MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

„Assessing the impact of hydropeaking on

benthic invertebrates

- identification of seasonal patterns"

verfasst von / submitted by

Klaus Prillinger Bsc

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of

Master of Science

Wien, 2017 / Vienna 2017

Studienkennzahl lt. Studienblatt / degree programme code as it appears on the student record sheet:	A 066 833
Studienrichtung lt. Studienblatt / degree programme as it appears on the student record sheet:	Masterstudium Ecology and Ecosystems
Betreut von / Supervisor:	Ass. Prof. Dr. Wolfram Graf

Acknowledgements

Gleich zu Beginn möchte ich mich bei meinen Eltern *Hannelore Prillinger* und *Josef Prillinger* für die großartige Unterstützung während meiner gesamten und durchaus turbulenten Studienzeit bedanken. Weiters möchte ich hier auch meine Schwester *Eva Fuchs* und meinen Schwager *Daniel Fuchs* erwähnen, die immer hinter mir gestanden haben.

Ein riesiges Dankeschön geht an *Lisa Schülting*, die mir vor allem bei der praktischen Arbeit und während des Schreib- und Auswertungsprozesses eine große Hilfe war.

Ich möchte mich hiermit bei *Prof. Wolfram Graf* für die Möglichkeit diese Arbeit zu schreiben bedanken. Danke auch für die konstruktive Kritik und die fordernden und fördernen Kommentare.

Des Weiteren möchte ich mich bei *Prof. Johann Waringer* bedanken, der mich während meines gesamten Bachelor- und Masterstudiums inspiriert hat und auch einen wesentlichen Teil zu dieser Arbeit beigetragen hat.

Ich möchte hier auch *Thomas Huber*, *Patrick Leitner* und *Florian Dossi* vom Institut für Hydrobiologie (IHG – BOKU) erwähnen, die mir während der Zeit im Labor eine große Hilfe waren. *Simon Vitecek* (Universität Wien) möchte ich für die Hilfe in der statistischen Auswertung danken.

Ich möchte mich auch bei *Patricio Ferrer Murguia*, *Siegfried Eisenberg, Michael Pointl, Fabian Pointl*, *Claudia Ammer*, *Josef Kaltenböck*, *René Diwald*, *Bernhard Gartner, Matthias Weigerstorfer*, *Thomas Zeilinger* und *Manuel Kemethofer* bedanken, die mich abseits des Studiums immer unterstützt haben und für mich da waren.

Last but not least geht mein ganzer Dank an *Nadine Gradwohl*, die mich vor allem in der finalen Phase motiviert und vorangetrieben hat.

Table of Contents

Introduction

Hydropower

In 1992, at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, attention was paid to climate change worldwide (Rio Declaration 1992). In 1997, the Kyoto protocol was signed by more than 191 countries for the purpose of limiting greenhouse gas emissions (Kyoto Protocol 1997). CO_2 release due to the use and consumption of fossil fuels are clearly connected to climate change (Solomon et al. 2008). The destruction of the ozone layer and the exhaustion of fossil fuels stored over millions of years are urging us to focus on alternative, renewable energy sources. Renewable resources such as light, wind or water are used to gain "green" electricity (Johansson et al. 1993; Bratrich et al. 2004; Bointer et al. 2013). Around 60 % of Austria's landscape is covered by the Eastern Alps (Fink et al. 2000) and thus has, due to the altitudinal gradients, suitable conditions to utilize hydropower (Steidl 2012; Auer et al. 2005). For this reason, especially the generation of hydroelectric power is emphasized in Austria. According to recent statements of E-control Austria (www.e-control.at, 31.12.2015) there are over 2000 small and big hydropower plants which cover more than 67 % of Austria's energy demand (Habersack et al. 2012) (figure 1).

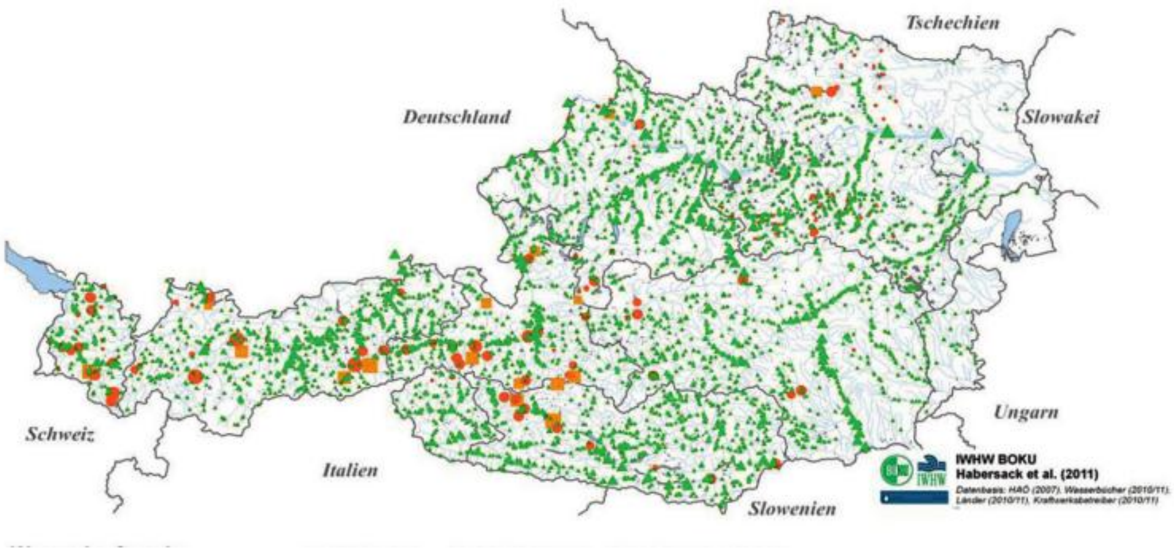


Figure 1. Hydropower plants in Austria; green triangles: running power plants, orange: storage power plants, red: pumped storage power plant; the size is according to maximum capacity (Habersack et al. 2012).

In Austria, more than 800 km of flowing water sections are estimated to be affected by hydropeaking (figure 2, Schmutz et al. 2013). The operation of hydropower plants (especially pumped storage power plants) and the related construction of dams are associated with a variety of environmental changes, such as the disruption of the longitudinal continuum of a river (Schilt 2006). Irregularly increased runoff (hydropeaking), for example, leads to “tidal zones” that are flooded at high discharge and are dry at low discharge (Brooker 1981). During periods of hydropeaking especially ecological relevant parameters like flow velocity and shear stress are changing rapidly. Other associated effects are changes in temperature, oxygen concentration or grain size compilation (Bruder et al. 2012). These changes caused by hydropeaking have observable impacts on the aquatic biota. Stranding is one of the major problems in the tidal zones of affected river sections. Escpecially animals from the shore zone are struggling with oxygen deficiency and dehydration when they are caught in small pools at low outflow (Baumann & Klaus 2003). Céréghino and Lavandier (1998 a,b) have shown that species composition of benthic invertebrates altered below power plant outlets and stranding of macroinvertebrates is a problem that can lead to a reduction in river productivity (Cushman 1985). Affected river sections show higher drift rates of benthic invertebrates (Matthaei et al. 1997; Trockner & Waringer 1997; Armanini et al. 2014) and as a result the benthic biomass decreases (Parasiewicz et al. 1998). The increase of shear stress is a main driver for drift of benthic invertebrates (Gibbins et al. 2007; Gibbins et al. 2010), caused, for example, by the onset of bedload transport (Bagnold 1977). A decrease of benthic invertebrates can have a great impact on the entire ecosystem. As an example they fulfill many important tasks due to their variety of different feeding types. Controlling algal growth (grazers), decomposition of allochthonous plant material or dead animal matter and filtering straining suspended matter and food particles are only some important tasks at the beginning of the food chain that they perform. Furthermore benthic invertebrates are at least important as a food source for fish (Covich et al. 1999; Wallace & Webster 1996; Wallace et al. 1977). .

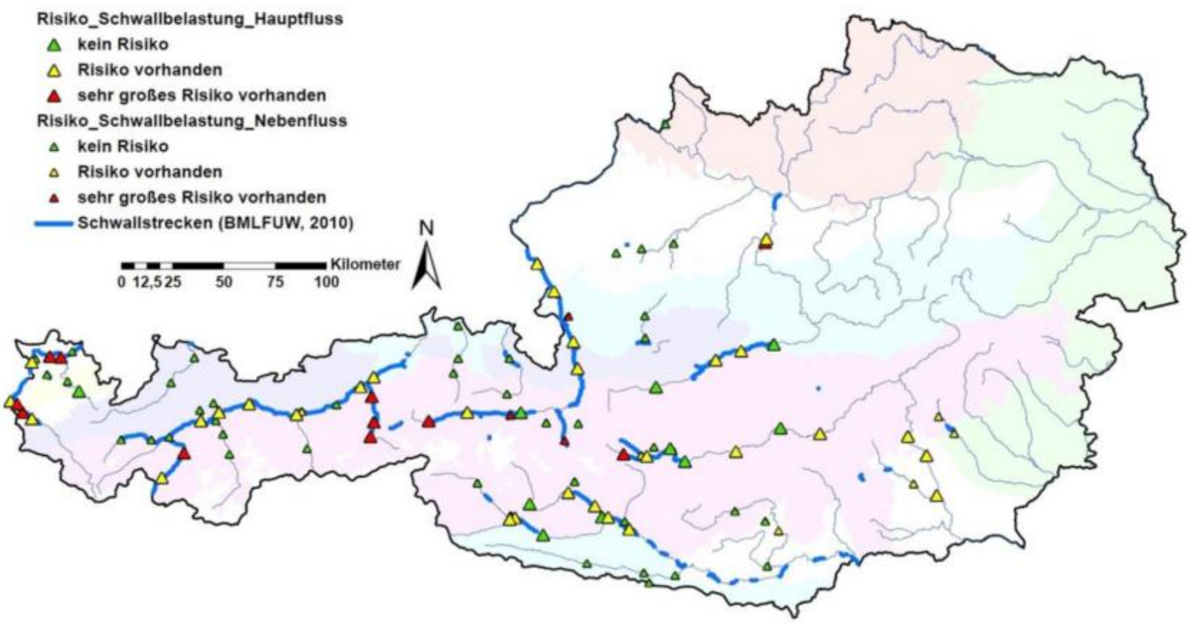


Figure 2. Risk of hydropeaking affected river regions in Austria. Big triangles: mainstreams, small triangles: tributaries; green: no risk, yellow: risk availability, red: high risk; blue line: hydropeaking sections (Schmutz et al. 2013).

Drift of benthic invertebrates

Dislocation (drift) plays an important role in the life history of benthic invertebrates, either controlled or arbitrarily. Waters (1965) defined three different types of drift for macroinvertebrates. The (1.) behavioral drift is a response to changing conditions such as changing light conditions or depleted resources and belongs to the natural behavior of an animal (daily drift). Behavioral drift can act as a low-cost way to move away from unfavorable areas like escaping from predators (Winkelmann et al. 2006). The (2.) constant drift happens occasionally to individuals of all taxa, which accidentally are detached from the sediments due to various reasons. This is rather random and does not happen to a great extent. The (3.) catastrophic drift is caused by floods or other physical disturbances (Anderson & Lehmkuhl 1968; Gibbins et al. 2007). Under natural conditions catastrophic drifts only occur a view times a year (floods). Investigations in hydropeaking affected river sections at power plant outflows showed that hydropeaking can cause catastrophic drifts up to several times a day (Baumann & Klaus 2003).

Benthic invertebrates have evolved many different behavioral and physical adaptations to the hydraulic conditions in running waters. Case bearing caddisflies, for example, use different materials as ballast gravel, whereas other taxa like *Simulium* sp. have developed permanent fixation tools (e.g. hooks) to minimize the risk of occasional drift (Dodds & Hisaw 1925; Statzner 2008). As an adaptation to life in running waters various life strategies have evolved that can be seen in different habitat preferences. Some taxa have adapted to be free swimming near the surface like species of the family Baetidae (Bohle 1995, Hieber et al. 2003), whereas other taxa like *Hydropsyche* sp. are interstitial dwellers (Capaltica & Kopecki 2013). Another example for adaptations to life in running waters are the dorsoventrally flattened body shapes of mayflies, which allows them to inhabit the substrate in habitats characterized by very rapid flow (Wetzel & Likens 1995). In addition to these adaptations, however, the size of the larvae plays an important role for the susceptibility of drift. Statzner (1988) showed that bigger individuals of *Ancylus fluviatilis*, *Potamopyrgus* sp. and *Gammarus fossarum* are more resistant to higher flow currents and explained this phenomenon due to the higher Reynolds-number (Re). Re is a dimensionless value that describes the ratio of inertial forces to the viscous forces (Purcell 1974). The Reynolds-number of a single species is dependent of its body length and so increases with increasing body length (Bohle 1995). According to this, Sagnes et al. (2008) observed that some larvae of Ephemeroptera shifted from medium to high current velocities as body size increased. Another example given is *Allogamus auricollis*, which was even found in areas with flow rates up to 30 cm s^{-1}, although this caddisfly is most abundant in areas with low current speed (0-5 cm s^{-1}) (Waringer 1989b). Bacher & Waringer (1996) claimed that first instar larvae are more likely to dislocate than larvae of higher instars. That is why *Allogamus auricollis* is expected to show higher abundances and drift rates in autumn than in spring. Other studies also have shown that drift of macroinvertebrates is size dependent (Hieber et al. 2003; Hieber et al. 2005) and therefore it is assumed that drift is also density dependent as densities decrease with increasing larval stage (Hildebrand 1974). This already implies a certain seasonality of drift due to different larval stages in different seasons.

Seasonality in aquatic communities

Seasonality can be defined as the repetition of a certain data time series that recurs every year. The angle of incidence of sunlight changes through the year due to the changes of inclination in the Earth's axis. This also influences the length of daylight (photoperiod) as well as the temperature. These effects become clearer with increasing latitudes and so seasonal differences become more distinct in northern and southern hemisphere. At the latitudes in which Austria is located these recurring time series can be divided in four major seasons (spring, summer, autumn, winter). Water temperature and the temperature regime are mainly influenced by irradiation conditions, climate and hydrology and thus exposed to seasonal fluctuations (Ward 1985). Aquatic communities are strongly affected by effects of radiation, as for example the drift of benthic animals is highly dependent on light (Jungwirth et al.

2003). Elliott (1965) also found a high correlation of light intensity and drift of benthic invertebrates. He detected that the drift rates increased within the first three hours after sunset. The main reason for this phenomenon is the reduction of predation risk in the darkness (Culp et al. 1991).
Light and temperature fluctuations throughout the year have a major impact on the primary production in water bodies and thus food availability varies throughout the year. Seasonal changes in physicochemical habitat variables, for example, favor the growth of macrophytes that serves as food source and offers a wide range of ecological niches for the faunal community (Wang et al. 2013; Arnitage et al. 2001). Oxygen saturation of water bodies is also temperature dependent and thus important for the oxygen supply of aquatic fauna (Jungwirth et al. 2003). Seasonality can also be seen in naturally occurring hydropeaking events (floods) as the discharge regime in alpine regions may be dominated by snowmelt during summer (Beurton & Thieken 2009) and thus influences the drift of benthic invertebrates.

Another important parameter to consider in the context of this thesis is the change of the benthic community structure throughout the year (Principe & Corogliano 2006; Giller & Twomey 1993; Boulton et al. 1992; Chainho et al. 2006). Quantity and quality of food sources are expected to influence seasonal population dynamics (Füreder 2007). Thomson and Townsend (1999) detected seasonal differences in food-web structures of benthic communities. They identified larger amounts of collector-gatherer organisms in spring and justified this due to a greater availability of detritus pools in this season.

All these parameters described above influence the life cycles of benthic invertebrates. After hatching, the young larvae pass a different number of larval stages (figure 3). Depending on the species, the larvae populate different habitats. Some larvae are located in the interstitial (e.g. *Leuctra* sp., Jungwirth et al. 2003), some are located on stones (e.g. *Ecdyonurus* sp., Statzner & Holm 1982) and some larvae are free swimming in the water column (e.g. *Rhithrogena* sp., Céréghino et al. 2004). After the final pupation, the imago hedges. The adult form only serves reproduction and is very short living and dies after the oviposition (Clifford 1982). Most alpine species of Ephemeroptera, Plecoptera and Trichoptera have an univoltine life cycle, but the duration of larval stages can vary between a few months up to three years for single species (Jungwirth et al. 2003). Previous research on the life cycles of some mayflies, for example, showed that there is a wide range of voltinism strategies within the family of Baetidae and even for the same species in different regions. Weichselbaumer (1984) detected an univoltine life cycle of *Baetis alpinus* in an alpine stream in Austria, whereas a bivoltine life cycle was detected in Poland for the same species (Kukula 1997). Anyhow, flexibility in life-history is low on species level.

Seasonality in species composition is accompanied by seasonal dominance of different taxa (Boyero et al. 2005; Robinson et al. 2004). A study conducted in the Suisse Alps showed that Chironomidae became dominant during summer (August). By contrast, the relative abundance decreased in autumn. The reason for this is the absence of taxa with univoltine life cycles (one generation per year) that have their flight period during summer and oviposition in autumn (Robinson et al. 2004, Winterbourn & Crowe 2001).

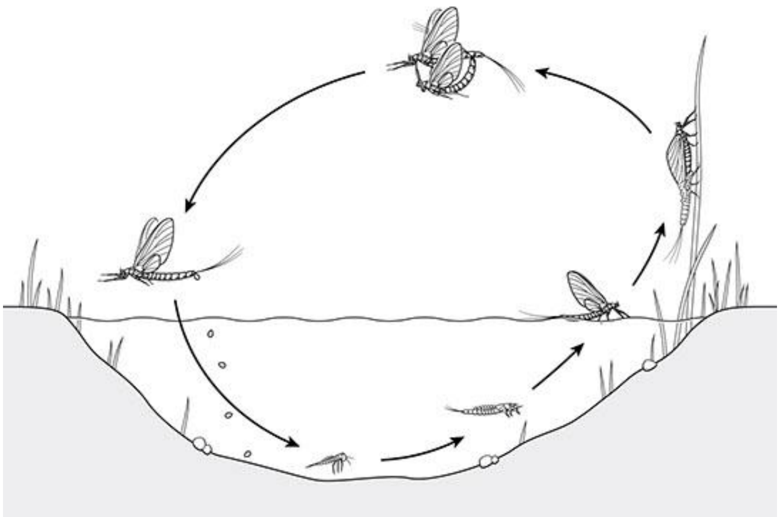


Figure 3. Schematic drawing of an Ephemeroptera life cycle (ettlin-illustration.ch).

Flight periods of most benthic invertebrates range from early spring to late autumn, although there are differences between species. Ulfstrand (1968) investigated life cycles of various species of Ephemeroptera, Plecoptera, Trichoptera and Simuliidae in Lapland Streams. He detected that the flight periods of these species were temperature dependent and occurred from May until early November. Svensson (1972) investigated the flight periods of different Trichoptera species at a South Swedish stream. He detected that most of the adult Trichoptera occurred from June to November, but that the flight periods differed among species. This was also shown by Wichard and Wagner (2015) and Pitch (1993).

As well as the species composition, species abundance changes seasonally throughout the year. Although different studies show contradicting results, highest abundance of aquatic stages seem to occur in autumn and least in summer (Giller & Twomey 1993; Burgherr & Ward 2001). As an example *Allogamus auricollis*, a case-bearing caddisfly with a one-year life cycle, passes through five larval instars and a pupal stage during the development from egg to imago (Waringer 1989a). Waringer (1986) found out that pupation occurs from June to

August and first and second instar larvae are most abundant in October. Overwintering mainly occurs in the third or fourth instar.

Aim and Hypotheses

This study deals with the drift of benthic invertebrates caused by suddenly increased flow (hydropeaking). It was investigated, how seasonal differences can be detected in the catastrophic drift of macroinvertebrates depending on size and life stage. Especially for species with univoltine life cycles with hatching in summer and subsequent oviposition (such as *Allogamus auricollis*) an increase of body size is expected from autumn to spring. This should result in higher drift rates in autumn and an increase of drifted biomass from autumn to spring. Species with bivoltine or multivoltine life cycles are expected to be more dominant in spring when other species decrease in abundance. It is assumed that early larval stages are more likely to drift than later ones, because of a smaller Reynolds number. Furthermore free swimming taxa and species that naturally occur in habitats with low water current are expected to be more susceptible to drift than interstitial taxa.

1. There is a significant effect of hydropeaking (H1).

   It is assumed that in the control samples only active and arbitrary drift occurs to macroinvertebrates, whereas the catastrophic drift is activated due to hydropeaking in the treatment samples. Consequently it is expected that the drift rates are significantly higher in the treatment samples than in the control samples. Furthermore, it is assumed that drift rates are highest during the first phases of the hydropeak.

2. Early larval instars and smaller species are more susceptible to drift than later instars and large taxa (H2).

   Due to various studies described above it is expected that smaller individuals are more affected by hydropeaking, because of their smaller Reynolds number. This is thought to result in lower drift resistance and higher drift rates of smaller individuals in general.

3. Drift rates are higher in autumn than in spring (H3).

   It is expected that most of the occurring species have their flight periods from spring to summer with subsequent oviposition. This is why higher numbers of smaller individuals are expected in autumn than in spring. According to H2 drift rates should be higher in autumn.

4. Interstitial taxa are more resistant to drift than flow exposed taxa (H4).

   It is expected that interstitial taxa can seek shelter in the sediment. On the other hand, surface and free swimming taxa are flow exposed and thus are expected to be more affected by hydropeaking.

Material and methods

Study site and experimental design

The experiments took place at the “Hydromorphology and Temperature Experimental Channels” (HyTEC) in Lunz am See, Lower Austria (Schmutz et al. 2013). The donor populations where sampled from the brook “Unterer Seebach”, around 600 m downstream the outflow of Lake Lunz. The study site is located 608 meters above sea level and belongs to the Northern Limestone Alps (Fink et al. 2000).

Two mixing basins are fed by lake water from Lake Lunz where water is taken from the surface and from 10 m in depth by two pipelines. The water is then discharged from the mixing basins into three testing flumes (2 m x 0.5 m x 0.5 m), which are connected to each basin. The discharge can be adjusted by computer software, and thus regulate the amount of water in flumes. See figure 5. The testing flumes are filled up to 15 cm height with sediments (microlithal and akal). Exchangeable drift nets (100 µm mesh size) were connected to each flume outflow (figures 4 & 5).

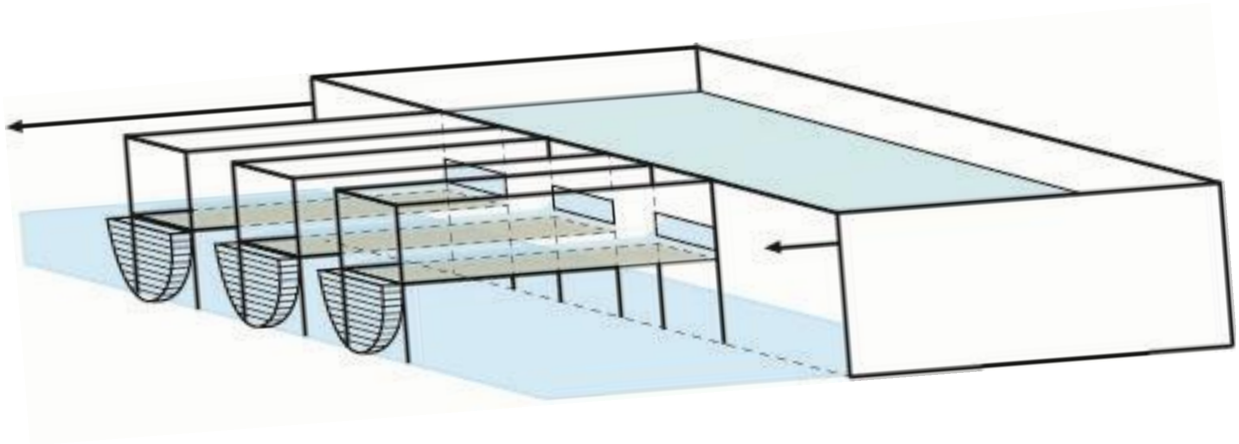


Figure 4. Schematic 3D-drawing of one experimental channel. Three experimental flumes are connected to the mixing basin, each with a changeable drift net at the outflow. Flow direction is shown with arrows.

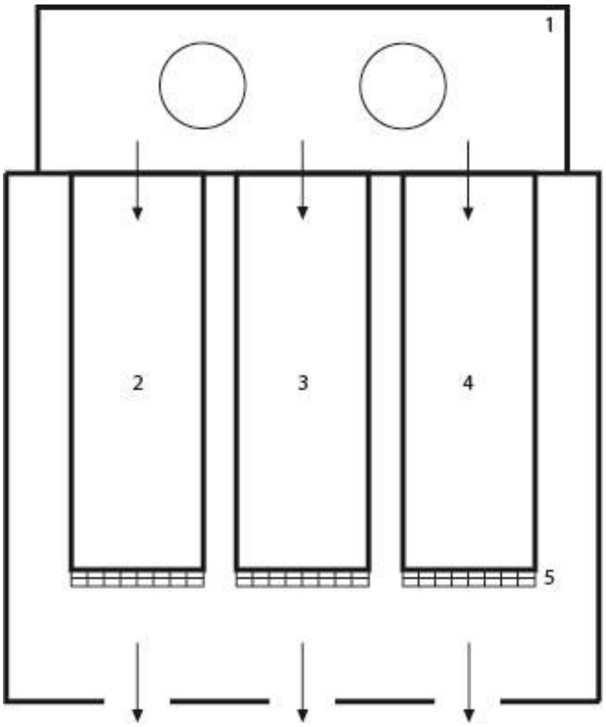


Figure 5. Schematic drawing of one experimental channel. (1) mixing basins; (2), (3) & (4) testing flumes; (5) changeable drift nets; arrows show flow direction.

In autumn and in spring, each experimental treatment and control was repeated twice, resulting in four different experimental runs (V21, V23, V33, V36). V21 and V23 were performed in autumn 2014, on 30th and 31st October respectively. The other experiments (V33 and V36) took place in early spring on the 8th and 9th of March 2015. Abiotic parameters such as temperature, water depth, flow velocity and shear stress were measured. The air and water temperatures were measured with data loggers. Water depth was measured at three different transects in the flumes (left – middle – right). The flow velocity was measured with a micro propeller (Höntzsch FT25GFE-MN20/100/P6) at the water surface, at 40 % of the water depth and on the bottom. Mean flow velocity was calculated by the two-point method formular by Bretschneider et al. (1993, Formula 1). Shear stress was measured with FST-(Fließwasserstammtisch) hemispheres (Table 1, Statzner & Müller, 1989).

Equation 1:

$$V_{mean} = 0.31 * v_{40\%} + 0.634 * v_{surface}$$

V_{mean} ... mean flow velocity
$V_{40\%}$ ... flow velocity at 40 % water depth
$V_{surface}$ ... surface flow velocity

Table 1. FST-hemisphere numbers and corresponding minimum near-bed shear stress for sedimentary channels (Bockelmann-Evans et al. 2008, Statzner & Müller, 1989)

Hemis-phere no.	Density (kg/m^3)	Shear stress (N/m^2)	Hemis-phere no.	Density (kg/m^3)	Shear stress (N/m^2)
1	1015	0.0828	13	2637	1.59
2	1031	0.0945	14	2988	2.27
3	1061	0.1180	15	3362	3.17
4	1092	0.1410	16	3795	4.48
5	1129	0.1660	17	4284	6.34
6	1198	0.2180	18	4833	8.95
7	1274	0.272	19	5459	12.70
8	1439	0.393	20	6167	17.90
9	1625	0.529	21	6958	25.30
10	1834	0.682	22	7854	35.70
11	2070	0.826	23	8867	50.40
12	2337	1.09	24	10009	71.20

Sampling of donor populations

Before running an experiment benthic invertebrates were sampled at the river "Unterer Seebach", next to the experimental facility. Four samples (corresponding to an area of 0.25 m^2), two near the shoreline and two samples slightly further towards the river center, were taken with a hand net (mesh size 100 µm) to cover taxa with different current preferences (this was repeated six times per experiment). Additionally, *Allogamus auricollis* was sampled from the Bodingbach nearby and was added to the samples. Before the start of the experiment the collected material were introduced to the flumes.

One group of three flumes was used as treatment whereas the other three served as control group synchronically. During an experimental run an artificial discharge peak (computer regulated) was induced in the treatment flumes, whereas the control flumes were discharged with a constant flow. The experiment can be separated into six phases as displayed in figure 6.

The Adaptation time (AT) lasts from the introduction of the organisms until the start of the upramping phase. After a duration of 30 minutes the flume nets are switched and emptied the first time. During the upramping phase (UR) the discharge increases from 2 l s^{-1} to 20 l s^{-1} in the treatment flumes. After this period (337 seconds) the flume nets were rinsed again followed by two phases with constant high discharge. The peak phase lasted for 20 minutes. During this stage the nets were emptied after 10 minutes (Peak 1, P1) and 20 minutes (Peak 2, P2). Finally the discharge decreased until the baseflow was reached again. Corresponding to the UR-phase, the downramping phase (DR) took 337 seconds. All remaining individuals were washed out from the sediment and classified as non-drifting (rest). Benthic invertebrates sampled in the different phases were fixed in 96 % formol.

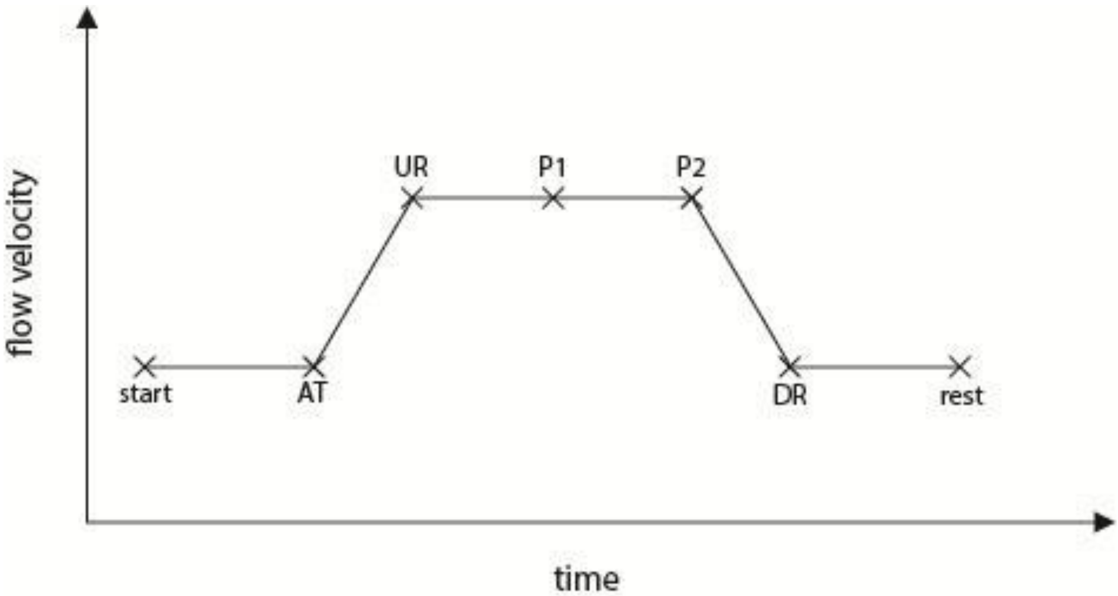


Figure 6. Timeline (x-axis) of the experiment with changes in flow velocity (y-axis). Start point and different sampling phases are marked with an X. AT (adaptation time), UR (upramping), P1 (peak 1), P2 (peak 2), DR (downramping) and rest (end of experiment).

Determination/Identification of species

Each sample was sieved in the laboratory (minimum mesh size: 500 µm) and determined to the lowest possible taxonomic level with determination literature (see annex I). Due to the presence of young larval instars some individuals could be determined only to family or order level. Individuals of Ephemeroptera, Plecoptera and Trichoptera were sorted into three size categories (C: 0-2 mm, B: 2-5 mm and A: larger than 5 mm). Chironomidae and Simuliidae were only classified into larger or smaller than 2 mm. In addition, all individuals belonging to the same order were dried on paper towels and weighed to get an estimate on the drifted biomass. Case-bearing caddisflies were removed from their cases for these measurements. Terrestrial taxa, adult forms (except aquatic beetles) and zooplankton were not considered.

Statistical analysis

Before the dataset was used for further processing, the data was extrapolated to one square meter (multiplied with 4), because the benthos sampling only covered an area of 0.25 m^2. The drift rates for each phase were calculated by dividing the number of individuals of one phase by the total number of remaining individuals (equation 2, example for P1). The total drift rate was calculated by dividing the sum of all drifted organisms (phases: UR, P1, P2 and DR) by the total number (drifted organisms and remaining individuals) (equation 3). In addition, same calculations were done for the relative biomass drift rate.

Equation 2

$$\frac{I(P1)}{I(P1) + I(P2) + I(DR) + I(rest)}$$

I ... Individuals
UR ... upramping
P1 ... peak 1
P2 ... peak 2
DR ...downramping

Equation 3

$$\frac{I(UR) + I(P1) + I(P2) + I(DR)}{I(UR) + I(P1) + I(P2) + I(DR) + I(rest)}$$

Statistical analysis was done with the software R-studio. To test for significances we applied the Mann-Whitney-U-test and the Kruskal-Wallis-H-test, both with a significance level of 0.05. A non-metric multidimensional scaling plot (nMDS) was calculated with Bray-Curtis dissimilarities. Figures and graphs were generated with R-studio, Microsoft Excel or Adobe Photoshop and Adobe Illustrator.

For the statistical analysis Bivalvia, Crustacea, Hydrachnidia, Hirudinea and Oligochaeta were removed from the dataset, because they did not occur in at least three phases and only were present in very low numbers.

Results

Abiotic measurements

The mean air temperature in autumn was ~9 °C, whereas the average water temperature was ~8.5 °C (table 2). In spring, the air temperature varied from 1 to 4 degrees, but water temperature was very constant at 3.4 °C. The mean surface flow velocity in the flumes was 0.04 m s^{-1} at baseflow (control, 2 L s^{-1}) and 0.39 m s^{-1} at peakflow (treatment, 20 L s^{-1}). The flow velocity at 40 % did not differ from the surface velocity in the control channels and was 0.3 m s^{-1} in the treatment channels. Near-surface flow velocity was approximately zero at baseflow, but at peakflow it increased up to 0.13 m s^{-1}. The water depth increased from 5.5– 8 cm during baseflow up to 11-14 cm at peakflow level. With Statzners hemispheres a shear stress between 0.0828 and 0.0945 N m^{-2} was measured during the baseflow. During the peakflow the near-bed shear stress increased to 0.826 N m^{-2}.

Table 2. Abiotic measurments for temperature, flow velocity, water depth and shear stress due to different conditions (season and discharge).

	season		discharge	
	autumn	spring	control	treatment
air temperature [°C]	9	1 - 4		
water temperature [°C]	8.5	3.4		
flow velocity surface [m s^{-1}]			0.04	0.47
flow velocity 40 % [m s^{-1}]			0.04	0.30
bottom flow velocity [m s^{-1}]			0.01	0.13
water depth [cm]			5.5 - 8	11 - 14
shear stress [N cm^{-2}]			0.0828-0.0945	0.826

Hydropeaking-induced drift of benthic invertebrates

Control versus Treatment

A significant difference in the drift rates of control and treatment samples could be detected (p= 0.0006 ; figure 7). In the treatment samples the drift rates were significantly higher (median = 15.3 %) than in the control samples (5.8 %).

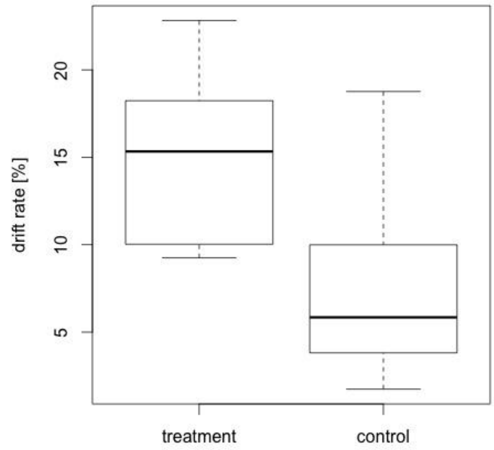


Figure 7. Boxplots of total drift rates [%] of treatment and control samples, both seasons are included (N=12).

Ephemeroptera

Ephemeroptera showed no significant difference in drift rates between control and treatment samples (figure 8). The drift rates were nearly equal, although little higher drift rates were detected in the treatment samples (median = 9.2 %) than in the control samples (7.5 %). *Baetis* sp. was the most dominant species of mayflies. The drift rates also did not differ significantly in treatment and control samples with higher drift rates during the experiment (12.4 %) than in the control channels (8.7 %, figure 9).

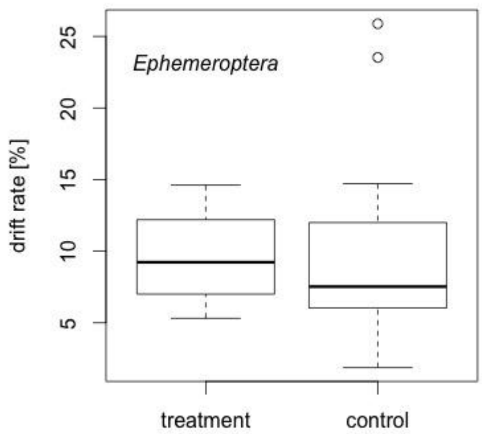


Figure 8. Boxplots of total drift rates [%] of Ephemeroptera of treatment and control samples, both seasons are included (N=12).

