Ecology of peccaries and feral pigs

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Niche partitioning among white-lipped peccaries (
tayassu pecari
), collared peccaries (
pecari tajacu
),and feral pigs (
sus scrofa
) Arnaud Leonard, Jean Desbiez, Sandra Aparecida Santos, Alexine Keuroghlian, Richard Ernest Bodme

Abstract

The introduction of a species into an ecosystem with species already occupying a similar trophic level is predicted to lead to a high degree of niche overlap. The feral pig (Sus scrofa), one of the world?s worst invasive species, was introduced to the Pantanal about 200 years ago and is thought to compete with the native white-lipped peccary (Tayassu pecari) and collared peccary (Pecari tajacu). Resource partitioning between the 3 species was examined, including analysis of fruit items and plants in fecal samples as well as encounter rates in different habitats, to help generate hypotheses about competitive interactions among the species. Overlaps in food resources and habitatuse between feral pigs and peccaries were found to be lower than expected. In fact, niche overlap was highest between the native species. Results indicate that currently, feral pigs are not ad irect threat to the native peccaries in the study area. Differences in morphology and behavior indicate possible mechanisms of niche partitioning between the species. Feral pigs may, nevertheless, impact the wildlife community in other ways as predators of eggs, by destruction of vegetation through rooting, or by functioning as disease reservoirs. Cattle-ranching activities may favor feral pigs and the current anthropogenic changes in the landscape could lead to changes incompetitive dynamics between feral pigs and native species.

Keywords: competition, frugivore, introduced species, niche overlap, Pantanal, Pecari tajacu, peccary, resource partitioning, Sus scrofa, Tayassu pecari

Oui