The “post-industrial biology” is very popular scientific discipline nowadays, and the Aculeata is very progressive group for research on post-industrial sites. In the past several years, some species have returned to fauna of the Czech Republic with rediscovery of vital populations at post-industrial sites. Especially the case of regionally extinct digger wasp *Bembix tarsata* found in 1990’s at brown coal spoil heaps at Mostecko region in north Bohemia, is a representative case.

We have studied several post-industrial sites with different aims. The survey on 50 sandpits in the Czech Republic showed that these biotopes host broad spectrum of the Aculeata dependent on early-succession stages with bare patches of sand. Some species prefer active quarrying, such as *Andrena barbilabris*. On the contrary, no species showed affinity to reclaimed sites. Populations of sandy biotope species are decreasing in Central Europe, especially those specialized on flying and moving sands occurring at the natural biotopes known as sand dunes. Ash coal deposits, which seem to host similar species diversity as natural sand dunes, could represent a possible replacement of this rare biotope. Very rare sand specialists, including new species for Bohemian part of the Czech Republic, were discovered on different ash coal deposits. The bad news are that reclamations destroy all habitat potential of ash coal deposits.

The survey on wildfire sites in north Bohemia showed that various species and groups of the Aculeata are able to inhabit very quickly the burned sites and the highest diversity of species is three to five years after the fire, before the site gets much overgrown by herbs and pioneer trees. Some unique species recently recorded only here were found at these burned sites at Jetřichovice.

We also prepare to publish the survey results of other post-industrial sites: road embankments, motocross racing fields, brown coal spoil heaps, and vertical sand walls.

Published studies:

Heneberg P., Bogusch P., Řehounek J. 2013: Sandpits provide critical refuge for bees and wasps (Hymenoptera: Apocrita). *Journal of Insect Conservation*, **17**: 473-490.

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Tropek, R., Cerna, I., Straka, J., Cizek, O. & Konvicka, M. 2013: Is coal combustion the last chance for vanishing insects of inland drift sand dunes in Europe? *Biological Conservation* **162**: 60–64. DOI: 10.1016/j.biocon.2013.03.027

Tropek R., Cerna I., Straka J. Kadlec T., Pech P., Tichanek F. & Sebek P. 2014: Restoration management of fly ash deposits crucially influence their conservation potential for terrestrial arthropods. *Ecological Engineering* **73**: 45–52. DOI: 10.1016/j.ecoleng.2014.09.011