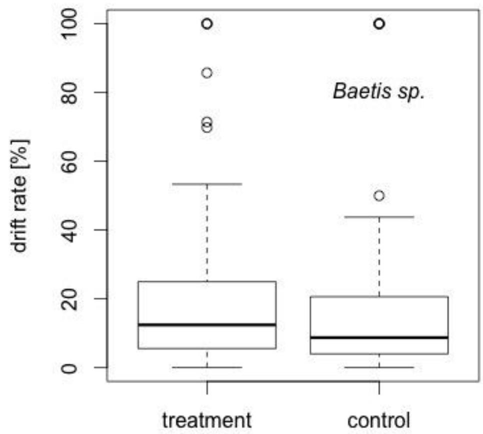


Figure 9. Boxplots of total drift rates [%] of *Baetis* sp. of treatment and control samples, both seasons are included (N=12).

Diptera

Diptera larvae showed a clear drift response to the hydropeaking event (figure 10). The treatment samples differ significantly (p = 0.004) from the control samples. The drift rates are more than double as high during the experiment (median = 23.7 %) than in the control samples (9.6 %).

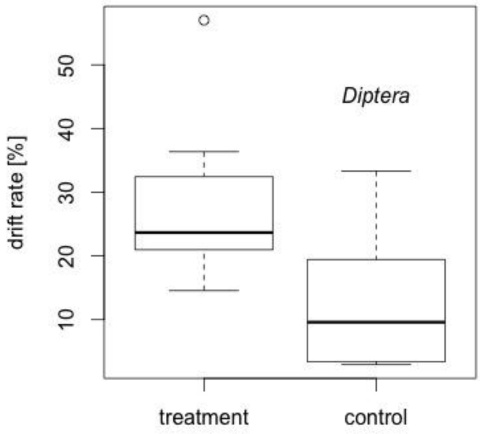
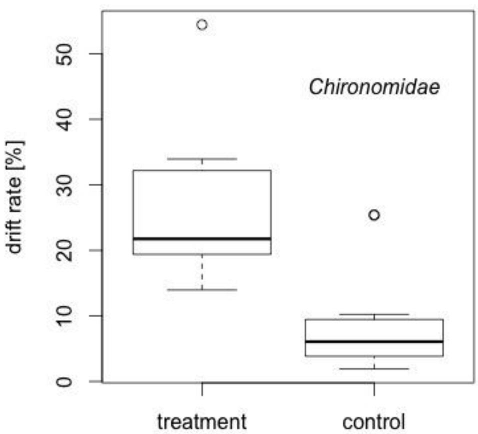


Figure 10. Boxplots of total drift rates [%] of Diptera of treatment and control samples, both seasons are included (N=12).

Chironomidae, the most dominant family of Diptera, also showed a significant difference between treatment and control (p = 0.0004, figure 11). *Simulium* sp., on the other hand, did not show a significant difference (figure 12). Around 50 % (median value) of all *Simulium* sp. larvae drifted during the experiment, whereas the drift rates were lower in the control samples (46 %).



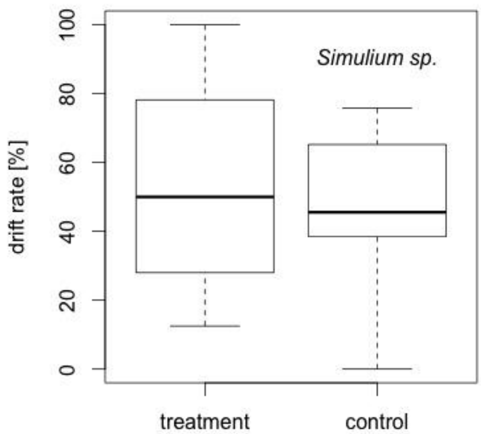


Figure 11. Boxplots of total drift rates [%] of Chironomidae of treatment and control samples, both seasons are included (N=12).

Figure 12. Boxplots of total drift rates [%] of *Simulium* sp. of treatment and control samples, both seasons are included (N=12).

Trichoptera

Trichoptera showed a significant difference in drift rates between control and treatment samples (p = 0.00004, figure 13). Within different genera of caddisflies, differences could be detected. Nethertheless, all following genera showed significant differences of treatment to control samples. *Allogamus* sp. has a median value drift rate of 9.3 % during the hydropeaking event and 1 % during the control (figure 14). The median value of drift rates of *Hydroptila* sp., *Micrasema* sp. and *Hydropsyche* sp. in the control samples is 0 (figures 15 -17). *Hydroptila* sp. was most susceptible to drift and showed drift rates around 20 % in the treatment samples. Around 13 % of *Micrasema* sp. and around 5 % of *Hydropsyche* sp. larvae drifted during the experiment.

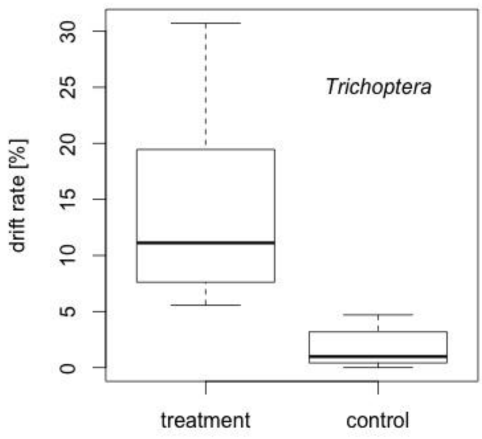


Figure 13. Boxplots of total drift rates [%] of Trichoptera of treatment and control samples, both seasons are included (N=12).

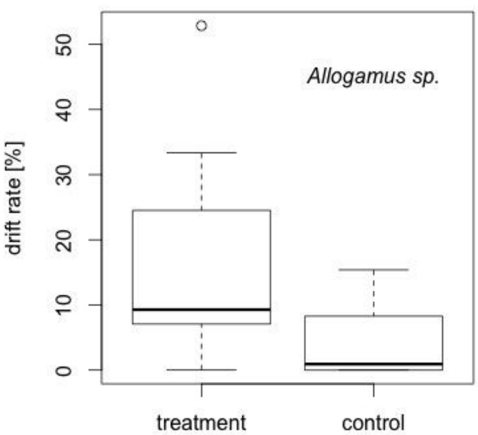


Figure 15. Boxplots of total drift rates [%] of *Allogamus* sp. of treatment and control samples, both seasons are included (N=12).

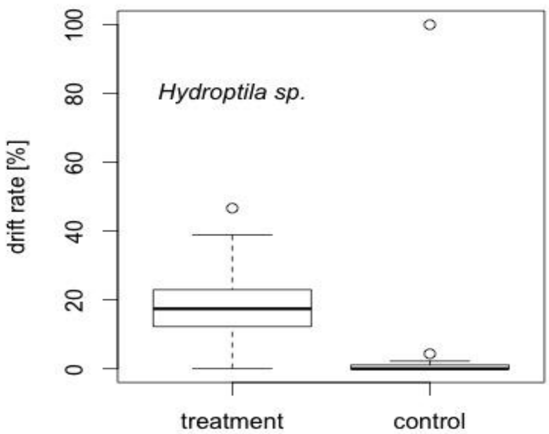


Figure 14. Boxplots of total drift rates [%] of *Hydroptila* sp. of treatment and control samples, both seasons are included (N=12).

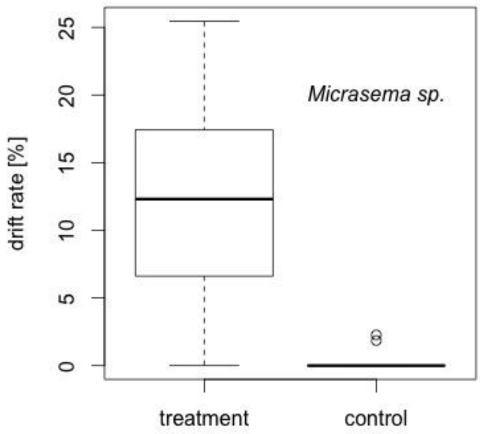


Figure 17. Boxplots of total drift rates [%] of *Micrasema* sp. of treatment and control samples, both seasons are included (N=12).

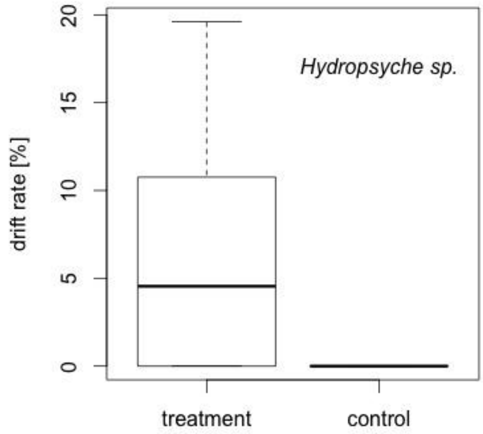


Figure 16. Boxplots of total drift rates [%] of *Hydropsyche* sp. of treatment and control samples, both seasons are included (N=12).

Plecoptera

The control and treatment samples showed significant differences in the drift rates (p = 0.00002) for stoneflies (figure 18). During the experiment around 13 % of all Plecoptera larvae drifted, whereas in the control group only around 2 % of the larvae were caught in the drift nets. As an example, the drift rates for *Amphinemura* sp. are shown in figure 19. The results for this species are very similar to the results for all Plecoptera and a significant difference could also be detected between control and treatment samples (p = 0.0009).

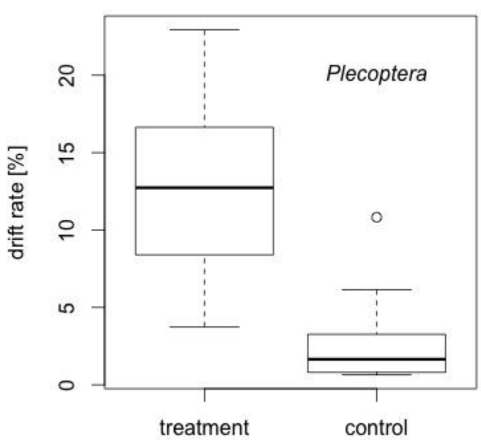


Figure 18. Boxplots of total drift rates [%] of Plecoptera of treatment and control samples, both seasons are included (N=12).

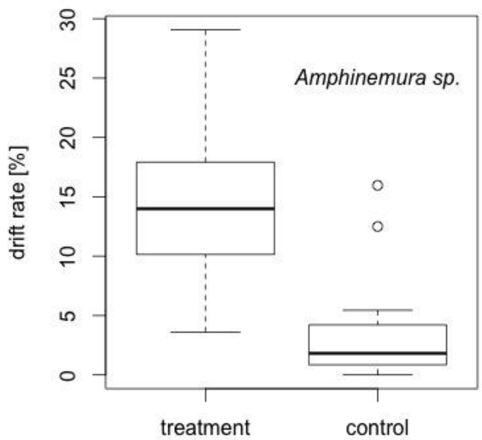


Figure 19. Boxplots of total drift rates [%] of *Amphinemura* sp. of treatment and control samples, both seasons are included (N=12).

Coleoptera

Beetles showed a strong impact of the hydropeaking event (figure 20). The treatment samples differ significantly to the control samples (p = 0.00001). Around 12 % of all beetles were caught in the drift nets during the experiment, whereas only around 2.5 % drifted in the control groups.

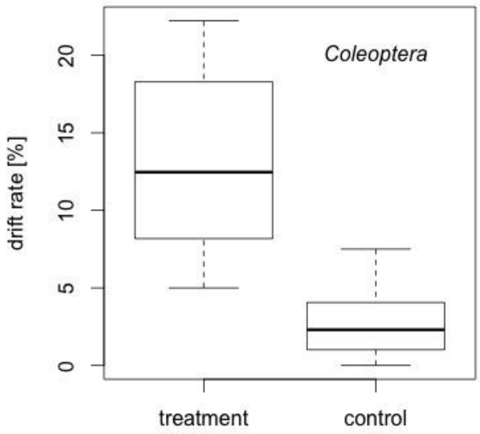


Figure 20. Boxplots of total drift rates [%] of Coleoptera of treatment and control samples, both seasons are included (N=12).

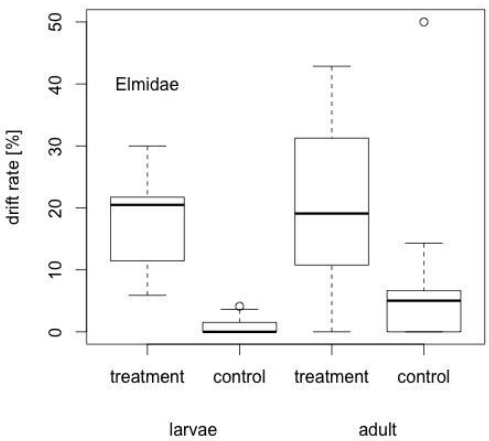


Figure 21. Boxplots of total drift rates [%] of larvae and adult beetles of the family Elmidae of treatment and control samples, both seasons are included (N=6).

The drift rates of beetle larvae and adults of Elmidae are shown in figure 21. Both, larvae (p = 0.00003), as well as adult beetles (p = 0.018) show significant differences between treatment and control samples.

Taxon-specific drift during the experimental phases of the treatment

Both, in autumn and in spring there was no significant difference comparing single phases from both seasons (UR, P1, P2, DR, figure 22). Treatment samples showed significant differences between the phases. In autumn, significant differences between most phases were detected, except for the upramping and peak 1 phase, which didn't show a significant difference (autumn: UR-P2: p = 0.004; UR-DR: p = 0.00000003; P1-P2: 0.0005; P1-DR: p = 0.000000006; P2-DR: p = 0.0007; spring: UR-P2: p = 0.000003; UR-DR: p = 0.000000009; P1-P2: p = 0.00006; P1-DR: p = 0.00000004; P2-DR: p = 0.002). Drift rates in peak 1 (median: 6.3 %) were higher than in in the upramping phase (5.4 %) and decreased from peak 2 (2.1 %) to downramping (0.7 %). In spring, the phases in treatment also differed significantly, except the upramping phase (4.6 %) and peak 1 (4.5 %). The mean drift rates decreased from upramping to downramping (0.6 %) (P2: 1.8 %). The control samples did not show any significant differences in the various phases. As well in autumn as in spring the drift rates are close to zero. Some outliers can be detected in phases of both seasons.

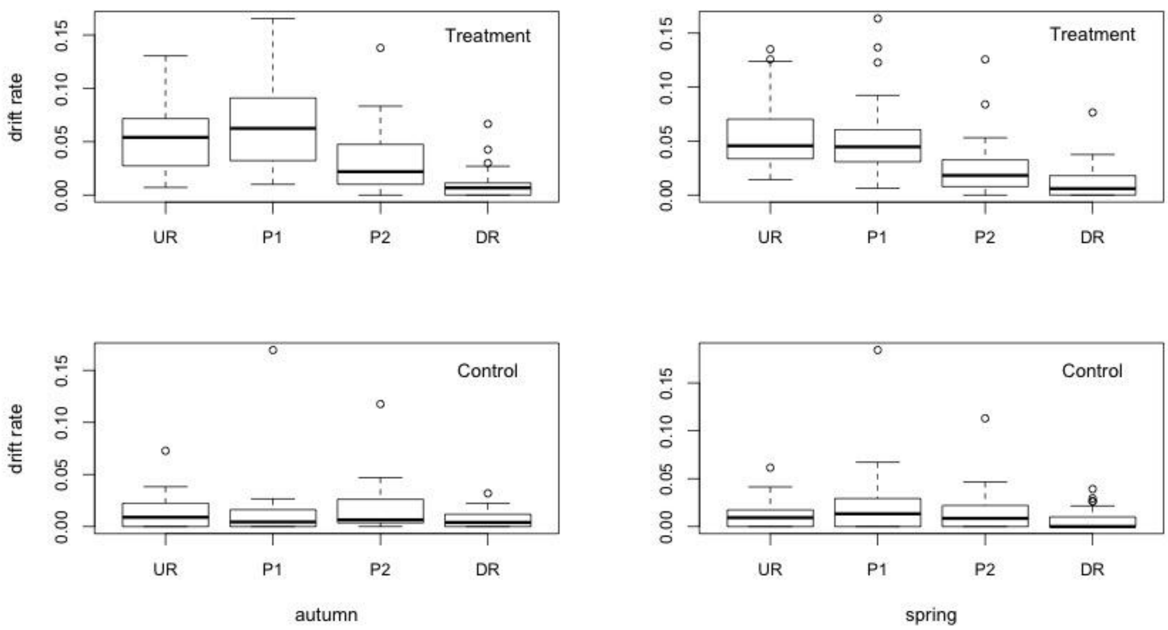


Figure 22. Drift rates of treatment (top) and control (bottom) samples in single phases separated to season: autumn (right) and spring (left); UR – upramping; P1 – peak 1; P2 – peak 2; DR – downramping (N = 6).

Ephemeroptera

Ephemeroptera showed a straight decrease in drift rates from UR to DR in autumn and in spring with little higher drift rates in autumn (figure 23). The single phases do not differ significantly between the seasons. During the upramping phase around 5 % of the mayflies drifted, whereas during P1 only 3.9 % and during P2 1.6 % drifted. In both seasons, less than 1 % drifted during the downramping phases. The percentage of drifted biomass is very similar to the drift rate. Although the percentage of drifted biomass is higher in autumn no significant difference can be detected between both seasons. The percentage of drifted biomass was higher in autumn during upramping (median 5.6 %) and peak 1 (4.1 %). In spring 3.5 % of biomass drifted during upramping and 2.6 % during peak 1 phase in the treatment samples. Peak 2 and downramping did not show very high biomass drift (less than 1 %).

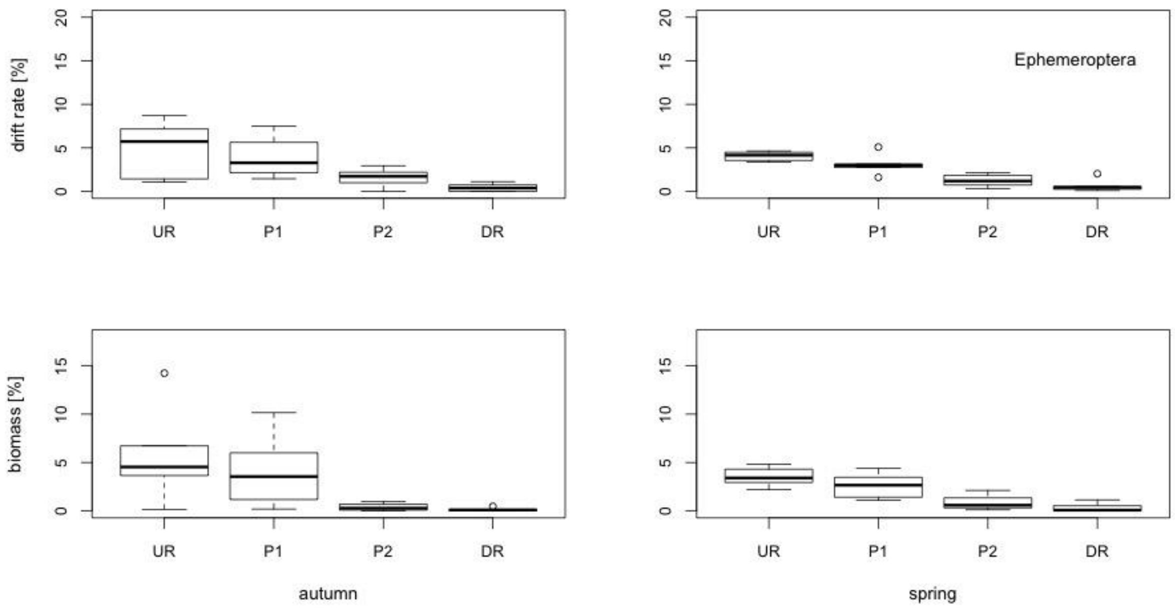


Figure 23. Drift rates (top) and percentage of drifted biomass (bottom) in different phases (UR, P1, P2, DR) of Ephemeroptera in autumn (left) and spring (right). Only treatment runs are displayed (N=6).

Drift rates of treatment channels of *Baetis rhodani* are shown in figure 24. Although there is a higher range in autumn, both seasons show very similar median values of the drift rates. During the first two phases of the peak (UR and P1) the drift rates are around 3 to 4 % in both seasons. In P2 the drift rates decrease below 1 % and in the downramping phase (DR) nearly no drift could be detected.

Heptageniidae (*Rhithrogena* sp., *Epeorus* sp. and *Ecdyonurus* sp.*)* were not very susceptible to drift in both seasons. In total 286 individuals of *Rhithrogena* sp. were detected, but only 7 drifted in total. 171 individuals of *Epeorus* sp. and 161 individuals of *Ecdyonurus* sp. were caught in both seasons, but only 7 respectively 4 individuals drifted.

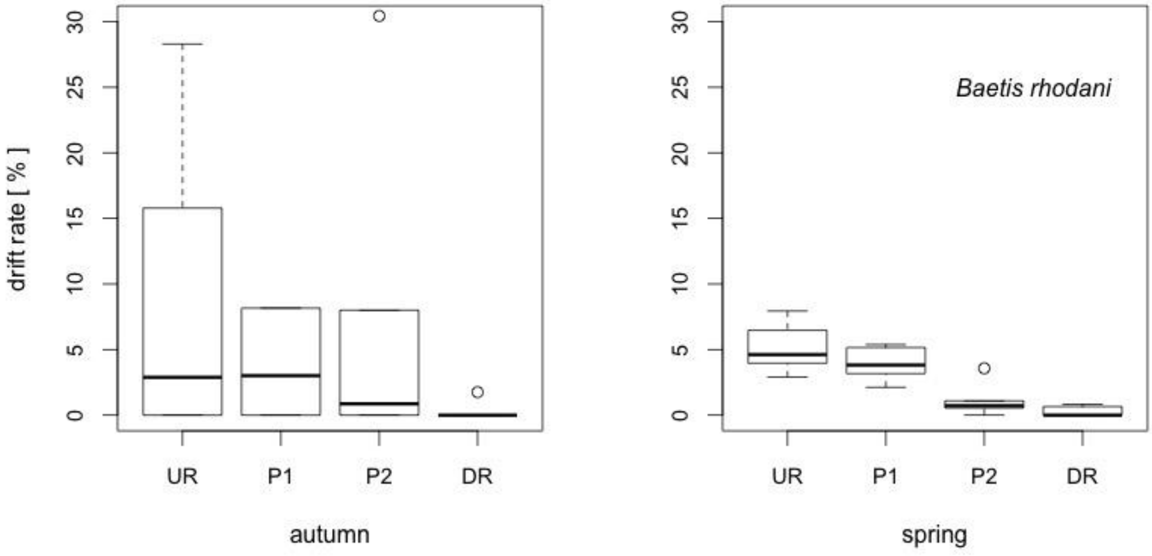


Figure 24. Drift rates [%] of *Baetis rhodani* in specific phases during the treatment in autumn (left) and spring (right) (N = 6).

Diptera

Diptera showed the highest drift rates of all orders (figure 25). Apart from drift rates in the upramping phase of autumn (median 5.9 %), drift rates of the other phases were almost equal in autumn and in spring. In autumn, the drift rates decreased from 11.1 % in P1 to 2.7 % in DR. In spring the highest mean drift rates were detected during the upramping phase (10.3 %) and 9.3 % drifted during the P1 phase. In the downramping phase 3.1 % of individuals drifted. The percentage of drifted biomass showed strong seasonal variations (figure 25). In autumn highest biomass drift was detected during peak 1 (median 8.4 %), followed by upramping (4.7 %), peak 2 (2.8 %) and downramping (0.9 %). By contrast, in spring highest biomass drift was measured during the upramping phase (9.5 %). The percentage of drifted biomass decreased with the duration of the experiment. In P1 still 6.4 % of Dipteran biomass drifted, in P2 3.9 % and in the downramping phase biomass drift was 1.4 %.

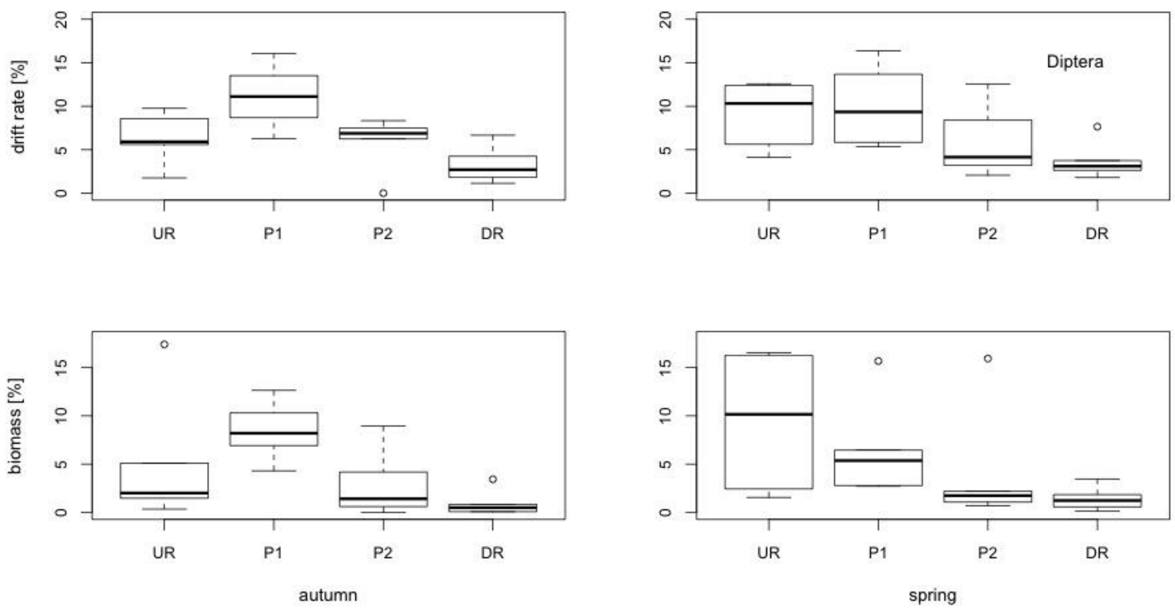


Figure 25. Drift rates (top) and percentage of drifted biomass (bottom) in different phases (UR, P1, P2, DR) of Diptera in autumn (left) and spring (right). Only treatment runs are displayed (N=6).

Chironomidae made up a large amount of all species in both seasons. In October, 945 individuals were counted, whereas the number increased to 3607 individuals in total in March. They showed drift rates from 15 – 40 % in total in both seasons. Chironomidae showed no clear drift response in the different phases (figure 26). As well in autumn and in spring highest drift rates were detected during P1 (11.5 % in autumn, 8.6 % in spring, median values). In autumn, the drift rates during P2 (7.3 %) were higher than during the UR-phase (4.9 %), whereas in spring drift rates were lower in P2 (4.2 %) than in UR (8.2 %). In both seasons drift rates were around 3 % during the DR-period. *Simulium* sp. was much more abundant in spring (356 individuals, 89 in autumn) and showed the highest drift rates of all species . In autumn drift rates between 18 and 86 % could be detected and in spring between 21 and 71 %. The drift rates during single phases were higher in spring than in autumn (figure 27). In autumn, the drift rates during the upramping phase was around 9.9 % and increased to 16.7 % in P1. In the last two phases of the hydropeak nearly no drift could be measured. In spring, the drift rates decreased straight from UR (median 23.8 %) to DR (3 %).

Other species of Diptera could not be further analyzed, because there were less than 10 individuals found in both seasons.

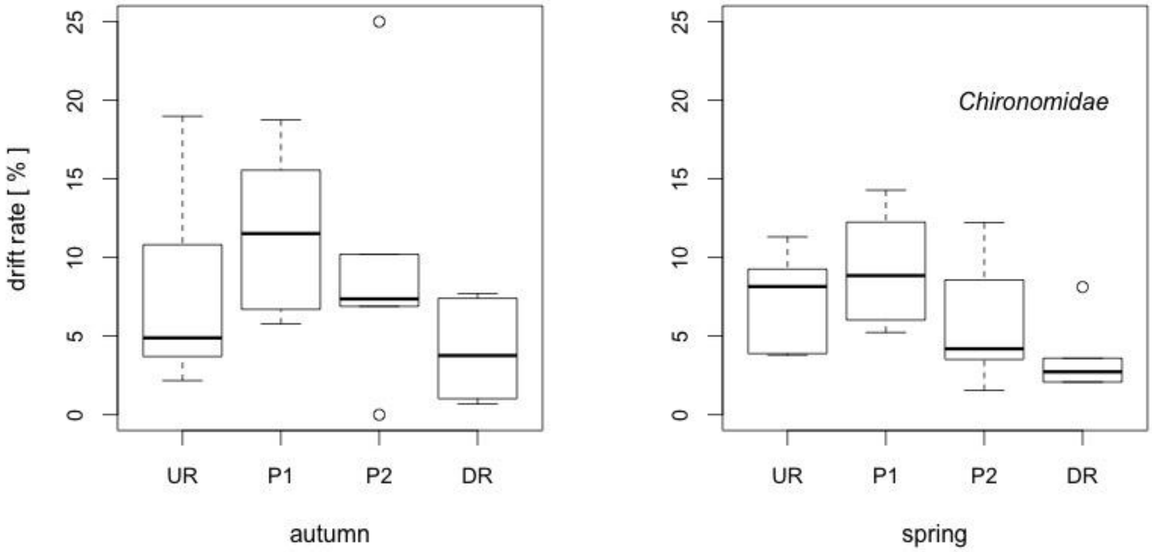


Figure 26. Drift rates [%] of Chironomidae in specific phases during the treatment in autumn (left) and spring (right) (N = 6).

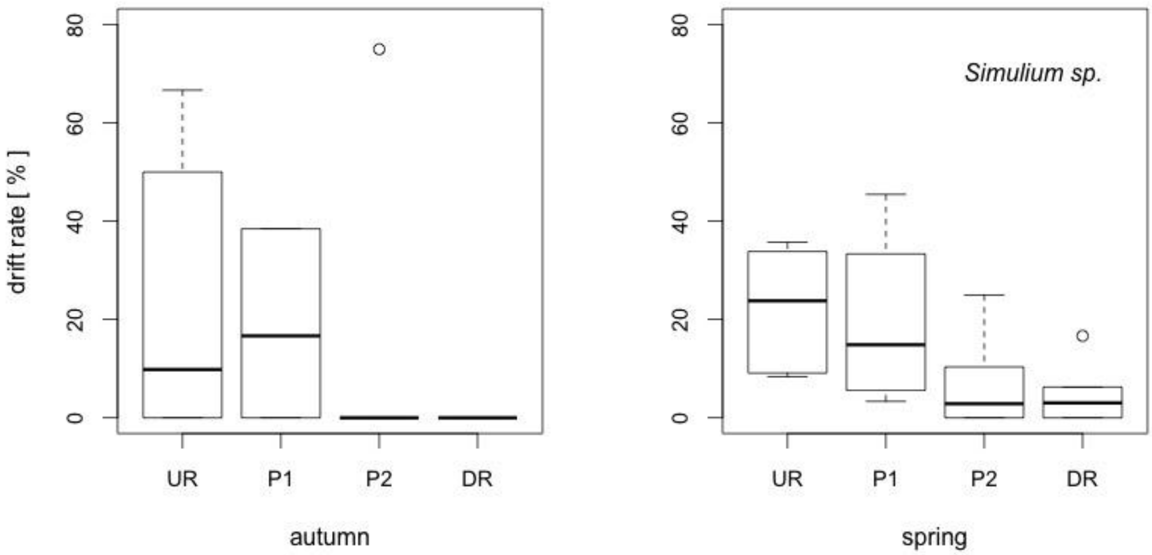


Figure 27. Drift rates [%] of *Simulium* sp. in specific phases during the treatment in autumn (left) and spring (right) (N = 6).

Trichoptera

Highest drift rates of Trichoptera could be found during the peak phase 1 (P1) (median 8.9 %) followed by peak phase 2 (P2) (5.0 %) and upramping (UR) (4.8 %) in autumn, whereas in the downramping phase (DR) the drift rates were nearly equal to zero in both seasons (figure 29). In spring the drift rates of the first three phases were more than 1 % lower than in autumn. The percentage of drifted biomass showed seasonal variations (figure 28). In autumn, the percentage of drifted biomass of Trichoptera was three times higher during upramping and peak 1 than in spring. In the upramping phase 4.6 % and during P1 3 % of Trichoptera biomass drifted, whereas in spring only 1.5 % (UR) and 1 % (P1) of biomass drifted in the treatment samples. During peak 2 and downramping biomass drift was less than 1 % in both seasons.

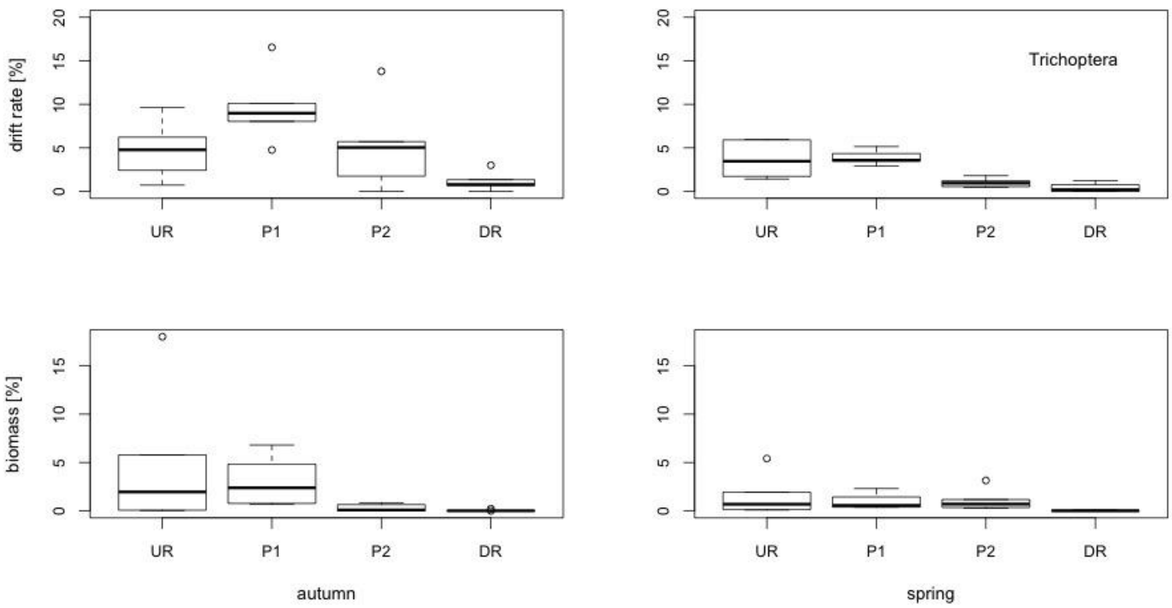


Figure 28. Drift rates (top) and percentage of drifted biomass (bottom) in different phases (UR, P1, P2, DR) of Trichoptera in autumn (left) and spring (right). Only treatment runs are displayed (N=6).

Using the following examples, differences in the drift behavior of single species can be recognized:

Allogamus auricollis showed very high drift rates during the peak phase (P1 and P2) in autumn (figure 29). Whereas during the upramping (median 2.2 %) and downramping phase (3.1 %) less den 4 % drifted, the drift rates increased up to 11.1 % in peak 1 and 6.5 % in peak 2 (median values). In comparison to autumn, the drift rates were very evenly distributed in all phases in spring. In spring the maximum drift rate was detected during peak phase 2 (P2, 1.5 %).

Hydroptila sp., on the other hand, was more susceptible to drift in spring than in autumn and also showed highest drift rates during Peak 1 (figure 30). *Micrasema setiferum*, on the other hand, showed higher drift rates in autumn, but also showed highest drift rates during peak 1 (figure 31). *Hydropsyche incognita* showed very low drift rates (total 3.5 %) in both seasons, with highest drift rates during the upramping phase in autumn (figure 32). In spring, no clear drift response could be detected. All of these species did not show high drift responses during the downramping phase.

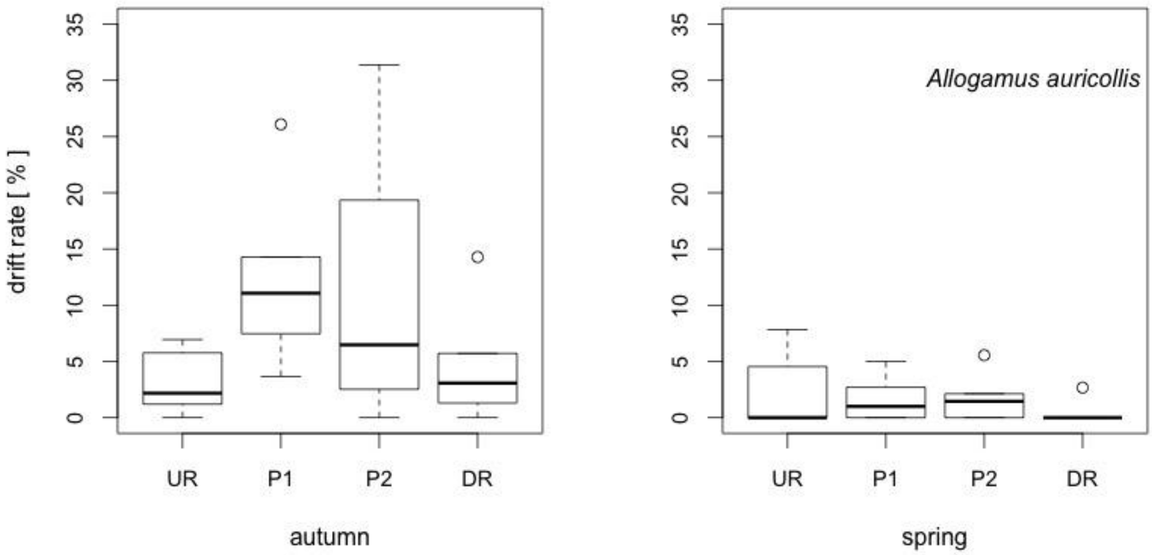


Figure 29. Drift rates [%] of *Allogamus auricollis* in single phases of treatment samples in autumn (left) and spring (right) (N=6).

