

CONTENTS

The institute and its scientific board	V
The staff and the field of work	VI
1. INTRODUCTION	1
2. RESERVOIRS	5
2.1. Substances dissolved and dispersed in reservoir water	5
2.2. Protozoan bacterivory during a summer phytoplankton peak in the Římov Reservoir	8
2.3. Phytoplankton	10
2.4. Zooplankton	10
2.4.1 Net zooplankton in the Slapy and Římov Reservoirs	10
2.4.2 Spatial heterogeneity of life history traits in <i>Daphnia</i> natural population	12
2.5. Monitoring of fish populations	12
3. SPECIAL INVESTIGATIONS	13
3.1. Estimating the unsaturated carbon content in humic material using Ultraviolet spectroscopy	13
3.2. Chemical characteristics of lakes in the High Tatra Mountains	13
3.3. Ammonium uptake in alpine streams in the High Tatra Mountains	14
3.4. Investigations on acidified lakes in Bohemian Forest (Šumava National Park and Biosphere Reserve)	15
3.5. Respiration to synthesis ratio in water bacteria related to population density and growth rate	16
3.6. The development of ciliates in a maar-crater lake	18
3.7. <i>Vibrio cholerae</i> feeding by ciliates	20
3.8. Phosphorus limitation and alkaline phosphatase in algal cultures	22
3.9. Chlorophyll and phosphorus in the High Tatra Mountain Lakes	24
3.10. Top-down control of phytoplankton in London reservoirs.....	26
3.11. Predatory feeding of <i>Acanthocyclops robustus</i>	28
3.12. Using horizontal fisheries sonar for quantitative surveys	28
PUBLICATIONS	29