

## The results in water quality improvement of first-season bioremediation done with Bioclean Pond Clarifier and Bioclean Aqua for various lakes

### Water quality parameters before treatment, and after the end of the first/second season

#### Fishing lake

Lake Kotelesk (2.6 hectares)	19. June 2007.	09. October 2007.
Ammonium mg/l	0,27	0,18
Free Ammonia mg/l	0,04	-
Nitrite mg/l	0,13	0,09
Nitrate mg/l	9,5	8,1
ortho-Phosphate mg/l	0,88	0,60
Total Algae Count ind. / ml	18 300	8 230

#### Swimming lake

Lake Sajoszoged (11 hectares)	06. July 2007.	07. September 2007.
Ammonium mg/l	0,39	0,13
Free Ammonia mg/l	0,02	-
Nitrite mg/l	0,21	0,04
Nitrate mg/l	19,5	5,8
ortho-Phosphate mg/l	0,43	0,20
Total Algae Count ind. / ml	24 230	8 210

#### Pathogenic count 06. July 2007:

Faecal Coliform:	702 ind. / 100 ml
Enterococcus:	180 ind. / 100 ml
Clostridium:	200 000 ind. / 50 ml

#### Pathogenic count 07. September 2007:

Faecal Coliform:	270 ind. / 100 ml
Enterococcus:	2 ind. / 100 ml
Clostridium:	- / 50 ml

#### Fishing lake

Lake Madaras (10 hectares)	20. June 2007.	07. October 2007.	04. March 2008.	07. July 2008.
Ammonium mg/l	0,31	0,20	0,21	0,16
Free Ammonia mg/l	0,003	-	0,003	-
Nitrite mg/l	0,18	0,09	0,09	-
Nitrate mg/l	24,5	13,5	9,80	0,9
ortho-Phosphate mg/l	0,52	0,29	0,31	0,05
Total Algae Count ind. / ml	31 520	18 201	17 400	75 435

### Fishing lake

Lake Etyek (12 hectares)	16. June 2007.	01. October 2007.
Ammonium mg/l	0,31	0,28
Free Ammonia mg/l	0,01	-
Nitrite mg/l	0,08	0,07
Nitrate mg/l	18,4	13,2
ortho-Phosphate mg/l	0,34	0,2
Total Algae Count ind. / ml	28 950	21 802

### DO balance restoration

	16. June 2007. 1st Treatment	29 June 2007. 2nd Treatment	14. September 2007. 3rd Treatment
<b>Dissolved Oxygen concentration</b>			
Upper layer	3.64 mg/l	6.5 mg/l	10.82 mg/l
Middle layer	3.11 mg/l	5.85 mg/l	10.63 mg/l
Lower layer	2.35 mg/l	5.82 mg/l	9.49 mg/l

### Sediment level change

Date:	Average sediment layer depth:
June 2007.	29 cm
March 2008.	14 cm

### Fishing lake

Lake Nagybivalyos S2 (18 hectares)	14. June 2007.	24. September 2007.
Ammonium mg/l	0,82	0,12
Free Ammonia mg/l	0,09	0,005
Nitrite mg/l	0,24	0,17
Nitrate mg/l	37,21	18
ortho-Phosphate mg/l	0,31	0,09
Total Algae Count ind. / ml	28 121	10 200

### Fishing lake

Lake Nagybivalyos (40 hectares)	14. June 2007.	24. September 2007.	26. November 2007.
Ammonium mg/l	0,73	0,37	0,49
Free Ammonia mg/l	0,2	0,04	0,04
Nitrite mg/l	0,91	0,24	0,34
Nitrate mg/l	40,31	39	18,5
ortho-Phosphate mg/l	0,53	0,92	0,29
Total Algae Count ind. / ml	37 102	9 480	10 820

### Fishing lake

Lake Berekfurdo (2 hectares)	21. June 2007.	08. October 2007.
Ammonium	0,28	0,24
Free Ammonia mg/l	-	-
Nitrite mg/l	0,07	0,06
Nitrate mg/l	17,2	13,2
ortho-Phosphate mg/l	0,29	0,21
Total Algae Count ind. / ml	28 520	9 820

### Sediment level change

Date:	Average sediment layer depth:
June 2007.	41 cm
March 2008.	17 cm

### Fishing lake

Lake Ludanyhalaszi (18 hectares)	14. July 2007.	25. September 2007.
Ammonium mg/l	0,42	0,14
Free Ammonia mg/l	-	-
Nitrite mg/l	0,11	0,07
Nitrate mg/l	16,5	9,5
ortho-Phosphate mg/l	0,32	0,18
Total Algae Count ind. / ml	34 550	12 520

### DO balance restoration

	14. July 2007. 1st Treatment	31. July 2007. 2nd Treatment	11. September 2007. 3rd Treatment
<b>Dissolved Oxygen concentration</b>			
Upper layer	8.35mg/l	10. 59 mg/l	10.51 mg/l
Middle layer	6.31 mg/l	5.65 mg/l	10.5 mg/l
Lower layer	1.22 mg/l	4.90 mg/l	10.3 mg/l