	352
Optimizing the bioindication of forest soil acidity, nitrogen and mineral nutrition using plant species P.E. Pinto (France and Nancy, France), J.-L. Dupouey (France), J.-C. Hervé, M. Legay (Nancy, France), S. Wurpillot, P. Montpied (France) and J.-C. Gégout (Nancy, France).....	359
Evaluating the impacts of wood production and trade on bird extinction risks S. Nishijima (Yokohama, Japan), T. Furukawa, T. Kadoya, F. Ishihama (Tsukuba, Japan), T. Kastner (Vienna, Austria), H. Matsuda and N. Kaneko (Yokohama, Japan).....	368
Selecting agri-environmental indicators for monitoring and assessment of environmental management in the example of landscape parks in Poland M. Kubacka, S. Bródka and A. Macias (Poznań Poland).....	377
Molecular and chemical characterization of a <i>Sphagnum palustre</i> clone: Key steps towards a standardized and sustainable moss bag technique A. Di Palma (Portici (NA), Italy), D. Crespo Pardo, V. Spagnuolo (Naples, Italy), P. Adamo (Portici (NA), Italy), R. Bargagli (Siena, Italy), D. Cafasso (Naples, Italy), F. Capozzi (Naples, Italy and Trieste, Italy), J.R. Aboal (Santiago de Compostela, Spain), A.G. González (France and Toulouse, France), O. Pokrovsky (Toulouse, France, Tomsk, Russia and Arkhangelsk, Russia), A.K. Beike (Stuttgart, Germany and Freiburg, Germany), R. Reski (Freiburg, Germany), M. Tretiach (Trieste, Italy), Z. Varela (Santiago de Compostela, Spain) and S. Giordano (Naples, Italy).....	388
Semi-automated classification method addressing marine strategy framework directive (MSFD) zooplankton indicators L. Uusitalo (Helsinki, Finland), J.A. Fernandes (Plymouth, UK), E. Bachiller (Bergen, Norway), S. Tasala and M. Lehtiniemi (Helsinki, Finland).....	398
Urgency, development stage and coordination degree analysis to support differentiation management of water pollution emission control and economic development in the eastern coastal area of China T. Li, Y. Han (Beijing, China), Y. Li (Tianjin, China), Z. Lu (Atlanta, GA, USA) and P. Zhao (Tianjin, China).....	406
Spatio-temporal assessment of urbanization impacts on ecosystem services: Case study of Nanjing City, China B. Li, D. Chen, S. Wu, S. Zhou, T. Wang and H. Chen (Nanjing, China).....	416
Atmospheric metal pollutants and environmental injustice: A methodological approach to environmental risk analysis using fuzzy logic and tree bark B.M. Gurgatz (Matinhos, Brazil), R. Carvalho-Oliveira (São Paulo, Brazil), D.C. de Oliveira (Porto Alegre, Brazil), E. Jouscoski (Matinhos, Brazil), G. Antoniaconi (Londrina, Brazil), P.H. do Nascimento Saldiva (São Paulo, Brazil) and R.A. Reis (Matinhos, Brazil).....	428
Identifying potential restoration areas of freshwater wetlands in a river delta Y. Hua, B. Cui, W. He and Y. Cai (Beijing, China).....	438
A geospatial approach to monitoring impervious surfaces in watersheds using Landsat data (the Mondego Basin, Portugal as a case study) V.M. Mantas, J.C. Marques and A.J.S.C. Pereira (Coimbra, Portugal).....	449
Are condition factors powerful proxies of energy content in wild tropical tunas? F. Sardenne, E. Chassot (Victoria, Seychelles), E. Fouché (Victoria, Seychelles and Toulouse, France), F. Ménard (Marseille, France), V. Lucas and N. Bodin (Victoria, Seychelles).....	467
Factors influencing cyanobacteria community structure in <i>Chara</i> -lakes A. Pelechata, M. Pelechaty (Poznań, Poland) and A. Pukacz (Ślubice, Poland).....	477
Evaluation of existing sustainable infrastructure rating systems for their application in developing countries J.M. Diaz-Sarachaga, D. Jato-Espino (Santander, Spain), B. Alsulami (Saudi Arabia) and D. Castro-Fresno (Santander, Spain).....	491
Sustainable transportation systems performance evaluation using fuzzy logic S. Rajak, P. Parthiban (Tiruchirappalli, India) and R. Dhanalakshmi (Dimapur, India).....	503
Optimising a clearance index based on neutral red as an indicator of physiological stress for bivalves M. Martinez-Haro (Coimbra, Portugal and Ciudad Real, Spain), A.J. Pais-Costa, T. Verdelhos, J.C. Marques (Coimbra, Portugal) and P. Acevedo (Ciudad Real, Spain).....	514
