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Using Motion Sensor Cameras to Examine Wildlife Use of Water Bodies in the Northern Chihuahuan Desert

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Indio Mountains Research Station (IMRS), in the northern Chihuahuan Desert, contains only one natural, permanent spring but many man-made ephemerally-full tanks, both of which are presumably important for the survival of many species residing in that area. The goal of this study was to examine the utility of utilizing motion sensor cameras to monitor wildlife use of these water bodies, and to determine species-specific preferences for individual water bodies and temporal activity patterns. We installed motion sensor cameras at five different water bodies throughout IMRS. Preliminary results indicate that the dominant mammal visiting these water bodies is peccary (*Pecari tajacu*), which tend to visit the tanks at dawn and dusk. Squaw Spring, the only permanent water body in the area, had the most diversity of mammals, including mule deer (*Odocoileus hemionus*), bobcats (*Lynx rufus*) and grey foxes (*Urocyon cinereoargenteus*). Research on mammal activity in the desert is challenging due to the low density of animals and extreme environmental conditions. This study has illustrated the utility of motion sensor cameras to aid in this research, and has shown that both natural and man-made tanks are important for the survival of many species that reside in this area.