# Models 1 - Herbivore biomass gradients

Report contains model outputs and diagnostics for grazing biomass models.

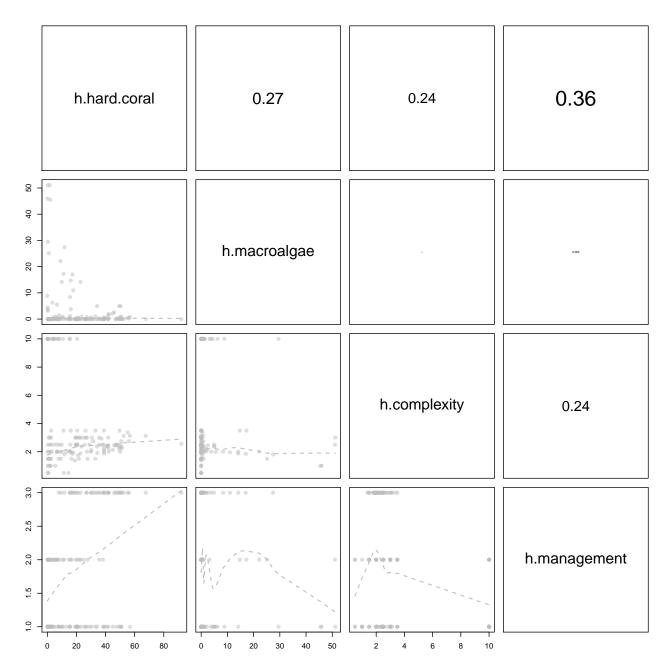
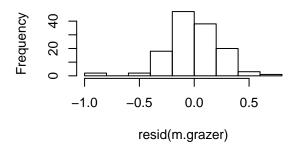
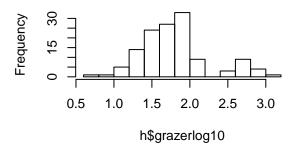


Figure 1: Correlation between explanatory covariates

## **Histogram of resid(m.grazer)**

# Histogram of h\$grazerlog10





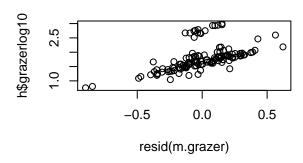


Figure 2: Grazer model residuals

### Grazers

```
##
## Shapiro-Wilk normality test
##
## data: resid(m.grazer)
## W = 0.97153, p-value = 0.007432
```

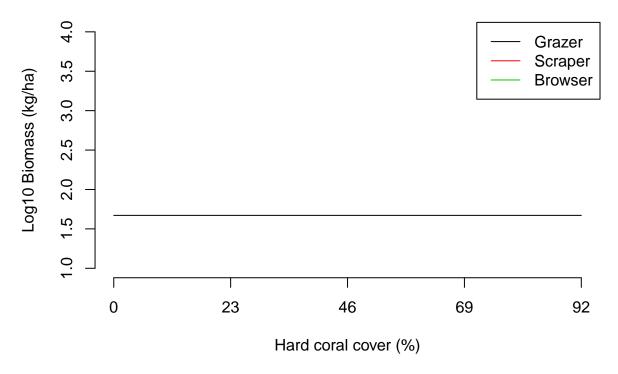
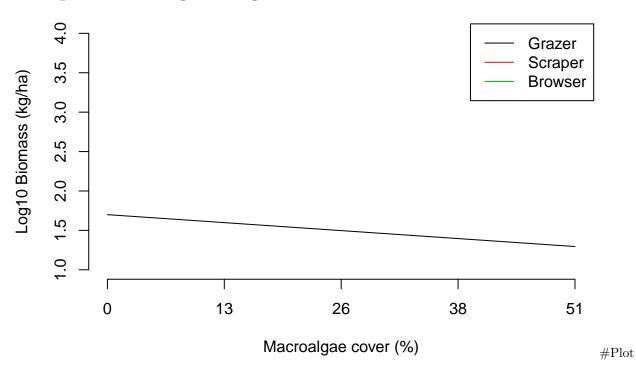


Figure 3: Grazer model effects

# Now plot macroalgae for grazers



### **Browsers**

```
## model diagnostic plots - browser biomass
par(mfrow=c(2,2))
hist(resid(m.browser))
hist(h$browserlog10)
plot(resid(m.browser), h$browserlog10)
shapiro.test(resid(m.browser)) #nope, but close enough again. We'll take what we can get.

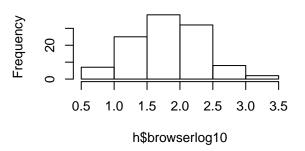
##
## Shapiro-Wilk normality test
##
## data: resid(m.browser)
## data: resid(m.browser)
## W = 0.97459, p-value = 0.03105
```

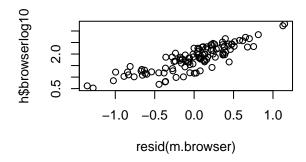
### **Histogram of resid(m.browser)**

# riistogram or resid(m.browser)

# -1.5 -0.5 0.5 1.0 1.5 resid(m.browser)

# Histogram of h\$browserlog10





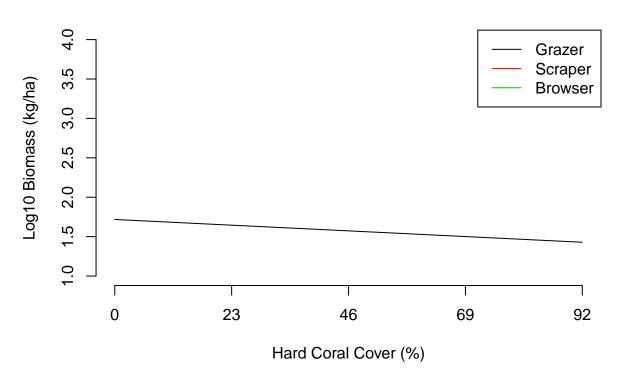


Figure 4: Browser model effects