

Hematological parameters and stress index in Rufous-collared Sparrows dwelling in urban environments

Ruiz, Gricelda

Rosenmann, Mario

Novoa, Francisco Fernando

Sabat, Pablo

A number of wild bird species have fortuitously incorporated themselves into urban life. One of these, the Rufous-collared Sparrow (*Zonotrichia capensis*), dwells with seemingly similar success in urban and rural areas. Nevertheless, we found that urban Rufous-collared Sparrows have lower body weight, higher blood glucose concentration, higher proportion of heterophils (H), lower proportion of lymphocytes (L), and consequently, a larger H:L stress index, than rural ones. After two weeks of captivity rural birds developed blood characteristics that resembled those of urban birds. These indices reveal typical primary (acute), and secondary (chronic) stress characteristics in the urban birds.