West Nile Virus and Climate Change

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Abstract

Introduction

Methodology

Historic Data

Data Introduction:

Summary Statistics

```
kable(summary_table)
```

Table 1: Table 1: Summary statistics of key variables related to WNV incidence.

Variable	Mean	SD
Temperature	20.5	5.2
Precipitation	50.2	12.4
Cases	10.3	3.8

Yearly Trends in WNV Cases

```
# Example plot (replace with actual data and plotting code)
main_trends_plot <- ggplot(summary_table, aes(x = Variable, y = Mean)) +
  geom_bar(stat = "identity") +
  ggtitle("Yearly WNV Cases Trends")

# Display plot
print(main_trends_plot)

# Save figure for the main manuscript in the specified directory
ggsave("/Users/ehardinparker/Desktop/Completed/CPH_Spring24/BIOS8060E/emmahardinparker-MADA-p
       plot = main_trends_plot,
       width = 8,
       height = 6,
       dpi = 300)
```

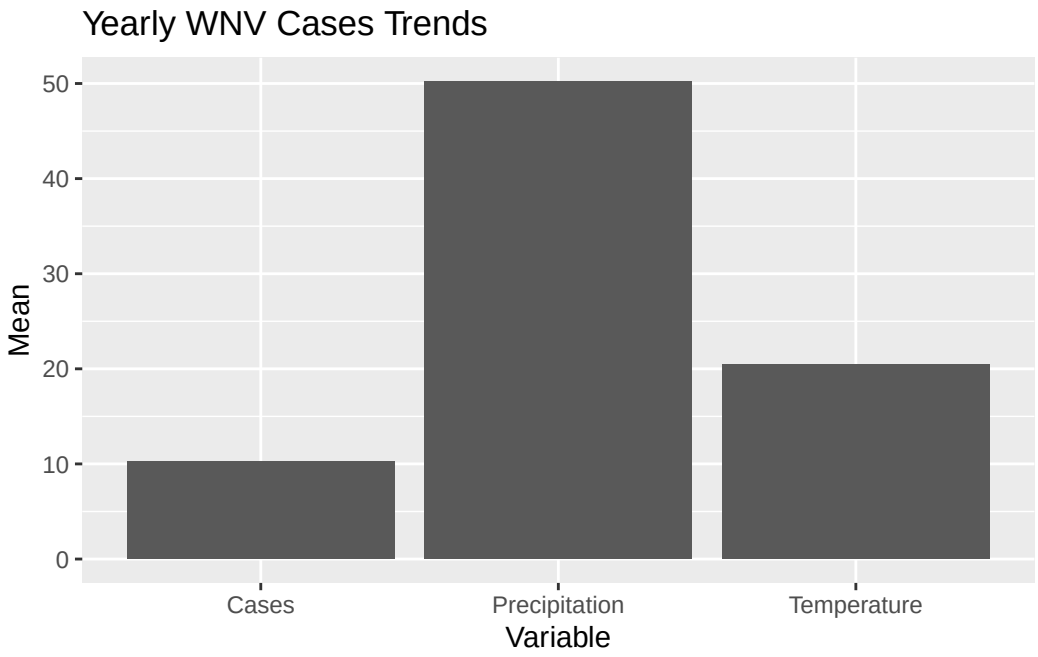

Figure 1: Figure 1: Yearly trends in reported WNV cases.

State-Specific Trends in WNV Cases

```
# Example plot (replace with actual data and plotting code)
state_trends_plot <- ggplot(summary_table, aes(x = Variable, y = SD)) +
  geom_line() +
  ggtitle("State-Specific WNV Cases Trends")

# Display plot
print(state_trends_plot)
```

```
`geom_line()`: Each group consists of only one observation.
i Do you need to adjust the group aesthetic?
```

```
# Save figure for supplemental materials in the specified directory
ggsave("/Users/ehardinparker/Desktop/Completed/CPH_Spring24/BIOS8060E/emmahardinparker-MADA-p
       plot = state_trends_plot,
       width = 8,
       height = 6,
       dpi = 300)
```

```
`geom_line()`: Each group consists of only one observation.
i Do you need to adjust the group aesthetic?
```

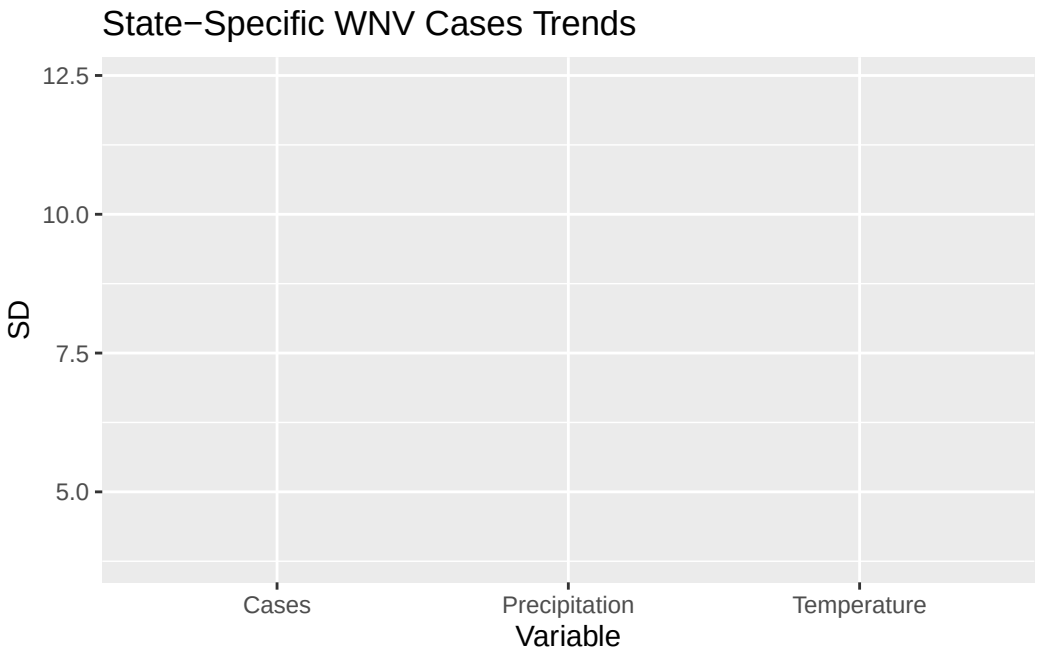

Figure 2: Figure 2: State-specific trends in reported WNV cases.

Results

Refer to Table 1 for descriptive statistics and Figure 1 for yearly trends. Additional state-specific trends can be found in Figure 2.

Discussion

Conclusion