

ABSTRACT: Apart from foraging conditions and predation pressure, which are often studied as the main factors causing ecological edge effects, we sought to clarify the boundary nature of edges beyond which animals cannot move any farther. To simulate animal groups interacting with one another, we made an agent-based model in a computational space. Assuming no predation pressure, we change the resource conditions between the habitat (comprising ‘interior’ and ‘edges’) and the ‘exterior.’ The results are robust. When the group density is high throughout the habitat, large groups tend to frequent the edges (*i.e.*, the boundaries between the interior and exterior) even if food resources are scarce in the exterior. When the group density is high and the group size variation is small, both the size of groups at the edges and their densities increase. These findings are discussed with reference to primates, particularly Japanese macaques, *Macaca fuscata*, as an example of group-living animals.