

Pre- and post-harvest movements of female rice-field rats in West Javanese rice fields

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Abstract. This study examined changes in the spatial behaviour of rice-field rats (*Rattus argentiventer*) associated with the harvest of lowland irrigated rice. Radio-collared female rice-field rats were tracked before and after harvest in rice fields in West Java, Indonesia. The rice-field rats clearly reacted to the changes in habitat structure caused by the harvest by relocating their home ranges on average 300–400 m to piles of rice straw left on the fields and to unharvested areas. Post-harvest, there was a decrease in home-range size of 67% (0.6 ha pre-harvest; 0.2 ha post-harvest) and a decrease in range span of 35% (139 m pre-harvest; 90 m post-harvest), which may indicate an immediate response to predation risk. Most rats remained in the rice fields for 2–3 weeks post-harvest. This contrasts to their pre-harvest preference for refuge habitats near the margins of crops.