Transmitter experiments

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Abstract

Questions:

1. How do cases affect signal strength?

2. How does the number of tags in the water affect the proportion of received pings?

3. How accurate is Vemco's specification of ping rate and ping delay?

1   Results

1.1   Experiment 1 - effect of cases

See Figures 1- 3.
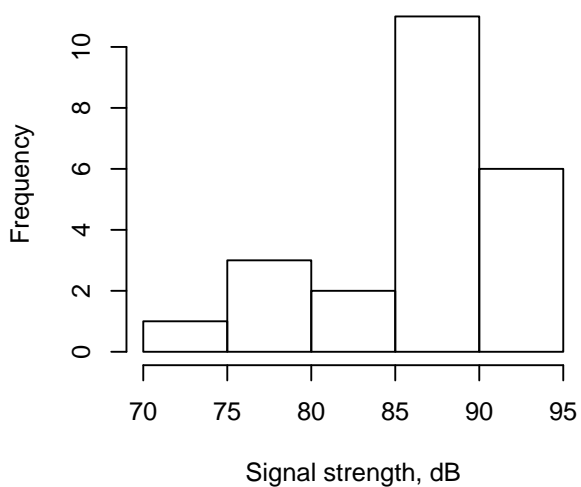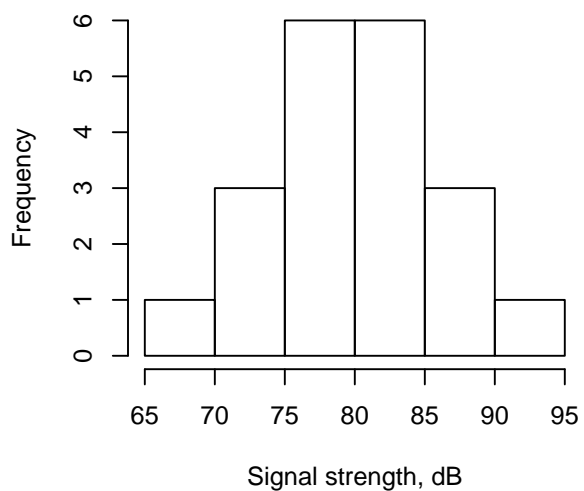
1.2   Experiment 2 - collisions

See Figure 4.

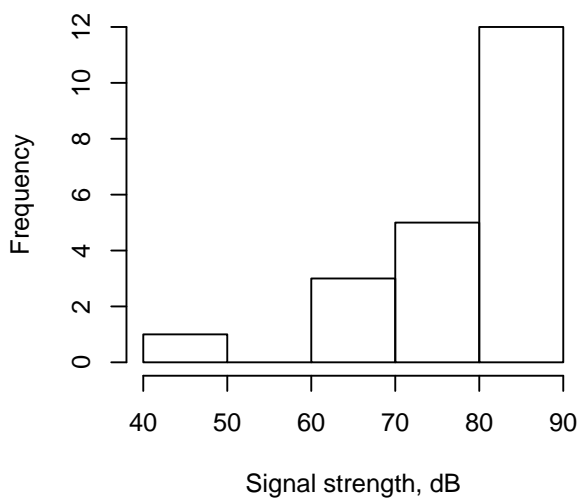## 1.3   Experiment 3 - ping rate

See Figure 5.

