

# Motion Activated Auditory Deterrents to Prevent Wildlife Vehicular Collisions Along High-Density Wildlife Crossing

Yeary, Maegan (School: J.W. Nixon High School)

The purpose of this experiment is to engineer a device that could be placed into a real wildlife environment with the ability to deter wildlife from crossing roads to avoid wildlife vehicle collisions, and at the same time, conserve sound pollution and preserve a safe and natural environment by only playing sound when motion is detected. In order to test this project, the speaker/sensor was placed along the road way so that as a vehicle passes, motion is detected, and the speaker would play the frequency of sound to deter *O. virginianus* from the roadway. Data was recorded when the *O. virginianus* were exposed to motion created frequencies. In conclusion, my data was positive and the reactions to the frequencies deterred the wildlife from the roadways.