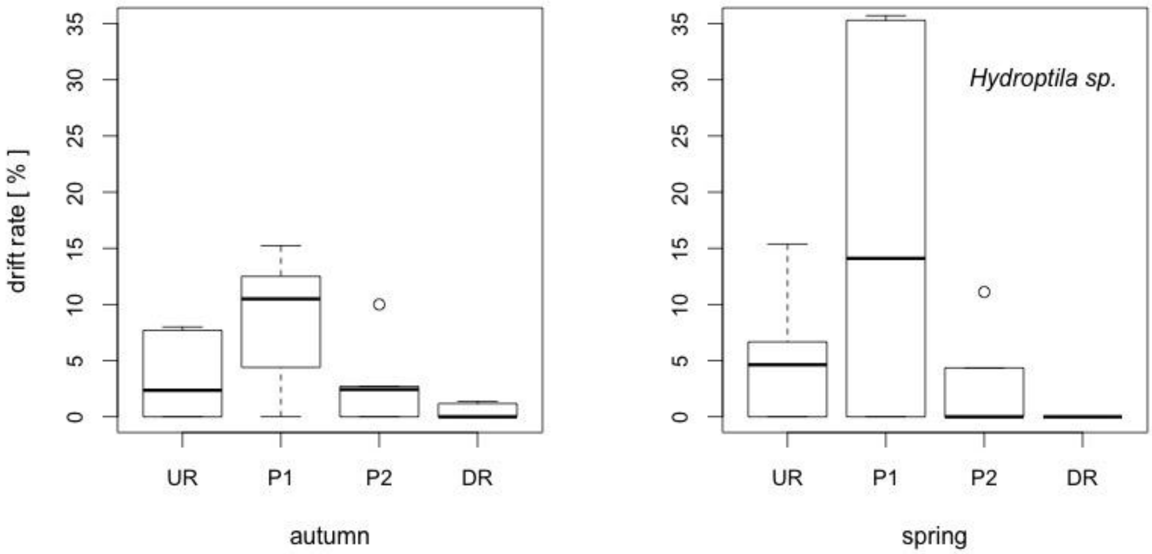


Figure 30. Drift rates [%] of *Hydroptila* sp. in single phases of treatment samples in autumn (left) and spring (right) (N=6).

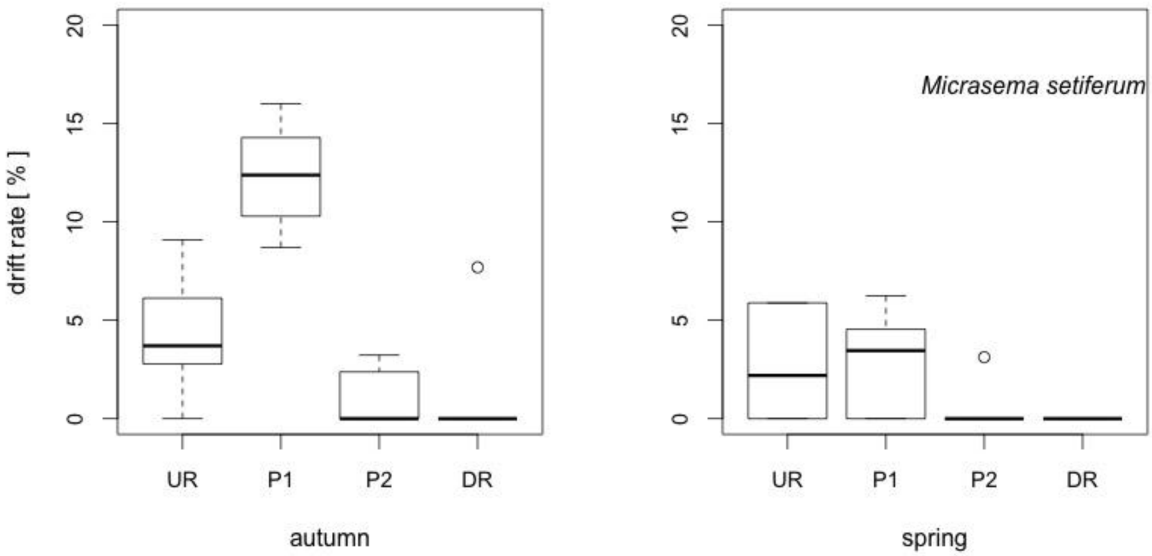


Figure 31. Drift rates [%] of *Micrasema setiferum* in single phases of treatment samples in autumn (left) and spring (right) (N = 6).

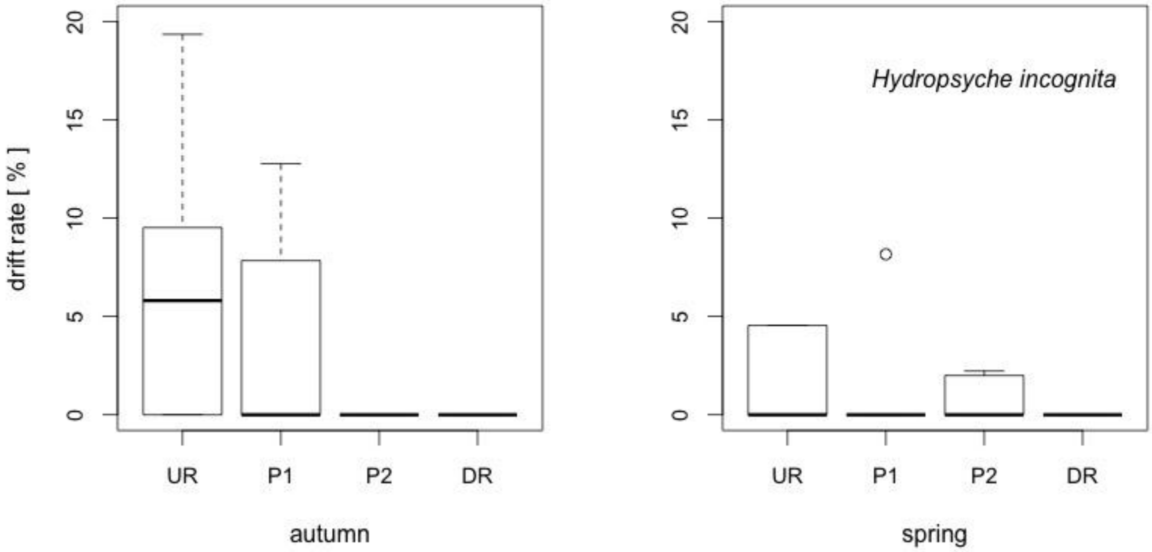


Figure 32. Drift rates [%] of *Hydropsyche incognita* in single phases of treatment samples in autumn (left) and spring (right) (N = 6).

Plecoptera

Overall, the drift rates of Plecoptera were lower in spring. Stonefly larvae show highest drift rates in peak 1 in autumn (median 8.6 %, figure 34), whereas in spring only 3.9 % drifted during the same phase, which gives a significant difference ($p = 0.04$). In UR 6.4 % drifted in autumn, but only 3.8 % in spring. The drift rates decrease in the last two phases. During P2, a seasonal difference with a higher drift rates in autumn (2.2 %) than in spring (1.3 %) could be deteceted, but the drift rates are below 0.5 % in the downramping phase in both seasons.

Biomass drift of stonefly larvae was also higher in autumn (figure 33). During UR 5.3 % (median) of biomass drifted in October, whereas only 4 % drifted in March. Peak 1 showed highest biomass drift in autumn (6 %), in spring only 2.2 % of treatment biomass drifted. In contrast to the drift rates of Plecoptera, no significant difference between the seasons could be detected for the biomass drift. The last two phases (P2, DR) showed very similar distributions of drifted biomass in both seasons with values from 1.3 % to 2.4 % during peak 2 and 0.1 % and 0.4 % during downramping.

As an example, the drift rates in single phases of *Amphinemura* sp. are shown in figure 34. During the upramping and peak 1 phase highest drift rates could be detected, whereas during peak 2 and downramping the drift rates decreased close to zero.

A seasonal variation can also be seen as the drift rates were higher in autumn than in spring, especially the drift rate during peak 1 was two times higher in autumn (8.6 %) than in spring (4.3 %).

The total abundance of *Nemoura/Nemourella* sp. was 5 times higher in autumn. *Leuctra* sp. did not show seasonal variations in abundance. Both species did not show very high drift response and could not be further analyzed (less den 10 individuals per season in drift).

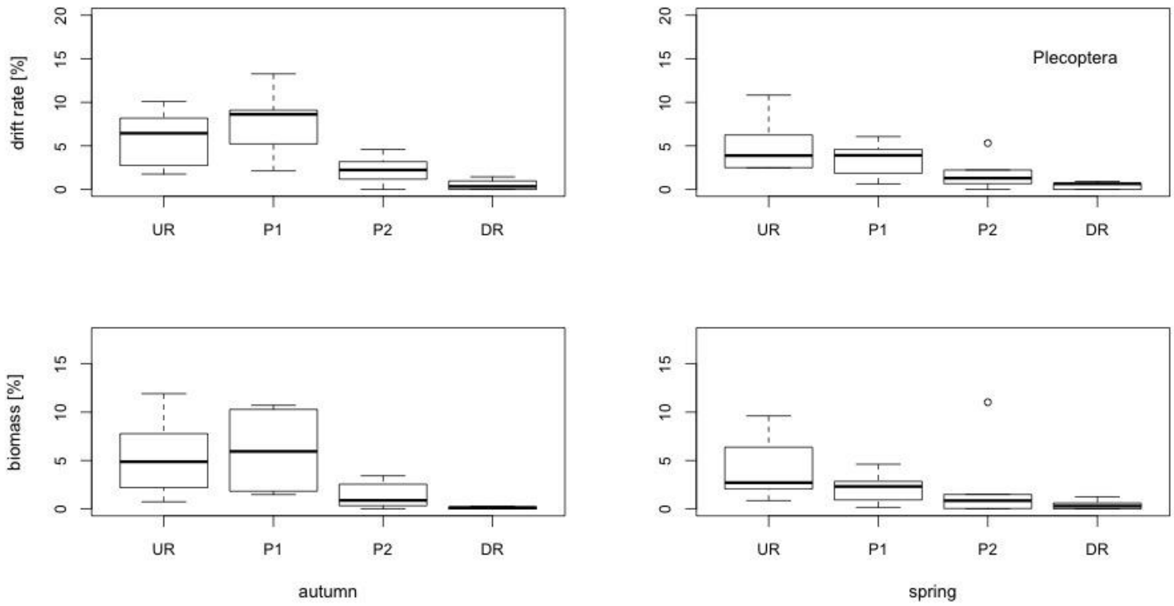


Figure 33. Drift rates (top) and percentage of drifted biomass (bottom) in different phases (UR, P1, P2, DR) of Trichoptera in autumn (left) and spring (right). Only treatment runs are displayed (N=6).

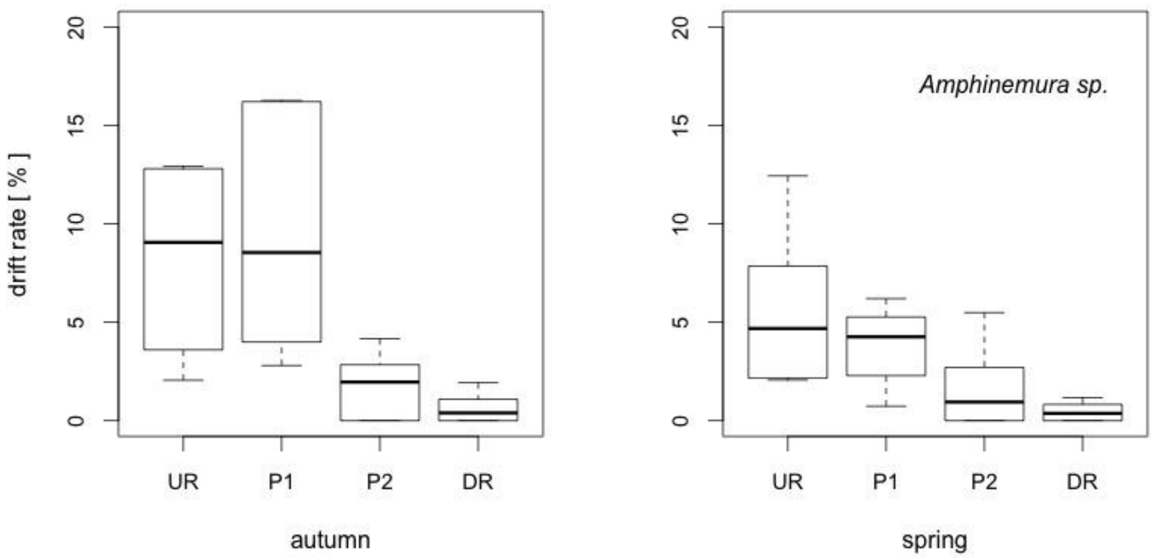


Figure 34. Drift rates [%] of *Amphinemura* sp. in single phases of treatment samples in autumn (left) and spring (right) (N = 6).

Coleoptera

The lowest drift rates of the investigated orders could be found for Coleoptera (figure 36). Although they showed a decrease from UR to DR the drift rates are below 5 % in autumn (median). In spring the drift rates decreased from 7.0 % (UR) to 0 % (DR). Escpecially the larvae of *Riolus* sp. and *Elmis* sp. showed total drift rates up to 10 %. Only 23 out of 1032 larvae of Scirtidae drifted (2.2 %). Drift rates from 10 – 14.2 % could be detected for adult stages of *Riolus* sp. and *Elmis* sp. In autumn, the total abundance of beetle larvae (1917) was nearly twice as high as in spring (1048). The percentage of drifted biomass was also nearly twice as high as in spring than in autumn (figure 35).

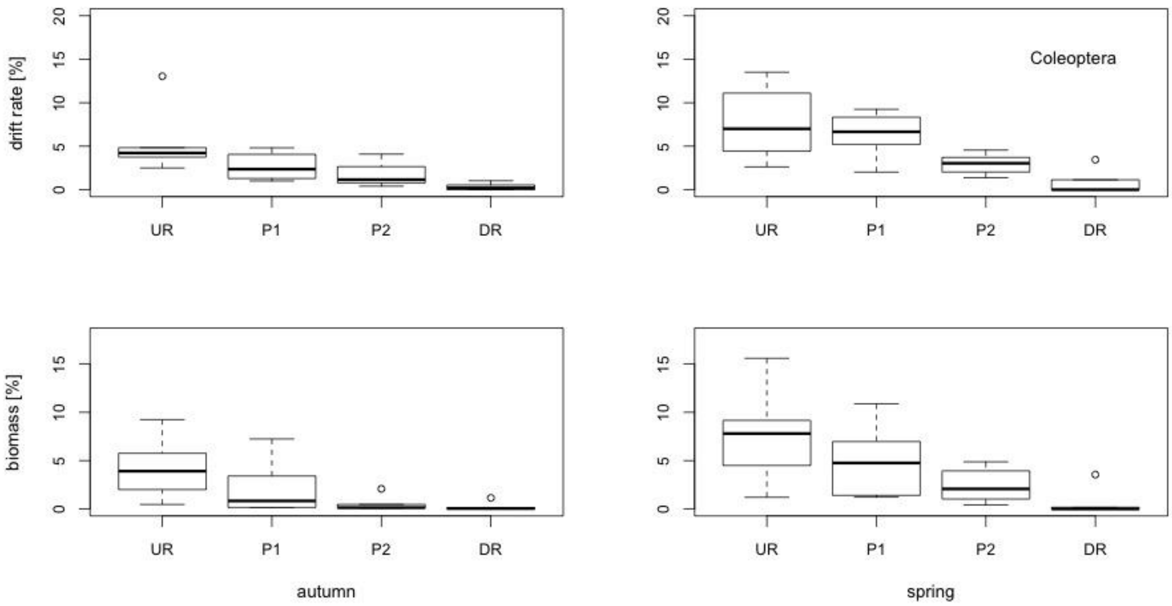


Figure 35. Drift rates (top) and percentage of drifted biomass (bottom) in different phases (UR, P1, P2, DR) of Coleoptera in autumn (left) and spring (right). Only treatment runs are displayed (N=6).

Other benthic invertebrate taxa

Around 36 % of all Oligochaeta drifted during the experiment in all phases, but the drift rates in autumn were double as high than in spring. All species of Gastropoda nearly showed no drift response.

Drift of different size classes

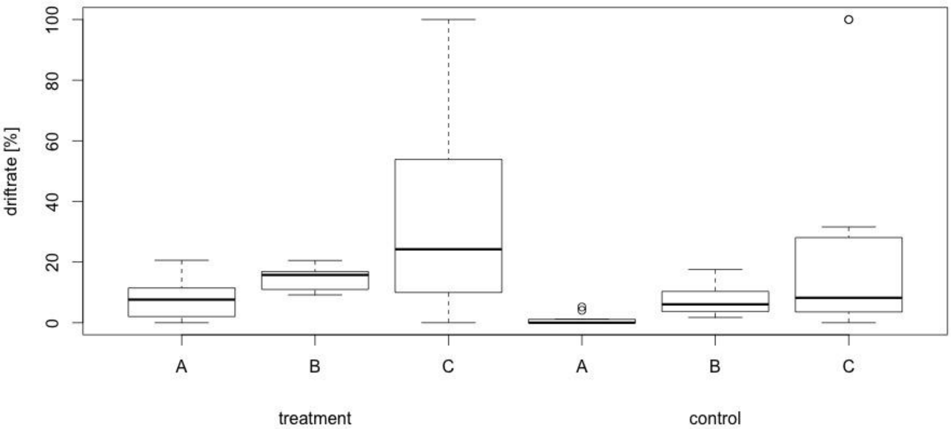


Figure 36. Drift rates of different size classes in treatment and control samples, both seasons are included: A > 5 mm, B: 2 - 5 mm, C < 2 mm (N=6).

The highest drift rates depending on the size of the larvae was measured for individuals smaller than 2 mm (figure 36). Individuals bigger than 5 mm showed the lowest drift rates. Significant differences between treatment and control samples could be detected for size classes A (p = 0.002) and B (p =0.0001). The median value for the drift rates of larvae bigger than 5 mm is 7.6 % in the treatment samples, whereas there is nearly no drift in the control samples. Larvae between 2 and 5 mm showed a median value of 15.8 % in the treatment samples and 6 % in the control samples. Although, the drift rates of individuals smaller than 2 mm was higher in the treatment samples (median = 24.2 %), no significant difference could be detected to the control samples (median = 8.2 %).

Ephemeroptera

For individuals of the order Ephemeroptera no significant differences for the drift rates of different size classes could be detected between control and treatment samples (figure 37). Larvae smaller than 2 mm showed the highest drift rates, whereas individuals bigger than 5 mm showed the lowest drift rates. As an example, the drift rates of different size classes of *Baetis* sp. are shown in figure 38. Very similar to the total Ephemeroptera drift rates, highest drift rates were detected for C-classified larvae and no significant difference could be detected between control and treatment samples.

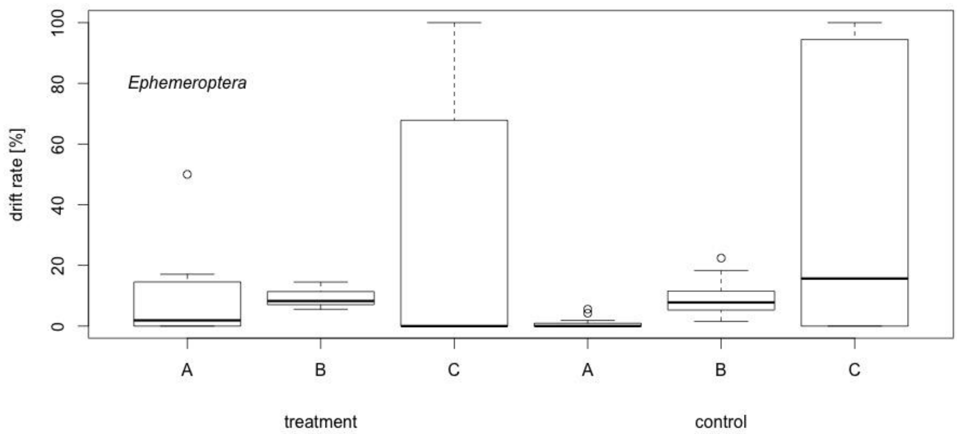


Figure 37. Drift rates of different size classes in treatment and control samples of Ephemeroptera, both seasons are included: A > 5 mm, B: 2 - 5 mm, C < 2 mm (N=6).

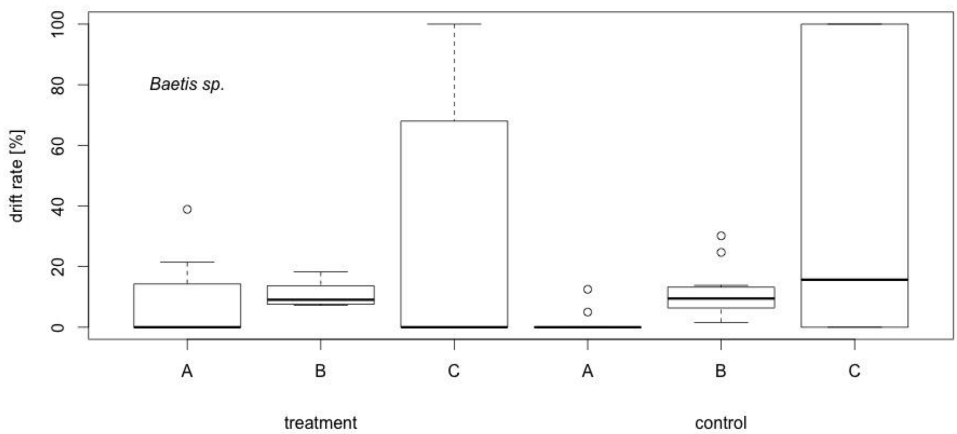


Figure 38. Drift rates of different size classes in treatment and control samples of *Baetis* sp., both seasons are included: A > 5 mm, B: 2 - 5 mm, C < 2 mm (N=6).

Diptera

Diptera showed a significant difference of drift rates between treatment and control samples for individuals smaller than 5 mm ($p = 0.005$, figure 39). The median value of the drift rate for B-classified larvae was 23.8 % in the treatment samples, whereas the median value was only 11.1 % in the control samples. Larvae bigger than 5 mm did not show a significant difference between control and treatment samples and the median values of both groups are 0. This was also observed for Chironomidae and *Simulium* sp. (figures 40 & 41). Chironomidae showed a significant difference in drift rates between treatment and control samples of larvae smaller than 5 mm ($p = 0.0005$) with higher drift rates during the treatment samples. In contrast, *Simulium* sp. showed very similar drift rates of larvae smaller than 5 mm in treatment and control samples, although the drift rates were little higher in the treatment samples.

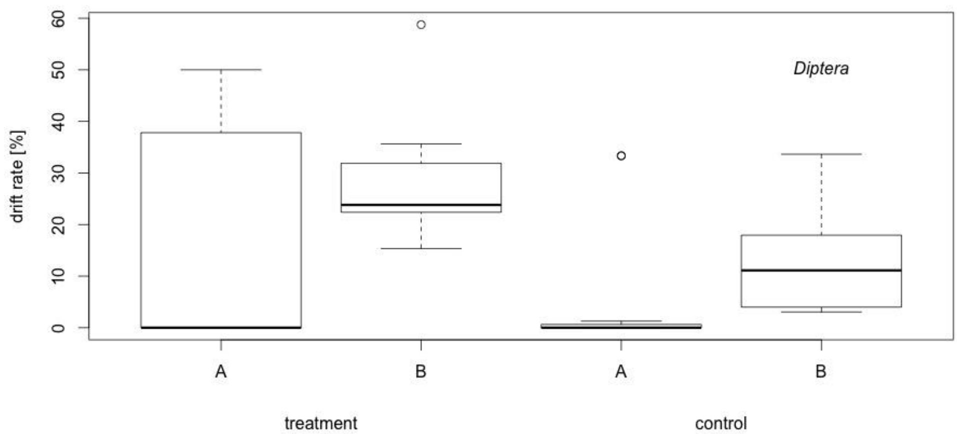


Figure 39. Drift rates of different size classes in treatment and control samples of Diptera larvae, both seasons are included: A > 5 mm, B: <5 mm (N=6).

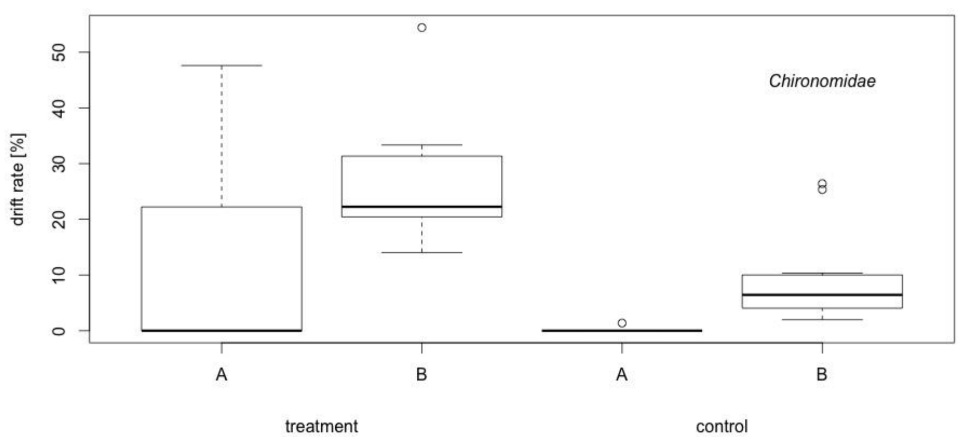


Figure 40. Drift rates of different size classes in treatment and control samples of Chironomidae, both seasons are included: A > 5 mm, B: <5 mm (N=6).

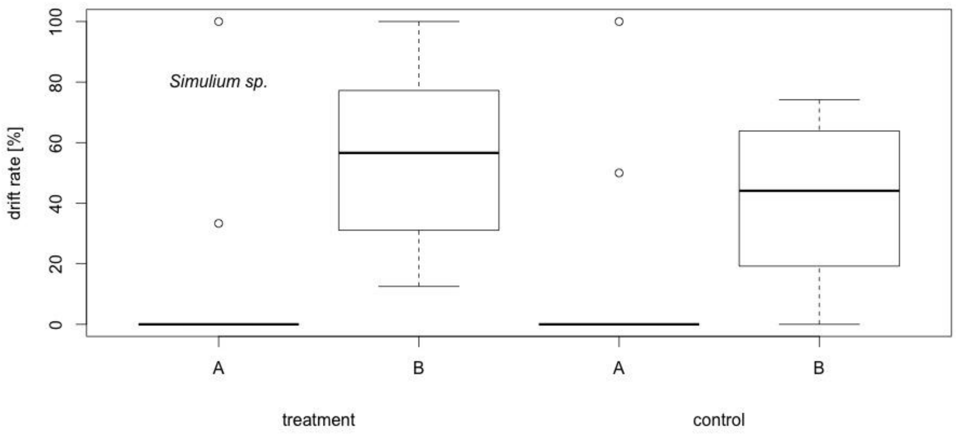


Figure 41. Drift rates of different size classes in treatment and control samples of *Simulium* sp., both seasons are included: A > 5 mm, B: <5 mm (N=6).

Trichoptera

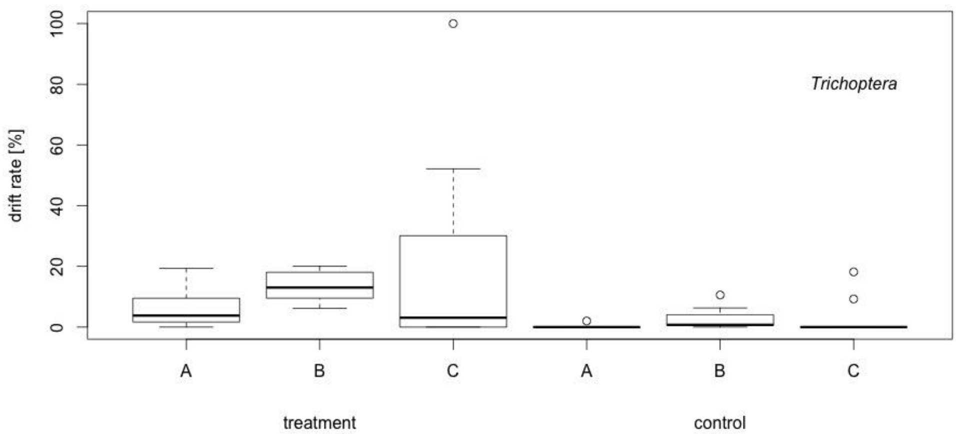


Figure 42. Drift rates of different size classes in treatment and control samples of Trichoptera larvae, both seasons are included: A > 5 mm, B: 2 - 5 mm, C < 2 mm (N=6).

Trichoptera showed a response to the hydropeak event. A- and B-classified larvae of the treatment samples have significantly higher drift rates than of the control samples (A: p = 0.0001, B: p = 0.0002, figure 42). In the control samples nearly no drift action could be detected. Larvae bigger than 5 mm showed a median drift rate of 3.8%, larvae smaller than 2 mm had a median drift rate of 3.1 %. The highest median drift rate was detected for individuals between 2 and 5 mm (13 %) during the treatment samples. Individual species showed variations to the total Trichoptera larvae. *Allogamus* sp., for example, did not show significant differences of drift rates in different size classes between control and treatment samples, although drift rates were higher in all size classes throughout the treatment samples (figure 43). *Micrasema* sp., on the other hand, showed a significant difference for drift rates of size class B. For larvae smaller than 2 mm and bigger than 5 mm no difference in drift rates between treatment and control samples could be detected. *Hydroptila* sp. showed very similar drift rates, as almost only B-classified larvae were caught. Larvae between 2 and 5 mm showed the highest drift rates in the treatment samples and the drift rate was significantly higher than in the control samples (p = 0.005). Bigger or smaller indiviudals nearly showed no drift response, neither in the treatment nor in the control samples. *Hydropsyche* larvae did not show high drift rates in the control samples either, but significant differences could be detected for A and B classified larvae (A: p = 0.001, B: p = 0.0009, figure 44). Larvae smaller than 2 mm almost did not show any drift response in the treatment samples.

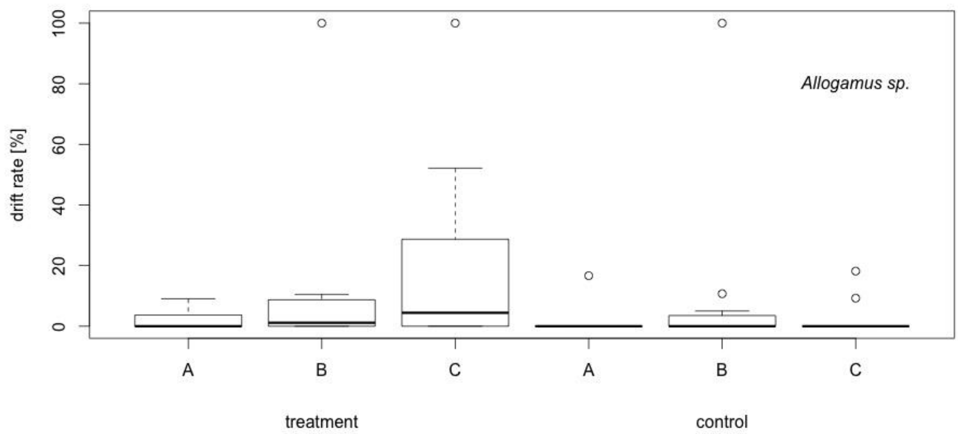


Figure 43. Drift rates of different size classes in treatment and control samples of *Allogamus* sp., both seasons are included: A < 5 mm, B: 2-5mm, C < 2mm (N= 6).

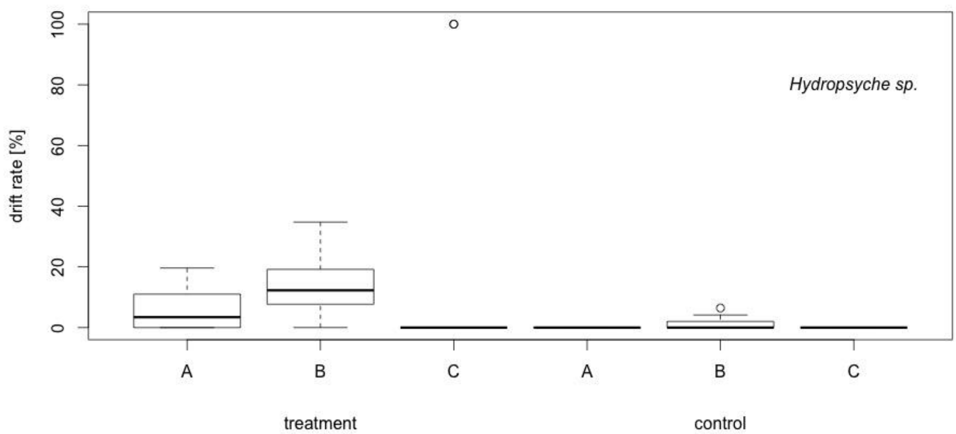


Figure 44. Drift rates of different size classes in treatment and control samples of *Hydropsyche* sp., both seasons are included: A < 5 mm, B: 2-5mm, C < 2mm (N= 6).

Plecoptera

Stonefly larvae showed the highest drift rates during the treatment samples (figure 45). As well in the treatment samples, as in the control samples highest drift rates were detected for larvae between 2 and 5 mm and a significant difference in the drift rates for B-classified larvae could be detected ($p = 0.00001$). *Amphinemura* sp., the most common Plecoptera larvae, showed very similar drift rates. A and C classified larvae nearly showed no drift response and the drift rates of larvae between 2 and 5 mm were significantly higher in the treatment samples ($p = 0.0005$).

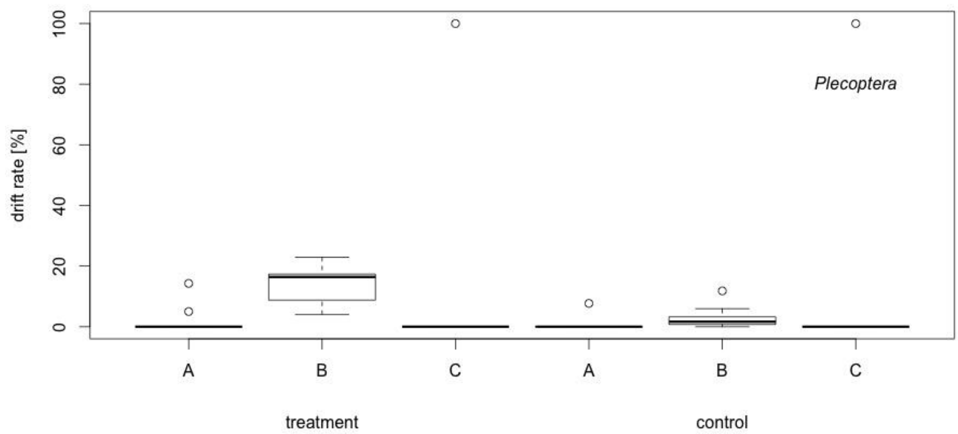


Figure 45. Drift rates of different size classes in treatment and control samples of Plecoptera larvae, both seasons are included: A > 5 mm, B: 2 - 5 mm, C < 2 mm (N=6).

Seasonal composition and drift patterns

Seasonal patterns of drift rates

The experimental groups of autumn and spring differed both significantly to their control groups (autumn p = 0.004; spring p = 0.041). Figure 46 shows seasonal variations of the drift rates in treatment and control samples. Although the drift rates of the treatment samples in autumn were higher than in spring, there were no significant differences. Similarly, the control samples did not differ significantly.

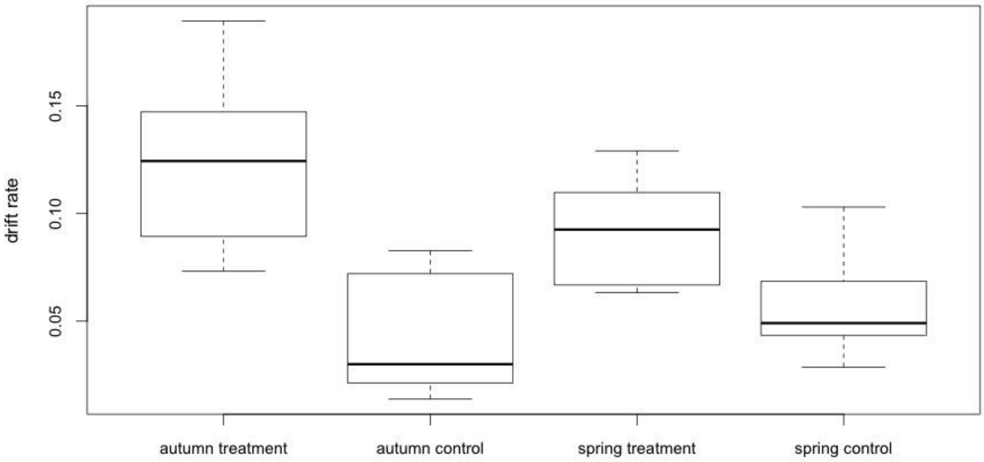


Figure 46. Boxplots shows drift rates of autumn and spring samples, control and treatment samples are separated (N = 6).

Species composition within the samples of different seasons

In autumn, 16.4 % of the donor population drifted in total, whereas in spring only 12.3 % of the collected benthos was found in the drifting nets. This corresponds to 9.65 % loss of total benthic invertebrate biomass in autumn and 9.13 % drifted biomass in spring. Figure 47 shows the percentage distribution of the faunal composition in total (left) and of only drifted individuals (right) in autumn and in spring. Seasonal variations can be detected as well for the total benthic community as for the composition of drifted organisms only. A detailed description of the differences in taxa densities and presence is given below.