39193 no case . mean: 87.217 nobs: 23

39195 s w holes . mean: 80.55 nobs: 20

39194 s wo holes . mean: 78.81 nobs: 21

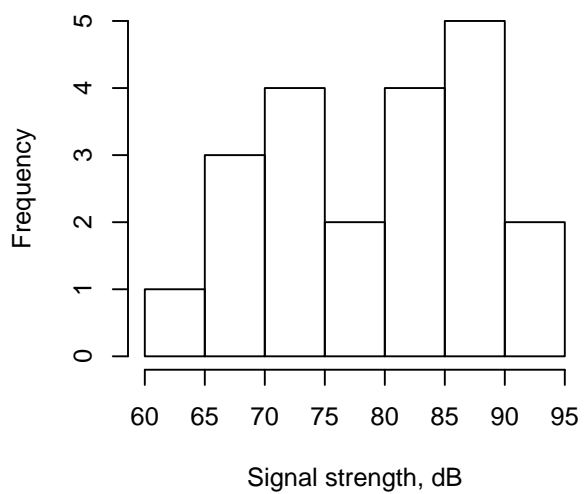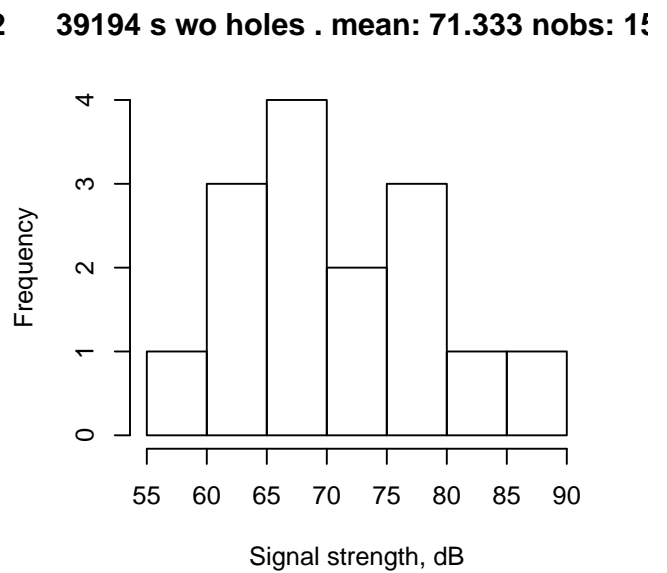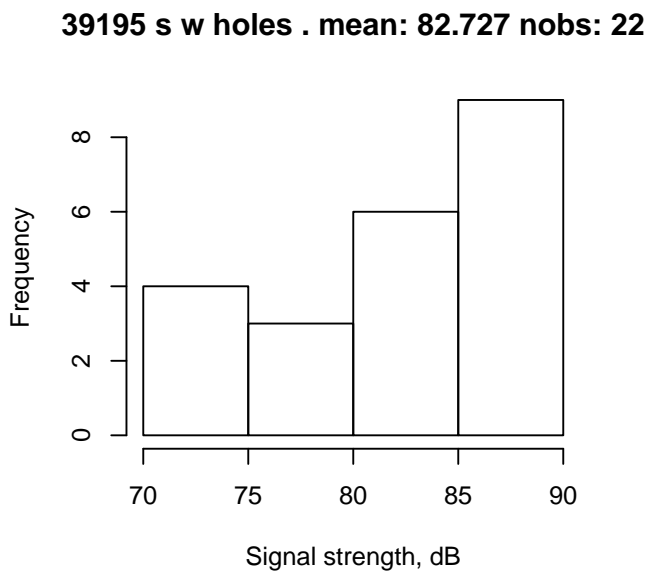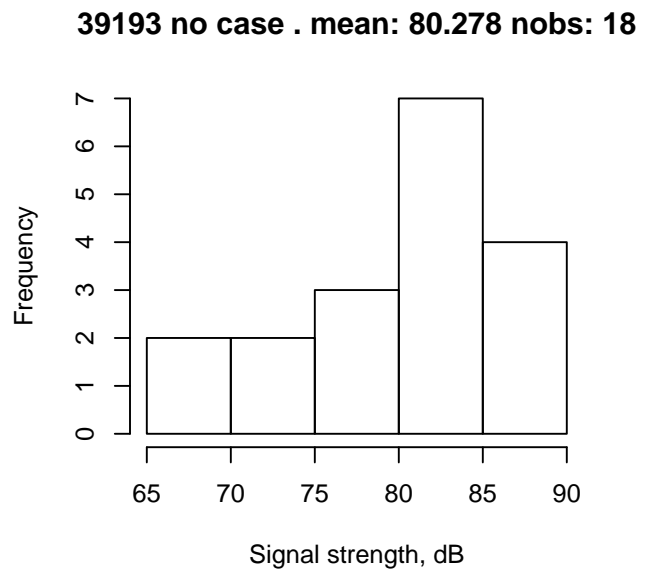**39196 large . mean: 79.81 nobs: 21**

