

SLIDE NUMBER

1209

Liite 6.3

SITE NAME

85-TIEN SILTA

RIVER

PYHÄJOKI

DATE

15/09/2011

GPS coordinates

7099303

3432221

Temperature

13.5

Particularities näytteenotto JO, näytealusta kivet, näytteenottosyvyys 30-40 cm, kivipohja, voimakas virtaus, varjostu ++, uoman leveys n. 40 cm, vedessä jonkin verran humusta, näytteenotto 0-3 m sillasta alavirtaan, laskenta 26.1.2012 EAn, AMIN=2,61, ENMF=Encyonema cf. minutiforme Krammer

IPS	SLA	DESCY	IDAP	GENRE	CEE	SHE	WAT	
16.2	12.1	15.6	11.3	14.8	14.1	14.2	10.4	
TDI	IBD	DI-CH	EPI-D	IDP	LOBO	SID	TID	IDSE/5
38.6	17.1	12.2	14.4	11.5	7.8	16.8	11.4	3.68

QUALITY NOTES / 20

Number of species	77	Diversity	5.40	Genera number	20
Population	429	Evenness	0.86		

Number	%	Code	ou	Designation	* : taxon	IBD	IPS	S	IPS	V
37	8.62	FCVE	SSVE	Fragilaria construens (Ehr.) Grunow f. venter (Ehr.) Hustedt	*	4	1			
26	6.06	AUSU	-	Aulacoseira subarctica (O. Muller) Haworth	*	4	1			
24	5.59	FCGR	FGRA	Fragilaria capucina Desmazieres var. gracilis (Oestrup) Hustedt	*	4.8	1			
24	5.59	AAMB	-	Aulacoseira ambigua (Grunow) Simonsen	*	3	1			
24	5.59	AMIN	ADMI	Achnanthes minutissima Kützing v. minutissima Kützing (Achnanthidium)	*	5	1			
23	5.36	GEXL	-	Gomphonema exilissimum (Grun.) Lange-Bertalot & Reichardt	*	5	1			
20	4.66	GPAP	-	Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum	*	2	1			
14	3.26	FCON	SCON	Fragilaria construens (Ehr.) Grunow f. construens (Staurosira)	*	4	1			
13	3.03	EMIN	-	Eunotia minor (Kützing) Grunow in Van Heurck	*	4.6	1			
13	3.03	EMEI	-	Eunotia meisteri Hustedt	*	5	3			
10	2.33	ASUC	KASU	Achnanthes suchlandtii Hustedt	*	4.5	1			
10	2.33	EINC	-	Eunotia incisa Gregory var. incisa	*	5	1			
10	2.33	TFLO	-	Tabellaria flocculosa (Roth) Kützing	*	5	1			
9	2.10	EIMP	-	Eunotia implicata Nörpel. Lange-Bertalot & Alles	*	5	2			
9	2.10	PINU	-	PINNULARIA C.G. Ehrenberg		4.7	2			
9	2.10	ENMF	-	Encyonema minutiforme Krammer		5	1			
8	1.86	NRHY	-	Navicula rhynchocephala Kützing	*	4	3			
8	1.86	ACHN	-	ACHNANTHES J.B.M. Bory de St. Vincent		4.5	2			
8	1.86	CPLA	-	Cocconeis placentula Ehrenberg var. placentula	*	4	1			
8	1.86	FNAN	-	Fragilaria nanana Lange-Bertalot	*	5	2			
6	1.40	CSTE	DSTE	Cyclotella stelligera Cleve et Grun (in Van Heurck)	*	4.2	1			
6	1.40	NAVI	-	NAVICULA J.B.M. Bory de St. Vincent		3.4	2			
6	1.40	NCRY	-	Navicula cryptocephala Kützing	*	3.5	2			
5	1.17	NDIS	-	Nitzschia dissipata (Kützing) Grunow var. dissipata	*	4	3			
5	1.17	SANG	-	Surirella angusta Kützing	*	4	1			
5	1.17	ALIO	-	Achnanthes linearoides Lange-Bertalot	*	5	2			
4	0.93	GOMP	-	GOMPHONEMA C.G. Ehrenberg		3.6	2			
4	0.93	FPIN	SSMU	Fragilaria pinnata Ehrenberg var. pinnata	*	4	1			
4	0.93	NIFR	-	Nitzschia frustulum (Kützing) Grunow var. frustulum	*	2	1			
4	0.93	AUIT	-	Aulacoseira italica (Ehrenb.) Simonsen	*	3.7	1			
3	0.70	ESEP	-	Eunotia septentrionalis Oestrup		5	3			
3	0.70	FBRE	SBRV	Fragilaria brevistriata Grunow (Pseudostaurosira)	*	3	1			
3	0.70	NPAD	-	Nitzschia palea (Kützing) W. Smith var. debilis (Kützing) Grunow in Cl. & Gru	*	3	1			
3	0.70	AULA	-	AULACOSEIRA G.H.K. Thwaites		3.8	1			
3	0.70	NIGR	-	Nitzschia gracilis Hantzsch	*	3	2			
3	0.70	ASAT	ADSO	Achnanthes subatomoides (Hustedt) Lange-Bertalot et Archibald	*	5	1			
3	0.70	NITZ	-	NITZSCHIA A.H. Hassall		1	2			
2	0.47	FUAC	UUAC	Fragilaria ulna (Nitzsch.) Lange-Bertalot var. acus (Kütz.) Lange-Bertalot	*	4	1			
2	0.47	PGRU	-	Pinnularia grunowii Krammer						
2	0.47	EBIL	-	Eunotia bilunaris (Ehr.) Mills var. bilunaris	*	5	2			
2	0.47	AUVA	-	Aulacoseira valida (Grunow) Krammer	*	4	2			
2	0.47	EPUN	-	Eunotia pectinalis (Kütz.) Rabenhorst var. undulata (Ralfs) Rabenhorst	*	4	2			
2	0.47	CROS	-	Cyclotella rossii Hakansson	*	4	1			
2	0.47	ALAN	PTLA	Achnanthes lanceolata (Breb.) Grunow var. lanceolata Grunow	*	4.6	1			