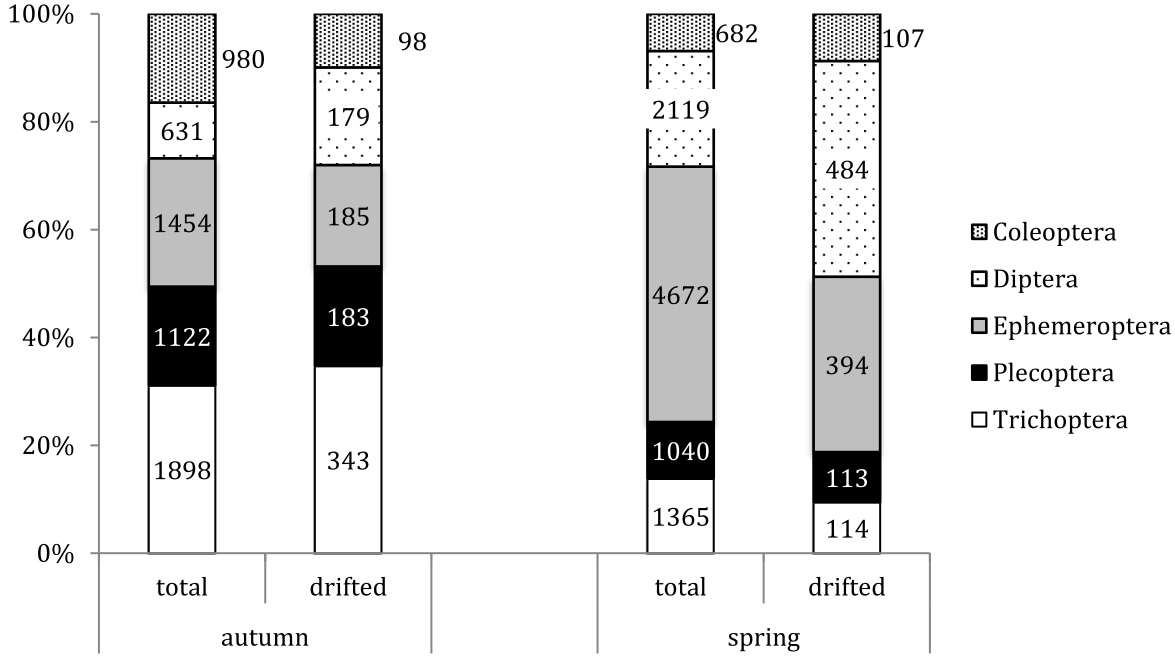


Figure 47. Dominance of benthic invertebrate groups in treatments (total) and drifted organisms, respectively, in autumn and spring; left: total abundance of organisms, right: drifted individuals only.

Seasonal variations could also be detected in the size of the larvae (table 3). Ephemeroptera, for example, showed the highest abundances of small (< 2 mm) and big larvae (> 5 mm) in spring. Almost all C-classed larvae of stoneflies were collected in autumn, whereas A-classed larvae were mainly caught in spring. Trichoptera did not show a big seasonal difference in the occurance of larvae larger than 5 mm, but nearly all individuals smaller than 2 mm were collected in autumn. Diptera were much more abundant in spring and therefore more larger individuals were caught in March.

Table 3. Total number of individuals according to size (A > 5mm; B between 5 and 2 mm; C < 2 mm), in brackets number of drifted individuals. Only treatment runs are included.

	A		B		C	
	spring	autumn	spring	autumn	spring	autumn
Ephemeroptera	197 (14)	50 (5)	4176 (324)	1397 (177)	299 (56)	7 (3)
Plecoptera	98 (2)	9 (0)	941 (110)	1063 (183)	1 (1)	50 (0)
Trichoptera	374 (13)	298 (31)	988 (101)	842 (138)	3 (0)	758 (174)
Diptera	120 (23)	25 (1)	1999 (461)	606 (178)		

Taxonomic composition

Ephemeroptera

In spring, the benthic composition was dominated by Ephemeroptera, which made up 47 % of the total benthos community and 33 % of all drifted individuals (figure 47). In autumn, Ephemeroptera represented the second largest group with 24 % of the total community and 19 % of the drifted individuals. This was mainly due to the high abundance of species of the family Baetidae (figure 48). Individuals of the family Baetidae were the most common taxa found in all samples. In spring, the number of individuals was almost four times higher (4238 individuals) than in autumn (1098). Most of the individuals were too small to be determined to species level (classified as juvenile), but around 70 % of all larger individuals could be detected as *Baetis rhodani*. Furthermore, *B. muticus* (16 %), *B. alpinus* (11 %) and *B. lutheri* (3 %) were determined. *Haprophlebia lauta* and *Haproleptoides confusa* of the family Leptophlebiidae were more abundant in autumn (245) than in spring (169), whereas individuals of the family Heptageniidae (*Rhithrogena* sp., *Epeorus* sp. and *Ecdyonurus* sp.) were more abundant in spring (254) than in autumn (84). Caenidae (*Caenis* sp.) were only caught in autumn. Furthermore, individuals of *Ephemerella major*, *Ephemerella mucronata*, *Ephemera danica*, *Caenis* sp., *Paraleptophlebia* sp., *Centroptilum* sp. and *Siphlonurus lacustris* were determined, but they only occurred in very low numbers (less than 10 individuals per experiment).

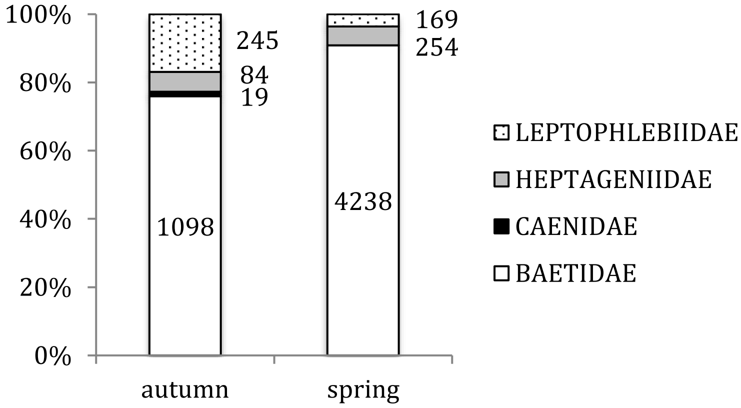


Figure 48. Percentage distribution of families of Ephemeroptera in treatment samples in autumn and in spring. Only families with more than 10 individuals are considered in this figure. Numbers in bars represent the total number of individuals.

Diptera

Diptera made up the second largest group (21 %) of the total community in spring and dominated the number of drifted individuals (40 %, figure 47). In autumn, Diptera represented 10 % of the total community and 18 % of the drifted community. Chironomidae was the most dominant family of Diptera, followed by Simuliidae (*Simulium* sp.) and Limoniidae (*Antocha* sp.) (figure 49). Furthermore, *Bazarella* sp. (Psychodidae) and *Hemerodromia* sp. (Empididae) were detected in the samples. *Ibisia marginata, Atherix ibis* (both Athericidae), *Tipula* sp. (Tipuliidae) and single individuals of Stratiomyiidae only occurred in very low numbers (less than 10 individuals per experiment).

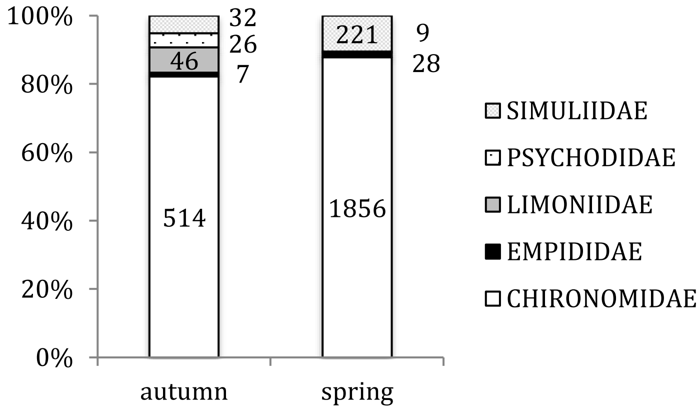


Figure 49. Percentage distribution of families of Diptera in treatment samples in autumn and in spring. Only families with more than 10 individuals are considered in this figure.

Trichoptera

In autumn the total species composition (31 %) and the composition of drifted individuals (35 %) were dominated by Trichoptera, whereas in spring they only made up 14 % of the total composition and 9 % of drifted individuals (figure 47). In total, 14 different species of 11 different families of Trichoptera could be determined. Whereas in autumn only 11 species could be identified to species level, in spring 3 additional species were found. *Hydropsyche dinarica* (2 individuals), *Oecetis* sp. (5) and *Rhyacophila tristis* (1, Rhyacophilidae) only were determined in March in very low numbers. *Allogamus*

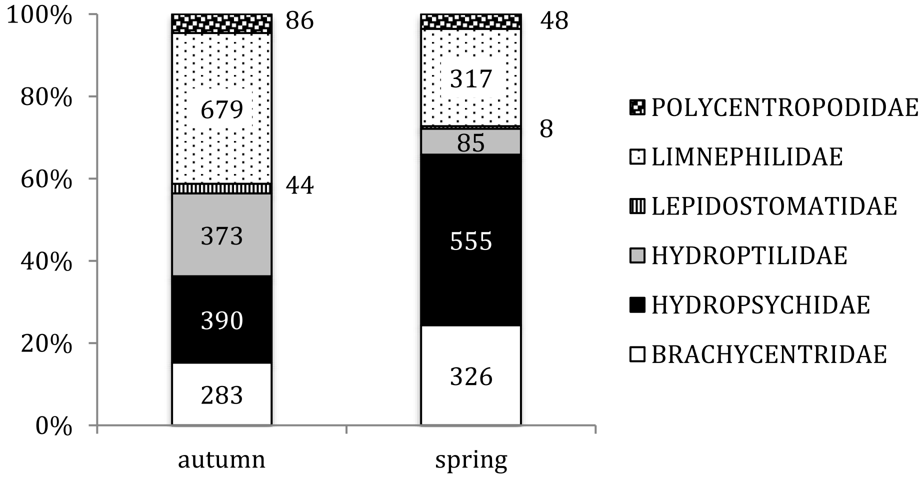


Figure 50. Percentage distribution of families of Trichoptera in treatment samples in autumn and in spring. Only families with more than 10 individuals are considered in this figure.

auricollis (Limnephilidae) was found most frequently, followed by *Micrasema setiferum* (Brachycentridae) and *Hydropsyche incognita* (Hydropsychidae, figure 50). *Hydroptila* sp. (Hydroptilidae) was more abundant in autumn (373 individuals) than in spring (85). *Polycentropus flavomaculatus* (Polycentropodidae) and *Lepidostoma hirtum* (Lepidostomatidae) were more abundant in autumn. *Sericostoma flavicorne* (Sericostomatidae), *Oecetis* sp., *Athripsodes* sp. (both Leptoceridae), *Psychomyia pusilla* (Psychomyidae) and *Glossosoma conformis* (Glossosomatidae) only occurred in very low numbers.

Plecoptera

The proportion of Plecoptera was 18 % of the total community in autumn and 11 % in spring (figure 47). In autumn, they made up 19 % of all drifted individuals whereas in spring stoneflies only represented 9 % of the drifted individuals. The most common species of stoneflies identified were *Amphinemura* sp. followed by *Nemoura/Nemourella* sp. (both family Nemouridae) and *Leuctra* sp. (Leuctridae, figure 51). Additional stoneflies collected were *Isoperla* sp. and other small individuals of the family Perlodidae that could’t be further determined.

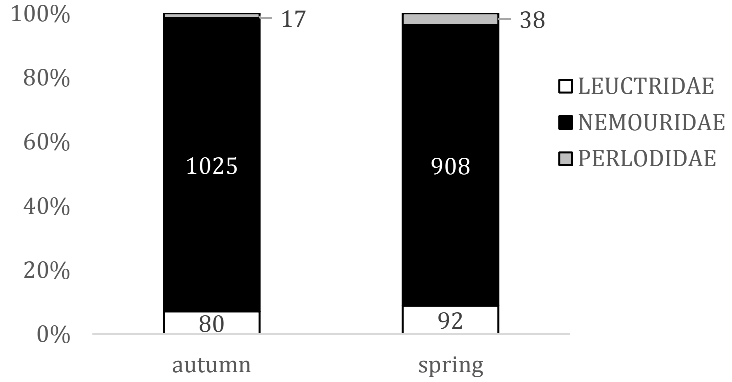


Figure 51. Percentage distribution of families of Plecoptera in treatment samples in autumn and in spring. Only families with more than 10 individuals are considered in this figure.

Coleoptera

Coleoptera made up 16 % of the total benthic community in autumn and 7 % in spring (figure 47). In October, 10 % of the drifted individuals were beetles, whereas in March they represented 9 % of the drifted community. Beetle larvae of *Riolus* sp., *Elmis* sp. (both family Elmidae) and larvae of Scirtidae were most common. Further, larvae of *Limnius* sp., *Esolus* sp. and larvae of *Platambus* sp., Orectochilus sp. and *Haliplus* sp. were collected, but they only occurred in very low numbers (less than 10 individuals per experiment). Adult forms of *Riolus* sp., *Elmis* sp., *Limnius* sp. *Hydraena* sp. and *Platambus* sp. were determined.

Other benthic invertebrates

In addition, Oligochaeta and Gastropoda were collected. The most common species of Gastropoda was *Planorbis* sp. Furthermore, *Radix* sp., *Ancylus fluviatilis*, *Bythinella austriaca* and *Valvata* sp. could be determined, but they only occurred in very low extent. In addition, a view species of Crustacea (*Assellus aquaticus* & *Gammarus fossarum*), Bivalvia (*Pisidium* sp.), Heteroptera (*Micronecta* sp.), Hirudinea (*Erpobdella* sp.) and Hydrachnidia were found.

Size distribution

Ephemeroptera

In spring, mayflies were more than 3 times more abundant than in autumn (table 3). Most individuals of Ephemeroptera were between 2 and 5 mm. In autumn, 95.7 % of all drifted Ephemeroptera larvae were classified in size B and only 1.6 % of the larvae were larger than 5 mm. The number of A-classified individuals increased in spring to 14.2 %. Larvae smaller than 2 mm were around 3 % in both seasons. Whereas in autumn only 50 individuals larger than 5 mm and 7 individuals smaller than 2 mm were caught, 197 A-classified and 299 C-classified larvae were collected in spring. A-classified mayflies could be mainly detected during the first two phases (UR & P1), but only in very low numbers (figure 52). In spring, around 14 % of A-classified larvae drifted, whereas in autumn 10 % of larvae bigger than 5 mm drifted. Small individuals were almost missing in autumn and were mainly caught during UR and P1 in spring (43 % drifted). In spring, the 19 % of larvae smaller than 2 mm were caught in the drifting nets. 8 % (spring) respectively 13 % (autumn) of larvae between 2 and 5 mm drifted in total.

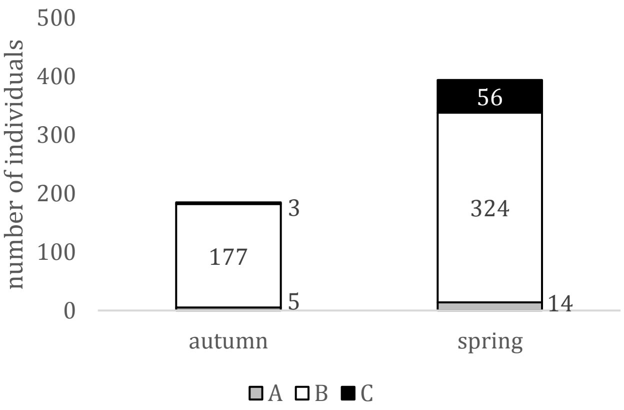


Figure 52. Total numbers of drifted Ephemeroptera larvae in autumn and spring sorted by size: A >5mm, B: 2-5 mm, C < 2mm.

Diptera

Almost all drifted Diptera larvae had a size smaller than 5 mm (figure 53). In spring, more larger individuals (4.8 % of total) were caught and could be detected in all phases of the experiment, although highest numbers were found during the peak phases. In autumn, 1 individual bigger than 5 mm was caught (4 %) and 178 individuals smaller than 5 mm were collected in the drift nets, which corresponds to 29 %. In spring, 23 % of B-classified larvae (461 individuals) and 19 % of A-classified (23 individuals) larvae drifted.

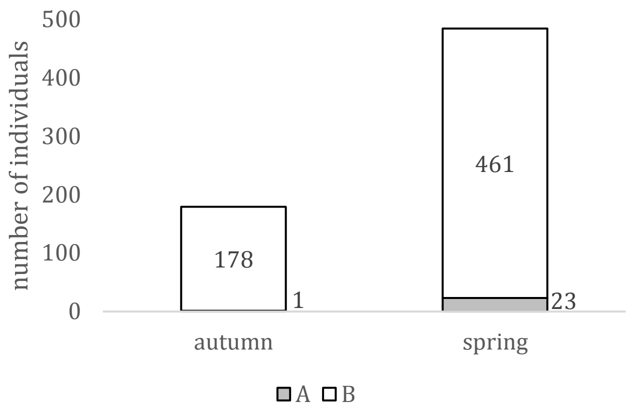


Figure 53. Number of individuals of Diptera larvae in autumn and in spring sorted by size: A >5mm, B < 5 mm.

Trichoptera

In general drift rates of caddisflies were higher in autumn throughout. In autumn, there were higher numbers of small sized larvae than big individuals in the treatment samples (table 3, figure 54). C-classified larvae made up the biggest part of the drifted individuals (174 individuals). In spring, more A-classified individuals than C-classified individuals could be detected. Most of the drifted Trichoptera larvae that were found had a size between 2 and 5 mm in spring. Individuals smaller than 2 mm were also highly represented in the drift nets in autumn. Especially during the peak phases many small larvae were collected. Larvae with a size larger than 5 mm mostly drifted during the UR and P1 phase.

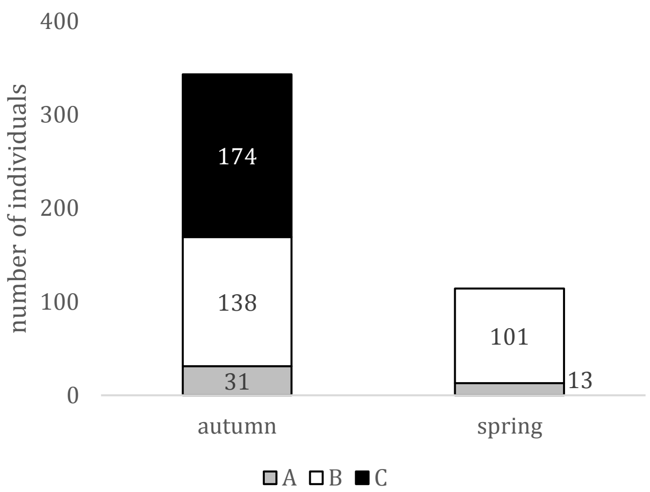


Figure 54. Total numbers of drifted Trichoptera larvae in autumn and spring sorted by size: A >5mm, B: 2-5 mm, C < 2mm.

Plecoptera

In general, most larvae found were between 2 and 5 mm in autumn and in spring (table 3). In spring 98 A-class larvae could be detected, whereas in autumn only 9 individuals occurred in this size class. Contrarily, in autumn 50 C-classed larvae occurred, but only one in spring. As it is shown in figure 55, one can see, that almost only larvae of size B were caught in the drifting nets. Only 2 individuals larger than 5 mm and one individual smaller than 2 mm were caught during P2 in spring.

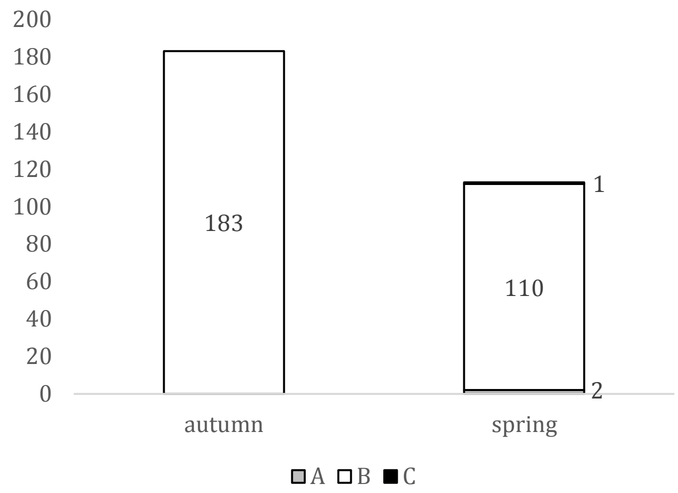


Figure 55. Total numbers of drifted Plecoptera larvae in autumn and spring sorted by size: A >5mm, B: 2-5 mm, C < 2mm

Analysis of size dependend drift of selected taxa

Ephemeroptera

As an example, the size distribution of *Baetis* sp. is shown in figure 56. In spring, as well as in autumn, most of the larvae were between 2 and 5 mm. Only 14 individuals were larger than 5 mm in total in autumn and only 7 individuals were smaller than 2 mm, whereas in spring 100 A-classified and 297 C-classified individuals were detected. The proportion of non-drifted to drifted larvae is very similar in autumn and in spring, although more B-classified individuals drifted in relation to the total numbers in autumn.

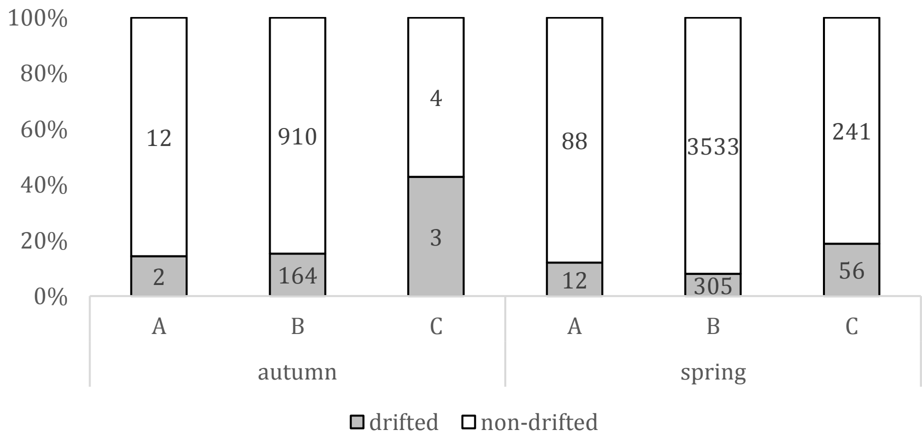


Figure 56. Percentage distribution of size classes of *Baetis* species separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

Diptera

Individuals of the family Chironomidae were more abundant in spring than in autumn (figure 57). Most of the larvae were smaller than 5 mm. In autumn only 20 individuals larger than 5 mm were collected, but none drifted. In spring, 20 individuals of A-classified larvae were collected in the drift samples. Around 20 % of all B-classified larvae drifted in autumn as well as in spring.

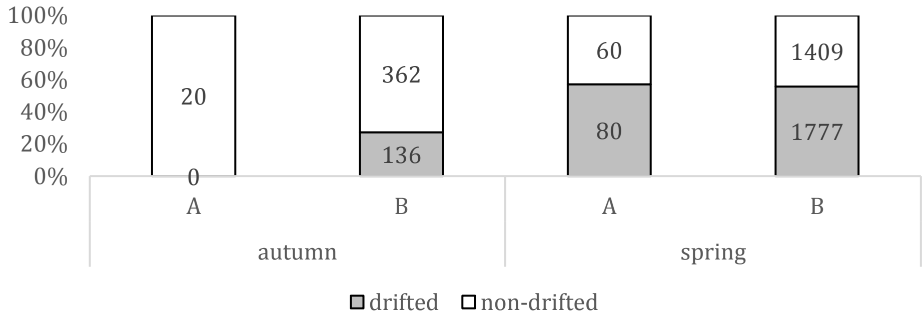


Figure 57. Percentage distribution of size classes of Chironomidae separated by season (autumn, spring): A > 5mm, B < 5 mm. Numbers in bars represent the total abundance of individuals.

Simulium sp. also was more abundant in spring (figure 58). In autumn, no larvae of *Simulium* sp. larger than 5 mm were collected, whereas in spring 33 individuals were caught in total, but only 2 individuals showed a drift response.

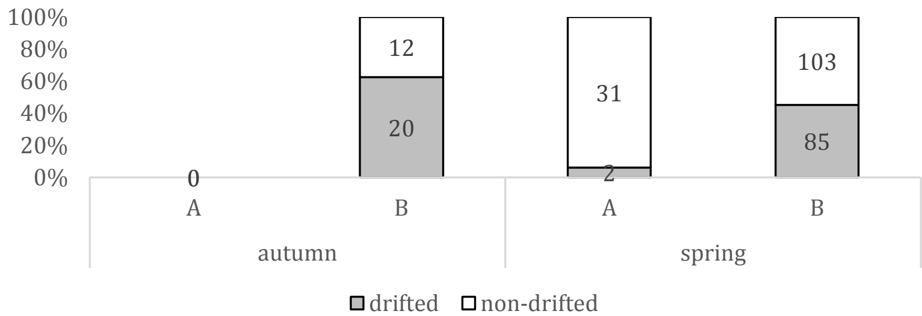


Figure 58. Percentage distribution of size classes of *Simulium* sp. separated by season (autumn, spring): A >5mm, B < 5 mm. Numbers in bars represent the total abundance of individuals.

Trichoptera

Allogamus auricollis showed a strong seasonal variation in abundance and size class distribution (figure 59). In autumn, more than twice as much individuals were collected than in spring and almost all individuals were smaller than 2 mm, whereas in spring only one individual of size C could be found.

A very similar result could be detected for *Hydroptila* sp. (figure 60). In spring, only 85 individuals were collected and all were between 2 and 5 mm. In autumn, 373 individuals were sampled in total, with 84 individuals smaller than 2 mm. No individuals larger than 5 mm were collected of *Hydroptila* sp.

Micrasema sp. showed very similar results in both seasons (figure 61). In autumn, one individual larger than 5 mm was collected, but all other sampled individuals were of size class B. Also the total abundance is very similar in both seasons.

The most larvae of size class A were determined as *Hydropsyche* sp. (mostly *Hydropsyche incognita*). Individuals larger than 5 mm were collected in autumn as well as in spring (figure 62). C-classified larvae were not very abundant in both seasons, but they showed a high drift response. In general, *Hydropsyche* sp. was not very susceptible for drift.

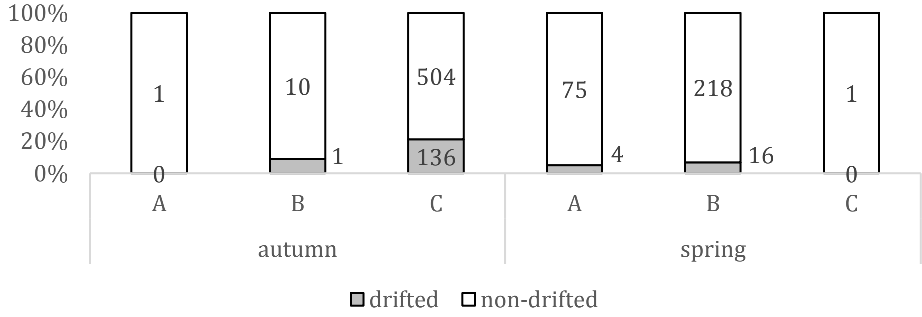


Figure 59. Percentage distribution of size classes of *Allogamus* species of drifted and non-drifted individuals separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

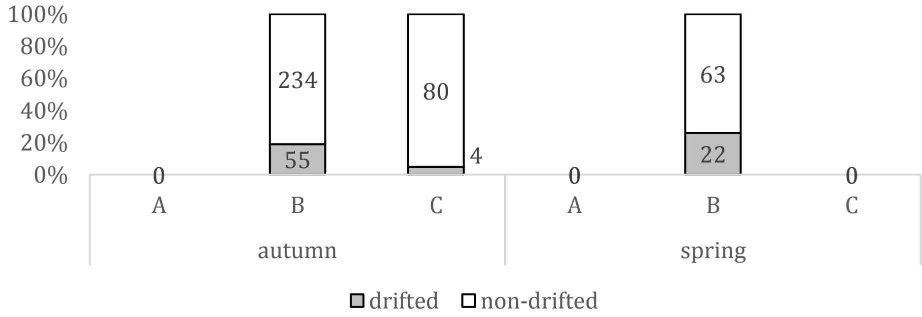


Figure 60. Percentage distribution of size classes of *Hydroptila* species of drifted and non-drifted individuals separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

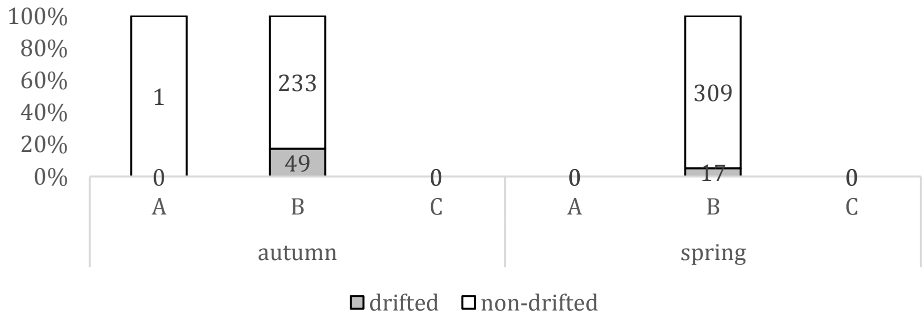


Figure 61. Percentage distribution of size classes of *Micrasema* species of drifted and non-drifted individuals separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

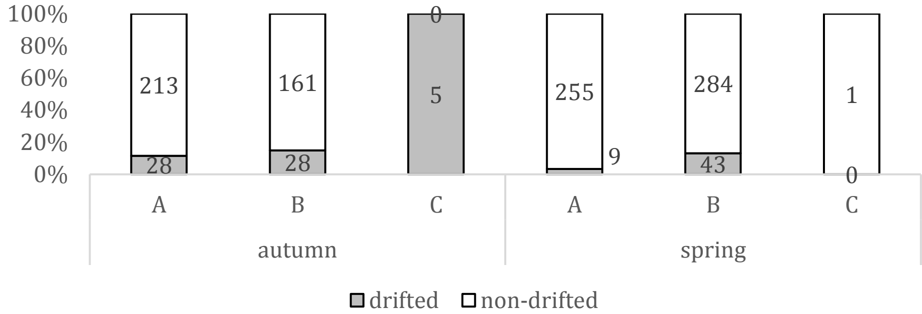


Figure 62. Percentage distribution of size classes of *Hydropsyche* species of drifted and non-drifted individuals separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

Plecoptera

Amphinemura sp. was the most common stonefly larvae in the samples. In autumn, as well as in spring, most of the larvae were between 2 and 5 mm (figure 63). In spring, 21 larger individuals and one smaller larvae could be found, whereas in autumn no A-classified larvae and 50 smaller individuals were caught. The A-classified larvae, as well as the C-classified larvae nearly showed no drift response.

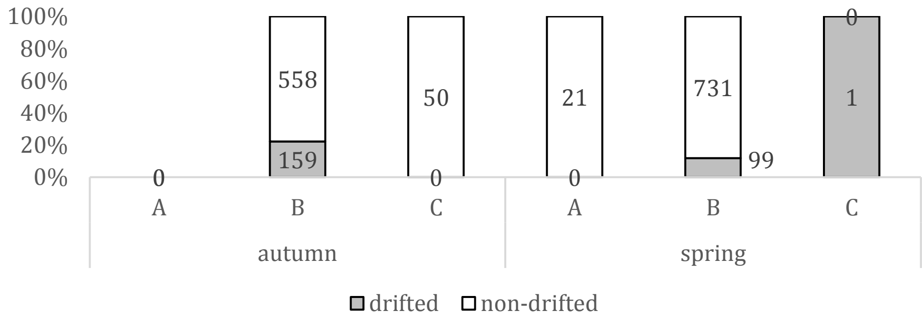


Figure 63. Percentage distribution of size classes of *Amphinemura* species of drifted and non-drifted individuals separated by season (autumn, spring): A >5mm, B: 2-5 mm, C < 2mm. Numbers in bars represent the total abundance of individuals.

Discussion

An artificial hydropeak was created to simulate a natural flood wave as it occurs at flow paths beneath storage power plants. A sudden increase of the water column results in various changes of ecological relevant parameters like the increase in bottom shear stress and changes in temperature or oxygen concentrations (Gibbins et al. 2010; Bruder et al. 2012). Alterations of these parameters have a substantial effect on the catastrophic drift of benthic invertebrates (Walters 1965) and thus cause a decrease in the benthic biomass (Parasiewicz et al. 1998). Since it is difficult to measure the impact of hydropeaking events on the drift of benthic invertebrates in the field, where species assemblages are already adapted to the stressor, hydropeaking waves were simulated in testing flumes for the purpose of this study.

For a better understanding of seasonal drift patterns of benthic invertebrates, the simulations were conducted in autumn and spring. The sampled larvae were measured and assigned to different size classifications. Consequently, differences in voltinism strategies between different orders and single taxa were identified. Furthermore, it was analyzed whether the size of the larvae affects its drift behavior or not.

Hydropeaking induced drift of benthic invertebrates

Control versus Treatment

The tenfold increase of discharge during the experiment is corresponds to reported ramping ratios in other studies (Schmutz et al. 2013). The increase of flow velocity and water depth lead to a tenfold increase in near bed shear stress, which is the main driver for an increase in drift rates and a reduction of biomass in affected river sections (Matthaei et al. 1997; Trockner & Waringer 1997; Gibbins et al. 2007; Armanini et al. 2014). This is further confirmed by comparison of treatment and control samples. The drift rates in the control samples were very low and consistent in autumn and in spring. The treatment samples showed significantly higher drift rates compared to corresponding controls in both seasons. Furthermore, it could be observed that the drift rates increased during the flow increase. Drift rates and drifted biomass were highest during the beginning of the peak event. After the first two phases (UR & P1) the drift rates of all investigated benthic invertebrates decreased, but were still higher than in the control samples. This indicates that the start of hydropeaking is the most important phase to the drift of benthic invertebrates. The very low drift rates in all phases of the control samples may be explained by constant drift, which happens occasionally to individuals of all taxa (Waters 1965).

Although the total drift rates of treatment and control samples differed significantly, variations between different orders and specific taxa could be detected. Caddisflies, stoneflies and beetles showed a significant effect in drift rates caused by the changing parameters due to the hydropeak. Although the total drift rates of Diptera differed significantly between control and treatment samples, the investigated taxa showed different results. Larvae of the family Chironomidae, on the one hand, showed a strong reaction to the peak event. *Simulium* sp., on the other hand, did not show a significant increase in drift rates. Although Simuliidae mostly occur in running waters with very high current, they showed highest drift rates of all families (Zhang & Malmqvist 1997). One explanation may be the duration of the adaptation phase. Blackfly larvae produce a silk thread from their mouths and use it to form sticky pads to adhere to the substrate surface. With tiny hooks on the tips of the abdomen they attach to these silk pads (Jungwirth et al. 2003). It is very likely that the blackflies in this experiment did not have enough time to attach to the substrate in the experimental flumes, which may have caused the high drift rates.

Furthermore, Ephemeroptera larvae did not show significant differences between control and treatment samples. But responses were highly taxa-specific. Although the family Baetidae is described as having very strong swimming abilities due to their streamlined body shape (Hynes 1970, Céréghino and Lavandier 1998 a,b, Oldmeadow et al. 2009), they showed drift rates up to 15 % in the treatment as well as in the control samples. Cabaltica et al. (2013) showed, that *Baetis rhodani* and *Baetis alpinus* prefer higher currents (FST-curves) and are classified as rheophilic and rheobiont. Possibly the conditions in the testing flumes did not meet their natural habitat preference, which lead to increased drift in treatment and control runs. Gibbins et al. (2010), on the other hand, claimed that the increase in bottom shear stress is the main driver for an increase of drift rates of *Baetis* sp. Due to their position in the water column, specimens of *Baetis* are usually highly exposed to the hydropeaking wave, leading to high probabilities of being drifted downstream.

Other Ephemeroptera taxa like the family Heptageniidae showed very low drift response in both, the treatment and in the control samples. This corresponds to observations made by other authors. Heptageniidae are frequently described by their dorsoventrally flattened body shape and are well suited for bottom dwelling in or near the boundary layer (Statzner & Holm 1982, Statzner & Holm 1989, Weissenberger et al. 1991). Especially *Rhithrogena* sp. is described as well adapted to fast flowing habitats (Céréghino et al. 2004). Correspondingly, Bruno et al. (2012) conducted an experimental study observing hydropeaking impacts and observed that Heptageniidae showed very low responses to simulated changes in bottom shear stress.

Taxon-specific drift during the experimental phases of the treatment

Corresponding to Carolli et al. (2010), the drift rates were significantly higher during the first two phases of the hydropeak. Most of the investigated orders and selected taxa showed highest drift rates during the arrival of the peak (UR), indicating that the increase of the water level during a hydropeaking wave might be a key factor when considering the impact on benthic invertebrates. Analogical to the drift rates, the breakdown of biomass was highest during the upramping and peak 1 phase.

Similarities (Bray-Curtis distances) between different phases of spring and autumn samples based on species composition separate very well (figure 64). Upramping phases (orange) and peak 1 phases (blue) seem to be more similar than peak 2 (green) and downramping phases (red). UR and P1 phase of experiment 23 (autumn) seem to be a bit different than in the other experiments, but also separate well from their P2 and DR. Overall the autumn experiments (V21 & V23) seem to be more dissimilar than the spring experiments (V33 & V36).

