"Winter"

"For Site 6"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Site 6 Winter")

"Ulva"

points(runif(6,10,20),runif(6,10,15),pch=16,cex=1.1,col=c("cornflowerblue"))

points(runif(50,10,20),runif(50,15,20),pch=16, cex=1.1,col= c("cornflowerblue"))

points(runif(25,20,30),runif(25,15,20),pch=16, cex=1.1,col= c("cornflowerblue"))

points(runif(1,30,40),runif(1,5,10),pch=16, cex=1.1,col= c("cornflowerblue"))

points(runif(5,30,40),runif(5,10,15),pch=16, cex=1.1,col= c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(1,0,10),runif(1,10,15),pch=18, cex=1.3,col=c("coral1"))

points(runif(1,0,10),runif(1,15,20),pch=18, cex=1.3,col=c("coral1"))

points(runif(10,10,20),runif(10,15,20),pch=18, cex=1.3,col=c("coral1"))

"Ectocarpus"

points(runif(99,0,10),runif(99,10,15),pch=3,col=c("seagreen3"))

points(runif(99,0,10),runif(99,15,20),pch=3,col=c("seagreen3"))

points(runif(200,0,10),runif(200,20,30),pch=3,col=c("seagreen3"))

points(runif(94,10,20),runif(94,10,15),pch=3,col=c("seagreen3"))

points(runif(40,10,20),runif(40,15,20),pch=3,col=c("seagreen3"))

points(runif(200,10,20),runif(200,20,30),pch=3,col=c("seagreen3"))

points(runif(100,20,30),runif(100,10,15),pch=3,col=c("seagreen3"))

points(runif(72,20,30),runif(72,15,20),pch=3,col=c("seagreen3"))

points(runif(200,20,30),runif(200,20,30),pch=3,col=c("seagreen3"))

points(runif(95,30,40),runif(95,10,15),pch=3,col=c("seagreen3"))

points(runif(100,30,40),runif(100,15,20),pch=3,col=c("seagreen3"))

points(runif(200,30,40),runif(200,20,30),pch=3,col=c("seagreen3"))

legend(locator(1),c('Ulva','Gracilaria verrucosa','Ectocarpus','Marsh edge'),pch=c(16,18,3,19),cex=1.3,col=c("cornflowerblue","coral1","seagreen3","peru"))

segments(0,20,40,20, pch=22, lty=2, lwd=4, col=("peru"))

"For Site 5"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Winter Site 5")

"Ulva"

points(runif(3,30,40),runif(3,10,15),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(20,30,40),runif(20,25,30),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,0,3),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(15,20,30),runif(15,9,12),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(64,20,30),runif(64,12,20),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,20,30),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(1,10,20),runif(1,0,3),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(1,10,20),runif(1,3,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,6,9),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,9,12),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(126,10,20),runif(126,12,20),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(15,0,10),runif(15,3,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(1,0,10),runif(1,6,9),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(16,0,10),runif(16,9,12),pch=16, cex=1.1,col=c("cornflowerblue"))

"Gracilaria tikvahiae"

points(runif(1,10,20),runif(1,3,6),pch=18, cex=1.3,col=c("deeppink"))

points(runif(15,0,10),runif(15,9,12),pch=18, cex=1.3,col= c("deeppink"))

points(runif(8,0,10),runif(8,12,20),pch=18, cex=1.3,col= c("deeppink"))

"Gracilaria verrucosa"

points(runif(2,20,30),runif(2,10,20),pch=18, cex=1.3,col= c("coral1"))

points(runif(40,10,20),runif(40,20,30),pch=18, cex=1.3,col= c("coral1"))

"Ectocarpus"

points(runif(20,30,40),runif(20,10,15),pch=3,col=c("seagreen3"))

points(runif(10,30,40),runif(10,15,20),pch=3,col=c("seagreen3"))

points(runif(40,30,40),runif(40,20,25),pch=3,col=c("seagreen3"))

points(runif(80,30,40),runif(80,25,30),pch=3,col=c("seagreen3"))

points(runif(3,20,30),runif(3,3,6),pch=3,col=c("seagreen3"))

points(runif(18,20,30),runif(18,6,9),pch=3,col=c("seagreen3"))

points(runif(24,20,30),runif(24,9,12),pch=3,col=c("seagreen3"))

points(runif(40,20,30),runif(40,12,20),pch=3,col=c("seagreen3"))

points(runif(1,10,20),runif(1,0,3),pch=3,col=c("seagreen3"))

points(runif(4,10,20),runif(4,3,6),pch=3,col=c("seagreen3"))

points(runif(21,10,20),runif(21,6,9),pch=3,col=c("seagreen3"))

points(runif(42,10,20),runif(42,9,12),pch=3,col=c("seagreen3"))

points(runif(40,10,20),runif(40,12,20),pch=3,col=c("seagreen3"))

points(runif(6,0,10),runif(6,3,6),pch=3,col=c("seagreen3"))

points(runif(30,0,10),runif(30,6,9),pch=3,col=c("seagreen3"))

points(runif(42,0,10),runif(42,9,12),pch=3,col=c("seagreen3"))

points(runif(32,0,10),runif(32,12,20),pch=3,col=c("seagreen3"))

points(runif(4,0,10),runif(4,20,30),pch=3,col=c("seagreen3"))

legend(locator(1),c('Ulva','Gracilaria tikvahiae','Gracilaria verrucosa','Ectocarpus'),pch=c(16,18,18,3),col=c("cornflowerblue", "deeppink","coral1","seagreen3"))

segments(0,12,12,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(12,12,20,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(20,12,35,25, pch=22, lty=2, lwd=4, col=("peru"))

segments(35,25,40,25, pch=22, lty=2, lwd=4, col=("peru"))

