

## MOSQUITOES (DIPTERA: CULICIDAE) IN THE CAPITAL OF THE CZECH REPUBLIC

FRANTIŠEK RETTICH AND MARTIN KULMA

National Institute of Public Health, Šrobárova 48, Prague 10, 142 00, Czech Republic

**Abstract** The occurrence of mosquitoes in Prague sub urban forests, gardens, parks, recreation areas, golf courses etc. was compared between flood and non-flood years. The monitoring was based on mosquito larvae collection and mosquito female catch by CO<sub>2</sub> traps. No massive larval populations of the anthropophilic species of flood mosquitoes (*Aedes vexans* or *Ae. sticticus*) appeared even after catastrophic floods (in 2002, 2006, and 2013). On the contrary, in drying out flood lagoons with water polluted by decaying vegetation, larvae of the mostly ornitophilic species *Culex pipiens/torrentium* hatched. No larviciding (often required by local authorities) was performed. In non-flood years, scarce populations of snow melt mosquitoes appeared regularly in remnants of natural habitats, with *Ae. cantans* being the dominant species. But rapid urbanization (fast spreading of the urban environment) caused the disappearance of many natural breeding sites. Some rare species recorded in the last two decades of the last century have not been collected again (*Ae. pulchritarsis*, *Ae. flavescens*, *Coquillettidia richiardii*, *Culiseta alaskaensis*, etc.). Of the sibling species *Cx. pipiens* and *Cx. torrentium*, it has been the latter that prevailed in most of the natural breeding sites. The breeding sites of an autogenous, anthropophilic form of *Cx. pipiens* (*molestus*), which was frequently detected in flooded basements in Prague in the second half of the last century, have gradually disappeared owing to improved maintenance of buildings. *Cx. modestus* (a new species to Prague) larvae were caught on the edge of flooded meadows in the southern outskirts of Prague in 2013. *Culex* spp. females dominated in most of the CO<sub>2</sub> trap catches. No invasive mosquito species have been recorded yet. Data from the first half of 2017 will be added to the poster.