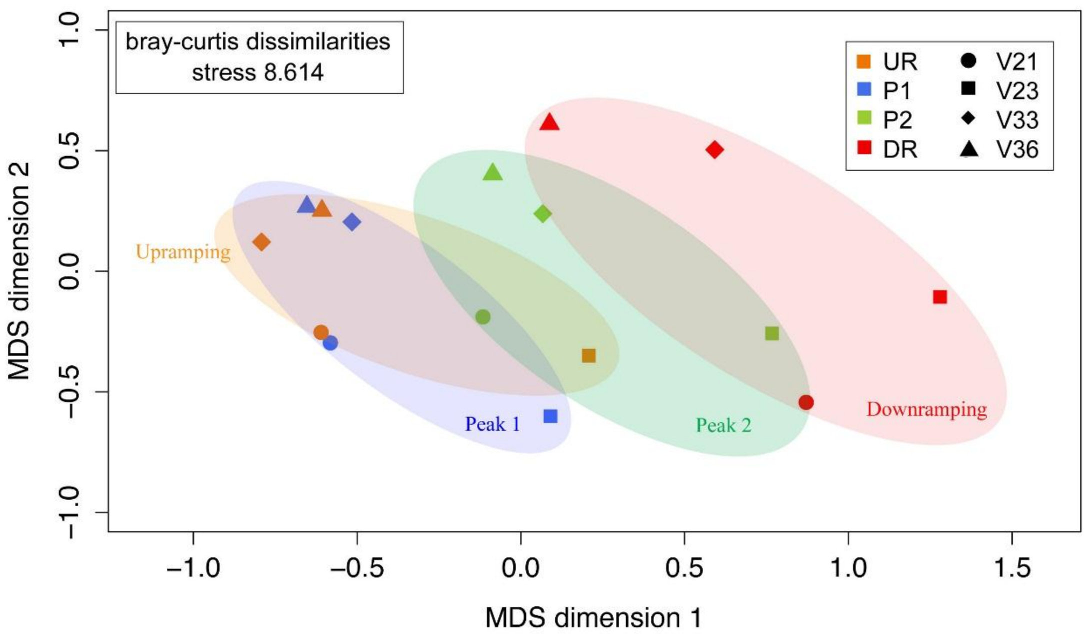


Figure 64. Non-metric multidimensional scaling (nMDS) plot using Bray-Curtis distances for species composition (including abundances) of different phases for experiments V21, V23 (autumn) and V33, V36 (spring). Phases are represented in different colors: UR (upramping – orange), P1 (peak 1 – blue), P2 (peak 2 – green), DR (downramping - red). Experiments are shown with different sysmbols. Phases are marked with ellipses: UR (orange), P1 (blue), P2 (green), DR (red).

Ephemeroptera

Ephemeroptera showed a decrease in drift rates from upramping to downramping in both seasons with little higher drift rates in autumn. Higher drift rates of mayflies in autumn were also detected by Céréghino and Lavandier (1998) downstream of a hydroelectric power plant. This leads to the assumption that mayflies show a clear response to changes in flow regime, but that the phase of flow increase has the highest impact.

Diptera

Simulium sp. showed the highest drift rates of all taxa and showed highest drift rates during the first two phases of the experiment. Since Simuliidae live near the surface and are very exposed to current, the probability of being detached from the sediments during flow increase may be high. Furthermore, they are reported to be very sensitive to an increase in bottom shear stress and are a common drift component (Bohle 1995, Bruno et al. 2012).

Chironomidae were most abundant in all drift samples. This is consistent with results of many authors that described species of the family Chironomidae as the most dominant drift component (Bergey and Ward 1989, Tilley 1989, Trockner and Waringer 1997, Burgherr and Ward 2001, Hieber et al. 2003, Robinson et al. 2004, Bruno et al. 2010). Furthermore, Chironomidae are frequently reported to be very sensitive to an increase in bottom shear stress (Imbert & Perry 2000, Jakob et al. 2013, Robinson et al. 2004).

Trichoptera

The highest drift rates of Trichoptera were measured during the increase of the water level and the first half of the discharge peak. *Allogamus auricollis* was the most dominant species in autumn followed by *Micrasema setiferum* and *Hydroptila* sp. Although *Allogamus auricollis* was additionally sampled, the densities were generally much higher in autumn than in spring. All of these species are described as limnophilic and naturally occurring in areas with low currents (Wichard 1988) explaining the high drift rates following flow increases.

Low drift rates of *Hydropsyche* sp. and *Rhyacophila* sp. may also be explained by their habitat preference. Both are described as rheophilic and they mostly occur under rocks. Some species of *Rhyacophila* sp., for example, pierce the claws in the sediment and spin a security thread to counteract drift (Wichard 1988, Cabaltica and Kopecki 2013, Wichard and Wagner 2015).

Comparing the individual drift rates in different phases of *Hydropsyche incognita* and *Allogamus auricollis*, clear differences in drift patterns can be observed. Although the drift rates of *Hydropsyche* sp. are less pronounced, there is a large variation, escpecially in autumn. *Hydropsyche incognita* shows the highest drift rates during the upramping phase (figure 17), whereas *Allogamus auricollis* shows highest drift rates during the peak phase (figure 14). Possibly, specimens of *Allogamus auricollis* are more affected by the duration of hydropeaking event.

Plecoptera

Like Ephemeroptera and some Trichoptera, Plecoptera larvae showed highest drift rates during UR and P1, indicating a higher importance of the flow increase than the peak itself.

Coleoptera

Beetles also showed a clear response to the hydropeak, as the drift rates of the treatment samples differed significantly to the control samples. The drift rates were highest during the arrival of the peak and decreased during the peak. This is supported by the consideration that increasing shear stress has a major effect on the drift behavior (Gibbins et al. 2007; Gibbins et al. 2010).

Furthermore, beetles showed very large differences in abundance regarding the different life stages. Although beetle larvae were more abundant than their adult forms the relative drift rates did not differ significantly. Especially larvae of *Riolus* sp. and *Elmis* sp. showed very similar drift rates compared to their adult forms. Beetle larvae and adult beetles were often found in drifted patches of moss. Therefore, these drift rates cannot be explained only by increasing shear stress. It is very likely that these moss-“pieces” were collected during the benthos sampling. During the peak phases these got flushed away only by the increase in flow velocity and thus the enclosed adult beetles and beetle larvae.

Other benthic invertebrates

Oligochaeta are sediment-dwellers (Timm 2013) and most likely the relatively high drift rates were caused by a too low adaptation times and possibly by too coarse sediments. Therefore, the specimens could not retreat into the sediment as the induced hydropeak arrived. Although Gastropoda are not totally resistant against drift, it can be expected that the induced increase in flow velocity was too low to dislocate the snails (Covich 2010).

Drift of different size classes

Apart from some Trichoptera larvae (*Micrasema* sp., *Hydroptila* sp. and *Hydropsyche* sp.) for which nearly no C-classified larvae were collected, highest drift rates could be detected for individuals smaller than 2 mm. These results confirm the theory that the drift resistance increases with increasing body length and thus with higher Reynolds number (Statzner 1988, Bohle 1995). Larvae smaller than 2 mm also showed the highest drift rates during the control samples.

Seasonal composition and drift patterns

According to the Bray-Curtis dissimilarities, the single phases of treatment samples in spring were more similar than the single phases in autumn (Figure 65). The nMDS method also showed that the single phases of both seasons separate very well, which concludes that there are similar results in both seasons. Coleoptera, Plecoptera and Trichoptera had a larger share on the total population in autumn. The proportion of Diptera and Ephemeroptera increased in spring.

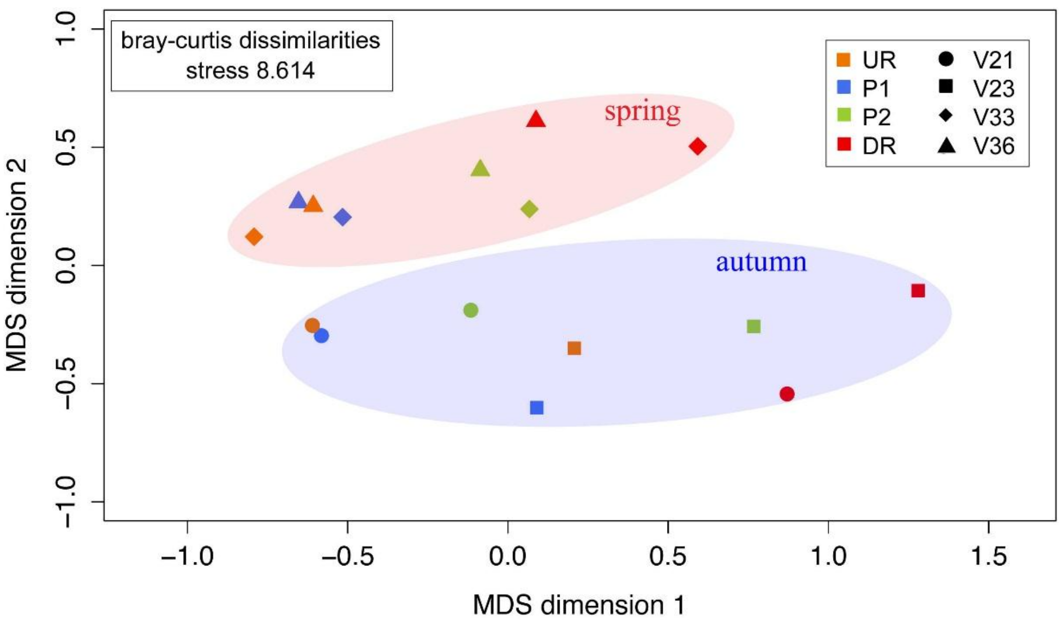


Figure 65. Non-metric multidimensional scaling (nMDS) plot using Bray-Curtis distances for species composition (including abundances) of different phases for experiments V21, V23 (autumn) and V33, V36 (spring). Phases are represented in different colors: UR (upramping – orange), P1 (peak 1 – blue), P2 (peak 2 – green), DR (downramping red). Experiments are shown with different sysmbols. Seasons are marked with ellipses: spring (red), autumn (blue).

The percentage of the total drifted biomass was very similar around 9.5 %, although slightly higher values were detected in autumn. Former research predicts a breakdown of benthic invertebrate biomass river sections below power plant outlets from 75 to 95 % (Bretschko & Moog 1990; Moog 1990). Nevertheless, these values are difficult to compare, because in those studies multiple hydropeaks and parameters like stranding were included and could not be considered in this study. However, it is assumed that the reduction in biomass is much higher in affected river sections than it would be expected from the existing results.

Both, in autumn and in spring, the percentage of drifted biomass strongly correlated to the drift rates of the investigated orders. The percentage of drifted biomass of stoneflies and caddisflies is higher in autumn although mainly early instar larvae were present. Highest drift rates and highest percentages of drifted biomass in autumn where also detected for Ephemeroptera. Therefore, it can be assumed that reduction of biomass is more dependent on the number of drifted individuals than on the size of the larvae. This assumption is supported by the higher drift rates and drifted biomass of Diptera in spring.

In a previous research Waringer (1992) detected a strong correlation between drift densities and drifted biomass. In contrast to our results, he found significant seasonal differences of drift densities, with higher drift densities in spring than in autumn. For more precise analyses and more detailed information, species should have been weighed individually, but due to efficiency reasons, this was not possible.

In general, higher drift rates and a higher percentage of drifted biomass were detected in autumn. Especially the larval size and therefore the life cycle of single taxa played an important role to the susceptibility to drift and can be mainly explained by having a closer look at the different taxa, as presented below. However, it should be considered that the water temperature may also have a big impact on the drift densities, which was not investigated in this research. Schülting et al. (2016), for example, observed that drift rates decreased during cold thermopeaking and thus may explain lower drift rates in spring.

Ephemeroptera

In both seasons, most of the collected Ephemeroptera larvae were between 2 and 5 mm. Although larvae smaller than 2 mm showed the highest drift rates, the size classification was not precise enough to draw conclusions about the drift sensitivity of different larval stages for Ephemeroptera.

Sartori and Landolt (1999) described an univoltine life cycle of *Baetis rhodani* in alpine regions with adult forms from March to November. This may explain the seasonal differences in drift rates as shown in the example of *Baetis rhodani* (figure 18), but other authors also described a bivoltine life cycle of *Baetis rhodani* (e.g. Elliott 1967).

It is very likely that the occurring mayflies in this study do not have an univoltine life cycle, because in spring, both small and large individuals were found. The higher total abundance and the higher abundance of small individuals in spring indicate that there is more than one generation per year. This particularly concerns Baetidae, which constitute the main part of all gathered Ephemeroptera. In previous studies, also often bivoltine life cycles, but also semivoltine life cycles of different Ephemeroptera taxa (mostly Baetidae) are described (Clifford 1982, Kukula 1997, Martynov 2013). Since the reason for higher drift rates in autumn can not be found in the size of the larvae it is very likely that other parameters such as the water temperature are responsible. In a former research it was shown that especially *Baetis* sp. showed reduced drift rates during cold thermopeaking (Schülting et al. 2016), which is consistent with the colder water temperature and the lower drift rates in spring in this research.

Diptera

Almost all collected Diptera larvae were smaller than 5 mm. Due to the high amount of Chironomidae larvae, specimens were only separated into groups larger and smaller than 5 mm. Chironomidae were more dominant in spring, although higher drift rates were detected in autumn. The proportional increase in spring may depend on the life cycles of Chironomidae. Corresponding to our observations, Robinson et al. 2004 stated that Chironomidae with multivoltine life cycles are present throughout the year and become more dominant during periods when other taxa with univoltine or large life-cycles such as stoneflies, heptageniid mayflies and caddisflies occur in lower densities.

Trichtopera

Trichoptera showed higher drift rates in autumn than in spring, which also resulted in higher drifted biomass. It could be observed that more than half of all drifted Trichoptera in autumn were smaller than 2 mm. In spring, only three individuals smaller than 2 mm were caught, but none drifted. The connection between size and susceptibility of drift is very well shown in the single drift rates of *Allogamus auricollis* and *Hydropsyche incognita*. Larger individuals in spring seem to counteract drift very well, whereas in autumn very high drift rates were detected. In general, later instars of *Allogamus auricollis, Hydropsyche* sp. and *Polycentropus flavomaculatus* could be detected in spring. Correspondingly, Wichard and Wagner (2015) claimed that the flight periods of most caddisflies range from April to October. Pitsch (1993) published a table of Trichoptera imagines caught from 1979 to 1991. Adult forms of different

Hydropsyche species and *Polycentropus flavomaculatus*, for example, were caught from Mai till October, whereas the number of caught individuals decreased to autumn. Furthermore, it is well documented that these species have univoltine life cycles (Graf et al. 2008). For this reason, it can be assumed that the experiment in autumn took place after hatching of Trichoptera larvae.

The seasonal differences in the relative drift rates are most likely due to the higher susceptibility for drift of small larvae and therefore to the univoltine life cycles of Trichoptera.

Plecoptera

Stonefly larvae showed seasonal variances in drift rates and size classes. In autumn almost only medium and small sized larvae could be found. The drift rates were higher than in spring, where much more large and medium sized individuals were present. These seasonal differences in size classes indicate that most of the investigated species only have one generation per year and can also be confirmed by previous research (Graf et al. 2009). Size also seems to be a significant factor to the susceptibility to drift for stoneflies. In autumn, when the sampled specimens still consisted of young larval instars, the drift rates were higher than in spring. This goes in line with a study of Hieber et al. (2003) who detected that early instars of stonefly larvae were much more abundant in drift than later ones. Additionally. the high drift rates of species of the family Nemouridae (mostly *Amphinemura* sp.) may be explained by their behavior in running waters. Most of the species found were typical shredder organisms that feed on leaves or plant material and mostly occur in debris-dams, pools and slow-flowing shore zones (Wolf & Zwick 1989). In contrast to Nemouridae, Leuctridae have a very slender body shape and seek shelter in the interstitial (Jungwirth et al. 2003). Therefore, they showed comparably low drift rates in these experiments.

Summary and Conclusion

Hydropeaking led to significantly increased macroinvertebrate drift during the peak flow, whereas drift reactions showed strongly taxa-specific as well as seasonal patterns. The flow increase was identified as a key phase during a hydropeaking event, since the highest drift rates and highest percentage of drifted biomass for most of the investigated taxa was measured at the beginning of the peak. Therefore, it is suggested that a reduced slew rate of the hydropeak leads to a reduction of drift rates and biomass loss. Single taxa also seem to be more sensitive to the duration of a hydropeaking event (e.g. *Allogamus auricollis*) than on the slew rate. In general, EPT-taxa showed higher drift rates in autumn compared with spring, which suggests that these taxa show a higher seasonality than Diptera. According to the size classes Trichoptera and Plecoptera seem to have univoltine life cycles, whereas within Ephemeroptera and Dipera univoltine, bivoltine and multivoltine life cycles are likely. The larval stage is one of the most important criteria to the susceptibility of drift as small larvae showed highest drift rates in all orders. This phenomenon can be explained by an increase of the Reynolds number with increasing body size and therefore a higher resistance to increasing shear stress. Furthermore, it was shown that drift rates of single taxa are connected to their habitat preferences. Free swimming species and species that prefer low currents were more susceptible to drift than interstitial taxa.

(H1) Hypothesis 1 can be confirmed.
A significant effect of hydropeaking could be shown as treatment and control samples differed significantly. As described above it can be assumed that the catastrophic drift increases significantly with increasing peakflow, whereas at constant low flow only occasional drift occurs (Walters 1965).

(H2) Hypotheses 2 can be confirmed.
A clear trend of size dependent drift was detected for nearly all investigated taxa whereas smaller specimens tended to show higher drift rates. Statzner & Holm (1989) claimed that young and small specimens have low Re's, since the Re increases with body size. Bottom shear stress and flow velocity increased during the peak flow simulations therefore individuals with higher Re's were beneficial compared to individuals with low Re‘s.

(H3) Hypothesis 3 can be confirmed
Inherent with hypothesis 2, higher drift rates were detected in autumn, as more smaller individuals were present. Furthermore, other parameters such as the warmer water temperature in autumn should be considered as a reason for the higher drift rates.

(H4) Hypothesis 4 can be confirmed.
Baetidae (surface dwelling) or limnophilic Trichoptera (*Allogamus auricollis*, *Hydroptila* sp.) showed higher susceptibility to drift. Interstitial occupants like *Hydropsyche* sp. or *Rhyacophila* sp. showed low drift rates. However, only one type of substrate was tested (microlithal), so possibly the results would differ in different sediment conditions.

Problems and suggestions

Although this study reveals seasonal patterns in the drift rates (mainly dependent on the larval stage of single taxa), only two seasons (autumn and spring) could be examined. Analyzes and observations over a longer period in all seasons may give more detailed information. Furthermore, changing variables as temperature, different grain size compositions or different intensities of the peak could not be considered in this study but should be tested in further research. Using macrolithal, for example, could lead to a reduction of drift rates, because of bigger interstitial niches, which may allow some taxa to retreat more easily. On the other hand macrolithal could lead to higher turbulences and thus increases drift rates. Also the duration of single phases and the upramping speed are decisive factors that probably have a strong impact on the drift rates. Moreover, it should be considered that the experiments in this study only observed drift reactions following a single peak, whereas flow paths beneath hydropower plants are exposed to multiple peaks. It can be assumed that multiple peaks have a stronger effect to the drift rates of benthic invertebrates and thus have a greater impact to the ecosystem in affected river sections.

Another aspect that has to be considered in this study are the randomly sampled donor populations. Although donor populations were sampled from different microhabitats it cannot be guaranteed that the sampled individuals showed an accurate representation of the occurring species community in a correct ratio.

For a better understanding of ecological consequences due to the drift of benthic invertebrates case studies in affected areas are needed. Case studies could help to investigate long-term effects of hydropeaking on changes in species composition and recolonization dynamics of the benthic fauna. Furthermore, effects like stranding was not considered in this study, but are an essential problem for aquatic communities.

Even though loss of biodiversity is only rarely mentioned as a consequence of hydropeaking most likely, benthic invertebrates with high drift susceptibility decrease in affected river sections, resulting in a reduction of biomass. This may have extensive effects on the entire ecosystem, as for example the food sources for fish are reduced.

Abstract

The operation of storage-power plants leads to irregularly increased runoff (hydropeaking) at flow paths beneath a hydropower plant. Hydropeaking leads to changes in hydraulic conditions and physico-chemical parameters, such as oxygen concentration. Even though drift plays an important role in the life history of benthic invertebrates, hydropeaking leads to increases in catastrophic drift and to a reduction of biomass in affected river stretches.

In Lunz am See (Austria) experimental channels (HyTEC) were constructed to simulate hydropeaking and thus investigate the drift of benthic invertebrates following hydraulic stress. In this study, seasonal patterns of macroinvertebrate drift caused by hydropeaking have been investigated. In two different seasons (autumn & spring) the hydropeaking-induced drift of aquatic macroinvertebrates was quantified and analyzed.

In general, higher drift rates were detected in autumn than in spring. This especially applied to Trichoptera and Plecoptera, of which small larvae were mainly found in autumn. A strong link between drift rates and larval size could be identified for these groups. Ephemeroptera and Diptera were most abundant in spring. Mayflies showed highest drift rates in autumn and Diptera in spring. Therefore, the life cycles of individual species have to be considered, as they show different life-history patterns. It was found that early larval stages are more susceptible to drift than larger individuals. Furthermore, a dependency of drift response to habitat preferences of single taxon is very likely. Swimming and lentic taxa that mostly occur in low-flowing habitats showed higher drift rates than interstitial taxa.

Zusammenfassung

Der Betrieb von Speicherkraftwerken führt zu häufigen Abflussschwankungen (Schwall) in Flussabschnitten unterhalb der Kraftwerke. Schwall verändert die hydraulischen Bedingungen und beeinträchtigt auch physikalische und chemische Parameter, wie zum Beispiel die Sauerstoffkonzentration. Obwohl die Drift eine wichtige Rolle in der Lebensweise von benthischen Invertebraten einnimmt, führen Veränderungen des natürlichen Abflussgeschehens zu einer Zunahme der Katastrophendrift und führen somit zu reduzierten Biomassen in betroffenen Fließgewässern.

In Versuchsrinnen in Lunz am See (Österreich) wurde ein künstlicher Schwall induziert um das Driftverhalten von Makrozoobenthos (MZB) zu untersuchen. Diese Arbeit befasst sich mit saisonalen Unterschieden des Driftverhaltens von MZB während Schwallereignissen. In zwei verschiedenen Saisonen (Frühling und Herbst) wurde das durch Schwall verursachte Driftverhalten von aquatischen Evertebraten untersucht.

Die gemessenen Driftraten waren im Herbst höher als im Frühling. Taxa der Köcherfliegen und der Steinfliegen zeigten einen deutlichen Zusammenhang der Driftraten und der Körpergröße, da vor allem kleine Individuen im Herbst gefunden wurden und diese stärker von der Schwalleinwirkung betroffen waren. Eintagsfliegen und Zweiflügler kamen hingegen im Frühling in höherer Dichte vor, wobei erstere höhere Driftraten im Herbst zeigten, Dipteren jedoch im Frühling. Grund dafür sind die unterschiedlichen Lebenszyklen verschiedener Arten, da sie unterschiedliche Reproduktionsstrategien verfolgen. Die Habitatpräferenz der unterschiedlichen Arten spielt ebenfalls eine wichtige Rolle bei der Driftsenitivität. Schwimmende und linitische Arten die bevorzugt in Bereichen mit langsamer Fließgeschwindigkeit vorkommen, zeigten höhere Driftraten als Arten, die im Interstitial leben.

References

Anderson N. & Lehmkuhl D. 1968. Catastrophic drift of insects in a woodland stream. Ecology.

Armanini D. G., Idigoras Chaumel A., Monk W. A., Marty J., Smokorowski K., Power M. & Baird D. J. 2014. Benthic macroinvertebrate flow sensitivity as a tool to assess effects of hydropower related ramping activities in streams in Ontario (Canada). Ecological Indicators, 46, 466–476.

Armitage P. D., Lattmann K., Kneebone N. & Harris I. 2001. Bank profile and structure as determinants of macroinvertebrate assemblages-seasonal changes and management. Regulated Rivers-Research & Management, 17(4-5), 543–556.

Auer I., Jurkovic A., Orlik A. et al. 2005. High quality climate data for the assessment of Alpine climate , its variability and change on regional scale - Collection and analysis of historical climatological data and metadata, ZAMG. Met-austria.eu.

Bacher I. & Waringer J. A. 1996. Hydraulic Microdistribution of Cased Caddis Larvae in an Austrian mountain brook. Int. Revue ges. Hydrobiol. 81, 4: 541-554.

Bagnold R. A. 1977. Bed load transport by natural rivers. Water Resources Research, Volume 13, 2: 303-312.

Beckelmann-Evans B. N. , Davies R. & Falconer R. A. 2008. Measuring bed shear stress along vegetated river beds using FST-hemispheres. Journal of Environmental Management 88: 627-637.

Bergey E. A., Ward J.V. 1989. Upstream-downstream movements of aquatic invertebrates in a Rocky Mountain stream. Hydrobiologia 185: 71-82.

Beurton S. & Thieken A. H. 2009. Seasonality of floods in Germany. Hydrological Sciences Journal 54: 62-76.

Bohle H. W. 1995. Spezielle Ökologie. [2]. Limnische Systeme. Berlin. Springer. ISBN 3-540-58263.

Bointner R. et al. 2013. Wirtschaftskraft Erneuerbarer Energie in Österreich und Erneuerbare Energie in Zahlen. Blue Globe Report #1/2013.

Boulton A. J., Peterson C. G., Grimm N. B. & Stuart G. 1992. Stability of an Aquatic Macroinvertebrate Community in a Multiyear Hydrologic Disturbance Regime, Ecology, 73(6), 2192–2207.

Boyero L., Valladolid M. & Arauzo M. 2005. Dynamics of Invertebrate Benthic Communities and Drift in a Regulated River of Central Spain. International Review of Hydrobiology, 90(4), 392–411

Bratrich C., Truffer B., Jorde K., Markard J., Meier W., Peter A., Schneider M. & Wehrli B. 2004. Green hydropower: A new assessment procedure for river management. River Research and Applications, 20(7), 865–882.

Bretschneider, H., Lecher, K., and Schmidt, M. (Eds.). 1993. Taschenbuch der Wasserwirtschaft, seventh edn. Verlag Paul Peary, Hamburg.

Bretschko G. & Moog O. 1990. Downstream effects of intermittent power generation. Water Science and Technology. Vol. 22. 127-135.

Brooker M.P. 1981 The impact of Impoundments on the downstream Fisheries and general ecology of Rivers. Adv. Appl. Biol. 6, 91 – 152.

Bruder A., Schweizer S., Vollenweider S., Tonolla D. & Meile T. 2012. Schwall und Sunk: Auswirkungen auf die Gewässerökologie und mögliche Sanierungsmassnahmen, 257–264.

Bruno C. M., Maiolini B., Carolli M. & Silveri L. 2010. Short time-scale impacts of hydropeaking on benthic invertebrates in an Alpine stream (Trentino, Italy). Limnologica - Ecology and Management of Inland Waters, 40(4), 281–290.

Bruno M. C., Siviglia A., Carolli M. & Maiolini B. 2012. Multiple drift responses of benthic invertebrates to interacting hydropeaking and thermopeaking waves. Ecohydrology, 6, 511–522.

Burgherr P. & Ward J. V. 2001. Longitudinal and seasonal distribution patterns of the benthic fauna of an alpine glacial stream (Val Roseg, Swiss Alps). Freshwater Biology, 46, 1705–1721.

Cabaltica A. & Kopecki I. 2013. Assessment of Hydropeaking Impact on Macrozoobenthos Using Habitat Modelling Approach. Civil and Environmental Research 3(11), 8–17.

Carolli M., Bruno M. C., Maiolini B. & Silveri L. 2010. Assessment of hydropeaking-induced alterations of benthic communities in experimental flumes. Biologia Ambientale, 24 (1): 215-223.

Céréghino R. & Lavandier P. 1998a. Influence of hypolimnetic hydropeaking on the distribution and population dynamics of Ephemeroptera in a mountain stream. Freshwater Biol. 40, 385–399.

Céréghino R. & Lavandier P. 1998b. Influence of hydropeaking on the distribution and larval development of the Plecoptera from a mountain stream. Regul. Rivers Res. Manage. 14, 297–309.

Céréghino R., Legalle M. & Lavandier P. 2004. Drift and benthic population structure of the mayfly Rhithrogena semicolorata (Heptageniidae) under natural and hydropeaking conditions. Hydrobiology 519, 127–133.

Chainho P., Costa J. L., Chaves M. L., Lane M. F., Dauer D. M. & Costa M. J. 2006. Seasonal and spatial patterns of distribution of subtidal benthic invertebrate communities in the Mondego River, Portugal - A poikilohaline estuary. Hydrobiologia, 555(1), 59–74.

Clifford H. F. 1982. Life cycles of Mayflies (Ephemeroptera), with special reference to voltinism. Quaestiones Entomologicae 18: 15-90.

Covich A. P., 2010. Winning the biodiversity arms race among freshwater gastropods: competition and coexistence through shell variability and predator avoidance. Hydrobiologia 653: 191–215.

Covich A. P., Palmer M. A. & Crowl T. A. 1999. The Role of Benthic Invertebrate Species in Freshwater Ecosystems: Zoobenthic species influence energy flows and nutrient cycling. BioScience, 49(2), 119–127.

Culp J. M., Glozier N. E. & Scrimgeour G. J. 1991. Reduction of predation risk under the cover of the darkness: Avoidance responses of mayfly larvae to a benthic fish. Oecologia. Volume 86: 163-169.

Cushman R. M. 1985. Review of Ecological Effects of Rapidly Varying Flows Downstream from Hydroelectric Facilities. North American Journal of Fisheries Management, 5(3A), 330–339.

Dodds G.S. & Hisaw F.L. 1925. Ecological Studies on Aquatic Insects . III . Adaptations of Caddisfly Larvae to Swift. Ecological Society of America, Ecology, Vol. VI, No. 2.

E-control Austria. 2015. Ökostrombericht 2015. www.e-control.at.

Elliott, J. M. 1967. lnvertebrate drift in a Dartmoor stream. Freshwater Biology Association. Arch. Hydrobiol. 68. 2. 202-237.

Fink, M. H., Moog, O., & Wimmer, R. 2000. Fliessgewässer-Naturräume Österreichs. Monographien (Umweltbundesamt) (Vol. 128).

Füreder L. 2007. Life at the edge: Habitat condition and bottom fauna of alpine running waters. International Review of Hydrobiology, 92(4-5), 491–513.

Gibbins C., Vericat D., Batalla R. J. 2007. When is stream invertebrate drift catastrophic? The role of hydraulics and sediment transport in initiating drift during flood events. Freshwater biology 52: 2369-2384.

Gibbins C., Vericat D., Batalla R. J. 2010. Invertebrate drift and benthic exhaustion during disturbance: response of mayflies (Ephemeroptera) to increasing shear stress and river-bed instability. River Research and Applications, 26, 499–511.

Giller P. S. & Twomey H. 1993. Benthic macroinvertebrate community organisation in two contrasting rivers - Between-site differences and seasonal patterns. Biol.Environ.Proc.R.Ir.Acad., 93 B(3), 115–125.

Graf W., Lorenz A. W., Tierno de Figueroa J. M., Lücke S.,López-Rodríguez M. J. & Davies C. 2009. Plecoptera (Distribution and ecological preferences of European freshwater organisms). Volume 2. Sofia-Moscow. Pensoft.

Graf W., Murphy J., Dahl J., Zamora-Muñoz C. & López-Rodríguez M. J. 2008. Trichoptera (Distribution and Ecological Preferences of European Freshwater Organisms). Volume 1. Sofia-Moscow. Pensoft.

Habersack H., Wagner B., Hauer C. & Jäger E. 2012. Wasserkraft in Österreich - aktueller Bestand und Decision Support System (DSS WASSERKRAFT). Österreichische Wasser- Und Abfallwirtschaft, 64(5-6), 336–343.

Hieber M., Robinson C. T. & Uehlinger U. 2003. Seasonal and diel patterns of invertebrate drift in different alpine stream types. Freshwater Biology, 48, 1078–1092.

Hieber M., Robinson C. T., Uehlinger U. & Ward J. V. 2005. A comparison of benthic macroinvertebrate assemblages among different types of alpine streams. Freshwater Biology, 50(12), 2087–2100.

Hildebrand S. G. 1974. The relation of drift to benthos density and food level in an artificial stream. University of Michigan. Limnology and oceanography, Volume 19, 6.

Humpesch U., Dokulil M. & Elliot J.M. 1982. Ökologische Auswirkungen der thermischen Gewässerbeeinflussung. Bundesministerium für Landes- und Forstwirtschaft. Wien. 257 pp.

Hynes H. B. 1970. The ecology of running waters. Liverpool. Liverpool Univ. Press. ISBN 0-85323-100-1.

Imbert, J. B., & Perry, J. A. 2000. Drift and benthic invertebrate responses to stepwise and abrupt increases in non-scouring flow. Hydrobiologia 436: 191–208.

Jakob C., Robinson C. T. & Uehlinger U. 2003. Longitudinal effects of experimental floods on stream benthos downstream from a large dam. Aquatic Sciences 65: 223–231.

Johansson, T. B., Kelly H., Reddy A. K. N. & Williams, R. H. 1993. Renewable Fuels and Electricity for a Growing World Economy : Defining and Achieving the Potential. Energy studies review, volume 4, issue 3.

Jungwirth M., Haidvogl G., Moog O., Muhar S., Schmutz S. 2003. Angewandte Fischökologie an Fließgewässern. Facultas Universitätsverlag. Wien. ISBN 3-8252-2113-X.

Kukula K. 1997. The life cycles of three species of Ephemeroptera in two streams in Poland. Hydrobiologia 353: 193-198.

Kyoto Protocol to the United Nations Framework Convention on Climate Change. 1998. UN Doc FCCC/CP/1997/7/Add.1, Dec. 10, 1997; 37 ILM 22

Marty, J., Smokorowski, K.E., Power, M., 2009. The influence of fluctuating ramping rates on the food web of boreal rivers. River Res. Appl. 25, 962–974.

Martynov A.V. 2013. The life cycles of mayflies of the eastern Ukraine. Subfamily Baetinae (Ephemeroptera, Baetidae). Vestnik zoologii 47 (1): e-35-e-44.

Matthaei C., Uehlinger U. R. S. & Frutiger A. 1997. Response of benthic invertebrates to natural versus experimental disturbance in a Swiss prealpine river. Freshwater Biology, (November 2015), 61–77.

Moog O. 1993. Quantification of daily peak hydropower effects on aquatic fauna and management to minimize environmental impcats. Regulated rivers: Research & Management: Vol. 8. 5-14.

Oldmeadow D. F., Lancaster J. & Rice S. P. 2009. Drift and settlement of stream insects in a complex hydraulic environment. Freshwater Biology, 55(5), 1020–1035.

Parasiewicz P., Schmutz S. & Moog O. 1998. The effect of managed hydropower peaking on the physical habitat, benthos and fish fauna in the River Bregenzerach in Austria.

Pitsch T. 1993. Zur Larvaltaxonomie, Faunistik und Ökologie mitteleuropäischer Fließwasser-Köcherfliegen (Insecta: Trichoptera). TU-Berlin. Landschaftsentwicklung und Umweltforschung. Sonderheft 8, Berlin.

Principe R. E. & Del Corigliano M. C. 2006. Benthic, drifting and marginal macroinvertebrate assemblages in a lowland river: Temporal and spatial variations and size structure. Hydrobiologia, 553(1), 303–317.

Purcell E. M. 1977. Life at low Reynolds number. American Journal of Physics 45, 3.

Rio Declaration on Environment and Development. 1992. UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874.

Robinson C. T. 2012. Long-term changes in community assembly, resistance, and resilience following experimental floods. Ecological Applications : A Publication of the Ecological Society of America, 22(7), 1949–61.

Robinson C. T., Tockner K. & Burgherr P. 2004. Drift benthos relationships in the seasonal colonization dynamics of alpine streams. Archiv Für Hydrobiologie, 160(August), 447–470.

Sagnes P., Mérigoux S. & Péru N. 2008. Hydraulic habitat use with respect to body size of aquatic insect larvae: Case of six species from a French Mediterranean type stream. Limnologica, 38(1), 23–33.

Sartori M. & Landolt P. 1999. Fauna Helvetica 2. Atlas de distribution des Ephémères de Suisse (Insecta: Ephemeroptera). Sous presse.

Schilt C. R. 2006. Developing fish passage and protection at hydropower dams. Applied Animal Behaviour Science, 104(3-4), 295–325.

Schmutz S., Fohler N., Friedrich T., Fuhrmann M., Graf W., Greimel F., Höller N., Jungwirth M., Leitner P., Moog O., Melcher A., Müllner K., Ochsenhofer G., Salcher G., Steidl C., Unfer G., Zeiringer B. 2013 Schwallproblematik an Österreichs Fließgewässern – Ökologische Folgen und Sanierungsmöglichkeiten. BMFLUW, Wien.

Schülting L., Feld C. K. & Graf W. 2016. Effects of hydro- and thermopeaking on benthic macroinvertebrate drift. Elsevier: Science of the Total Environment 573: 1472-1480.

Solomon S., Plattner G.P., Knutto R. & Friedlingstein P. 2008. Irreversible climate change due to carbon dioxide emissions. PNAS. Vol. 106, no. 6, 1704-1709.

Statzner B. 1988. Growth and reynolds number of lotic macroinvertebrates: a problem for adaptation of shape to drag. Oikos, 51(1), 84–87.

Statzner B. 2008. How views about flow adaptations of benthic stream invertebrates changed over the last century. International Review of Hydrobiology, 93(4-5), 593–605.

Statzner B. & Holm T. F. 1982. Morphological Adaptations of Benthic Invertebrates to Stream Flow – An Old Question Studied by Means of a New Technique (Laser Doppler Anemometry). Berlin. Oecologia 53: 290-292.

Statzner B. & Holm T. F. 1989. Morphological adaptation of shape to flow: Microcurrents around lotic macroinvertebrates with known Reynolds numbers at quasi-natural flow conditions. Berlin. Oecologia 78: 145-157.

Statzner B. & Müller R. 1989. Standard hemispheres as indicators of flow characteristics in lotic benthos research. Freshwater Biology 21, 445-459.

Steidl C. 2012. Das Makrozoobenthos in der Schwallstrecke Enns. Master Thesis. BOKU. Vienna.

Svensson B. W. 1972. Flight periods, ovarian maturation, and mating in Trichoptera in a South Swedish stream. Copenhagen. Oikos 23: 370 – 383.

