Introduction

Research indicates that bird flocking behavior differs between urban and natural habitats, primarily due to variations in predation risk and food resources. Urban environments generally exhibit lower predation risk, leading to smaller and less compact flocks compared to rural counterparts (Carere et al., 2009). In high-risk areas, birds form larger, more compact flocks and increase vigilance behaviors (Barbosa, 1997).

Urban habitats often provide reliable food sources, resulting in more consistent foraging patterns and social networks among urban birds (Jones et al., 2019).

Starling flocking behavior differs between urban roosts with high and low predation risk, with larger and more compact flocks in the high-risk roost.

Aerial flocking patterns of wintering starlings, Sturnus vulgaris, under different predation risk

Starling flocking behavior differs between urban roosts with high and low predation risk, with larger and more compact flocks in the high-risk roost.

捕食風險高和低的城市棲息地之間的椋鳥群體行為有所不同，高風險棲息地的鳥群更大、更緊湊。

Foraging Behavior of Urban Birds: Are Human Commensals Less Sensitive to Predation Risk than their Nonurban Counterparts  
Urban birds like House Sparrows are less sensitive to predation risk than their nonurban counterparts when foraging.