

Animal movement simulation

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1 Generating individual animal step lengths data (utilization distribution)

Lengths generated from a gamma distribution

$$g(l'_{t,i}|b_1, b_2) = \frac{1}{\Gamma(b_1).b_1^{b_2}} . l'_{t,i}{}^{b_1-1} . e^{-\frac{l'_{t,i}}{b_2}}$$

```
b1 <- 10 ; b2 <- 10  
g <- rgamma(n = 100, scale = b1, shape = b2)
```

Dealing with turning angles

2 Defining