## Practical 5

## Jumping Rivers

This practical is all about Methamphetamines! Yes, you read that right. Let's load in the data and necessary packages first

This is a dataset containing locations of real meth lab busts in the US. Take a look at the data to get a feel of it

Confession: I've made up the pounds\_seized column. Unfortunately the DEA don't give that kind of stuff out. However I've checked a couple of records and the numbers are within reason!

- 1. Using **leaflet**, create an interactive map of the locations of the meth lab busts. Hint: Use addCircles()
- 2. Try adding the argument radius = ~pounds\_seized to addCircles(). What happens?
- 3. Try colouring the points by the pounds seized. To do this, use the colourNumeric()
- 4. The problem with using colourNumeric() in this instance, is that the data is heavily skewed. If we look at a histogram of the pounds\_seized, there isn't many meth labs that had over 1000 pounds of meth seized

```
library("ggplot2")
ggplot(meth, aes(x = pounds_seized)) + geom_histogram()
```

5. We can set up a colour scheme such that we have discrete colours using colourBin(), like so

```
pal_size_bin = colorBin(palette = c("Green", "Yellow", "Orange", "Red"), domain = meth$pounds_seized,
    bins = c(0, 150, 300, 750, max(meth$pounds_seized)))
```

What colour scheme do you think we're using here?

- 6. Use the new colour scheme to colour the points
- 7. Add a legend to the plot

Solutions

```
vignette("solutions5", package = "jrSpatial")
```