

# Contents

## Plenary lecture

Downing, J.A. Global limnology: up-scaling aquatic services and processes to planet Earth . . . . .	1149
Poole K.E. and J.A. Downing: Influence of stream reach characteristics on freshwater mussel populations in a predominantly agricultural landscape . . . . .	1167
Ao, L., M. Yamada, M. Kobayashi and O. Mitamura: Groundwater flow system estimated by stable isotopes of oxygen and hydrogen in an alluvial fan of the Echi River, Japan . . . . .	1174
Melack, J.M. and D.L. Engle: An organic carbon budget for an Amazon floodplain lake . . . . .	1179
Rukhovets, L.A., G.P. Astrakhansev and V.A. Andreev: Assimilation potential (AP) of Great European Lakes and global warming: economic aspects . . . . .	1183
Carey, C.C., K.C. Weathers and K.L. Cottingham: Increases in phosphorus at the sediment-water interface may influence the initiation of cyanobacterial blooms in an oligotrophic lake . . . . .	1185
White, J.D. and D.E. Facey: Diet overlap between native yellow perch and invasive white perch in Missisquoi Bay, Lake Champlain, Vermont . . . . .	1189
Syväranta, J. & R.I. Jones: Isotopic variability in lake littoral organisms presents a challenge for food web studies . . . . .	1193
Pinto, P., M. Morais, P. Usseglio-Polatera, H. Dias Figueiredo, A.C. Martins, A.P. Duque, C. Gonçalves, M. Santo and P. Guilherme: Seasonal and spatial gradients in the biological and ecological traits of benthic macroinvertebrate communities in Mediterranean rivers in southern Portugal . . . . .	1197
Hayakawa, K. and Y. Sugiyama: Variability in downward attenuation of ultraviolet radiation in Lake Biwa	1202
Bio, A., A. Couto, R. Costa, A. Prestes, N. Vieira, A. Valente and J. Azevedo: Biomanipulation of Furnas Lake, Azores: effects of repeated fish removal . . . . .	1207
Danehy, R.J. and R.E. Bilby: Periphyton and macroinvertebrate assemblage responses to flow regime in spring-fed headwaters . . . . .	1210
Ohta, K. and K. Kozawa: Humic substances discharged from sewage treatment plants . . . . .	1215
Kamiya, K., T. Fukushima, Y. Onda, K. Matsushige and S. Mizugaki: Changes in sedimentation rates and phosphorus accumulation in shallow Japanese lakes during 30 years . . . . .	1219
Sandu, C., C. Boroneant, M.C. Trifu, G. Balint und J. Bloesch: Effect of global warming on climate parameters and hydrology of the Mureş River Basin . . . . .	1225
Gerecke, R., H. Franz & M. Cantonati: Invertebrate diversity in springs of the National Park Berchtesgaden (Germany): relevance for long-term monitoring . . . . .	1229
Morais, M., P. Pinto, A. Pedro, T. Battin, S. Gafny, M. Gerino, E. Marti, M. Puig, M. Pusch, A. Solimini, C. Voreadou, F. Sabater and P. Usseglio-Polatera: Relationships among macroinvertebrate community structure, bio/ecological trait profiles, and environmental descriptors in European human-altered streams . . . . .	1234
Verhamme, E.M. and M.T. Auer: Comparison of carbon flux and indicators of bioavailability at nearshore and offshore locations in Lake Superior . . . . .	1239
Nagy, H.B., Z. Varga, Z. László, N. Szállassy and G. Dévai: Impact of different population size on male behaviour in <i>Libellula fulva</i> (Odonata: Libellulidae) . . . . .	1242
Jacobsen, D.: Classical alpine stream types on the equator: are they different? . . . . .	1245
Zohary, T. and M. Shlichter: Invasion of Lake Kinneret by the N <sub>2</sub> -fixing cyanobacterium <i>Cylindrospermopsis cuspidis</i> Komarek & Kling . . . . .	1251

Jones, S.B., C.G. Ingersoll, J.T. Parris and D.K. Hardesty: Effects of carbaryl, copper, and other organic chemicals on cholinesterase activity in brains of surrogate and listed species of fish . . . . .	1255
Taub, F.B.: Contributions of cellulose to a microbial-algal- <i>Daphnia</i> food chain in Closed Ecological Systems . . . . .	1259
Agyemang, T.K., K. Schmieder, T. Heege, J. Heblinski, H. Sajadyan, L. Vardanyan and R. Böcker: Reviewing Lake Sevan's surface area using remote sensing & GIS techniques . . . . .	1264
Cantonati, M., E. Bertuzzi, A. Scalfi and V. Campana: The potential importance for spring conservation of residual habitats after flow capturing: A case study . . . . .	1267
Boda, P. and Z. Csabai: Seasonal and diel flight activity patterns of aquatic Coleoptera and Heteroptera . .	1271
Sreedharan, G., L.D. Corkum and T.B. Johnson: Response of the round goby, an invasive fish, to food odours . . . . .	1275
Spitale, D. and A. Petraglia: Springs like islands: implications on richness and species density . . . . .	1279
Urban, N.R. and A. Desai: Are the Great Lakes a significant net source or sink of CO <sub>2</sub> ? . . . . .	1283
Gonzalez Rueda, C. and G. Hernando Guillot Monroy: Characterization of periphytic algae from Macheta and Paipa thermal springs, Colombia . . . . .	1289
Barberena L., C.E. and H. Montoya T.: Culture and life strategies of the microalga <i>Tetraselmis contracta</i> (N. Carter) Butcher at the central coastal lagoons in Lima, Peru . . . . .	1293
Auer, N.: Importance of woody material in Great Lake aquatic food webs . . . . .	1298
Brown, M.E.: Environmental factors influencing invasibility and ecological consequences of persistent invasions of the spiny waterflea . . . . .	1301
Watanabe Nara, F., A. Imai, K. Matsushige and K. Komatsu: Stable carbon isotopic characterization of DOC and its humic fraction in Lake Kasumigaura, Japan . . . . .	1307
Trân, J.K.: Discrete reproduction leads to an intermediate predator-prey functional response . . . . .	1310