

CONTENTS

THE INSTITUTE, SCIENTIFIC COUNCIL	5
INSTITUTE STAFF AND FIELD OF WORK	6
1 INTRODUCTION	
1.1 Director's preface	9
1.2 Projects	10
1.3 Consultancies	12
1.4 Report on finances	13
1.5 Presentations of IHB members at international conferences	14
1.6 Stays abroad	15
1.7 Foreign visitors to Hydrobiological Institute	17
1.8 Students' theses finished in 2008	17
2 RESERVOIRS	
2.1 Regular monitoring of the reservoirs Slapy and Římov: dissolved and dispersed substances in 2008	18
2.2 Regular monitoring of the reservoirs Slapy and Římov: microbial characteristics, chlorophyll and zooplankton biomass in 2008	19
2.3 Regular Monitoring: fish stock composition in the Římov Reservoir in 2008	20
2.4 Competition relationships among dominant species of phytoplankton in the reservoirs	21
2.5 Spatio-temporal patterns of bacterioplankton production and community composition related to phytoplankton composition and protistan bacterivory in a dam reservoir	22
2.6 Spatial and temporal dynamics of young-of-the-year fish in a canyon-type reservoir	23
2.7 Patterns and reasons of different pelagic behaviour of perch fry: novel insight into the declared ecological plasticity of a species	25
2.8 Recent decrease in pH of the surface and the euphotic layer in Slapy reservoir.	26

3 LAKES	
3.1 Light-induced changes in leucine and glucose incorporation by <i>Planktothrix rubescens</i> and bacteria in Lake Zürich	28
3.2 Proton production by transformations of aluminium and iron in lakes	29
3.3 Microbial food web dynamics in a tropical warm-monomictic hyposaline lake	29
4 SPECIAL INVESTIGATIONS	
4.1 Size selectivity in summer and winter diets of great cormorant (<i>Phalacrocorax carbo</i>): does it reflect a season-dependent difference in foraging efficiency?	30
4.2 Composition changes of phototrophic microbial communities along the salinity gradient in the solar saltern evaporation ponds of Eilat, Israel	31
4.3 Reclassification of planktonic nostocacean cyanobacteria <i>Anabaena reniformis</i> , <i>An. kisseleviana</i> and <i>Aphanizomenon aphanizomenoides</i> to a new genus <i>Sphaerospermopsis</i>	32
4.4 Phylogenetic and morphologic verification of <i>Chroococcus</i> and <i>Limnococcus</i> genera, Chroococcales, Cyanobacteria	34
4.5 Diversity of pelagic bacteria in puszta wetlands near Debrecen (Hungary)	39
4.6 Modelling of nutrient export from catchments to surface waters	40
5 PUBLICATIONS	43