Figure 1: Trial 1
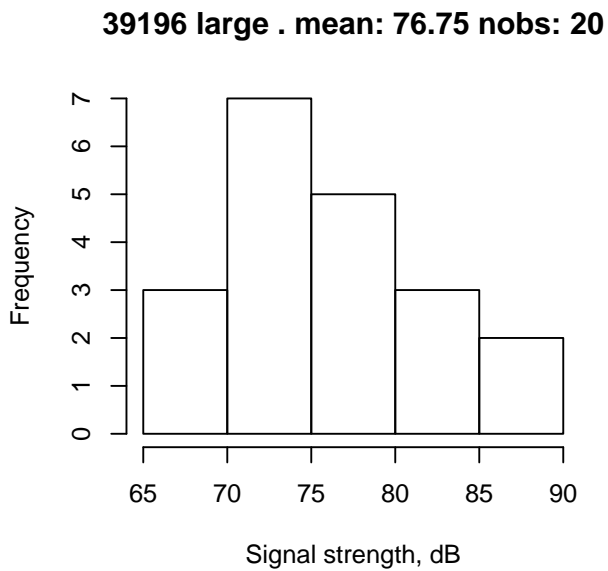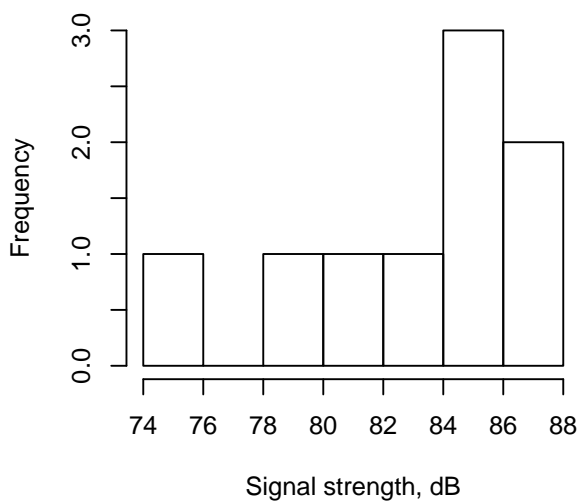
2

39196 large . mean: 76.75 nobs: 20

39193 no case . mean: 80.278 nobs: 18

39195 s w holes . mean: 82.727 nobs: 22

39194 s wo holes . mean: 71.333 nobs: 15
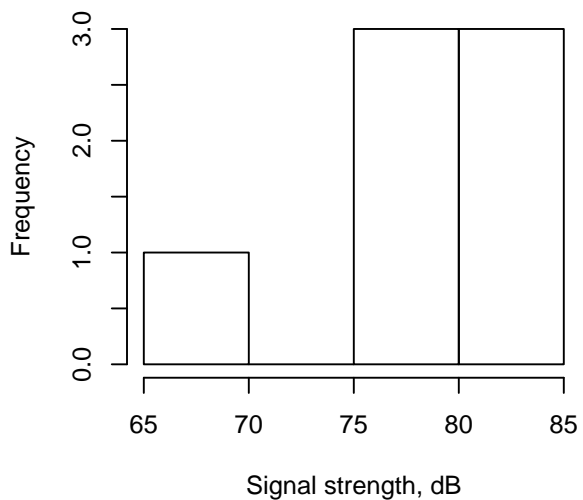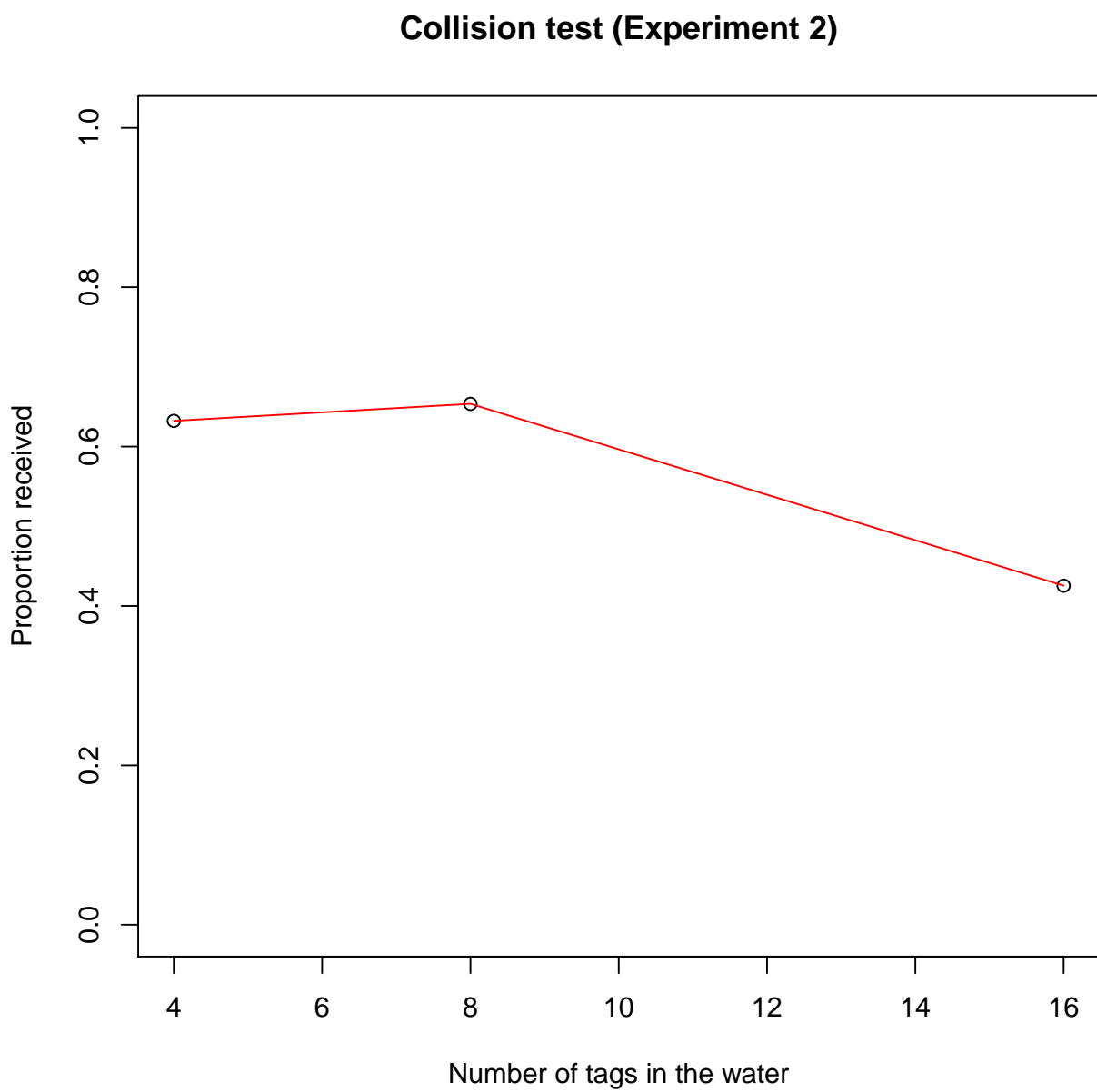
Figure 2: Trial 2

