HUMAN DISTURBANCE AND LEPIDOPTERAN ACTIVITY IN MISSION TRAILS REGIONAL PARK

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Managers of national parks and reserves have serious concerns about the diversity of animals within the park. A manager's job is to promote coexistence between wildlife and people using the park. Little is known about how human activities affect insects use of reserves and parks. Thus effects of humans walking along maintained trails in Mission Trials Regional Park (MTRP) were examined. While no prior studies have examined insects, a long held belief is that direct approaches are more disturbing than indirect approaches for other animals. Some studies have found that direct approaches are more disturbing; while other studies have found that indirect approaches are more disturbing. The goal of this study was to determine the flight initiation distance of local butterfly species in MTRP with direct and indirect approaches to determine which approach is more disturbing. Analysis of the data found that *Apodemia virgulti* and some members of the *Lycaenidae* family are more sensitive to indirect approach, while *Junonia coenia* is similarly affected by both approaches. It is important to have an understanding of how animals react to spatial movement of humans because human activities could reduce the areas available for foraging and habitat use.