

# Short-term effects of farming practices on populations of common voles

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## Abstract

Management decreases rodent numbers through reduction of vegetation height and cover along fence lines and other refuge habitats. Most farming practices remove vegetation and the short-term impact of mowing, mulching, harvesting and ploughing was studied on common voles (*Microtus arvalis*). Population dynamics and demographic parameters were estimated by live trapping before, and after farming practices were carried out. A gradient of disturbance according to the reduction of vegetation height, vegetation cover and nest sites is proposed. Estimates of vegetation height and vegetation cover before, and after farming practices fitted the model as well as the population response. It is concluded that only ploughing can suppress common vole populations the other farming practices being inappropriate to control pest rodents.

**Author Keywords:** Disturbance; Land use; *Microtus arvalis*; Pest rodent control; Population density; Reproduction

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