

LIFE Revives

LIFE20 NAT/FI/000611

D3a Monitoring status of the salmonid populations; electrofishing (+ D5b Monitoring the water quality of restoration sites; temperature loggers)

Electrofishing in Pirkanmaa area in August 2022

Mon-Thu 08.-11.08.2022

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All fish were released, and brown trout measured for length and weight. For temperature measurements an analogic thermometer was used, and Pesola spring balances were used to measure the weight – alive fish were put to a balanced minigrip bag (so that also some water was included in the weight). GeOmega device was used for electrofishing.

08.08. 14:30-15:30 Hietaanoja (GPS 661-662)

- from Jokisjärvi to road bridge, WGS84 61.49014/23.342392-61.490187/23.343739 = 100 m
- width 1-3 m, max. depth 0,3 m, low current
- muddy banks, but hard bottom in the center of the river, water plants
- water temperature not measured
- weather around 22 degrees, sunny
- 64 perch, 6 roach, 6 ide, 1 sculpin, 1 lamprey, 4 small crayfish
- no brown trout observation
- also 2 other spots from Hietaanoja checked but very low water levels were found; it was decided to find another comparison river

08.08. 16:25–17:30 Pinsiön-Matalusjoki, so-called Jäppinen bridge

(GPS 663-664)

- from road bridge to rocky bottom before a large stone and the field (KKJ 3306546/6829450), WGS84 $61.524325/23.360063-61.524636/23.361034=60~\mathrm{m}$
- width 3–5 m, depth 0,3–1,0 m, relatively low current
- muddy banks, but hard bottom in the center of the river, also large stones
- clear water, temperature 13 degrees
- weather around 18 degrees, sunny
- no observations from other fish species
- brown trout caught (also escapes of around 250-300, 120, 120, 100, 100 and 250-300 mm individuals):

weight
19 g
22 g
95 g
140 g
> 300 g
> 300 g
> 300 g

09.08. 10:20–11:00 Turkimusoja, below Vaivia road (GPS 667–666)

- from a fallen tree (below cottage) to a large stone and a water level meter (above cottage) (KKJ 3296584/6846379), WGS84 61.670302/23.154671–61.67103/23.154587 = 85 m
- width around 1 m, depth max. 45 cm, generally 10–20 cm, relatively low current (easy for electrofishing)
- clear water, rocky bottom and gravel, good-looking spot, water temperature 14 degrees
- weather around 15 degrees, sunny
- 87 perch, 2 lamprey, 2 burbot
- no brown trout observation

<u>09.08. 11:50–12:50 Turkimusoja, Pertta</u> (GPS 669–670)

- from 2 large rocks to red border mark (KKJ 3296507/6846029), WGS84 61.66637/23.158372–61.66662/23.156444 = 120 m
- width 1–2 m, depth 10–30 cm, max. 50 cm, relatively low current
- clear water, temperature 14 degrees, gravel but also muddy banks, old coniferous forest (easy for electrofishing)
- weather 19 degrees, sunny
- water temperature 14 degrees
- 106 perch, 2 brown trout caught and 1 around 150 mm missed:

length	weight
181 mm	70 g
205 mm	100 g

<u>09.08. 14:20–14:55 Turkimusoja, central park bridge</u> (GPS 671–672)

- from bridge to a fallen spruce (KKJ 3297458/6845364), WGS84 61.662163/23.172093—61.662465/23.171014 = 110 m
- width 1–2 m, depth 10–50 cm, appr. 20 cm, relatively low current (easy for electrofishing)
- clear water, temperature 13 degrees, gravel but also muddy banks, lot of rubbish
- weather 21 degrees, sunny
- 101 perch, 1 lamprey
- no observations from brown trout

09.08. 16:00–16:45 Prentinjoki, lowest section (GPS 673–674)

- from fork to 2 stones & buckthorn, after a side channel, *WGS84 61.63212/23.157613* 61.632521/23.156631 = 60 m
- width 3–5 m, depth max. 80 cm, appr. 40 cm, low/high current, big stones but also pools, dark water, temperature 11 degrees
- weather 21 degrees, sunny
- 2 crayfish, 2 sculpins + some probably larger fish observations

09.08. 17:30–17:55 Prentinjoki, Lohikoski (GPS 675–676)

- from a building & hairpin to lean-to, WGS84 61.656896/23.126322-61.656479/23.125351 = 75 m
- width 1-3 m, depth max. 40 cm, appr. 15 cm (easy for electrofishing)
- stones, dark water, temperature 11 degrees
- weather 18 degrees, sunny
- no fish

10.08. 10:00-11:10 Ruonanjoki, Kominkoski (GPS 677-678)

- from lagoon & toilet to large stone & a birch (KKJ 3311018/6846504), *WGS84* 61.678746/23.427158–61.679544/23.426041 = 120 m
- width 5-10 m, depth 0,3-0,55 m, appr. 30 cm
- clear water, temperature 13 degrees, stones
- weather 17 degrees, sunny
- 18 roach, 32 perch, 8 sculpin, 5 burbot, 2 signal crayfish
- 1 brown trout caught + 1 missed (around 200 mm)

length	weight
289 mm	230 g

10.08. 12:45–13:30 Ruonanjoki, Koivistonkoski (GPS 679–680)

- from a fallen tree in a pool to another pool before stream (KKJ 3311218/68474389), WGS84 61.68725/23.429563–61.687972/23.429014 = 90 m
- width 5-10 m, depth 0,1-0,8 m, appr. 10 cm, relatively low current
- gravel, no hiding spots for fish, clear water, temperature 14 degrees
- weather 20 degrees, sunny
- 82 sculpin, 1 lamprey(?), 15 perch, 3 crayfish, 12 roach, 1 frog
- 1 brown trout + 3 missed (around 70, 100 & 150 mm)

length	weight
71 mm	3 g

10.08. 14:25–14:55 Ruonanjoki, Hyyrynkoski

(GPS 681-682)