2	0.47	ALIR	-	Aulacoseira lirata (Ehr.) Ross in Hartley	*	4	1
2	0.47	CMEN	-	Cyclotella meneghiniana Kützing	*	2	1
2	0.47	FTEN	-	Fragilaria tenera (W.Smith) Lange-Bertalot	*	4	2
2	0.47	NPAR	-	Nitzschia parvula W.M.Smith		2.8	1
2	0.47	FERI	-	Frustulia erifuga Lange-Bertalot & Krammer	*	5	2
1	0.23	NVTL	SVTC	Navicula ventralis Krasske	*	5	1
1	0.23	SAPH	-	Surirella amphioxys W.Smith	*	5	1
1	0.23	NMUT	LMUT	Navicula mutica Kützing	*	2	2
1	0.23	NCON	DCOT	Navicula contenta Grunow	*	4	1
1	0.23	ACAL	PTCA	Achnanthes calcar Cleve			
1	0.23	ALFR	PLFR	Achnanthes lanceolata (Breb.) Grun. ssp. frequentissima Lange-Bertalot	*	3.4	1
1	0.23	FLAP	SLPP	Fragilaria lapponica Grunow in van Heurck	*	5	2
1	0.23	NEDT	-	Nitzschia epithemoides Grunow var. disputata (Carter) Lange-Bertalot	*	4	3
1	0.23	FULN	UULN	Fragilaria ulna (Nitzsch.) Lange-Bertalot var. ulna	*	3	1
1	0.23	ABRY	-	Adafia bryophila (Petersen) Moser Lange-Bertalot & Metzeltin	*	5	2
1	0.23	FLDU	SRDU	Fragilaria leptostauron (Ehr.) Hustedt var. dubia (Grunow) Hustedt	*	4	1
1	0.23	NCOC	CCOC	Navicula cocconeiformis Gregory ex Greville	*	5	2
1	0.23	AUGR	-	Aulacoseira granulata (Ehr.) Simonsen	*	2.9	1
1	0.23	NIPM	-	Nitzschia perminuta (Grunow) M. Peragallo	*	4.5	1
1	0.23	NPAL	-	Nitzschia palea (Kützing) W. Smith	*	1	3
1	0.23	TGLA	-	Tetracyclus glans (Ehrenb.) Mills		5	3
1	0.23	NDME	NIME	Nitzschia dissipata (Kützing) Grunow var. media (Hantzsch.) Grunow	*	4	3
1	0.23	DMON	-	Diatoma moniliformis Kützing	*	4	2
1	0.23	FRAG	-	FRAGILARIA H.C. Lyngbye		3.6	2
1	0.23	EUNO	-	EUNOTIA C.G. Ehrenberg		4.8	2
1	0.23	APED	-	Amphora pediculus (Kützing) Grunow	*	4	1
1	0.23	ERHO	-	Eunotia rhomboidea Hustedt	*	5	1
1	0.23	ESLE	-	Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann	*	5	2
1	0.23	EMTR	-	Eunotia muscicola Krasske var. tridentula Norpel et Lange-Bertalot		5	3
1	0.23	MCCO	-	Meridion circulare (Greville) Agardh var. constrictum (Ralfs) Van Heurck	*	5	1
1	0.23	FPAR	PPRS	Fragilaria parasitica (W.Sm.) Grun. var. parasitica	*	4	1
1	0.23	COCS	-	Cocconeis species		3.5	2
1	0.23	NEXI	-	Navicula exilis Kützing	*	4.8	2

