CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY

Name(s)

Kristen Schiavon; Addison Williams

Project Number

38323

Project Title

Can Odocoileus hemionus Adapt to Topography Changes within a Major Migratory Route?

Abstract

Objectives/Goals

Our objective is to prove that if you change the topography in a major migrator route for mule deer, they will adapt over time.

Methods/Materials

1. Check trail cameras
2. Remove cameras from security box
3. Check the battery percentage
4. Turn off the trail camera (the switch is in the corner to the top left).
5. Take out the four batteries (if below 50%) replace with (4) new batteries.
6. Put the used batteries into your backpack.
7. While the camera is off take out the SD Card (it is sticking up at the bottom left corner).
8. Take the new SD card from your backpack and insert it into the SD location on the camera.
9. Turn the camera back on.
10. Place the camera back into the security box facing the same direction
11. Lock the trail camera security box (make sure the trail camera is facing the proper direction).
12. Write the information in field log book.
13. Repeat for the remaining (59) trial cameras.
14. Once you have checked all of the trial cameras, take the SD cards collected and transfer all the images onto a flash drive.
15. Condense the camera images taken by the trial cameras 226 and 227 from years acquired onto a flash drive.
16. Begin evaluation and analysis of image data on flash drive containing trial camera 227 and 227 image data.
17. Once done logging all the images from all years, look at data to evaluate the numbers of deer walking all the way through the under crossing.
18. This information will help determine if deer movement is being manipulated or controlled by topography change to area and evaluate whether deer are adapting to the changes.

Results

Over time the mule deer were able to get use to the change in the topography and use the under crossing.

Conclusions/Discussion

After completing our investigation on whether a migratory meal deer herd movie can be manipulate or

Summary Statement

Our project is proving that if there is a major topographic change within a migratory mammals major travel route, they can and will adapt over time to reduce the number of fatal car collisions.

Help Received

Michael DeLasseux helped answer any questions on the undercrossing. Sara Holm answered any questions abut the deer herd.

Preliminary