"Site 4"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Winter Site 4")

"Ulva"

points(runif(2,0,10),runif(2,2,4),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(6,0,10),runif(6,4,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,0,10),runif(4,6,8),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,0,10),runif(4,8,10),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,0,2),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,2,4),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,4,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(3,10,20),runif(3,6,8),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,8,10),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,10,20),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,0,2),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,2,4),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,4,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(6,20,30),runif(6,8,10),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(1,30,40),runif(1,0,2),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(2,30,40),runif(2,4,6),pch=16, cex=1.1,col=c("cornflowerblue"))

points(runif(10,30,40),runif(10,10,20),pch=16, cex=1.1,col=c("cornflowerblue"))

"Enteromorpha"

points(runif(4,0,10),runif(4,6,8), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(18,0,10),runif(18,8,10), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(4,10,20),runif(4,6,8), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(2,10,20),runif(2,8,10), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(50,10,20),runif(50,10,20), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(6,20,30),runif(6,6,8), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(6,20,30),runif(6,8,10), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(1,30,40),runif(1,0,2), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(2,30,40),runif(2,8,10), cex=1.1,pch=16,col=("cornflowerblue"))

points(runif(70,30,40),runif(70,10,20), cex=1.1,pch=16,col=("cornflowerblue"))

"Hypnea"

points(runif(30,0,10),runif(30,0,2),pch=18, cex=1.3, col=("firebrick1"))

"Ectocarpus"

points(runif(10,0,10),runif(10,4,6),pch=3,col=c("seagreen3"))

points(runif(32,0,10),runif(32,6,8),pch=3,col=c("seagreen3"))

points(runif(12,10,20),runif(12,2,4),pch=3,col=c("seagreen3"))

points(runif(24,10,20),runif(24,4,6),pch=3,col=c("seagreen3"))

points(runif(20,10,20),runif(20,6,8),pch=3,col=c("seagreen3"))

points(runif(32,10,20),runif(32,8,10),pch=3,col=c("seagreen3"))

points(runif(60,10,20),runif(60,10,20),pch=3,col=c("seagreen3"))

points(runif(6,20,30),runif(6,2,4),pch=3,col=c("seagreen3"))

points(runif(10,20,30),runif(10,4,6),pch=3,col=c("seagreen3"))

points(runif(30,20,30),runif(30,6,8),pch=3,col=c("seagreen3"))

points(runif(24,20,30),runif(24,8,10),pch=3,col=c("seagreen3"))

points(runif(2,30,40),runif(2,4,6),pch=3,col=c("seagreen3"))

points(runif(6,30,40),runif(6,6,8),pch=3,col=c("seagreen3"))

points(runif(18,30,40),runif(18,8,10),pch=3,col=c("seagreen3"))

points(runif(100,30,40),runif(100,10,20),pch=3,col=c("seagreen3"))

legend(locator(1),c('Ulva','Enteromorpha','Hypnea','Ectocarpus'),pch=c(16,17,19,3),col=c("cornflowerblue","darkgoldenrod2","firebrick1","seagreen3"))

segments(0,10,4,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(4,10,15,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(15,10,27,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(27,12,32,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(32,12,40,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 3"

plot(c(0,40),c(-0.5,50),type='n')

plot(c(0,40),c(-0.5,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Winter Site 3")

"Ulva"

points(runif(1,10,20),runif(1,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,10,20),runif(3,3,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,0,1),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,1,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,2,3),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(11,20,30),runif(11,3,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,30,40),runif(5,2,3),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(42,30,40),runif(42,3,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,30,40),runif(4,10,20),pch=16, cex=1.1, col=c("cornflowerblue"))

"Enteromorpha"

points(runif(1,0,10),runif(1,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,0,10),runif(1,0,1), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,0,10),runif(4,1,2), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,0,10),runif(3,2,3), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(35,0,10),runif(35,3,10), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,-0.5,0), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(15,10,20),runif(15,0,1), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(10,10,20),runif(10,1,2), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,10,20),runif(1,2,3), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,0,1), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,1,2),pch pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,2,3), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(10,30,40),runif(10,-0.5,0), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,30,40),runif(5,0,1), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(16,30,40),runif(16,1,2), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,30,40),runif(3,2,3), pch=16,col=c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(14,30,40),runif(14,3,10),pch=18, cex=1.3, col=c("coral1"))