IDSE/5 3.68

degradation low

organic pollution non-existent

anthropogenic eutrophication low



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SLIDE NUMBER**1208**

SITE NAME

JOUTENNIVA

RIVER

PYHÄJOKI

DATE

15/09/2011

GPS coordinates

7106466

3428223

Temperature

13.5

Particularities näyttöotto JO, näytealusta kivet, näyttöottoosyvyys n. 40 cm, kivipohja, voimakas virtaus, varjostu ++, uoman leveys n. 40 m, vedessä jonkin verran humusta, näyttöottoaikka sillasta n. 10 m ylävirtaan, laskenta 25.1.2012 EAn, AMIN=2,62

IPS	SLA	DESCY	IDAP	GENRE	CEE	SHE	WAT	
17.0	13.5	16.0	13.4	16.4	17.9	16.1	13.5	
TDI	IBD	DI-CH	EPI-D	IDP	LOBO	SID	TID	IDSE/5
43.5	17.8	13.2	16.3	13.9	5.4	18.6	14.6	4.07

QUALITY NOTES / 20

Number of species	46	Diversity	3.92	Genera number	17
Population	425	Evenness	0.71		

Number	%	Code	ou	Designation	* : taxon	IBD	IPS	S	IPS	V
96	22.59	ASUC	KASU	Achnanthes suchlandtii Hustedt	*		4.5		1	
91	21.41	AMIN	ADMI	Achnanthes minutissima Kützing v. minutissima Kützing (Achnanthidium)	*		5		1	
43	10.12	AAMB	-	Aulacoseira ambigua (Grunow) Simonsen	*		3		1	
27	6.35	AUSU	-	Aulacoseira subarctica (O.Muller) Haworth	*		4		1	
22	5.18	FCVE	SSVE	Fragilaria construens (Ehr.) Grunow f. venter (Ehr.) Hustedt	*		4		1	
16	3.76	FCGR	FGRA	Fragilaria capucina Desmazieres var. gracilis (Oestrup) Hustedt	*		4.8		1	
15	3.53	ASAT	ADSO	Achnanthes subatomoides (Hustedt) Lange-Bertalot et Archibald	*		5		1	
11	2.59	EMIN	-	Eunotia minor (Kützing) Grunow in Van Heurck	*		4.6		1	
10	2.35	EMEI	-	Eunotia meisteri Hustedt	*		5		3	
8	1.88	NDIS	-	Nitzschia dissipata (Kützing) Grunow var. dissipata	*		4		3	
8	1.88	FCRS	-	Frustulia crassinervia (Breb.) Lange-Bertalot et Krammer	*		5		2	
7	1.65	EINC	-	Eunotia incisa Gregory var. incisa	*		5		1	
7	1.65	NCRY	-	Navicula cryptocephala Kützing	*		3.5		2	
6	1.41	GPAR	-	Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum	*		2		1	
5	1.18	CSTE	DSTE	Cyclotella stelligera Cleve et Grun (in Van Heurck)	*		4.2		1	
5	1.18	FPIN	SSMU	Fragilaria pinnata Ehrenberg var. pinnata	*		4		1	