Tilley L. J. 1989. Diel drift of Chironomidae larvae in a pristine Idaho mountain stream. Hydrobiologia 174: 133-149.

Timm T. 2013. Life forms in Oligochaeta: a literature review. Estonia. Zoology in the middle east, Supplementum 4.

Tomson R. M. & Townsend C. R. 1999. The effect of seasonal variation on the community structure and food-web attributes of two streams: implication for foodweb science. Oikos 82: 75-88.

Tockner K. & Waringer J. A. 1997. Measuring Drift during a receding flood: Results from an Austrian mountain brook (Ritrodat-Lunz). Int. Revue ges. Hydrobiol. 82, 1, 1-13.

Ulfstrand S. 1968. Life Cycles of Benthic Insects in Lapland Streams (Ephemeroptera, Plecoptera, Trichoptera, Dipera Simuliidae). Copenhagen, Oikos 19: 167-190.

Wallace J. B. & Webster J. R. 1996. The Role of Macroinvertebrates in Stream Ecosystem Function. Annual Review of Entomology, 41(1), 115–139.

Wallace J. B., Webster J. R. & Woodall W. 1977. Role of filter feeders in flowing waters. Arch. Hydrobiology, 79(4), 506–532.

Wang X., Cai Q., Jiang W.,& Qu X. 2013. Inter-annual patterns in the stability and persistence of stream macroinvertebrate communities: relationship with water physicochemical parameters. Journal of Freshwater Ecology, 28(1), 79–90.

Ward J. V. 1985. Thermal characteristics of running waters. Hydrobiologia 125: 31-46.

Waringer J.A. 1986. The abundance and distribution of caddisflies (Trichoptera) caught by emergence traps in the ‚Ritrodat' research area oft he Lunzer Seebach (Lower Austria) from 1980 to 1982. Freshwater Biology, 16, 49-59.

Waringer, J. A. 1989a. Resistance of cased caddis larva to accidental entry into the drift: the contribtuion of active and passive elements. Freshwater Biology, 21, 411-420.

Waringer, J. A. 1989b. Life cycle, horizontal microdistribution and current resistance of Allogamus auricollis (Trichoptera: Limnephilidae) in an Austrian mountain brook. Freshwater Biology, 22, 177–188.

Waringer J. A. 1992. The drifting of invertebrates and particulate organic matter in an Austrian mountain brook. Freshwater biology, 27, 367-278.

Waters T. F. 1965. Interpretation of Invertebrate Drift in Streams. Ecological Society of America Stable. Ecology, 46(3), 327–334.

Weichselbaumer, R., 1984. Die Populationsdynamik von *Baetis alpinus* (Pictet) und anderer Baetidae (Ephemeroptera) in einen kleinen Mittelgebirgsbach (Piburger Bach, Tirol). Diss. Abt. Lim- nol. Innsbruck 19: 1–171.

Weissenberger J., Spatz H.-Ch., Emans A. & Schoerbel J. 1991. Measurement of lift and draf forces in the range experienced by benthic arthropods at velocities below 1.2 m.s-1. Freshwater biology 25: 21-31.

Wetzel R. G. & Likens G. E. 1995. Limnological analyses. New York. Springer. ISBN 2-540-97331-1.

Wichard W. & Wagner R. 2015. Die Köcherfliegen: Trichoptera. Magdeburg. VerlagsKG Wolf. ISBN 978-3-89432-272-4.

Wichard W. 1988. Die Köcherfliegen: Trichoptera. Wittenberg Lutherstadt. Ziemsen. ISBN 3-7403-0045-0.

Winkelmann C., Petzoldt T., Koop J. H. E., Mathaei C. D. & Benndorf J. 2006. Benthivorous fish reduce stream invertebrate drift in a large scale field experiment. Aquatic Ecology 42: 483–492

Winterbourn M. J. & Crowe A. L. M. 2001. Flight activity of insects along a mountain stream: Is directional flight adaptive? Freshwater Biology, 46(11), 1479–1489.

Wolf B. & Zwick P. 1989. Plurimodal emergence and pluivoltism of Central European populations of *Nemurella pictetii* (Plecoptera: Nemouridae). Oecologia 79: 431-438.

Zhang Y. & Malmqvist B. 1997. Phenotypic plasticity in a suspension-feeding insect. Simulium lundstromi (Diptera: Simuliidae), in response to current velocity. Copenhagen. OIKOS 78: 503-510.

Appendix I

Determination literature

Glöer, P. & Meier-Brook C. 2001. Süßwassermollusken. Ein Bestimmungsschlüssel für die Bundesrepublik Deutschland. 13. Aufl., Hamburg, 136 pp.

Bauernfeind, E. & Humpesch U. H. 2001. Die Eintagsfliegen Zentraleuropas (Insecta: Ephemeroptera). Bestimmung und Ökologie. 239 pp., Naturhistorisches Museum Wien

Jäch, M. 2006. Wasserkäfer. Skriptum zum Spezialpraktikum (Sommersemester 2006). Universität Wien.

Pitsch, T. 1993. Zur Larvaltaxonomie, Faunistik und Ökologie mitteleuropäischer Fließwasser-Köcherfliegen (Insecta: Trichoptera). Landschaftsentwicklung und Umweltforschung, Sonderheft 8:1-316.

Waringer, J. & Graf W. 1997. Atlas der oesterreichischen Koecherfliegenlarven. Facultas Universitaetsverlag, 286pp, Wien. Ergänzungen 2004.

Waringer J. & Graf W., 2011, Atlas of Central European Trichoptera Larvae, Erik Mauch Verlag, Dinkelscherben, Germany.

Tachet H., Richoux P., Bournaud M. & Usseglio-Polatera 2000. Invertébrés d’eau douce, systématique, biologie, écologie. CNRS Èditions, Paris.

Appendix II

Figures

Figure 1: Schmutz S., Fohler N., Friedrich T., Fuhrmann M., Graf W., Greimel F., Höller N., Jungwirth M., Leitner P., Moog O., Melcher A., Müllner K., Ochsenhofer G., Salcher G., Steidl C., Unfer G., Zeiringer B. (2013) Schwallproblematik an Österreichs Fließgewässern – Ökologische Folgen und Sanierungsmöglichkeiten. BMFLUW, Wien.

Figure 2: Habersack, H., Wagner, B., Hauer, C., & Jäger, E. (2012). Wasserkraft in Österreich - aktueller Bestand und Decision Support System (DSS WASSERKRAFT). Österreichische Wasser- Und Abfallwirtschaft, 64(5-6), 336–343.

Figure 3: http://ettlin-illustration.ch/images/ephemera_vulgata.jpg?crc=4183739265 (23.10.2016)

Appendix III

Date	Box_nr	Treatment	Phase	Group	Family	Taxon_name	Abd_n	A	B	C	Abd_total
30.10.2014	1	Treatment	AZ	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	1	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
30.10.2014	1	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			6		6
30.10.2014	1	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		1	16		17
30.10.2014	1	Treatment	AZ	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			211		211
30.10.2014	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			29		29
30.10.2014	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			5		5
30.10.2014	1	Treatment	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	1	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1			1
30.10.2014	1	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	1	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1			1
30.10.2014	1	Treatment	AZ	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
30.10.2014	1	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
30.10.2014	1	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			38		38
30.10.2014	1	Treatment	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			10		10
30.10.2014	1	Treatment	AZ	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	1	Treatment	AZ	Plecoptera	PERLODIDAE	Perlodidae			1		1
30.10.2014	1	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1	1		2
30.10.2014	1	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
30.10.2014	1	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		4			4
30.10.2014	1	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae		3			3
30.10.2014	1	Treatment	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	1	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	2				2
30.10.2014	1	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	3				3
30.10.2014	1	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
30.10.2014	1	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	3				3
30.10.2014	1	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			15		15
30.10.2014	1	Treatment	UR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			14		14
30.10.2014	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			15		15
30.10.2014	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
30.10.2014	1	Treatment	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			2		2
30.10.2014	1	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	1		2
30.10.2014	1	Treatment	UR	Ephemeroptera	BAETIDAE	Cloeon		1			1
30.10.2014	1	Treatment	UR	Gastropoda	PLANORBIDAE	Planorbis	2				2
30.10.2014	1	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	7				7
30.10.2014	1	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			37		37
30.10.2014	1	Treatment	UR	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			5		5
30.10.2014	1	Treatment	UR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
30.10.2014	1	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			5		5
30.10.2014	1	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			7		7
30.10.2014	1	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				10	10
30.10.2014	1	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		4			4
30.10.2014	1	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			4		4
30.10.2014	1	Treatment	UR	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
30.10.2014	1	Treatment	UR	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
30.10.2014	1	Treatment	P1	Bivalvia	SPHAERIIDAE	Sphaerium	1				1
30.10.2014	1	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	7				7
30.10.2014	1	Treatment	P1	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	1	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			12		12
30.10.2014	1	Treatment	P1	Diptera	SIMULIIDAE	Simulium			5		5
30.10.2014	1	Treatment	P1	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	1	Treatment	P1	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			15		15
30.10.2014	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			9		9
30.10.2014	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	1	Treatment	P1	Ephemeroptera	HEPTAGENIIDAE	Epeorus			2		2
30.10.2014	1	Treatment	P1	Gastropoda	PLANORBIDAE	Planorbis	3				3
30.10.2014	1	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	7				7
30.10.2014	1	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			41		41
30.10.2014	1	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	1	Treatment	P1	Plecoptera	LEUCTRIDAE	Leuctra			1		1
30.10.2014	1	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			8		8
30.10.2014	1	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			10		10
30.10.2014	1	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				32	32
30.10.2014	1	Treatment	P1	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
30.10.2014	1	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		6			6
30.10.2014	1	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
30.10.2014	1	Treatment	P1	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1			1
30.10.2014	1	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	2				2
30.10.2014	1	Treatment	P2	Coleoptera	ELMIDAE	Elmis lv.	3				3
30.10.2014	1	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			13		13
30.10.2014	1	Treatment	P2	Diptera	SIMULIIDAE	Simulium			6		6
30.10.2014	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			7		7
30.10.2014	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1

30.10.2014	1	Treatment	P2	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	1	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	14				14
30.10.2014	1	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			6		6
30.10.2014	1	Treatment	P2	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			6		6
30.10.2014	1	Treatment	P2	Plecoptera	LEUCTRIDAE	Leuctra			2		2
30.10.2014	1	Treatment	P2	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			1		1
30.10.2014	1	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila			2		2
30.10.2014	1	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				21	21
30.10.2014	1	Treatment	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	1	Treatment	P2	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1			1
30.10.2014	1	Treatment	DR	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	1	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			3		3
30.10.2014	1	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.		2			2
30.10.2014	1	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	11				11
30.10.2014	1	Treatment	DR	Trichoptera	HYDROPTILIDAE	Hydroptila				1	1
30.10.2014	1	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				6	6
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	18				18
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	23				23
30.10.2014	1	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	14				14
30.10.2014	1	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	116				116
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Limnius lv.	1				1
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Limnius ad.	1				1
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	8				8
30.10.2014	1	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
30.10.2014	1	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	4				4
30.10.2014	1	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae			36		36
30.10.2014	1	Treatment	Rest	Diptera	SIMULIIDAE	Simulium			2		2
30.10.2014	1	Treatment	Rest	Diptera	ATHERICIDAE	Ibisia marginata		2			2
30.10.2014	1	Treatment	Rest	Diptera	LIMONIIDAE	Antocha		1	2		3
30.10.2014	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			285		285
30.10.2014	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		12	4		16
30.10.2014	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	1	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta		1	105		106
30.10.2014	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		6	2		8
30.10.2014	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			7		7
30.10.2014	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		2	7		9
30.10.2014	1	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			4		4
30.10.2014	1	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		2	2		4
30.10.2014	1	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	3				3
30.10.2014	1	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	17				17
30.10.2014	1	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	25				25
30.10.2014	1	Treatment	Rest	Gastropoda	VALVATIDAE	Valvata	1				1
30.10.2014	1	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
30.10.2014	1	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	1	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	30				30
30.10.2014	1	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			205		205
30.10.2014	1	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		6	165		171
30.10.2014	1	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra			41		41
30.10.2014	1	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla			9		9
30.10.2014	1	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			41		41
30.10.2014	1	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			71		71
30.10.2014	1	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1		272	273
30.10.2014	1	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum		2	3		5
30.10.2014	1	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			2		2
30.10.2014	1	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		41			41
30.10.2014	1	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			41		41
30.10.2014	1	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		26			26
30.10.2014	1	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			9		9
30.10.2014	1	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			4		4
30.10.2014	1	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. str.		1			1
30.10.2014	2	Treatment	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	2	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
30.10.2014	2	Treatment	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	4				4
30.10.2014	2	Treatment	AZ	Coleoptera	ELMIDAE	Riolus lv.	2				2
30.10.2014	2	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			17		17
30.10.2014	2	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		1	20		21
30.10.2014	2	Treatment	AZ	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			200	66	266
30.10.2014	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			27		27
30.10.2014	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			5		5
30.10.2014	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	2	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
30.10.2014	2	Treatment	AZ	Gastropoda	PLANORBIDAE	Planorbis	1				1
30.10.2014	2	Treatment	AZ	Gastropoda	LYMNAEIDAE	Radix	1				1
30.10.2014	2	Treatment	AZ	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
30.10.2014	2	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			19		19
30.10.2014	2	Treatment	AZ	Plecoptera	PERLODIDAE	Perlodidae			1		1
30.10.2014	2	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				6	6
30.10.2014	2	Treatment	AZ	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			2		2
30.10.2014	2	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1

30.10.2014	2	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
30.10.2014	2	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	9				9
30.10.2014	2	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	2	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			5		5
30.10.2014	2	Treatment	UR	Diptera	SIMULIIDAE	Simulium			2		2
30.10.2014	2	Treatment	UR	Diptera	PSYCHODIDAE	Bazarella			1		1
30.10.2014	2	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			20	3	23
30.10.2014	2	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
30.10.2014	2	Treatment	UR	Gastropoda	PLANORBIDAE	Planorbis	2				2
30.10.2014	2	Treatment	UR	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
30.10.2014	2	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	2	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				5	5
30.10.2014	2	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			2		2
30.10.2014	2	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		6			6
30.10.2014	2	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
30.10.2014	2	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			4		4
30.10.2014	2	Treatment	P1	Coleoptera	ELMIDAE	Riolus ad.	2				2
30.10.2014	2	Treatment	P1	Coleoptera	SCIRTIDAE	Scirtidae lv.	3				3
30.10.2014	2	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	5				5
30.10.2014	2	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	2				2
30.10.2014	2	Treatment	P1	Coleoptera	DYTISCIDAE	Platambus lv.	1				1
30.10.2014	2	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			13		13
30.10.2014	2	Treatment	P1	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	2	Treatment	P1	Diptera	PSYCHODIDAE	Bazarella			1		1
30.10.2014	2	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			26		26
30.10.2014	2	Treatment	P1	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
30.10.2014	2	Treatment	P1	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	2	Treatment	P1	Gastropoda	PLANORBIDAE	Planorbis			1		1
30.10.2014	2	Treatment	P1	Gastropoda	PLANORBIDAE	Ancylus fluviatilis			1		1
30.10.2014	2	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			3		3
30.10.2014	2	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			13		13
30.10.2014	2	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	2	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				5	5
30.10.2014	2	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			8		8
30.10.2014	2	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
30.10.2014	2	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			7		7
30.10.2014	2	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	2				2
30.10.2014	2	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			8		8
30.10.2014	2	Treatment	P2	Diptera	LIMONIIDAE	Antocha		1			1
30.10.2014	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
30.10.2014	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	2	Treatment	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	2	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	4				4
30.10.2014	2	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	2	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				12	12
30.10.2014	2	Treatment	P2	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			2		2
30.10.2014	2	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
30.10.2014	2	Treatment	DR	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	2	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	2	Treatment	DR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	2	Treatment	DR	Diptera	PSYCHODIDAE	Bazarella			1		1
30.10.2014	2	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis rhodani	1				1
30.10.2014	2	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	9				9
30.10.2014	2	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	2	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				2	2
30.10.2014	2	Treatment	Rest	Bivalvia	SPHAERIIDAE	Sphaerium	1				1
30.10.2014	2	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	44				44
30.10.2014	2	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
30.10.2014	2	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	143				143
30.10.2014	2	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	45				45
30.10.2014	2	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	18				18
30.10.2014	2	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
30.10.2014	2	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	3				3
30.10.2014	2	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae			97		97
30.10.2014	2	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			6		6
30.10.2014	2	Treatment	Rest	Diptera	PSYCHODIDAE	Bazarella			3		3
30.10.2014	2	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	2	Treatment	Rest	Diptera	STRATIOMYIIDAE	Stratiomyiidae		1			1
30.10.2014	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			200		200
30.10.2014	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			56		56
30.10.2014	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			16		16
30.10.2014	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			17		17
30.10.2014	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
30.10.2014	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			9		9
30.10.2014	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			9		9
30.10.2014	2	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			5		5
30.10.2014	2	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			16		16
30.10.2014	2	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1	5		6

30.10.2014	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			4		4
30.10.2014	2	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	79				79
30.10.2014	2	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	21				21
30.10.2014	2	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	13				13
30.10.2014	2	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
30.10.2014	2	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	4				4
30.10.2014	2	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	11				11
30.10.2014	2	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			76	50	126
30.10.2014	2	Treatment	Rest	Plecoptera	PERLODIDAE	Perlodidae			2		2
30.10.2014	2	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		2	3		5
30.10.2014	2	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra			17		17
30.10.2014	2	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				48	48
30.10.2014	2	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum		1	59		60
30.10.2014	2	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		57			57
30.10.2014	2	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			32		32
30.10.2014	2	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			38		38
30.10.2014	2	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			2		2
30.10.2014	2	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
30.10.2014	2	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			2		2
30.10.2014	2	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		5			5
30.10.2014	2	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	3	Treatment	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Treatment	AZ	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	3	Treatment	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	3	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
30.10.2014	3	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			9		9
30.10.2014	3	Treatment	AZ	Diptera	SIMULIIDAE	Simulium			8		8
30.10.2014	3	Treatment	AZ	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			139	44	183
30.10.2014	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			27		27
30.10.2014	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
30.10.2014	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			3		3
30.10.2014	3	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	3	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
30.10.2014	3	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			13		13
30.10.2014	3	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				7	7
30.10.2014	3	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			3		3
30.10.2014	3	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	3	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	8				8
30.10.2014	3	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	3	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			10		10
30.10.2014	3	Treatment	UR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	3	Treatment	UR	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	3	Treatment	UR	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			14		14
30.10.2014	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
30.10.2014	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
30.10.2014	3	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	5				5
30.10.2014	3	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			8		8
30.10.2014	3	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	3	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			4		4
30.10.2014	3	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			9		9
30.10.2014	3	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		2			2
30.10.2014	3	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			3		3
30.10.2014	3	Treatment	UR	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
30.10.2014	3	Treatment	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	6				6
30.10.2014	3	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			11		11
30.10.2014	3	Treatment	P1	Diptera	LIMONIIDAE	Antocha			5		5
30.10.2014	3	Treatment	P1	Diptera	PSYCHODIDAE	Bazarella			2		2
30.10.2014	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			4		4
30.10.2014	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
30.10.2014	3	Treatment	P1	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	2				2
30.10.2014	3	Treatment	P1	Gastropoda	PLANORBIDAE	Planorbis	1				1
30.10.2014	3	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	15				15
30.10.2014	3	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	3	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			2		2
30.10.2014	3	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				3	3
30.10.2014	3	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	3	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			8		8
30.10.2014	3	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		4			4
30.10.2014	3	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			4		4
30.10.2014	3	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			11		11
30.10.2014	3	Treatment	P2	Diptera	LIMONIIDAE	Antocha			2		2
30.10.2014	3	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	3	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
30.10.2014	3	Treatment	P2	Gastropoda	LYMNAEIDAE	Radix	1				1

30.10.2014	3	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	14				14
30.10.2014	3	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	3	Treatment	P2	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	3	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				2	2
30.10.2014	3	Treatment	P2	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae				1	1
30.10.2014	3	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila			4		4
30.10.2014	3	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	3	Treatment	DR	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	3	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	3	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	3	Treatment	DR	Trichoptera	HYDROPTILIDAE	Hydroptila				2	2
30.10.2014	3	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	14				14
30.10.2014	3	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	107				107
30.10.2014	3	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	92				92
30.10.2014	3	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.		2			2
30.10.2014	3	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	30				30
30.10.2014	3	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
30.10.2014	3	Treatment	Rest	Coleoptera	DYTISCIDAE	Platambus lv.	1				1
30.10.2014	3	Treatment	Rest	Coleoptera	DYTISCIDAE	Platambus ad.	1				1
30.10.2014	3	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	18				18
30.10.2014	3	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		13	128		141
30.10.2014	3	Treatment	Rest	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	3	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			11		11
30.10.2014	3	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	3	Treatment	Rest	Diptera	PSYCHODIDAE	Bazarella			17		17
30.10.2014	3	Treatment	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
30.10.2014	3	Treatment	Rest	Diptera	STRATIOMYIIDAE	Stratiomyiidae		2			2
30.10.2014	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			112		112
30.10.2014	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			45		45
30.10.2014	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
30.10.2014	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			3		3
30.10.2014	3	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella ignita		1			1
30.10.2014	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		6	1		7
30.10.2014	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		1	4		5
30.10.2014	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			6		6
30.10.2014	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			6		6
30.10.2014	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Cloeon			1		1
30.10.2014	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
30.10.2014	3	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			6		6
30.10.2014	3	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			4		4
30.10.2014	3	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	8				8
30.10.2014	3	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	113				113
30.10.2014	3	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	45				45
30.10.2014	3	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
30.10.2014	3	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	0				0
30.10.2014	3	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	0				0
30.10.2014	3	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			91		91
30.10.2014	3	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			10		10
30.10.2014	3	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla			2		2
30.10.2014	3	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			4	72	76
30.10.2014	3	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			8		8
30.10.2014	3	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			16		16
30.10.2014	3	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			88	80	168
30.10.2014	3	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		47			47
30.10.2014	3	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			42		42
30.10.2014	3	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			26		26
30.10.2014	3	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			2		2
30.10.2014	3	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		6			6
30.10.2014	4	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	4	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			4		4
30.10.2014	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	4	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			1		1
30.10.2014	4	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			5		5
30.10.2014	4	Control	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	4	Control	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	4	Control	UR	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
30.10.2014	4	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			17		17
30.10.2014	4	Control	UR	Diptera	SIMULIIDAE	Simulium			8		8
30.10.2014	4	Control	UR	Diptera	LIMONIIDAE	Antocha			2		2
30.10.2014	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			130	54	184
30.10.2014	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			13		13
30.10.2014	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	4	Control	UR	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
30.10.2014	4	Control	UR	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	4	Control	UR	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	4	Control	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	4	Control	UR	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	4	Control	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	4				4

30.10.2014	4	Control	UR	Plecoptera	NEMOURIDAE	Amphinemura			10		10
30.10.2014	4	Control	UR	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	4	Control	UR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
30.10.2014	4	Control	UR	Plecoptera	PERLODIDAE	Perlodidae			1		1
30.10.2014	4	Control	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	4	Control	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			1		1
30.10.2014	4	Control	UR	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	4	Control	P1	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
30.10.2014	4	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	4	Control	P1	Diptera	SIMULIIDAE	Simulium			7		7
30.10.2014	4	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
30.10.2014	4	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			7		7
30.10.2014	4	Control	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			9		9
30.10.2014	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	4	Control	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	4	Control	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
30.10.2014	4	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			1	1	2
30.10.2014	4	Control	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	4	Control	DR	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	4	Control	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	4	Control	DR	Trichoptera	LIMNEPHILIDAE	Limnephilidae			1		1
30.10.2014	4	Control	DR	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
30.10.2014	4	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	52				52
30.10.2014	4	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	8				8
30.10.2014	4	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	21				21
30.10.2014	4	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	10				10
30.10.2014	4	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	4				4
30.10.2014	4	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	4	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	2				2
30.10.2014	4	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae			56		56
30.10.2014	4	Control	Rest	Diptera	SIMULIIDAE	Simulium			8		8
30.10.2014	4	Control	Rest	Diptera	LIMONIIDAE	Antocha			6		6
30.10.2014	4	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	4	Control	Rest	Diptera	LIMONIIDAE	Limoniidae		1			1
30.10.2014	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			352	56	408
30.10.2014	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			18		18
30.10.2014	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
30.10.2014	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			7		7
30.10.2014	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			17		17
30.10.2014	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			11		11
30.10.2014	4	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			144		144
30.10.2014	4	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia			6		6
30.10.2014	4	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			10		10
30.10.2014	4	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			3		3
30.10.2014	4	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	8				8
30.10.2014	4	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	34				34
30.10.2014	4	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	12				12
30.10.2014	4	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	2				2
30.10.2014	4	Control	Rest	Gastropoda	VALVATIDAE	Valvatidae	12				12
30.10.2014	4	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	5				5
30.10.2014	4	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	4	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	13				13
30.10.2014	4	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			100		100
30.10.2014	4	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		4	215		219
30.10.2014	4	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			16		16
30.10.2014	4	Control	Rest	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	4	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			23		23
30.10.2014	4	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			9	34	43
30.10.2014	4	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	4	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			22		22
30.10.2014	4	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		22	46		68
30.10.2014	4	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			2		2
30.10.2014	4	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
30.10.2014	4	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				29	29
30.10.2014	4	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		6			6
30.10.2014	5	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
30.10.2014	5	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	5	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			4		4
30.10.2014	5	Control	AZ	Diptera	SIMULIIDAE	Simulium			10		10
30.10.2014	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			39	53	92
30.10.2014	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			22		22
30.10.2014	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			6		6
30.10.2014	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
30.10.2014	5	Control	AZ	Heteroptera	CORIXIDAE	Micronecta	1				1
30.10.2014	5	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
30.10.2014	5	Control	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	5	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			11	3	14
30.10.2014	5	Control	AZ	Plecoptera	PERLODIDAE	Isoperla			2		2

30.10.2014	5	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			2		2
30.10.2014	5	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	5	Control	UR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			2	1	3
30.10.2014	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
30.10.2014	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	5	Control	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	5	Control	UR	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	5	Control	P1	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
30.10.2014	5	Control	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	5	Control	P1	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
30.10.2014	5	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	5	Control	P1	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			10		10
30.10.2014	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			5		5
30.10.2014	5	Control	P1	Heteroptera	CORIXIDAE	Micronecta			1		1
30.10.2014	5	Control	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			2		2
30.10.2014	5	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	5	Control	P1	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	5	Control	P2	Coleoptera	DYTISCIDAE	Platambus lv.	1				1
30.10.2014	5	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	5	Control	P2	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	5	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			5		5
30.10.2014	5	Control	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
30.10.2014	5	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	5	Control	DR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	5	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	5	Control	Rest	Bivalvia	SPHAERIIDAE	Pisidium	2				2
30.10.2014	5	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	9				9
30.10.2014	5	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	5				5
30.10.2014	5	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	16				16
30.10.2014	5	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	85				85
30.10.2014	5	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	35				35
30.10.2014	5	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	1				1
30.10.2014	5	Control	Rest	Coleoptera	HYDRAENIDAE	Hydraenidae ad.	1				1
30.10.2014	5	Control	Rest	Coleoptera	DYTISCIDAE	Oreodytes	1				1
30.10.2014	5	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	7				7
30.10.2014	5	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		6	52		58
30.10.2014	5	Control	Rest	Diptera	SIMULIIDAE	Simulium		1	5		6
30.10.2014	5	Control	Rest	Diptera	LIMONIIDAE	Antocha			3		3
30.10.2014	5	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	5	Control	Rest	Diptera	STRATIOMYIIDAE	Stratiomyiidae		1			1
30.10.2014	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			310	79	389
30.10.2014	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			26		26
30.10.2014	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			23		23
30.10.2014	5	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			97		97
30.10.2014	5	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia			4		4
30.10.2014	5	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			31		31
30.10.2014	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			6		6
30.10.2014	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			6		6
30.10.2014	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		4	20		24
30.10.2014	5	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			2		2
30.10.2014	5	Control	Rest	Ephemeroptera	CAENIDAE	Caenis			1		1
30.10.2014	5	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	19				19
30.10.2014	5	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	4				4
30.10.2014	5	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	13				13
30.10.2014	5	Control	Rest	Gastropoda	VALVATIDAE	Valvatidae	19				19
30.10.2014	5	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
30.10.2014	5	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
30.10.2014	5	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
30.10.2014	5	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	42				42
30.10.2014	5	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			191		191
30.10.2014	5	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			40		40
30.10.2014	5	Control	Rest	Plecoptera	PERLODIDAE	Isoperla			7		7
30.10.2014	5	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			36		36
30.10.2014	5	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			6		6
30.10.2014	5	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			20		20
30.10.2014	5	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			7		7
30.10.2014	5	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			43		43
30.10.2014	5	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. str.			1		1
30.10.2014	5	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus			4		4
30.10.2014	5	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			32		32
30.10.2014	5	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		42	13		55
30.10.2014	5	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			4		4
30.10.2014	5	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
30.10.2014	5	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			3		3
30.10.2014	5	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			2		2
30.10.2014	6	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.	3				3
30.10.2014	6	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	6	Control	AZ	Coleoptera	ELMIDAE	Riolus lv.	2				2

30.10.2014	6	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			7		7
30.10.2014	6	Control	AZ	Diptera	SIMULIIDAE	Simulium		4	79		83
30.10.2014	6	Control	AZ	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	6	Control	AZ	Diptera	LIMONIIDAE	Antocha		1			1
30.10.2014	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			2	26	28
30.10.2014	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			26		26
30.10.2014	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	6	Control	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia			1		1
30.10.2014	6	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	3				3
30.10.2014	6	Control	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	6	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			49		49
30.10.2014	6	Control	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	6	Control	AZ	Plecoptera	PERLODIDAE	Perlodidae			1		1
30.10.2014	6	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			4		4
30.10.2014	6	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita			1		1
30.10.2014	6	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			2		2
30.10.2014	6	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				21	21
30.10.2014	6	Control	UR	Diptera	SIMULIIDAE	Simulium		2	2		4
30.10.2014	6	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	6	Control	UR	Plecoptera	NEMOURIDAE	Amphinemura			6		6
30.10.2014	6	Control	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
30.10.2014	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			2	8	10
30.10.2014	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			9		9
30.10.2014	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	6	Control	P1	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
30.10.2014	6	Control	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	4				4
30.10.2014	6	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	6	Control	P2	Coleoptera	ELMIDAE	Riolus lv.	4				4
30.10.2014	6	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	6	Control	P2	Diptera	SIMULIIDAE	Simulium		1	4		5
30.10.2014	6	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
30.10.2014	6	Control	P2	Gastropoda	PLANORBIDAE	Planorbis	1				1
30.10.2014	6	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			7		7
30.10.2014	6	Control	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	6	Control	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			7		7
30.10.2014	6	Control	DR	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	6	Control	DR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	6	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	6	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	6	Control	DR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	6	Control	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	6	Control	DR	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	6	Control	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
30.10.2014	6	Control	Rest	Bivalvia	SPHAERIIDAE	Pisidium	2				2
30.10.2014	6	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	16				16
30.10.2014	6	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	41				41
30.10.2014	6	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	76				76
30.10.2014	6	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	31				31
30.10.2014	6	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	5				5
30.10.2014	6	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		2	21		23
30.10.2014	6	Control	Rest	Diptera	SIMULIIDAE	Simulium		3	10		13
30.10.2014	6	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			2		2
30.10.2014	6	Control	Rest	Diptera	LIMONIIDAE	Antocha			3		3
30.10.2014	6	Control	Rest	Diptera	PSYCHODIDAE	Psychodidae			2		2
30.10.2014	6	Control	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
30.10.2014	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			39		39
30.10.2014	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			14		14
30.10.2014	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			8		8
30.10.2014	6	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1	6		7
30.10.2014	6	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			7		7
30.10.2014	6	Control	Rest	Ephemeroptera	EPHEMERIDAE	Ephemera danica			1		1
30.10.2014	6	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
30.10.2014	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			7	1	8
30.10.2014	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	6	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			1		1
30.10.2014	6	Control	Rest	Ephemeroptera	CAENIDAE	Caenis			3		3
30.10.2014	6	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	8				8
30.10.2014	6	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	3				3
30.10.2014	6	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	5				5
30.10.2014	6	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
30.10.2014	6	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	11				11
30.10.2014	6	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			112	7	119
30.10.2014	6	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			8	1	9
30.10.2014	6	Control	Rest	Plecoptera	PERLODIDAE	Perlodidae			4	1	5
30.10.2014	6	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			3	3	6
30.10.2014	6	Control	Rest	Plecoptera	PERLIDAE	Perla grandis		1			1
30.10.2014	6	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			40		40
30.10.2014	6	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		45			45

30.10.2014	6	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			5		5
30.10.2014	6	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				114	114
30.10.2014	6	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
30.10.2014	6	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		2			2
30.10.2014	6	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. str.			2		2
30.10.2014	6	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis				1	1
30.10.2014	6	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			4		4
30.10.2014	6	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			41		41
30.10.2014	1	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				
30.10.2014	1	Control	AZ	Coleoptera	ELMIDAE	Elmis lv.	2				
30.10.2014	1	Control	AZ	Coleoptera	ELMIDAE	Riolus lv.	1				
30.10.2014	1	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				
30.10.2014	1	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			21		
30.10.2014	1	Control	AZ	Diptera	SIMULIIDAE	Simulium			2		
30.10.2014	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.				157	
30.10.2014	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			32		
30.10.2014	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	1	Control	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	1	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	1	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	3				3
30.10.2014	1	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			22		22
30.10.2014	1	Control	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			2		2
30.10.2014	1	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				2	2
30.10.2014	1	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
30.10.2014	1	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
30.10.2014	1	Control	AZ	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			2		2
30.10.2014	1	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	1	Control	UR	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	1	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			7		7
30.10.2014	1	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
30.10.2014	1	Control	UR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	1	Control	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
30.10.2014	1	Control	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
30.10.2014	1	Control	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			3		3
30.10.2014	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
30.10.2014	1	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	1	Control	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	1	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	1	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
30.10.2014	1	Control	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	1	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	1	Control	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	1	Control	DR	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
30.10.2014	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	1	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	21				21
30.10.2014	1	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	46				46
30.10.2014	1	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	128				128
30.10.2014	1	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
30.10.2014	1	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	91				91
30.10.2014	1	Control	Rest	Coleoptera	ELMIDAE	Limnius ad.	1				1
30.10.2014	1	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	1				1
30.10.2014	1	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	3				3
30.10.2014	1	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		2	142		144
30.10.2014	1	Control	Rest	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	1	Control	Rest	Diptera	LIMONIIDAE	Antocha			6		6
30.10.2014	1	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	1	Control	Rest	Diptera	CERATOPOGONIDAE	Ceratopogonidae			1		1
30.10.2014	1	Control	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
30.10.2014	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			136		136
30.10.2014	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			111		111
30.10.2014	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			50		50
30.10.2014	1	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			4		4
30.10.2014	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	4		5
30.10.2014	1	Control	Rest	Ephemeroptera	CAENIDAE	Caenis			1		1
30.10.2014	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
30.10.2014	1	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		2	2		4
30.10.2014	1	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	6				6
30.10.2014	1	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	15				15
30.10.2014	1	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	23				23
30.10.2014	1	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	2				2
30.10.2014	1	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	8				8
30.10.2014	1	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			245		245
30.10.2014	1	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			50		50
30.10.2014	1	Control	Rest	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	1	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			1		1
30.10.2014	1	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		2		9	11

30.10.2014	1	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			22		22
30.10.2014	1	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			6		6
30.10.2014	1	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			4		4
30.10.2014	1	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			44		44
30.10.2014	1	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum		1	102		103
30.10.2014	1	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		47			47
30.10.2014	1	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum		2	5		7
30.10.2014	1	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		9			9
30.10.2014	1	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			8		8
30.10.2014	1	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1	1		2
30.10.2014	1	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			4		4
30.10.2014	1	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	2	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			9		9
30.10.2014	2	Control	AZ	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	2	Control	AZ	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			34	27	61
30.10.2014	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			17		17
30.10.2014	2	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
30.10.2014	2	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			7		7
30.10.2014	2	Control	AZ	Plecoptera	PERLODIDAE	Isoperla			3		3
30.10.2014	2	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus			3		3
30.10.2014	2	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			3		3
30.10.2014	2	Control	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	2	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	2	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	2	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	2	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	2	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	2	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	2	Control	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
30.10.2014	2	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	2	Control	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	2	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			3		3
30.10.2014	2	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	2	Control	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				3	3
30.10.2014	2	Control	DR	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	2	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	2	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	2	Control	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	2	Control	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	2	Control	DR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			1		1
30.10.2014	2	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	60				60
30.10.2014	2	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
30.10.2014	2	Control	Rest	Coleoptera	ELMIDAE	Limnius lv.	2				2
30.10.2014	2	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	12				12
30.10.2014	2	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	13				13
30.10.2014	2	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	3				3
30.10.2014	2	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		10	35		45
30.10.2014	2	Control	Rest	Diptera	LIMONIIDAE	Antocha			10		10
30.10.2014	2	Control	Rest	Diptera	TIPULIDAE	Tipulidae		2			2
30.10.2014	2	Control	Rest	Diptera	STRATIOMYIIDAE	Stratiomyiidae		1			1
30.10.2014	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			55		55
30.10.2014	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
30.10.2014	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			5		5
30.10.2014	2	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			52		52
30.10.2014	2	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1	3		4
30.10.2014	2	Control	Rest	Ephemeroptera	CAENIDAE	Caenis			6		6
30.10.2014	2	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			3		3
30.10.2014	2	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	2	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	4				4
30.10.2014	2	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	27				27
30.10.2014	2	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	17				17
30.10.2014	2	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	3				3
30.10.2014	2	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	6				6
30.10.2014	2	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			65		65
30.10.2014	2	Control	Rest	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	2	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			4		4
30.10.2014	2	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			3		3
30.10.2014	2	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		5			5
30.10.2014	2	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			7		7
30.10.2014	2	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				49	49
30.10.2014	2	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			13		13
30.10.2014	2	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			53		53
30.10.2014	2	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		24			24
30.10.2014	2	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			7		7
30.10.2014	2	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			39		39
30.10.2014	2	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum		1			1
30.10.2014	2	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			2		2
30.10.2014	2	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	34				34

