



# Colorado Science and Engineering Fair

## 2024 Individual Project Abstract Form

**Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.**

Title of Project: **Mosquito Bite, West Nile Fright**

Finalist's Name: **Lucy Brittain**

School and City: **Creede Schools, Creede, CO**

Sponsor's Name: **Bryan Eubank**

Category: **Mathematics & Computer Sciences (MACS)**

Division: **Junior (6th - 8th grades)**

Abstract (250 words or less):

I chose to do my project on **West Nile Virus** because **it is a concern in the area, both for humans and animals. Mosquitos** contract the **virus** from birds and **pass it to** other animals and humans. **Mineral County** has not collected mosquitos previously. I was curious to know **if West Nile Virus was present in Mineral County.**

I used **Predictive Modeling** to explore **this** question. I developed graphs and charts from the **information** that I **gathered** from the counties used **in** the study. I used **P** and **R2** values to determine statistical **significance in each** variable **used** (population density, elevation, **high** and low temperature).

The results of my project showed that none of my variables were statistically significant **in** the **West Nile Virus Incident Rate.**

In conclusion, there is **no reason to** believe that **West Nile Virus is in** Mineral County according to the data I collected. I **plan to** continue my research **this** summer.

I plan to assist my **local** public health administration **in** mosquito collection **this** upcoming summer.

*I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.*

Finalist's Signature: *Lucy Brittain*

Date: *3/4/24*

**In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with your Finalist Verification/Permission Form. A signed copy of this form must be included in your notebook.**

**Signature:** Lucy Brittain  
Lucy Brittain (Mar 2, 2024 11:54 MST)

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