4	0.94	NSMM	-	Navicula(dicta) schmassmannii Hustedt	*		5		1	
3	0.71	NEXI	-	Navicula exilis Kützing	*		4.8		2	
3	0.71	CPLA	-	Cocconeis placentula Ehrenberg var. placentula	*		4		1	
3	0.71	PSIN	-	Pinnularia sinistra Krammer	*		3		2	
2	0.47	FERI	-	Frustulia erifuga Lange-Bertalot & Krammer	*		5		2	
2	0.47	NPAD	-	Nitzschia palea (Kützing) W. Smith var. debilis (Kützing) Grunow in Cl. & Gru	*		3		1	
2	0.47	ALIO	-	Achnanthes linearoides Lange-Bertalot	*		5		2	
2	0.47	ADMS	-	Adlafia minuscula (Grunow) Lange-Bertalot	*		3		1	
2	0.47	CROS	-	Cyclotella rossii Hakansson	*		4		1	
2	0.47	ESLE	-	Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann	*		5		2	
2	0.47	ERHO	-	Eunotia rhomboidea Hustedt	*		5		1	
2	0.47	GOMP	-	GOMPHONEMA C.G. Ehrenberg			3.6		2	
2	0.47	NRAD	-	Navicula radiosa Kützing	*		5		2	
1	0.24	NRHY	-	Navicula rhynchocephala Kützing	*		4		3	
1	0.24	ESEP	-	Eunotia septentrionalis Oestrup			5		3	
1	0.24	NIFR	-	Nitzschia frustulum (Kützing) Grunow var. frustulum	*		2		1	
1	0.24	AUIT	-	Aulacoseira italica (Ehrenb.) Simonsen	*		3.7		1	
1	0.24	CPST	DPST	Cyclotella pseudostelligera Hustedt	*		4		1	
1	0.24	ALVS	EULA	Achnanthes laevis Oestrup var. laevis Oestrup	*		5		2	
1	0.24	CMEN	-	Cyclotella meneghiniana Kützing	*		2		1	
1	0.24	NCOC	CCOC	Navicula cocconeiformis Gregory ex Greville	*		5		2	
1	0.24	FVUL	-	Frustulia vulgaris (Thwaites) De Toni	*		4		3	
1	0.24	STAN	-	Stauroneis anceps Ehrenberg	*		5		3	
1	0.24	TFLO	-	Tabellaria flocculosa (Roth) Kützing	*		5		1	
1	0.24	NIPM	-	Nitzschia perminuta (Grunow) M. Peragallo	*		4.5		1	
1	0.24	NAVI	-	NAVICULA J.B.M. Bory de St. Vincent			3.4		2	
1	0.24	NCTE	-	Navicula cryptotenella Lange-Bertalot	*		4		1	
1	0.24	GEXL	-	Gomphonema exilissimum (Grun.) Lange-Bertalot & Reichardt	*		5		1	

Omnidia 5.3								2
1	0.24	APUS	RPUS	Achnanthes pusilla (Grunow)De Toni	*	5	3	
1	0.24	ALVD	PLVD	Achnanthes levanderi Hustedt		4	1	

IDSE/5 4.07								
degradation low								
organic pollution non-existent								
anthropogenic eutrophication non-existent								

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