30.10.2014	3	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
30.10.2014	3	Control	AZ	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	3	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			17		17
30.10.2014	3	Control	AZ	Diptera	SIMULIIDAE	Simulium			3		3
30.10.2014	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			19	80	99
30.10.2014	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			15		15
30.10.2014	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
30.10.2014	3	Control	AZ	Gastropoda	PLANORBIDAE	Planorbis	1				1
30.10.2014	3	Control	AZ	Heteroptera	CORIXIDAE	Micronecta	1				1
30.10.2014	3	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	9				9
30.10.2014	3	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			19		19
30.10.2014	3	Control	AZ	Plecoptera	PERLODIDAE	Isoperla		1			1
30.10.2014	3	Control	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			7		7
30.10.2014	3	Control	AZ	Plecoptera	LEUCTRIDAE	Leuctra			1		1
30.10.2014	3	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
30.10.2014	3	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			6		6
30.10.2014	3	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		2			2
30.10.2014	3	Control	AZ	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			3		3
30.10.2014	3	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
30.10.2014	3	Control	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
30.10.2014	3	Control	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	3	Control	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	3	Control	UR	Coleoptera	ELMIDAE	Riolus lv.	2				2
30.10.2014	3	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	3	Control	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
30.10.2014	3	Control	UR	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	3	Control	UR	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	3	Control	UR	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	3	Control	P1	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	3	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	3	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	3	Control	P2	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	3	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			3		3
30.10.2014	3	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
30.10.2014	3	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
30.10.2014	3	Control	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	3	Control	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	3	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	3	Control	P2	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
30.10.2014	3	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.				2	2
30.10.2014	3	Control	DR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	3	Control	DR	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
30.10.2014	3	Control	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	3	Control	Rest	Bivalvia	SPHAERIIDAE	Pisidium	1				1
30.10.2014	3	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	12				12
30.10.2014	3	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	19				19
30.10.2014	3	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	83				83
30.10.2014	3	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	10				10
30.10.2014	3	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	123				123
30.10.2014	3	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
30.10.2014	3	Control	Rest	Coleoptera	HALIPLIDAE	Haliplus lv.	1				1
30.10.2014	3	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	11				11
30.10.2014	3	Control	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
30.10.2014	3	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae			82		82
30.10.2014	3	Control	Rest	Diptera	PSYCHODIDAE	Bazarella			5		5
30.10.2014	3	Control	Rest	Diptera	LIMONIIDAE	Antocha			7		7
30.10.2014	3	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	3	Control	Rest	Diptera	ATHERICIDAE	Ibisia marginata		4			4
30.10.2014	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			472		472
30.10.2014	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			26		26
30.10.2014	3	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			2		2
30.10.2014	3	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			46		46
30.10.2014	3	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		15	1		16
30.10.2014	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			3		3
30.10.2014	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		3	1		4
30.10.2014	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			9		9
30.10.2014	3	Control	Rest	Gastropoda	VALVATIDAE	Valvata	1				1
30.10.2014	3	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	41				41
30.10.2014	3	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	8				8
30.10.2014	3	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	4				4
30.10.2014	3	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	8				8
30.10.2014	3	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	2				2
30.10.2014	3	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	3	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	10				10
30.10.2014	3	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			381		381
30.10.2014	3	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			95		95
30.10.2014	3	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			21		21
30.10.2014	3	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		3	3	26	32

30.10.2014	3	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			2		2
30.10.2014	3	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		6			6
30.10.2014	3	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			76		76
30.10.2014	3	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			19		19
30.10.2014	3	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae		1			1
30.10.2014	3	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		53			53
30.10.2014	3	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			40		40
30.10.2014	3	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			6		6
30.10.2014	3	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			2		2
30.10.2014	3	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			4		4
30.10.2014	4	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			5		5
30.10.2014	4	Treatment	AZ	Diptera	SIMULIIDAE	Simulium			2		2
30.10.2014	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			22		22
30.10.2014	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			16		16
30.10.2014	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			4		4
30.10.2014	4	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	3				3
30.10.2014	4	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			5		5
30.10.2014	4	Treatment	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	4	Treatment	AZ	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
30.10.2014	4	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	4	Treatment	UR	Coleoptera	HALIPLIDAE	Haliplus lv.	1				1
30.10.2014	4	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			4		4
30.10.2014	4	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	4	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	4	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	4	Treatment	P1	Coleoptera	HALIPLIDAE	Haliplus lv.	1				1
30.10.2014	4	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			4		4
30.10.2014	4	Treatment	P1	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	4	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	4	Treatment	P1	Gastropoda	PLANORBIDAE	Planorbis	1				1
30.10.2014	4	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	4	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			2		2
30.10.2014	4	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1	17	18
30.10.2014	4	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			2		2
30.10.2014	4	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			2		2
30.10.2014	4	Treatment	P1	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
30.10.2014	4	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	4	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	2				2
30.10.2014	4	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
30.10.2014	4	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	5				5
30.10.2014	4	Treatment	P2	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	4	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				16	16
30.10.2014	4	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	4	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
30.10.2014	4	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				2	2
30.10.2014	4	Treatment	DR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			1		1
30.10.2014	4	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	10				10
30.10.2014	4	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	23				23
30.10.2014	4	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	8				8
30.10.2014	4	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
30.10.2014	4	Treatment	Rest	Coleoptera	ELMIDAE	Limnius ad.	1				1
30.10.2014	4	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	3				3
30.10.2014	4	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae			25		25
30.10.2014	4	Treatment	Rest	Diptera	SIMULIIDAE	Simulium			2		2
30.10.2014	4	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			23		23
30.10.2014	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			6		6
30.10.2014	4	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		3	1		4
30.10.2014	4	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		1	1		2
30.10.2014	4	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			2		2
30.10.2014	4	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			1		1
30.10.2014	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			21		21
30.10.2014	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		5			5
30.10.2014	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		2			2
30.10.2014	4	Treatment	Rest	Gastropoda	VALVATIDAE	Valvata	11				11
30.10.2014	4	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	23				23
30.10.2014	4	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	4				4
30.10.2014	4	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	3				3
30.10.2014	4	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	3				3
30.10.2014	4	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
30.10.2014	4	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	15				15
30.10.2014	4	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			23		23
30.10.2014	4	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			13		13
30.10.2014	4	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra			2		2
30.10.2014	4	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla			1		1
30.10.2014	4	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			4		4
30.10.2014	4	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				33	33
30.10.2014	4	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			12		12
30.10.2014	4	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			14		14

30.10.2014	4	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			4		4
30.10.2014	4	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		14			14
30.10.2014	4	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			5		5
30.10.2014	4	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		5			5
30.10.2014	4	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			4		4
30.10.2014	4	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			2		2
30.10.2014	5	Treatment	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
30.10.2014	5	Treatment	AZ	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	5	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			4		4
30.10.2014	5	Treatment	AZ	Diptera	SIMULIIDAE	Simulium			29		29
30.10.2014	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			37		37
30.10.2014	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			8		8
30.10.2014	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
30.10.2014	5	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	5	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	5	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				9	9
30.10.2014	5	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	5	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
30.10.2014	5	Treatment	AZ	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			1		1
30.10.2014	5	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	3				3
30.10.2014	5	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	12				12
30.10.2014	5	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	5	Treatment	UR	Diptera	SIMULIIDAE	Simulium			1		1
30.10.2014	5	Treatment	UR	Diptera	LIMONIIDAE	Antocha			2		2
30.10.2014	5	Treatment	UR	Diptera	PSYCHODIDAE	Bazarella			1		1
30.10.2014	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
30.10.2014	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
30.10.2014	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	5	Treatment	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
30.10.2014	5	Treatment	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	5	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			11		11
30.10.2014	5	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				6	6
30.10.2014	5	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			7		7
30.10.2014	5	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		6			6
30.10.2014	5	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			1		1
30.10.2014	5	Treatment	P1	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
30.10.2014	5	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			3		3
30.10.2014	5	Treatment	P1	Diptera	LIMONIIDAE	Antocha			1		1
30.10.2014	5	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	5	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
30.10.2014	5	Treatment	P1	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
30.10.2014	5	Treatment	P1	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	1				1
30.10.2014	5	Treatment	P1	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
30.10.2014	5	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			12		12
30.10.2014	5	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
30.10.2014	5	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				14	14
30.10.2014	5	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
30.10.2014	5	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			3		3
30.10.2014	5	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
30.10.2014	5	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	1				1
30.10.2014	5	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			5		5
30.10.2014	5	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
30.10.2014	5	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	5	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			1		1
30.10.2014	5	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				5	5
30.10.2014	5	Treatment	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae				2	2
30.10.2014	5	Treatment	P2	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne				1	1
30.10.2014	5	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila				1	1
30.10.2014	5	Treatment	DR	Coleoptera	DYTISCIDAE	Platambus lv.	1				1
30.10.2014	5	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	5	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	5	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	32				32
30.10.2014	5	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	20				20
30.10.2014	5	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	29				29
30.10.2014	5	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	7				7
30.10.2014	5	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	8				8
30.10.2014	5	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	1				1
30.10.2014	5	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	5				5
30.10.2014	5	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		1	42		43
30.10.2014	5	Treatment	Rest	Diptera	SIMULIIDAE	Simulium			7		7
30.10.2014	5	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			3		3
30.10.2014	5	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
30.10.2014	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			49		49
30.10.2014	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			16		16
30.10.2014	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			13		13
30.10.2014	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	1		2
30.10.2014	5	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			40		40
30.10.2014	5	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			10		10
30.10.2014	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
30.10.2014	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1

30.10.2014	5	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			1		1
30.10.2014	5	Treatment	Rest	Gastropoda	VALVATIDAE	Valvata	1				1
30.10.2014	5	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	8				8
30.10.2014	5	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	26				26
30.10.2014	5	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	7				7
30.10.2014	5	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
30.10.2014	5	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
30.10.2014	5	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	9				9
30.10.2014	5	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			61		61
30.10.2014	5	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			15		15
30.10.2014	5	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra			8		8
30.10.2014	5	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				79	79
30.10.2014	5	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			15		15
30.10.2014	5	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			6		6
30.10.2014	5	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			1		1
30.10.2014	5	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		25			25
30.10.2014	5	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			18		18
30.10.2014	5	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			9		9
30.10.2014	5	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			2		2
30.10.2014	5	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			3		3
30.10.2014	5	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			2		2
30.10.2014	6	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			5		5
30.10.2014	6	Treatment	AZ	Diptera	SIMULIIDAE	Simulium			5		5
30.10.2014	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			22		22
30.10.2014	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			11		11
30.10.2014	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
30.10.2014	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
30.10.2014	6	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
30.10.2014	6	Treatment	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
30.10.2014	6	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			10		10
30.10.2014	6	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	6	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			4		4
30.10.2014	6	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1
30.10.2014	6	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
30.10.2014	6	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
30.10.2014	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	6	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	3				3
30.10.2014	6	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			4		4
30.10.2014	6	Treatment	UR	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			2		2
30.10.2014	6	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			2		2
30.10.2014	6	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	6	Treatment	P1	Crustacea	ASELLIDAE	Asellus aquaticus	1				1
30.10.2014	6	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			7		7
30.10.2014	6	Treatment	P1	Diptera	SIMULIIDAE	Simulium			2		2
30.10.2014	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
30.10.2014	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
30.10.2014	6	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	4				4
30.10.2014	6	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			3		3
30.10.2014	6	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	6	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			7		7
30.10.2014	6	Treatment	P1	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum		1			1
30.10.2014	6	Treatment	P1	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
30.10.2014	6	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae				1	1
30.10.2014	6	Treatment	P1	Trichoptera	LEPTOCERIDAE	Athripsodes				1	1
30.10.2014	6	Treatment	P1	Trichoptera	LEPIDOSTOMATIDAE	Lepidostomatidae				1	1
30.10.2014	6	Treatment	P2	Coleoptera	ELMIDAE	Elmis lv.	1				1
30.10.2014	6	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
30.10.2014	6	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
30.10.2014	6	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	8				8
30.10.2014	6	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			2		2
30.10.2014	6	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis				1	1
30.10.2014	6	Treatment	Rest	Bivalvia	SPHAERIIDAE	Sphaerium	2				2
30.10.2014	6	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	8				8
30.10.2014	6	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	31				31
30.10.2014	6	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	12				12
30.10.2014	6	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	20				20
30.10.2014	6	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	4				4
30.10.2014	6	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	1				1
30.10.2014	6	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	4				4
30.10.2014	6	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		2	34		36
30.10.2014	6	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			8		8
30.10.2014	6	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia		1			1
30.10.2014	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.				4	4
30.10.2014	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			45		45
30.10.2014	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			14		14
30.10.2014	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
30.10.2014	6	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			11		11
30.10.2014	6	Treatment	Rest	Ephemeroptera	CAENIDAE	Caenis			2		2
30.10.2014	6	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
30.10.2014	6	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			4		4

30.10.2014	6	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			1		1
30.10.2014	6	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			5		5
30.10.2014	6	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	19				19
30.10.2014	6	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	3				3
30.10.2014	6	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	6				6
30.10.2014	6	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	23				23
30.10.2014	6	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	3				3
30.10.2014	6	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	5				5
30.10.2014	6	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	30				30
30.10.2014	6	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			102		102
30.10.2014	6	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		1	23		24
30.10.2014	6	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra			8		8
30.10.2014	6	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla			3		3
30.10.2014	6	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			6		6
30.10.2014	6	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			4		4
30.10.2014	6	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum setiferum			61		61
30.10.2014	6	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			7		7
30.10.2014	6	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
30.10.2014	6	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			12		12
30.10.2014	6	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		5			5
30.10.2014	6	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		29			29
30.10.2014	6	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			4		4
30.10.2014	6	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			14		14
30.10.2014	6	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne		2			2
30.10.2014	6	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostomatidae			2		2
08.03.2015	1	Treatment	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	1	Treatment	AZ	Coleoptera	ELMIDAE	Limnius lv.	1				1
08.03.2015	1	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
08.03.2015	1	Treatment	AZ	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
08.03.2015	1	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae		6	35		41
08.03.2015	1	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		20	71		91
08.03.2015	1	Treatment	AZ	Diptera	LIMONIIDAE	Antocha			1		1
08.03.2015	1	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
08.03.2015	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			168	36	204
08.03.2015	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			20		20
08.03.2015	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
08.03.2015	1	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus/lutheri			22		22
08.03.2015	1	Treatment	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
08.03.2015	1	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			4		4
08.03.2015	1	Treatment	AZ	Plecoptera	LEUCTRIDAE	Leuctra			1		1
08.03.2015	1	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
08.03.2015	1	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
08.03.2015	1	Treatment	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			1		1
08.03.2015	1	Treatment	AZ	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
08.03.2015	1	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	2				2
08.03.2015	1	Treatment	UR	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
08.03.2015	1	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
08.03.2015	1	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	5				5
08.03.2015	1	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
08.03.2015	1	Treatment	UR	Coleoptera	ELMIDAE	Elmis ad.	1				1
08.03.2015	1	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			21		21
08.03.2015	1	Treatment	UR	Diptera	SIMULIIDAE	Simulium			10		10
08.03.2015	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			20	8	28
08.03.2015	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			5		5
08.03.2015	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
08.03.2015	1	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus/lutheri			3		3
08.03.2015	1	Treatment	UR	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
08.03.2015	1	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
08.03.2015	1	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
08.03.2015	1	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			5		5
08.03.2015	1	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
08.03.2015	1	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
08.03.2015	1	Treatment	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	1	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	10				10
08.03.2015	1	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	1				1
08.03.2015	1	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			13		13
08.03.2015	1	Treatment	P1	Diptera	SIMULIIDAE	Simulium			2		2
08.03.2015	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			16		16
08.03.2015	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			7		7
08.03.2015	1	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus/lutheri			2		2
08.03.2015	1	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			1		1
08.03.2015	1	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			3		3
08.03.2015	1	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
08.03.2015	1	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			5		5
08.03.2015	1	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		2	2		4
08.03.2015	1	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	1	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	2				2
08.03.2015	1	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			7		7
08.03.2015	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			3		3
08.03.2015	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1

08.03.2015	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
08.03.2015	1	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis alpinus/lutheri			1		1
08.03.2015	1	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			1		1
08.03.2015	1	Treatment	P2	Plecoptera	PERLODIDAE	Isoperla			1		1
08.03.2015	1	Treatment	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
08.03.2015	1	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
08.03.2015	1	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	1	Treatment	DR	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	1	Treatment	DR	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
08.03.2015	1	Treatment	DR	Coleoptera	ELMIDAE	Riolus lv.	3				3
08.03.2015	1	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			4		4
08.03.2015	1	Treatment	DR	Diptera	SIMULIIDAE	Simulium			1		1
08.03.2015	1	Treatment	DR	Diptera	EMPIDIDAE	Hemerodromia			1		1
08.03.2015	1	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
08.03.2015	1	Treatment	DR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
08.03.2015	1	Treatment	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
08.03.2015	1	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	24				24
08.03.2015	1	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	9				9
08.03.2015	1	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	34				34
08.03.2015	1	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	57				57
08.03.2015	1	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	13				13
08.03.2015	1	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
08.03.2015	1	Treatment	Rest	Coleoptera	ELMIDAE	Limnius ad.	1				1
08.03.2015	1	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
08.03.2015	1	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		6	176		182
08.03.2015	1	Treatment	Rest	Diptera	SIMULIIDAE	Simulium		7	8		15
08.03.2015	1	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			2		2
08.03.2015	1	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			6		6
08.03.2015	1	Treatment	Rest	Diptera	ATHERICIDAE	Ibisia marginata		1			1
08.03.2015	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		3	5		8
08.03.2015	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			487	49	536
08.03.2015	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		12	147		159
08.03.2015	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			16		16
08.03.2015	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		5	24		29
08.03.2015	1	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			9		9
08.03.2015	1	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			3		3
08.03.2015	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			26		26
08.03.2015	1	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides			2		2
08.03.2015	1	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
08.03.2015	1	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			11		11
08.03.2015	1	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	8		9
08.03.2015	1	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	10				10
08.03.2015	1	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	13				13
08.03.2015	1	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	1				1
08.03.2015	1	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	2				2
08.03.2015	1	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
08.03.2015	1	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta		3			3
08.03.2015	1	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			127		127
08.03.2015	1	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		2	15		17
08.03.2015	1	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla		4	1		5
08.03.2015	1	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		7			7
08.03.2015	1	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			45		45
08.03.2015	1	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
08.03.2015	1	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
08.03.2015	1	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			8		8
08.03.2015	1	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		25	48		73
08.03.2015	1	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			81		81
08.03.2015	1	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostomatidae			1		1
08.03.2015	1	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		2			2
08.03.2015	1	Treatment	Rest	Trichoptera	PSYCHOMYIIDAE	Psychomyia				1	1
08.03.2015	1	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		47			47
08.03.2015	2	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
08.03.2015	2	Treatment	AZ	Coleoptera	ELMIDAE	Elmis ad.	1				1
08.03.2015	2	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			22		22
08.03.2015	2	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		16	86		102
08.03.2015	2	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		2			2
08.03.2015	2	Treatment	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			2		2
08.03.2015	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			62		62
08.03.2015	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		6	46		52
08.03.2015	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
08.03.2015	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			15		15
08.03.2015	2	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			2		2
08.03.2015	2	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			2		2
08.03.2015	2	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			6		6
08.03.2015	2	Treatment	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
08.03.2015	2	Treatment	AZ	Plecoptera	PERLODIDAE	Isoperla		1			1
08.03.2015	2	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1	1		2
08.03.2015	2	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1			1
08.03.2015	2	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
08.03.2015	2	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1

08.03.2015	2	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	1				1
08.03.2015	2	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	2				2
08.03.2015	2	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae		1	17		18
08.03.2015	2	Treatment	UR	Diptera	SIMULIIDAE	Simulium		1	21		22
08.03.2015	2	Treatment	UR	Diptera	LIMONIIDAE	Antocha			1		1
08.03.2015	2	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			5	3	8
08.03.2015	2	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			4		4
08.03.2015	2	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus		1	2		3
08.03.2015	2	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
08.03.2015	2	Treatment	UR	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
08.03.2015	2	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			2		2
08.03.2015	2	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			7		7
08.03.2015	2	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1	3		4
08.03.2015	2	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
08.03.2015	2	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			2		2
08.03.2015	2	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
08.03.2015	2	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		1			1
08.03.2015	2	Treatment	P1	Coleoptera	ELMIDAE	Elmis ad.	1				1
08.03.2015	2	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	1				1
08.03.2015	2	Treatment	P1	Crustacea	ASELLIDAE	Asellus aquaticus	1				1
08.03.2015	2	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae		2	25		27
08.03.2015	2	Treatment	P1	Diptera	SIMULIIDAE	Simulium			8		8
08.03.2015	2	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
08.03.2015	2	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			5		5
08.03.2015	2	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
08.03.2015	2	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
08.03.2015	2	Treatment	P1	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
08.03.2015	2	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
08.03.2015	2	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			5		5
08.03.2015	2	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			6		6
08.03.2015	2	Treatment	P2	Coleoptera	ELMIDAE	Elmis lv.	1				1
08.03.2015	2	Treatment	P2	Crustacea	ASELLIDAE	Asellus aquaticus	1				1
08.03.2015	2	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae		1	17		18
08.03.2015	2	Treatment	P2	Diptera	SIMULIIDAE	Simulium			2		2
08.03.2015	2	Treatment	P2	Diptera	EMPIDIDAE	Hemerodromia			1		1
08.03.2015	2	Treatment	P2	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
08.03.2015	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
08.03.2015	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
08.03.2015	2	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			4		4
08.03.2015	2	Treatment	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			1		1
08.03.2015	2	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			2		2
08.03.2015	2	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			2	1	3
08.03.2015	2	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	2	Treatment	P2	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
08.03.2015	2	Treatment	P2	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			1		1
08.03.2015	2	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			4		4
08.03.2015	2	Treatment	DR	Diptera	SIMULIIDAE	Simulium			2		2
08.03.2015	2	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1	1	2
08.03.2015	2	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			2		2
08.03.2015	2	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	2				2
08.03.2015	2	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	3				3
08.03.2015	2	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	3				3
08.03.2015	2	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	8				8
08.03.2015	2	Treatment	Rest	Coleoptera	ELMIDAE	Limnius lv.	1				1
08.03.2015	2	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	4				4
08.03.2015	2	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	1				1
08.03.2015	2	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	2				2
08.03.2015	2	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		8	180		188
08.03.2015	2	Treatment	Rest	Diptera	SIMULIIDAE	Simulium		2	29		31
08.03.2015	2	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			1		1
08.03.2015	2	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			3		3
08.03.2015	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		4	2		6
08.03.2015	2	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			36		36
08.03.2015	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			288		288
08.03.2015	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		5	86		91
08.03.2015	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			11		11
08.03.2015	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			23		23
08.03.2015	2	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		1	5		6
08.03.2015	2	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			2		2
08.03.2015	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		3	8		11
08.03.2015	2	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		2	6		8
08.03.2015	2	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		6			6
08.03.2015	2	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		3			3
08.03.2015	2	Treatment	Rest	Ephemeroptera	SIPHLONURIDAE	Siphlonurus lacustris		1			1
08.03.2015	2	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	6				6
08.03.2015	2	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	4				4
08.03.2015	2	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	1				1
08.03.2015	2	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella		3			3
08.03.2015	2	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
08.03.2015	2	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			12		12

08.03.2015	2	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			108	108
08.03.2015	2	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		3	4	7
08.03.2015	2	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla		3	2	5
08.03.2015	2	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		5	7	12
08.03.2015	2	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		12	34	46
08.03.2015	2	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		5		5
08.03.2015	2	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			42	42
08.03.2015	2	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			5	5
08.03.2015	2	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			31	31
08.03.2015	2	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			11	11
08.03.2015	2	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		21		21
08.03.2015	2	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1		1
08.03.2015	2	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Limnephilidae			2	2
08.03.2015	3	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1			1
08.03.2015	3	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae			9	9
08.03.2015	3	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		24	65	89
08.03.2015	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			21	21
08.03.2015	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		12	45	57
08.03.2015	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus		2	1	3
08.03.2015	3	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			7	7
08.03.2015	3	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1	1	2
08.03.2015	3	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1			1
08.03.2015	3	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			5	5
08.03.2015	3	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1		1
08.03.2015	3	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1	1
08.03.2015	3	Treatment	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.			1	1
08.03.2015	3	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	8			8
08.03.2015	3	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	4			4
08.03.2015	3	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.	1			1
08.03.2015	3	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	2			2
08.03.2015	3	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			17	17
08.03.2015	3	Treatment	UR	Diptera	SIMULIIDAE	Simulium			12	12
08.03.2015	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			15	15
08.03.2015	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			13	13
08.03.2015	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			6	6
08.03.2015	3	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus		1	4	5
08.03.2015	3	Treatment	UR	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1	1
08.03.2015	3	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			27	27
08.03.2015	3	Treatment	UR	Plecoptera	LEUCTRIDAE	Leuctra			2	2
08.03.2015	3	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2	2
08.03.2015	3	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		1	1	2
08.03.2015	3	Treatment	UR	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1	1
08.03.2015	3	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			2	2
08.03.2015	3	Treatment	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			3	3
08.03.2015	3	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			1	1
08.03.2015	3	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.	2			2
08.03.2015	3	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	3			3
08.03.2015	3	Treatment	P1	Crustacea	ASELLIDAE	Asellus aquaticus	2			2
08.03.2015	3	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			22	22
08.03.2015	3	Treatment	P1	Diptera	SIMULIIDAE	Simulium			3	3
08.03.2015	3	Treatment	P1	Diptera	EMPIDIDAE	Hemerodromia			1	1
08.03.2015	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			4	4
08.03.2015	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			4	4
08.03.2015	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			5	5
08.03.2015	3	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis lutheri			1	1
08.03.2015	3	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1		1
08.03.2015	3	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1	1
08.03.2015	3	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1			1
08.03.2015	3	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			10	10
08.03.2015	3	Treatment	P1	Plecoptera	LEUCTRIDAE	Leuctra			1	1
08.03.2015	3	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2	2
08.03.2015	3	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			3	3
08.03.2015	3	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			3	3
08.03.2015	3	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	2			2
08.03.2015	3	Treatment	P2	Coleoptera	ELMIDAE	Elmis ad.	1			1
08.03.2015	3	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae		1	13	14
08.03.2015	3	Treatment	P2	Diptera	EMPIDIDAE	Hemerodromia			1	1
08.03.2015	3	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			2	2
08.03.2015	3	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1	1
08.03.2015	3	Treatment	P2	Gastropoda	PLANORBIDAE	Ancylus fluviatilis			1	1
08.03.2015	3	Treatment	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			1	1
08.03.2015	3	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			4	4
08.03.2015	3	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			2	2
08.03.2015	3	Treatment	P2	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		1		1
08.03.2015	3	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1	1
08.03.2015	3	Treatment	P2	Trichoptera	HYDROPTILIDAE	Hydroptila			1	1
08.03.2015	3	Treatment	DR	Coleoptera	ELMIDAE	Riolus lv.	1			1
08.03.2015	3	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			8	8
08.03.2015	3	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis muticus			1	1
08.03.2015	3	Treatment	DR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1	1

08.03.2015	3	Treatment	Rest	Bivalvia	SPHAERIIDAE	Sphaerium	1				1
08.03.2015	3	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.			7		7
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.			33		33
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.			26		26
08.03.2015	3	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.			9		9
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.			5		5
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.			2		2
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Limnius lv.		4			4
08.03.2015	3	Treatment	Rest	Coleoptera	ELMIDAE	Limnius ad.			1		1
08.03.2015	3	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus			7		7
08.03.2015	3	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum			13		13
08.03.2015	3	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		8	368		376
08.03.2015	3	Treatment	Rest	Diptera	SIMULIIDAE	Simulium		14	37		51
08.03.2015	3	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia		1	8		9
08.03.2015	3	Treatment	Rest	Diptera	ATHERICIDAE	Ibisia marginata		1			1
08.03.2015	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			520	120	640
08.03.2015	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		25	158		183
08.03.2015	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			18		18
08.03.2015	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			17		17
08.03.2015	3	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		1	8		9
08.03.2015	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		3	9		12
08.03.2015	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		7	29		36
08.03.2015	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		3	2		5
08.03.2015	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			38		38
08.03.2015	3	Treatment	Rest	Ephemeroptera	EPHEMERIDAE	Ephemera danica		1			1
08.03.2015	3	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		10	5		15
08.03.2015	3	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
08.03.2015	3	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella			3		3
08.03.2015	3	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis			10		10
08.03.2015	3	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix			2		2
08.03.2015	3	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella			4		4
08.03.2015	3	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			2		2
08.03.2015	3	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			28		28
08.03.2015	3	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			178		178
08.03.2015	3	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		5	14		19
08.03.2015	3	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		12	8		20
08.03.2015	3	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla		2	6		8
08.03.2015	3	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		6			6
08.03.2015	3	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			48		48
08.03.2015	3	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		4			4
08.03.2015	3	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		42			42
08.03.2015	3	Treatment	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			3		3
08.03.2015	3	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			64		64
08.03.2015	3	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		15	47		62
08.03.2015	3	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			22		22
08.03.2015	3	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			2		2
08.03.2015	3	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			7		7
08.03.2015	3	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
08.03.2015	3	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne			1		1
08.03.2015	4	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
08.03.2015	4	Control	AZ	Coleoptera	ELMIDAE	Elmis lv.	1				1
08.03.2015	4	Control	AZ	Coleoptera	HYDRAENIDAE	Hydraena ad.	1				1
08.03.2015	4	Control	AZ	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
08.03.2015	4	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			20		20
08.03.2015	4	Control	AZ	Diptera	SIMULIIDAE	Simulium		5	33		38
08.03.2015	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			105	25	130
08.03.2015	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			22		22
08.03.2015	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			23		23
08.03.2015	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			23		23
08.03.2015	4	Control	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			4		4
08.03.2015	4	Control	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			2		2
08.03.2015	4	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1			1
08.03.2015	4	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			1		1
08.03.2015	4	Control	AZ	Plecoptera	LEUCTRIDAE	Leuctra			1		1
08.03.2015	4	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			2		2
08.03.2015	4	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
08.03.2015	4	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
08.03.2015	4	Control	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.				1	1
08.03.2015	4	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
08.03.2015	4	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
08.03.2015	4	Control	UR	Diptera	SIMULIIDAE	Simulium			2		2
08.03.2015	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			12	3	15
08.03.2015	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
08.03.2015	4	Control	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
08.03.2015	4	Control	UR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
08.03.2015	4	Control	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
08.03.2015	4	Control	P1	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
08.03.2015	4	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			13		13
08.03.2015	4	Control	P1	Diptera	SIMULIIDAE	Simulium			13		13
08.03.2015	4	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			13	11	24

08.03.2015	4	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			4		4
08.03.2015	4	Control	P1	Plecoptera	NEMOURIDAE	Amphinemura			2		2
08.03.2015	4	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			9		9
08.03.2015	4	Control	P2	Diptera	SIMULIIDAE	Simulium			4		4
08.03.2015	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			3	4	7
08.03.2015	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
08.03.2015	4	Control	P2	Ephemeroptera	BAETIDAE	Baetis lutheri			2		2
08.03.2015	4	Control	DR	Diptera	CHIRONOMIDAE	Chironomidae			4		4
08.03.2015	4	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			6		6
08.03.2015	4	Control	DR	Ephemeroptera	EPHEMERELLIDAE	Ephemerella			1		1
08.03.2015	4	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	3				3
08.03.2015	4	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	15				15
08.03.2015	4	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	12				12
08.03.2015	4	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	16				16
08.03.2015	4	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	4	Control	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	2				2
08.03.2015	4	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		4	78		82
08.03.2015	4	Control	Rest	Diptera	SIMULIIDAE	Simulium			10		10
08.03.2015	4	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
08.03.2015	4	Control	Rest	Diptera	LIMONIIDAE	Antocha			5		5
08.03.2015	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			240		240
08.03.2015	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani			62		62
08.03.2015	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			5		5
08.03.2015	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			13		13
08.03.2015	4	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			5		5
08.03.2015	4	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			18		18
08.03.2015	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		8	1		9
08.03.2015	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		3	8		11
08.03.2015	4	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		4	3		7
08.03.2015	4	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
08.03.2015	4	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	6				6
08.03.2015	4	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	2				2
08.03.2015	4	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	3				3
08.03.2015	4	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	5				5
08.03.2015	4	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra			16		16
08.03.2015	4	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			97		97
08.03.2015	4	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		8	1		9
08.03.2015	4	Control	Rest	Plecoptera	PERLODIDAE	Isoperla		2	1		3
08.03.2015	4	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		12	95		107
08.03.2015	4	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			30		30
08.03.2015	4	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1			1
08.03.2015	4	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			3		3
08.03.2015	4	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			47		47
08.03.2015	4	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			4		4
08.03.2015	4	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
08.03.2015	4	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		36			36
08.03.2015	4	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis			1		1
08.03.2015	4	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila tristis			1		1
08.03.2015	4	Control	Rest	Trichoptera	PSYCHOMYIIDAE	Psychomyia pusilla			1		1
08.03.2015	5	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	6				6
08.03.2015	5	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	2				2
08.03.2015	5	Control	AZ	Coleoptera	ELMIDAE	Riolus lv.	1				1
08.03.2015	5	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.	2				2
08.03.2015	5	Control	AZ	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
08.03.2015	5	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae		1	36		37
08.03.2015	5	Control	AZ	Diptera	SIMULIIDAE	Simulium		2	27		29
08.03.2015	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			62		62
08.03.2015	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		8	18		26
08.03.2015	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus		1	7		8
08.03.2015	5	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus		1	7		8
08.03.2015	5	Control	AZ	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
08.03.2015	5	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1	1		2
08.03.2015	5	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	11				11
08.03.2015	5	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			5		5
08.03.2015	5	Control	AZ	Plecoptera	LEUCTRIDAE	Leuctra			1		1
08.03.2015	5	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	5	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1			1
08.03.2015	5	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			4		4
08.03.2015	5	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
08.03.2015	5	Control	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	5	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			4		4
08.03.2015	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
08.03.2015	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani		1	2		3
08.03.2015	5	Control	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
08.03.2015	5	Control	UR	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
08.03.2015	5	Control	UR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	5	Control	UR	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.			1		1
08.03.2015	5	Control	P1	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
08.03.2015	5	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			2		2
08.03.2015	5	Control	P1	Diptera	SIMULIIDAE	Simulium			3		3

08.03.2015	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			10		10
08.03.2015	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani		1	4		5
08.03.2015	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
08.03.2015	5	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
08.03.2015	5	Control	P1	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
08.03.2015	5	Control	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	5	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			5		5
08.03.2015	5	Control	P2	Diptera	SIMULIIDAE	Simulium			2		2
08.03.2015	5	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			4		4
08.03.2015	5	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
08.03.2015	5	Control	P2	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia			1		1
08.03.2015	5	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			1		1
08.03.2015	5	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	4				4
08.03.2015	5	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	11				11
08.03.2015	5	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	25				25
08.03.2015	5	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	9				9
08.03.2015	5	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	20				20
08.03.2015	5	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	5				5
08.03.2015	5	Control	Rest	Coleoptera	HALIPLIDAE	Haliplus lv.	1				1
08.03.2015	5	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		26	112		138
08.03.2015	5	Control	Rest	Diptera	SIMULIIDAE	Simulium			8		8
08.03.2015	5	Control	Rest	Diptera	LIMONIIDAE	Antocha			3		3
08.03.2015	5	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			9		9
08.03.2015	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			167	43	210
08.03.2015	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		35	43		78
08.03.2015	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			7		7
08.03.2015	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		2	8		10
08.03.2015	5	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		1	11		12
08.03.2015	5	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			27		27
08.03.2015	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		5	2		7
08.03.2015	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	2		3
08.03.2015	5	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena			10		10
08.03.2015	5	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1	1		2
08.03.2015	5	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	1				1
08.03.2015	5	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	3				3
08.03.2015	5	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	4				4
08.03.2015	5	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
08.03.2015	5	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	9				9
08.03.2015	5	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			87		87
08.03.2015	5	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra		4	5		9
08.03.2015	5	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		12	4		16
08.03.2015	5	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		10	38		48
08.03.2015	5	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		6			6
08.03.2015	5	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			40		40
08.03.2015	5	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			6		6
08.03.2015	5	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		2	1		3
08.03.2015	5	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.		1	51		52
08.03.2015	5	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			3		3
08.03.2015	5	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		61			61
08.03.2015	5	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosomatidae			1		1
08.03.2015	6	Control	Rest	Bivalvia	SPHAERIIDAE	Sphaerium	2				2
08.03.2015	6	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.	1				1
08.03.2015	6	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			43		43
08.03.2015	6	Control	AZ	Diptera	SIMULIIDAE	Simulium		3	78		81
08.03.2015	6	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1	2		3
08.03.2015	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.		3	73		76
08.03.2015	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		2	36		38
08.03.2015	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			8		8
08.03.2015	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus		2	13		15
08.03.2015	6	Control	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri		1			1
08.03.2015	6	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			4		4
08.03.2015	6	Control	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
08.03.2015	6	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			4		4
08.03.2015	6	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			7		7
08.03.2015	6	Control	UR	Diptera	SIMULIIDAE	Simulium			8		8
08.03.2015	6	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			12	1	13
08.03.2015	6	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			4		4
08.03.2015	6	Control	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
08.03.2015	6	Control	UR	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		1			1
08.03.2015	6	Control	UR	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.			1		1
08.03.2015	6	Control	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	6	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			7		7
08.03.2015	6	Control	P1	Diptera	SIMULIIDAE	Simulium		1	7		8
08.03.2015	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			19		19
08.03.2015	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
08.03.2015	6	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
08.03.2015	6	Control	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
08.03.2015	6	Control	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
08.03.2015	6	Control	P2	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	6	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			6		6

