

Conflicting effects of invasive common mynas (*Acridotheres tristis*) on foraging and nesting behaviors of native house sparrows

Although the Common myna is an aggressive species that was introduced to many parts of the world, relatively little is known about its influence on the behavior and breeding success of native species. This study examines the influence of the presence of mynas on the foraging and nesting behaviors of House sparrows in the field and in captivity. Using a video camera the vigilance of foraging sparrows was quantified in the presence and absence of mynas. Additionally, an experiment in aviaries which examined the sparrow's preference to forage alongside mynas, doves (as a control) or other sparrows was conducted. The influence of mynas on the nesting behavior of sparrows was also examined by placing Myna or dove decoys near sparrow's nests while the nestlings were being fed. Surprisingly, in the field, sparrows that foraged alongside mynas were less vigilant and spent more time foraging than sparrows that foraged without mynas. Furthermore, in aviary experiments, the sparrows preferred to forage alongside mynas. On the other hand, when presented near the sparrow nest, the myna's decoy decreased nestlings feeding rate by the female, and male ceased feeding altogether. Thus, our results suggest that sparrows perceive their environment as safer when foraging alongside mynas, but treat mynas as potential nest predators when encountering them at the vicinity of the nest. Consequently, invasive mynas may improve the foraging success of native sparrows but reduce their breeding success.