3
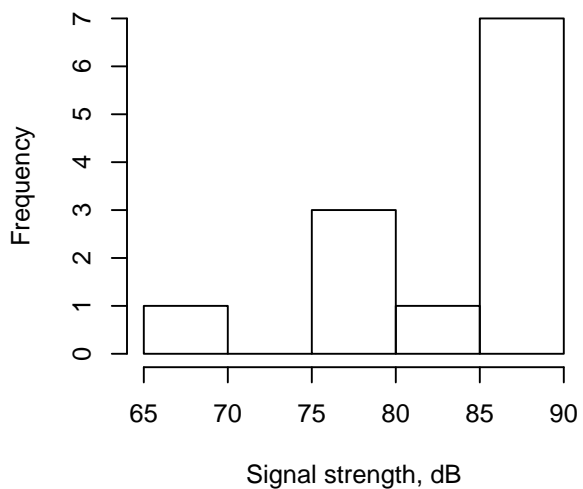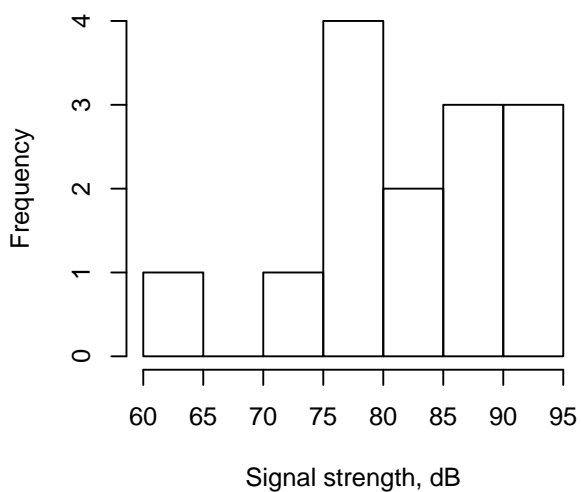
Figure 3: Trial 3

Collision test (Experiment 2)

Figure 4: Collision experiment.

Figure 5: Ping rate.