

Spiders along a pollution gradient (Araneae)

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Abstract: Thirty-one species were found during a study of the ground-living spiders at a distance of 2.5-30 km from a smelter, in Monchegorsk (Kola Peninsula, Russia). Three species were found in an industrial barren 2.5-5 km from the smelter. Two of them, *Steatoda phalerata* and *Agyneta gulosa*, were caught at the 2.5 km site. Eight species were collected in a heavily polluted area, 10 km from the smelter. Eighteen species were found both at the 20 km and 30 km sites. The spider assemblage in a slightly damaged spruce forest, 30 km S of the smelter complex, was more or less typical for the northern taiga forest-floor. Spider densities were very low (3-6 ind./sq.m.) at heavily polluted sites, and close to normal magnitude of northern conifer forests (60 ind./sq.m) at the 30 km site.

Key words: industrial barren, heavy metals, smelter, sulphur dioxide, taiga, Kola Peninsula