Fluctuating asymmetry: A tool for impact assessment on fish populations in a tropical polluted bay, Brazil L.B. Seixas, A.F.G.N. dos Santos and L.N. dos Santos (Rio de Janeiro, Brazil).....	522

Modeling wetland plant metrics to improve the performance of vegetation-based indices of biological integrity	
R.C. Jones, C.P. Hawkins (Logan, UT, USA), M.S. Fennessy (USA) and J.J. Vander Laan (Logan, UT, USA)...	533
In-between forest expansion and cropland decline: A revised USLE model for soil erosion risk under land-use change in a Mediterranean region	
G. Mancino, A. Nolè (Potenza, Italy), L. Salvati (Rome, Italy) and A. Ferrara (Potenza, Italy).....	544
Using climatic suitability thresholds to identify past, present and future population viability	
V. Almpanidou (Thessaloniki, Greece), G. Schofield (Thessaloniki, Greece and Geelong, Australia), A.S. Kallimanis (Thessaloniki, Greece), O. Türkozan (Aydin, Turkey), G.C. Hays (Geelong, Australia) and A.D. Mazaris (Thessaloniki, Greece) .....	551
An approach to map landscape functions in Atlantic Forest—Brazil	
G.S.G. Távora and A.P.D. Turetta (Rio de Janeiro, Brazil) .....	557
Ranking the indicators of building performance and the users' risk via Analytical Hierarchy Process (AHP): Case of Malaysia	
N. Khalil (Seri Iskandar, Malaysia and Kuala Lumpur, Malaysia), S.N. Kamaruzzaman and M.R. Baharum (Kuala Lumpur, Malaysia) .....	567
Assessment of artificial substrates for evaluating groundwater microbial quality	
J. Voisin (France and Villeurbanne, France), B. Cournoyer (France) and F. Mermillod-Blondin (France and Villeurbanne, France).....	577
Benthic taxa as potential indicators of a deep-sea oil spill	
T. Washburn, A.C.E. Rhodes and P.A. Montagna (Corpus Christi, TX, USA).....	587
Biofilm growth kinetics and nutrient (N/P) adsorption in an urban lake using reclaimed water: A quantitative baseline for ecological health assessment	
T. Wang, Z. Xu, Y. Li, M. Liang (Beijing, China), Z. Wang (Shihezi City, China) and P. Hynds (Dublin 7, Ireland and Dublin, Ireland) .....	598
Corrigendum to "Quantitative analysis of anthropogenic influences on coastal water—A new perspective" [Ecol. Indic. (2016) 673–683]	
M. Cai (Xiamen, China), Y. Liu (Qingdao, China), K. Chen (Xiamen, China), D. Huang (Fuzhou, China) and S. Yang (Xiamen, China).....	608
Hyperspectral remote sensing of cyanobacterial pigments as indicators of the iron nutritional status of cyanobacteria-dominant algal blooms in eutrophic lakes	
G. Chi, J. Ma, Y. Shi and X. Chen (Shenyang, China) .....	609
How does dune morphology shape coastal EC habitats occurrence? A remote sensing approach using airborne LiDAR on the Mediterranean coast	
M. Bazzichetto (Pesche, Italy), M. Malavasi (Prague 6, Czech Republic), A.T.R. Acosta (Roma, Italy) and M.L. Carranza (Pesche, Italy).....	618
The reliability of a composite biodiversity indicator in predicting bird species richness at different spatial scales	
F. Valerio (Évora, Portugal and Parma, Italy), M. Basile (Parma, Italy, Montelibretti, Italy, Freiburg, Germany), R. Balestrieri (Parma, Italy and Montelibretti, Italy), M. Posillico (Montelibretti, Italy and Castel di Sangro, Italy), S. Di Donato (Montelibretti, Italy), T. Altea (Freiburg, Germany) and G. Matteucci (Rende, Italy) .....	627
Role of capitals and capabilities in ensuring economic resilience of land conservation efforts: A case study of the grain for green project in China's Loess Hills	
Q. Li (Müncheberg, Germany and Berlin, Germany), T.S. Amjath-Babu and P. Zander (Müncheberg, Germany) .....	636
How functional traits of estuarine macrobenthic assemblages respond to metal contamination?	
D. Piló (Portugal and Cadiz, Spain), R. Ben-Hamadou (Doha, Qatar), F. Pereira, A. Carriço (Portugal), P. Pereira (Lisbon, Portugal), A. Corzo (Cadiz, Spain), M.B. Gaspar (Portugal and Faro, Portugal) and S. Carvalho (Portugal and Saudi Arabia).....	645
Across the grain: Multi-scale map comparison and land change assessment	
B.A. Pond (Peterborough, Canada) .....	660