- from large round stone and a summer cottage to bridge (KKJ 3311420/6848743), *WGS84* 61.699212/23.431572–61.699582/23.431428 = 45 m
- width 5–10 m, depth 0,1–0,35 m, appr. 15 cm
- big stones, clear water, temperature 16 degrees
- weather 21 degrees, sunny
- 45 roach, 53 perch, 4 sculpin and a brown trout:

length	weight
170 mm	55 g

10.08. 16:40–17:15 Lavajoki, Kattilakoski (GPS 683–684 & 685–686)

- 16:40-16:55 from bridge to upwards, WGS84 61.644041/23.383802-61.644292/23.383552 = 35 m
- width 5-10 m, depth > 1 m, brown water, dredged recently
- water temperature 17 degrees, weather sunny 22 degrees
- 4 burbot, 1 roach
- 17:00–17:15 a small rapid below the bridge, starting from a fallen tree, *WGS84* 61.643803/23.384266–61.64389/23.383952 = 20 m
- depth 0,1-0,2 m in the rapid
- 20 roach, 15 perch, 4 burbot
- no brown trout observations

10.08. 17:35–18:10 Lavajoki, Pilpuankoski (GPS 687–688)

- from old generator to upper part of a pool with 2 large rocks, $WGS84\ 61.630863/23.376782-61.630947/23.377112 = 30$ m (real later GPS point a bit more above)
- width 1–10 m, depth 10–80 cm, average 30 cm, big stones, small rapids, and pools, recently restored good-looking place
- water temperature 16 degrees, weather sunny 20 degrees
- 8 sculpin, 17 perch, 4 pike, 12 burbot, 29 roach
- no brown trout

10.08. 18:45-19:10 Lavajoki, Rokkakoski (GPS 689-690)

- from a pool to another pool over the rapids, *WGS84 61.626479/23.377889–61.626762/23.377642* = 45 m
- width 1-5 m, depth 10-70 cm, average 40 cm, very rocky, dark water
- water temperature 16 degrees, weather sunny 18 degrees
- 46 perch, 2 burbot, 35 roach, 1 pike
- no brown trout

11.08. 10:00–10:20 Prentinjoki, middle part (GPS 692–693)

- a small rapid from a fallen spruce elsewhere dredged poor place, *WGS84 61.649331/23.139755* 61.649599/23.13962 = 30 m
- width 1–2 m, depth 30–50 cm, rocks, dark water
- water temperature 11 degrees, weather sunny 17 degrees
- no fish observations

11.08. 11:15–12:05 Palinperänpuro, lowest section (GPS 694–695)

- lowest spot from backyard of summer cottage to bridge, *WGS84 61.714025/23.028045*–61.713738/23.02887 = 80 m
- width 0,5-2 m, depth 10-20 cm, nice gravel bottom and clear water, easy to fish
- water temperature 9,5 degrees, weather sunny 18,5 degrees
- 60-70 perch, 2 very small pikes
- no brown trout

11.08. 12:20–12:40 Palinperänpuro, middle section (GPS 696–697)

- from bridge to another bridge and a large rock, *WGS84 61.712134/23.026722*–61.711897/23.026557 = 30 m
- width 0,3–0,8 m, depth 10–20 cm, average current, gravel bottom, larger rocks, easy to fish and nice-looking rapids
- water temperature 9,5 degrees, weather sunny 17,5 degrees
- 1 roach

<u>11.08. 13:10–13:40 Palinperänpuro, upper section</u> (GPS 698–699)

- the upper part from a fallen large spruce to "stairs" of the stream, WGS84 61.708983/23.025504–61.708687/23.025712 = 50 m
- width 0,5–1 m, depth 10–15 cm, small stones, nice and easy place
- water temperature 9,5 degrees, weather sunny 18 degrees
- 11 brown trout caught and 5 missed:

length	weight
55 mm	3 g
55 mm	3 g
57 mm	2,5 g

57 mm	3 g
48 mm	2 g
115 mm	16 g
51 mm	1,5 g
55 mm	3 g
48 mm	1,5 g
49 mm	1,5 g
50 mm	2 g

11.08. 15:45–17:00 Pinsiön-Matalusjoki, lower section right before the lake (GPS 700–701)

- from bridge to place where 2 channels combine again (KKJ 3304878/6829302), $WGS8461.522106/23.3289-61.522031/23.329861 = 70 \,\mathrm{m}$
- width 3-10 m, depth 0,3-0,6 m, average current
- rocky bottom
- clear water, 13 degrees
- weather around 20 degrees, sunny
- 40 perch, 2 roach, 4 sculpin, 2 burbot, and 3 brown trout caught (also 2 missed, around 130 mm):

length	weight
270 mm	205 g
146 mm	38 g
145 mm	33 g

In addition to electrofishing, 09.08. a temperature logger in Turkimusoja was checked; it was ok but there was low level of water, only 20–30 cm (GPS 668, KKJ 3296541/6846974, *WGS84* 61.675751/23.1528).

Furthermore, Pinsiö-Matalusjoki middle location (Leipävuori, KKJ 3305843/6829311) was electrofished 17.08. by Heikki Holsti for 45 m, and 24 brown trout were caught. At the same day and location, 50 adult FPM were collected and transported to Konnevesi Research Station.

ATTACHMENTS

Electrofishing_FPM_sites_maps_Pirkanmaa.pdf