

ABSTRACT

In the ground squirrels, vigilant antipredator behaviour is frequently studied as a part of antipredator strategy. More vigilant animals have greater chances to avoid a predator attack. But it's also true, that animals allocating more time to vigilance, can allocate less time to foraging. There is obvious trade-off between vigilance and foraging. Ground squirrels, marmots and prairie dogs have to receive a lot of food to accumulate fat reserves for the hibernation period, and in case of juveniles also to ensure their growth. Therefore, they are forced to allocate time between aforementioned activities suitably. In view of the close relationship between vigilance and foraging, these two activities are often investigated together. The most important factors influencing aforementioned activities are number of simultaneously active individuals and presence of visual barriers. An affect has also age, sex and reproductive status of the individual or caloric content of the food. After the detection of a predator with the aid of vigilance, can be initiated escape response. Escape distance, escape velocity and escape behaviour in general are influenced especially by the type of predator, type of vegetation cover and individual distance from a burrow entrance. It is important that total energy costs of these activities must be lower than the benefits.