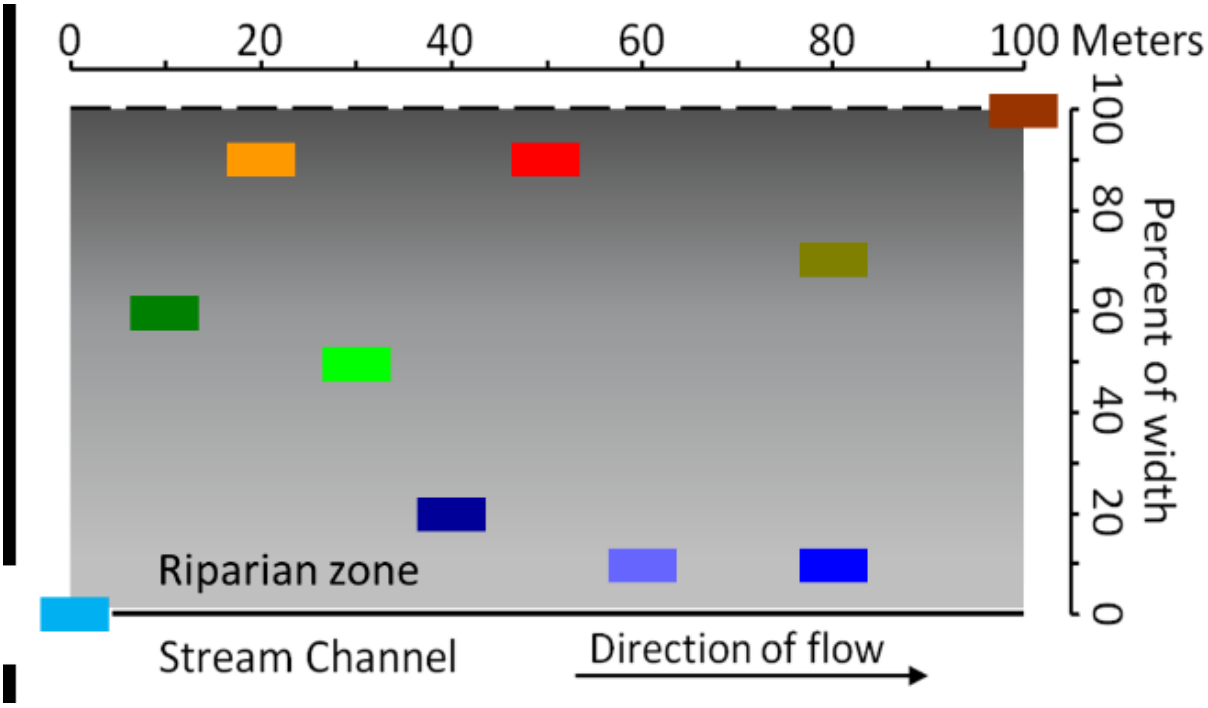
Monitoring protocol for riparian habitats in tributaries of the Vindel River

Ten sites were selected for demonstration restoration and another ten were chosen as reference sites. To monitor how the plant species composition in riparian areas was affected by demonstration restoration compared to a reference situation consisting of best practice restoration, we located a plot ranging 100 m in the middle of each restored reach encompassing the entire width of the riparian zone. We then located and marked permanently ten vegetation subplots in each of these plots in the 10 + 10 reaches, following the distribution given in the illustration below. Each subplot measured 0.5 x 1 m. In total, there were 200 subplots.



We visited the sites in August 2013 and 2014. We used a lace to delimit each subplot and noted all vascular plant species present. The listing of all species was made in such a way that the results could later be compiled in a table showing the existence of every individual plant in every subplot.

In August 2014, we also carefully investigated the whole 100-m long reach and wrote down all the vascular plant species present in each reach. This provided a large-scale measure of plant diversity in addition to the small-scale information received from the subplots.

The method chosen, working with permanent plots at two different scales, proved to be reliable and practical and is recommended for further monitoring of riparian plants in the restored reaches.