



Dispersal of the invasive plant *Mimulus guttatus* and the role of high flow events

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Increased occurrence of high-flow events as a result of climate change may affect the dispersal success of an invasive plant species *Mimulus guttatus* and may result in range expansion. Predicted changes in climate point to a continuation of the recent observed trends in increased precipitation and high-flow events in Northern Europe. The poster focusses on the dispersal characteristics of *M. guttatus*, and especially the roles of vegetative fragmentation with increasing water velocities, subsequent fragment survival, regeneration and colonization, as well the buoyancy, survival and germination success of seeds. Results have shown that the rate of spread of *M. guttatus* into inundation communities along rivers is likely to increase with more frequent high-flow events, especially if these coincide with the growing season. Thus, predicting the response of riparian invasive species to environmental change requires not only an understanding of the role of climate in plant demography but also the impact of changes in hydrology in rates of spread.