08.03.2015	6	Control	P2	Diptera	SIMULIIDAE	Simulium			4		4
08.03.2015	6	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			10		10
08.03.2015	6	Control	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
08.03.2015	6	Control	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			2		2
08.03.2015	6	Control	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
08.03.2015	6	Control	DR	Coleoptera	ELMIDAE	Riolus ad.	1				1
08.03.2015	6	Control	DR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
08.03.2015	6	Control	DR	Diptera	SIMULIIDAE	Simulium		1	4		5
08.03.2015	6	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			5		5
08.03.2015	6	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
08.03.2015	6	Control	DR	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1			1
08.03.2015	6	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	8				8
08.03.2015	6	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	3				3
08.03.2015	6	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	2				2
08.03.2015	6	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	10				10
08.03.2015	6	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	13				13
08.03.2015	6	Control	Rest	Coleoptera	HYDRAENIDAE	Hydraena ad.	1				1
08.03.2015	6	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		2	182		184
08.03.2015	6	Control	Rest	Diptera	SIMULIIDAE	Simulium			8		8
08.03.2015	6	Control	Rest	Diptera	LIMONIIDAE	Antocha		1	1		2
08.03.2015	6	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			3		3
08.03.2015	6	Control	Rest	Diptera	ATHERICIDAE	Ibisia marginata		1			1
08.03.2015	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		7	13		20
08.03.2015	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			492		492
08.03.2015	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		14	108		122
08.03.2015	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			11		11
08.03.2015	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			21		21
08.03.2015	6	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			7		7
08.03.2015	6	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			8		8
08.03.2015	6	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia			1		1
08.03.2015	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	4		5
08.03.2015	6	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		7	15		22
08.03.2015	6	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			3		3
08.03.2015	6	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	9				9
08.03.2015	6	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	2				2
08.03.2015	6	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			79		79
08.03.2015	6	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		5	1		6
08.03.2015	6	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra		5	9		14
08.03.2015	6	Control	Rest	Plecoptera	PERLODIDAE	Isoperla		2	2		4
08.03.2015	6	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		5	25		30
08.03.2015	6	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			29		29
08.03.2015	6	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			11		11
08.03.2015	6	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			26		26
08.03.2015	6	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			2		2
08.03.2015	6	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		2			2
08.03.2015	6	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		42			42
09.03.2015	1	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.		5	2		7
09.03.2015	1	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.			1		1
09.03.2015	1	Control	AZ	Coleoptera	ELMIDAE	Riolus lv.			3		3
09.03.2015	1	Control	AZ	Coleoptera	ELMIDAE	Riolus ad.			1		1
09.03.2015	1	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			26		26
09.03.2015	1	Control	AZ	Diptera	SIMULIIDAE	Simulium		2	32		34
09.03.2015	1	Control	AZ	Diptera	LIMONIIDAE	Antocha			1		1
09.03.2015	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			26	25	51
09.03.2015	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			28		28
09.03.2015	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			7	5	12
09.03.2015	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			14		14
09.03.2015	1	Control	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			9		9
09.03.2015	1	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1	2		3
09.03.2015	1	Control	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
09.03.2015	1	Control	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
09.03.2015	1	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			2		2
09.03.2015	1	Control	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			5		5
09.03.2015	1	Control	AZ	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			2		2
09.03.2015	1	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
09.03.2015	1	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus			1		1
09.03.2015	1	Control	AZ	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1	2		3
09.03.2015	1	Control	AZ	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
09.03.2015	1	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
09.03.2015	1	Control	UR	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	1	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			2	7	9
09.03.2015	1	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
09.03.2015	1	Control	UR	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
09.03.2015	1	Control	P1	Coleoptera	DYTISCIDAE	Oreodytes sanmarkii	1				1
09.03.2015	1	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			10		10
09.03.2015	1	Control	P1	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			1	11	12
09.03.2015	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
09.03.2015	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
09.03.2015	1	Control	P1	Ephemeroptera	BAETIDAE	Baetis muticus			1		1

09.03.2015	1	Control	P2	Coleoptera	ELMIDAE	Riolus lv.	2				2
09.03.2015	1	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			8		8
09.03.2015	1	Control	P2	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	1	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			9		9
09.03.2015	1	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
09.03.2015	1	Control	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	1	Control	P2	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	1	Control	P2	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
09.03.2015	1	Control	DR	Coleoptera	ELMIDAE	Riolus ad.	1				1
09.03.2015	1	Control	DR	Diptera	CHIRONOMIDAE	Chironomidae			6		6
09.03.2015	1	Control	DR	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1	9	10
09.03.2015	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
09.03.2015	1	Control	DR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
09.03.2015	1	Control	Rest	Bivalvia	SPHAERIIDAE	Sphaerium	2				2
09.03.2015	1	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.		2	9		11
09.03.2015	1	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.			21		21
09.03.2015	1	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.			110		110
09.03.2015	1	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.			37		37
09.03.2015	1	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.			13		13
09.03.2015	1	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.			1		1
09.03.2015	1	Control	Rest	Coleoptera	HALIPLIDAE	Haliplus lv.		1			1
09.03.2015	1	Control	Rest	Coleoptera	ELMIDAE	Limnius lv.		1			1
09.03.2015	1	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus		2			2
09.03.2015	1	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		31	243		274
09.03.2015	1	Control	Rest	Diptera	SIMULIIDAE	Simulium		3	9		12
09.03.2015	1	Control	Rest	Diptera	LIMONIIDAE	Antocha		4	1		5
09.03.2015	1	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			3		3
09.03.2015	1	Control	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
09.03.2015	1	Control	Rest	Diptera	ATHERICIDAE	Ibisia marginata		2			2
09.03.2015	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			388	80	468
09.03.2015	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		12	111		123
09.03.2015	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus		2	12		14
09.03.2015	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus			32		32
09.03.2015	1	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		2	6		8
09.03.2015	1	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		3			3
09.03.2015	1	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			18		18
09.03.2015	1	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
09.03.2015	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1	5		6
09.03.2015	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			7		7
09.03.2015	1	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		2	11		13
09.03.2015	1	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	3				3
09.03.2015	1	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	7				7
09.03.2015	1	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	8				8
09.03.2015	1	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella			1		1
09.03.2015	1	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
09.03.2015	1	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			4		4
09.03.2015	1	Control	Rest	Oligochaeta	LUMBRICIDAE	Eiseniella		1			1
09.03.2015	1	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			129		129
09.03.2015	1	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		2	7		9
09.03.2015	1	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra		4	2		6
09.03.2015	1	Control	Rest	Plecoptera	PERLODIDAE	Isoperla		3	8		11
09.03.2015	1	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae		2	56	3	61
09.03.2015	1	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		49			49
09.03.2015	1	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			7		7
09.03.2015	1	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			58		58
09.03.2015	1	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			5		5
09.03.2015	1	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		2			2
09.03.2015	1	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1			1
09.03.2015	1	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
09.03.2015	1	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		11	37		48
09.03.2015	1	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne/personatum			3		3
09.03.2015	1	Control	Rest	Trichoptera	LEPTOCERIDAE	Athripsodes			1		1
09.03.2015	1	Control	Rest	Trichoptera	PSYCHOMYIIDAE	Psychomyia pusilla			1		1
09.03.2015	1	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche dinarica		1			1
09.03.2015	2	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.		6			6
09.03.2015	2	Control	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.				1	1
09.03.2015	2	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			40		40
09.03.2015	2	Control	AZ	Diptera	SIMULIIDAE	Simulium		5	29		34
09.03.2015	2	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		3			3
09.03.2015	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			38	29	67
09.03.2015	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			12		12
09.03.2015	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			6	2	8
09.03.2015	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			14		14
09.03.2015	2	Control	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			3		3
09.03.2015	2	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			4		4
09.03.2015	2	Control	AZ	Plecoptera	NEMOURIDAE	Nemoura/Nemurella				1	1
09.03.2015	2	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		3			3
09.03.2015	2	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			6		6

09.03.2015	2	Control	UR	Diptera	SIMULIIDAE	Simulium			6		6
09.03.2015	2	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			9	1	10
09.03.2015	2	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	2	Control	UR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
09.03.2015	2	Control	UR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	2	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae			7		7
09.03.2015	2	Control	P1	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	2	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			4	3	7
09.03.2015	2	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			3		3
09.03.2015	2	Control	P1	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
09.03.2015	2	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	2	Control	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
09.03.2015	2	Control	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
09.03.2015	2	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			7		7
09.03.2015	2	Control	P2	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	2	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			7	4	11
09.03.2015	2	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani		1			1
09.03.2015	2	Control	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
09.03.2015	2	Control	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
09.03.2015	2	Control	DR	Diptera	CHIRONOMIDAE	Chironomidae			3		3
09.03.2015	2	Control	DR	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	2	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			2	5	7
09.03.2015	2	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
09.03.2015	2	Control	DR	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	2	Control	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
09.03.2015	2	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.		4			4
09.03.2015	2	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.			9		9
09.03.2015	2	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.			22		22
09.03.2015	2	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.			8		8
09.03.2015	2	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.			4		4
09.03.2015	2	Control	Rest	Coleoptera	ELMIDAE	Limnius ad.			1		1
09.03.2015	2	Control	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum			1		1
09.03.2015	2	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus		2			2
09.03.2015	2	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		2	379		381
09.03.2015	2	Control	Rest	Diptera	SIMULIIDAE	Simulium		5	6		11
09.03.2015	2	Control	Rest	Diptera	LIMONIIDAE	Antocha			1		1
09.03.2015	2	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
09.03.2015	2	Control	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
09.03.2015	2	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		2	4		6
09.03.2015	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			132	200	332
09.03.2015	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		2	71		73
09.03.2015	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			13		13
09.03.2015	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		5	13		18
09.03.2015	2	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			2		2
09.03.2015	2	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		3	5		8
09.03.2015	2	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		3	21		24
09.03.2015	2	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
09.03.2015	2	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			19		19
09.03.2015	2	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		2			2
09.03.2015	2	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	9				9
09.03.2015	2	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	4				4
09.03.2015	2	Control	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella		3			3
09.03.2015	2	Control	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
09.03.2015	2	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			12		12
09.03.2015	2	Control	Rest	Oligochaeta	LUMBRICIDAE	Eiseniella			5		5
09.03.2015	2	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			107		107
09.03.2015	2	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		1	1		2
09.03.2015	2	Control	Rest	Plecoptera	PERLODIDAE	Isoperla		2	13		15
09.03.2015	2	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra		3	12		15
09.03.2015	2	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		8			8
09.03.2015	2	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae		6	61		67
09.03.2015	2	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			63		63
09.03.2015	2	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			7		7
09.03.2015	2	Control	Rest	Trichoptera	LEPTOCERIDAE	Oecetis lacustris			4		4
09.03.2015	2	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		14	19		33
09.03.2015	2	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		31			31
09.03.2015	2	Control	Rest	Trichoptera	GLOSSOSOMATIDAE	Glossosoma conformis			1		1
09.03.2015	2	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
09.03.2015	2	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		2			2
09.03.2015	2	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			15		15
09.03.2015	2	Control	Rest	Trichoptera	LEPTOCERIDAE	Athripsodes				2	2
09.03.2015	2	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne/personatum				1	1
09.03.2015	3	Control	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.		3			3
09.03.2015	3	Control	AZ	Diptera	CHIRONOMIDAE	Chironomidae			46		46
09.03.2015	3	Control	AZ	Diptera	SIMULIIDAE	Simulium		4	31		35
09.03.2015	3	Control	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus			2		2
09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			57	15	72
09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		3	24		27
09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			2		2

09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus		1	12		13
09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			5		5
09.03.2015	3	Control	AZ	Ephemeroptera	BAETIDAE	Centroptilum			1		1
09.03.2015	3	Control	AZ	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	3	Control	AZ	Plecoptera	LEUCTRIDAE	Leuctra			2		2
09.03.2015	3	Control	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			3		3
09.03.2015	3	Control	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
09.03.2015	3	Control	UR	Diptera	CHIRONOMIDAE	Chironomidae			2		2
09.03.2015	3	Control	UR	Diptera	SIMULIIDAE	Simulium			4		4
09.03.2015	3	Control	UR	Ephemeroptera	BAETIDAE	Baetis juv.			10		10
09.03.2015	3	Control	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	3	Control	UR	Ephemeroptera	BAETIDAE	Centroptilum		1			1
09.03.2015	3	Control	P1	Diptera	CHIRONOMIDAE	Chironomidae		1	4		5
09.03.2015	3	Control	P1	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	3	Control	P1	Ephemeroptera	BAETIDAE	Baetis juv.			7		7
09.03.2015	3	Control	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	3	Control	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	3	Control	P1	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
09.03.2015	3	Control	P1	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	3	Control	P2	Diptera	CHIRONOMIDAE	Chironomidae			3		3
09.03.2015	3	Control	P2	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	3	Control	P2	Ephemeroptera	BAETIDAE	Baetis juv.			12		12
09.03.2015	3	Control	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			5		5
09.03.2015	3	Control	DR	Diptera	CHIRONOMIDAE	Chironomidae			1		1
09.03.2015	3	Control	DR	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	3	Control	DR	Ephemeroptera	BAETIDAE	Baetis juv.			3		3
09.03.2015	3	Control	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	3	Control	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	8				8
09.03.2015	3	Control	Rest	Coleoptera	ELMIDAE	Elmis lv.	21				21
09.03.2015	3	Control	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	7				7
09.03.2015	3	Control	Rest	Coleoptera	ELMIDAE	Riolus lv.	36				36
09.03.2015	3	Control	Rest	Coleoptera	ELMIDAE	Limnius lv.	1				1
09.03.2015	3	Control	Rest	Coleoptera	ELMIDAE	Riolus ad.	4				4
09.03.2015	3	Control	Rest	Coleoptera	ELMIDAE	Elmis ad.	3				3
09.03.2015	3	Control	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	3				3
09.03.2015	3	Control	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	7				7
09.03.2015	3	Control	Rest	Diptera	CHIRONOMIDAE	Chironomidae		72	500		572
09.03.2015	3	Control	Rest	Diptera	SIMULIIDAE	Simulium			10		10
09.03.2015	3	Control	Rest	Diptera	LIMONIIDAE	Antocha		3	1		4
09.03.2015	3	Control	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
09.03.2015	3	Control	Rest	Diptera	ATHERICIDAE	Ibisia marginata		1			1
09.03.2015	3	Control	Rest	Diptera	EMPIDIDAE	Hemerodromia			4		4
09.03.2015	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus			2		2
09.03.2015	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			534	10	544
09.03.2015	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		33	113		146
09.03.2015	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis muticus		5	2		7
09.03.2015	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		4	12		16
09.03.2015	3	Control	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri			5		5
09.03.2015	3	Control	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			3		3
09.03.2015	3	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			17		17
09.03.2015	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		2	2		4
09.03.2015	3	Control	Rest	Diptera	EMPIDIDAE	Empididae			1		1
09.03.2015	3	Control	Rest	Diptera	ATHERICIDAE	Atherix ibis		1			1
09.03.2015	3	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		3			3
09.03.2015	3	Control	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		5			5
09.03.2015	3	Control	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	3		4
09.03.2015	3	Control	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	1				1
09.03.2015	3	Control	Rest	Gastropoda	PLANORBIDAE	Planorbis	16				16
09.03.2015	3	Control	Rest	Gastropoda	LYMNAEIDAE	Radix	2				2
09.03.2015	3	Control	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
09.03.2015	3	Control	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			13		13
09.03.2015	3	Control	Rest	Oligochaeta	LUMBRICIDAE	Eiseniella		1			1
09.03.2015	3	Control	Rest	Plecoptera	NEMOURIDAE	Amphinemura			105		105
09.03.2015	3	Control	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		3	8		11
09.03.2015	3	Control	Rest	Plecoptera	LEUCTRIDAE	Leuctra		4	7		11
09.03.2015	3	Control	Rest	Plecoptera	PERLODIDAE	Isoperla			9		9
09.03.2015	3	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			8		8
09.03.2015	3	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			29		29
09.03.2015	3	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		26			26
09.03.2015	3	Control	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche dinarica		1			1
09.03.2015	3	Control	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			58		58
09.03.2015	3	Control	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			21		21
09.03.2015	3	Control	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		8			8
09.03.2015	3	Control	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1	1		2
09.03.2015	3	Control	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		5	60		65
09.03.2015	3	Control	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			2		2
09.03.2015	3	Control	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostoma flavicorne/personatum			1		1
09.03.2015	4	Treatment	AZ	Coleoptera	ELMIDAE	Riolus ad.	1				1
09.03.2015	4	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1

09.03.2015	4	Treatment	AZ	Coleoptera	ELMIDAE	Riolus lv.	2				2
09.03.2015	4	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae		1	40		41
09.03.2015	4	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		5	45		50
09.03.2015	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			100	3	103
09.03.2015	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			37		37
09.03.2015	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			8		8
09.03.2015	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus			14		14
09.03.2015	4	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
09.03.2015	4	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		3	2		5
09.03.2015	4	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	4				4
09.03.2015	4	Treatment	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	1				1
09.03.2015	4	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			2		2
09.03.2015	4	Treatment	AZ	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	4	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
09.03.2015	4	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
09.03.2015	4	Treatment	UR	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
09.03.2015	4	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	2				2
09.03.2015	4	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	1				1
09.03.2015	4	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			19		19
09.03.2015	4	Treatment	UR	Diptera	SIMULIIDAE	Simulium			3		3
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			25		25
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			6		6
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			10		10
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			6		6
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
09.03.2015	4	Treatment	UR	Ephemeroptera	BAETIDAE	Centroptilum			1		1
09.03.2015	4	Treatment	UR	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	3				3
09.03.2015	4	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
09.03.2015	4	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			3		3
09.03.2015	4	Treatment	UR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	4	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			3		3
09.03.2015	4	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			1		1
09.03.2015	4	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	4				4
09.03.2015	4	Treatment	P1	Coleoptera	ELMIDAE	Esolus lv.	1				1
09.03.2015	4	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae			29		29
09.03.2015	4	Treatment	P1	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	4	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			3	13	16
09.03.2015	4	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			7		7
09.03.2015	4	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
09.03.2015	4	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	4	Treatment	P1	Ephemeroptera	BAETIDAE	Centroptilum			1		1
09.03.2015	4	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	4	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
09.03.2015	4	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
09.03.2015	4	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			3		3
09.03.2015	4	Treatment	P1	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
09.03.2015	4	Treatment	P1	Trichoptera	HYDROPTILIDAE	Hydroptila			1		1
09.03.2015	4	Treatment	P1	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.			1		1
09.03.2015	4	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	2				2
09.03.2015	4	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	1				1
09.03.2015	4	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae			7		7
09.03.2015	4	Treatment	P2	Diptera	SIMULIIDAE	Simulium			3		3
09.03.2015	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			2		2
09.03.2015	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
09.03.2015	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis alpinus			2		2
09.03.2015	4	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
09.03.2015	4	Treatment	P2	Ephemeroptera	HEPTAGENIIDAE	Epeorus			1		1
09.03.2015	4	Treatment	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		1			1
09.03.2015	4	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			16		16
09.03.2015	4	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			1		1
09.03.2015	4	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis rhodani			1		1
09.03.2015	4	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis muticus			2		2
09.03.2015	4	Treatment	DR	Ephemeroptera	BAETIDAE	Centroptilum			1		1
09.03.2015	4	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			2		2
09.03.2015	4	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	4	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	5				5
09.03.2015	4	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.		2	1		3
09.03.2015	4	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	31				31
09.03.2015	4	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	21				21
09.03.2015	4	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	14				14
09.03.2015	4	Treatment	Rest	Coleoptera	ELMIDAE	Limnius lv.	1				1
09.03.2015	4	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	3				3
09.03.2015	4	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	8				8
09.03.2015	4	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		20	409		429
09.03.2015	4	Treatment	Rest	Diptera	SIMULIIDAE	Simulium		6	20		26
09.03.2015	4	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
09.03.2015	4	Treatment	Rest	Diptera	ATHERICIDAE	Atherix ibis		2			2
09.03.2015	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			792		792
09.03.2015	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		9	112		121

09.03.2015	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus		2	12		14
09.03.2015	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		5	26		31
09.03.2015	4	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		1	7		8
09.03.2015	4	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		4	9		13
09.03.2015	4	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		1	22		23
09.03.2015	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			3		3
09.03.2015	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		4			4
09.03.2015	4	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1			1
09.03.2015	4	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	3				3
09.03.2015	4	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	6				6
09.03.2015	4	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	3				3
09.03.2015	4	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	2				2
09.03.2015	4	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
09.03.2015	4	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	4				4
09.03.2015	4	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			134		134
09.03.2015	4	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		2	1		3
09.03.2015	4	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		4	7		11
09.03.2015	4	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla		2	3		5
09.03.2015	4	Treatment	Rest	Plecoptera	PERLODIDAE	Dictyogenus		1			1
09.03.2015	4	Treatment	Rest	Plecoptera	PERLIDAE	Dinocras		1			1
09.03.2015	4	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			42		42
09.03.2015	4	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		6	43		49
09.03.2015	4	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			63		63
09.03.2015	4	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			4		4
09.03.2015	4	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			5		5
09.03.2015	4	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1			1
09.03.2015	4	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		49			49
09.03.2015	4	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		4			4
09.03.2015	4	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophilidae			2		2
09.03.2015	4	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Limnephilidae		1			1
09.03.2015	4	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus			3		3
09.03.2015	5	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.	1				1
09.03.2015	5	Treatment	AZ	Coleoptera	ELMIDAE	Riolus lv.	1				1
09.03.2015	5	Treatment	AZ	Coleoptera	DYTISCIDAE	Platambus ad.	1				1
09.03.2015	5	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae		2	20		22
09.03.2015	5	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		5	14		19
09.03.2015	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			39	2	41
09.03.2015	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani			11		11
09.03.2015	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			2	2	4
09.03.2015	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus		3	8		11
09.03.2015	5	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri		1	2		3
09.03.2015	5	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1			1
09.03.2015	5	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
09.03.2015	5	Treatment	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
09.03.2015	5	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	5	Treatment	UR	Coleoptera	ELMIDAE	Riolus ad.	1				1
09.03.2015	5	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.	1				1
09.03.2015	5	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.	2				2
09.03.2015	5	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae			20		20
09.03.2015	5	Treatment	UR	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.			9		9
09.03.2015	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani		3	2		5
09.03.2015	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
09.03.2015	5	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus		1	1		2
09.03.2015	5	Treatment	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
09.03.2015	5	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
09.03.2015	5	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			2		2
09.03.2015	5	Treatment	UR	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	5	Treatment	UR	Trichoptera	HYDROPTILIDAE	Hydroptila			2		2
09.03.2015	5	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae		1	2		3
09.03.2015	5	Treatment	UR	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			1		1
09.03.2015	5	Treatment	P1	Coleoptera	ELMIDAE	Riolus ad.	1				1
09.03.2015	5	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.	2				2
09.03.2015	5	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae		5	23		28
09.03.2015	5	Treatment	P1	Diptera	SIMULIIDAE	Simulium			5		5
09.03.2015	5	Treatment	P1	Diptera	LIMONIIDAE	Antocha			1		1
09.03.2015	5	Treatment	P1	Diptera	EMPIDIDAE	Hemerodromia			1		1
09.03.2015	5	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			8		8
09.03.2015	5	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani			2		2
09.03.2015	5	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus		1			1
09.03.2015	5	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
09.03.2015	5	Treatment	P1	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	2				2
09.03.2015	5	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			4		4
09.03.2015	5	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
09.03.2015	5	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			1		1
09.03.2015	5	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
09.03.2015	5	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		4			4
09.03.2015	5	Treatment	P2	Coleoptera	ELMIDAE	Riolus ad.	1				1
09.03.2015	5	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.	1				1
09.03.2015	5	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae		3	5		8

09.03.2015	5	Treatment	P2	Diptera	LIMONIIDAE	Antocha		1			1
09.03.2015	5	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			5		5
09.03.2015	5	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis rhodani		1	1		2
09.03.2015	5	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis muticus			1		1
09.03.2015	5	Treatment	P2	Plecoptera	NEMOURIDAE	Amphinemura			5		5
09.03.2015	5	Treatment	P2	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		1			1
09.03.2015	5	Treatment	P2	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		1			1
09.03.2015	5	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae		2	11		13
09.03.2015	5	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis muticus		1	1		2
09.03.2015	5	Treatment	DR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
09.03.2015	5	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	5	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.	81				81
09.03.2015	5	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.	2				2
09.03.2015	5	Treatment	Rest	Coleoptera	ELMIDAE	Elmis ad.	1				1
09.03.2015	5	Treatment	Rest	Coleoptera	ELMIDAE	Limnius ad.	1				1
09.03.2015	5	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.	12				12
09.03.2015	5	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.	28				28
09.03.2015	5	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.	18				18
09.03.2015	5	Treatment	Rest	Crustacea	ASELLIDAE	Asellus aquaticus	5				5
09.03.2015	5	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum	1				1
09.03.2015	5	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		11	136		147
09.03.2015	5	Treatment	Rest	Diptera	SIMULIIDAE	Simulium		2	4		6
09.03.2015	5	Treatment	Rest	Diptera	LIMONIIDAE	Antocha		1	1		2
09.03.2015	5	Treatment	Rest	Diptera	TIPULIDAE	Tipulidae		1			1
09.03.2015	5	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			1		1
09.03.2015	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			215	17	232
09.03.2015	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		5	49		54
09.03.2015	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus		1	14		15
09.03.2015	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		2	7		9
09.03.2015	5	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		3	2		5
09.03.2015	5	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		1			1
09.03.2015	5	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1	2		3
09.03.2015	5	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta		1	8		9
09.03.2015	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		16	4		20
09.03.2015	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		3	4		7
09.03.2015	5	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		1	3	1	5
09.03.2015	5	Treatment	Rest	Ephemeroptera	EPHEMERELLIDAE	Ephemerella major			1		1
09.03.2015	5	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	1				1
09.03.2015	5	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	1				1
09.03.2015	5	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	1				1
09.03.2015	5	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
09.03.2015	5	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	2				2
09.03.2015	5	Treatment	Rest	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1
09.03.2015	5	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
09.03.2015	5	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura			85		85
09.03.2015	5	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		2	5		7
09.03.2015	5	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		4	8		12
09.03.2015	5	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla			2		2
09.03.2015	5	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			11		11
09.03.2015	5	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			40		40
09.03.2015	5	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		7	23		30
09.03.2015	5	Treatment	Rest	Trichoptera	LEPTOCERIDAE	Oecetis lacustris			1		1
09.03.2015	5	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
09.03.2015	5	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostomatidae			1		1
09.03.2015	5	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae		6	37		43
09.03.2015	5	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		44			44
09.03.2015	5	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			7		7
09.03.2015	5	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		4			4
09.03.2015	5	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1			1
09.03.2015	6	Treatment	AZ	Coleoptera	ELMIDAE	Riolus lv.			1		1
09.03.2015	6	Treatment	AZ	Coleoptera	SCIRTIDAE	Scirtidae lv.			2	1	3
09.03.2015	6	Treatment	AZ	Coleoptera	GYRINIDAE	Orectochilus lv.		2	3		5
09.03.2015	6	Treatment	AZ	Diptera	CHIRONOMIDAE	Chironomidae		5	14		19
09.03.2015	6	Treatment	AZ	Diptera	SIMULIIDAE	Simulium		2	10		12
09.03.2015	6	Treatment	AZ	Diptera	LIMONIIDAE	Antocha		1			1
09.03.2015	6	Treatment	AZ	Ephemeroptera	HEPTAGENIIDAE	Epeorus		1			1
09.03.2015	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis juv.			80	31	111
09.03.2015	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis rhodani		5	24		29
09.03.2015	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis muticus			14		14
09.03.2015	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis alpinus		2	13		15
09.03.2015	6	Treatment	AZ	Ephemeroptera	BAETIDAE	Baetis lutheri		5	1		6
09.03.2015	6	Treatment	AZ	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			3		3
09.03.2015	6	Treatment	AZ	Plecoptera	NEMOURIDAE	Amphinemura			9		9
09.03.2015	6	Treatment	AZ	Plecoptera	PERLODIDAE	Isoperla			5		5
09.03.2015	6	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita			1		1
09.03.2015	6	Treatment	AZ	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1			1
09.03.2015	6	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		1			1
09.03.2015	6	Treatment	AZ	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			4		4
09.03.2015	6	Treatment	AZ	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			1		1
09.03.2015	6	Treatment	AZ	Hydrachnidia	[Ph:Hydrachnidia]	Hydrachnidia	1				1

09.03.2015	6	Treatment	UR	Coleoptera	ELMIDAE	Riolus lv.			5		5
09.03.2015	6	Treatment	UR	Coleoptera	ELMIDAE	Elmis lv.			2		2
09.03.2015	6	Treatment	UR	Coleoptera	SCIRTIDAE	Scirtidae lv.			1		1
09.03.2015	6	Treatment	UR	Coleoptera	GYRINIDAE	Orectochilus lv.		1			1
09.03.2015	6	Treatment	UR	Diptera	CHIRONOMIDAE	Chironomidae		2	23		25
09.03.2015	6	Treatment	UR	Diptera	SIMULIIDAE	Simulium			5		5
09.03.2015	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis juv.				8	8
09.03.2015	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis rhodani			8		8
09.03.2015	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis muticus			4		4
09.03.2015	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis alpinus			1		1
09.03.2015	6	Treatment	UR	Ephemeroptera	BAETIDAE	Baetis lutheri			1		1
09.03.2015	6	Treatment	UR	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			2		2
09.03.2015	6	Treatment	UR	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			6		6
09.03.2015	6	Treatment	UR	Plecoptera	NEMOURIDAE	Amphinemura			11		11
09.03.2015	6	Treatment	UR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			9		9
09.03.2015	6	Treatment	UR	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			2		2
09.03.2015	6	Treatment	P1	Coleoptera	ELMIDAE	Riolus lv.			2	4	6
09.03.2015	6	Treatment	P1	Coleoptera	ELMIDAE	Elmis lv.			1		1
09.03.2015	6	Treatment	P1	Coleoptera	GYRINIDAE	Orectochilus lv.		1	2		3
09.03.2015	6	Treatment	P1	Coleoptera	ELMIDAE	Elmis ad.			1		1
09.03.2015	6	Treatment	P1	Diptera	CHIRONOMIDAE	Chironomidae		1	23		24
09.03.2015	6	Treatment	P1	Diptera	SIMULIIDAE	Simulium		1	3		4
09.03.2015	6	Treatment	P1	Diptera	EMPIDIDAE	Hemerodromia			1		1
09.03.2015	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis juv.			1	12	13
09.03.2015	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis rhodani		1	4		5
09.03.2015	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis muticus			5		5
09.03.2015	6	Treatment	P1	Ephemeroptera	BAETIDAE	Baetis alpinus		1	9		10
09.03.2015	6	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			1		1
09.03.2015	6	Treatment	P1	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
09.03.2015	6	Treatment	P1	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
09.03.2015	6	Treatment	P1	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			1		1
09.03.2015	6	Treatment	P1	Plecoptera	NEMOURIDAE	Amphinemura			8		8
09.03.2015	6	Treatment	P1	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	6	Treatment	P1	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis			1		1
09.03.2015	6	Treatment	P1	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			6		6
09.03.2015	6	Treatment	P1	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			2		2
09.03.2015	6	Treatment	P1	Plecoptera	NEMOURIDAE	Nemoura/Nemurella			1		1
09.03.2015	6	Treatment	P2	Coleoptera	ELMIDAE	Riolus lv.				1	1
09.03.2015	6	Treatment	P2	Coleoptera	ELMIDAE	Elmis lv.				1	1
09.03.2015	6	Treatment	P2	Coleoptera	SCIRTIDAE	Scirtidae lv.				1	1
09.03.2015	6	Treatment	P2	Diptera	CHIRONOMIDAE	Chironomidae		2	19		21
09.03.2015	6	Treatment	P2	Diptera	SIMULIIDAE	Simulium			2		2
09.03.2015	6	Treatment	P2	Ephemeroptera	BAETIDAE	Baetis juv.			3	9	12
09.03.2015	6	Treatment	P2	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta	2				2
09.03.2015	6	Treatment	P2	Plecoptera	LEUCTRIDAE	Leuctra			1		1
09.03.2015	6	Treatment	P2	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		1	1		2
09.03.2015	6	Treatment	DR	Diptera	CHIRONOMIDAE	Chironomidae			5		5
09.03.2015	6	Treatment	DR	Diptera	SIMULIIDAE	Simulium			1		1
09.03.2015	6	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis juv.			7	2	9
09.03.2015	6	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis rhodani		1			1
09.03.2015	6	Treatment	DR	Ephemeroptera	BAETIDAE	Baetis muticus			3		3
09.03.2015	6	Treatment	DR	Plecoptera	NEMOURIDAE	Amphinemura			1		1
09.03.2015	6	Treatment	DR	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae			2		2
09.03.2015	6	Treatment	Rest	Coleoptera	ELMIDAE	Riolus lv.			32		32
09.03.2015	6	Treatment	Rest	Coleoptera	ELMIDAE	Elmis lv.			25	2	27
09.03.2015	6	Treatment	Rest	Coleoptera	SCIRTIDAE	Scirtidae lv.			34	2	36
09.03.2015	6	Treatment	Rest	Coleoptera	GYRINIDAE	Orectochilus lv.		4			4
09.03.2015	6	Treatment	Rest	Coleoptera	ELMIDAE	Esolus lv.			1		1
09.03.2015	6	Treatment	Rest	Coleoptera	ELMIDAE	Riolus ad.			3		3
09.03.2015	6	Treatment	Rest	Coleoptera	HYDRAENIDAE	Hydraena ad.			1		1
09.03.2015	6	Treatment	Rest	Coleoptera	HALIPLIDAE	Haliplus lv.			1		1
09.03.2015	6	Treatment	Rest	Crustacea	GAMMARIDAE	Gammarus fossarum		2			2
09.03.2015	6	Treatment	Rest	Diptera	CHIRONOMIDAE	Chironomidae		6	140		146
09.03.2015	6	Treatment	Rest	Diptera	SIMULIIDAE	Simulium			5		5
09.03.2015	6	Treatment	Rest	Diptera	LIMONIIDAE	Antocha			1		1
09.03.2015	6	Treatment	Rest	Diptera	EMPIDIDAE	Hemerodromia			2		2
09.03.2015	6	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Epeorus		2	3		5
09.03.2015	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis juv.			202	42	244
09.03.2015	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis rhodani		8	144		152
09.03.2015	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis muticus			109	13	122
09.03.2015	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis alpinus		2	20		22
09.03.2015	6	Treatment	Rest	Ephemeroptera	BAETIDAE	Baetis lutheri		1	5		6
09.03.2015	6	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habrophlebia lauta			30		30
09.03.2015	6	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Paraleptophlebia		1			1
09.03.2015	6	Treatment	Rest	Ephemeroptera	LEPTOPHLEBIIDAE	Habroleptoides		2	2		4
09.03.2015	6	Treatment	Rest	Ephemeroptera	EPHEMERIDAE	Ephemera danica		1			1
09.03.2015	6	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Rhithrogena		3	30		33
09.03.2015	6	Treatment	Rest	Ephemeroptera	HEPTAGENIIDAE	Ecdyonurus		4	3	1	8
09.03.2015	6	Treatment	Rest	Gastropoda	PLANORBIDAE	Ancylus fluviatilis	5				5
09.03.2015	6	Treatment	Rest	Gastropoda	LYMNAEIDAE	Radix	1				1

09.03.2015	6	Treatment	Rest	Gastropoda	HYDROBIIDAE	Bythinella	1				1
09.03.2015	6	Treatment	Rest	Gastropoda	PLANORBIDAE	Planorbis	6				6
09.03.2015	6	Treatment	Rest	Hirudinea	ERPOBDELLIDAE	Erpobdella	1				1
09.03.2015	6	Treatment	Rest	Oligochaeta	LUMBRICIDAE	Eiseniella		3			3
09.03.2015	6	Treatment	Rest	Oligochaeta	[Kl:Oligochaeta]	Oligochaeta			19		19
09.03.2015	6	Treatment	Rest	Plecoptera	NEMOURIDAE	Amphinemura		21	99		120
09.03.2015	6	Treatment	Rest	Plecoptera	LEUCTRIDAE	Leuctra		2	11		13
09.03.2015	6	Treatment	Rest	Plecoptera	PERLODIDAE	Isoperla		7	5		12
09.03.2015	6	Treatment	Rest	Plecoptera	NEMOURIDAE	Nemoura/Nemurella		7	1		8
09.03.2015	6	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsyche incognita		39			39
09.03.2015	6	Treatment	Rest	Trichoptera	LIMNEPHILIDAE	Allogamus auricollis		10	23	1	34
09.03.2015	6	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropus flavomaculatus		2			2
09.03.2015	6	Treatment	Rest	Trichoptera	POLYCENTROPODIDAE	Polycentropodidae			5		5
09.03.2015	6	Treatment	Rest	Trichoptera	HYDROPSYCHIDAE	Hydropsychidae		6	37		43
09.03.2015	6	Treatment	Rest	Trichoptera	BRACHYCENTRIDAE	Micrasema setiferum ssp.			30		30
09.03.2015	6	Treatment	Rest	Trichoptera	HYDROPTILIDAE	Hydroptila			6		6
09.03.2015	6	Treatment	Rest	Trichoptera	RHYACOPHILIDAE	Rhyacophila s. Str.		1			1
09.03.2015	6	Treatment	Rest	Trichoptera	LEPIDOSTOMATIDAE	Lepidostoma hirtum			1		1
09.03.2015	6	Treatment	Rest	Trichoptera	SERICOSTOMATIDAE	Sericostomatidae				1	1

List of Figures

List of Tables