"Hypnea"

points(runif(15,30,40),runif(15,0,1),pch=19, cex=1.3, col=c("firebrick1"))

"Ectocarpus"

points(runif(9,0,10),runif(9,-0.5,0),pch=3,col=c("seagreen3"))

points(runif(19,0,10),runif(19,0,1),pch=3,col=c("seagreen3"))

points(runif(12,0,10),runif(12,1,2),pch=3,col=c("seagreen3"))

points(runif(13,0,10),runif(13,2,3),pch=3,col=c("seagreen3"))

points(runif(105,0,10),runif(105,3,10),pch=3,col=c("seagreen3"))

points(runif(5,10,20),runif(5,-0.5,0),pch=3,col=c("seagreen3"))

points(runif(5,10,20),runif(5,0,1),pch=3,col=c("seagreen3"))

points(runif(10,10,20),runif(10,1,2),pch=3,col=c("seagreen3"))

points(runif(19,10,20),runif(19,2,3),pch=3,col=c("seagreen3"))

points(runif(137,10,20),runif(137,3,10),pch=3,col=c("seagreen3"))

points(runif(4,10,20),runif(4,10,20),pch=3,col=c("seagreen3"))

points(runif(8,10,20),runif(8,20,30),pch=3,col=c("seagreen3"))

points(runif(6,20,30),runif(6,-0.5,0),pch=3,col=c("seagreen3"))

points(runif(1,20,30),runif(1,0,1),pch=3,col=c("seagreen3"))

points(runif(3,20,30),runif(3,1,2),pch=3,col=c("seagreen3"))

points(runif(30,20,30),runif(30,20,30),pch=3,col=c("seagreen3"))

points(runif(4,30,40),runif(4,1,2),pch=3,col=c("seagreen3"))

points(runif(2,30,40),runif(2,2,3),pch=3,col=c("seagreen3"))

legend(locator(1),c('Ulva','Enteromorpha','Gracilaria verrucosa','Hypnea','Ectocarpus'),pch=c(16,17,18,19,3),col=c("cornflowerblue",

"darkgoldenrod2","coral1","firebrick1","seagreen3"))

segments(0,3,40,3, pch=22, lty=2, lwd=4, col=("peru"))

"Site 2"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Winter Site 2")

"Ulva"

points(runif(1,0,10),runif(1,3,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,0,10),runif(2,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,0,10),runif(2,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,0,3),pch=16, cex=1.1, col=c("cornflowerblue"))

"Enteromorpha"

points(runif(1,0,10),runif(1,6,9), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,0,10),runif(5,12,20),pch pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,10,20),runif(3,3,6), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,9,12), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,0,3), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,6,9), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(9,20,30),runif(9,9,12), pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,20,30),runif(8,12,20), pch=16, cex=1.1, col=c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(6,20,30),runif(6,3,6),pch=18, cex=1.3, col=c("coral1"))

"Ectocarpus"

points(runif(31,0,10),runif(31,9,12),pch=3,col=c("seagreen3"))

points(runif(80,0,10),runif(80,12,20),pch=3,col=c("seagreen3"))

points(runif(21,10,20),runif(21,6,9),pch=3,col=c("seagreen3"))

points(runif(18,10,20),runif(18,9,12),pch=3,col=c("seagreen3"))

points(runif(12,20,30),runif(12,6,9),pch=3,col=c("seagreen3"))

points(runif(45,20,30),runif(45,9,12),pch=3,col=c("seagreen3"))

points(runif(11,20,30),runif(11,12,20),pch=3,col=c("seagreen3"))

points(runif(6,20,30),runif(6,20,30),pch=3,col=c("seagreen3"))

legend(locator(1),c('Ulva','Enteromorpha','Gracilaria verrucosa', 'Ectocarpus'),pch=c(16,17,18,3),col=c("cornflowerblue","darkgoldenrod2","coral1","seagreen3"))

segments(0,12,30,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 1"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Winter site 1")

"Gracilaria verrucosa"

points(runif(2,0,10),runif(2,0,10),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

"Fall"

"For Site 6"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Fall Site 6")

"Gracilaria verrucosa"

points(runif(1,0,10),runif(1,16,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,20,30),runif(2,20,30),pch=18, cex=1.3, col=c("coral1"))

points(runif(6,30,40),runif(6,20,30),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

segments(0,20,40,20, pch=22, lty=2, lwd=4, col=("peru"))

"For Site 5"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title ("Fall site 5")

"Gracilaria verrucosa"

points(runif(10,30,40),runif(10,6,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(4,30,40),runif(4,40,50),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,20,30),runif(1,3,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,20,30),runif(2,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(5,20,30),runif(5,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,30,20),runif(2,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,30,20),runif(2,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,0,10),runif(1,3,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(3,0,10),runif(3,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,0,10),runif(1,9,12),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

segments(0,12,12,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(12,12,20,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(20,12,35,25, pch=22, lty=2, lwd=4, col=("peru"))

segments(35,25,40,25, pch=22, lty=2, lwd=4, col=("peru"))

"Site 4"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Fall site 4")

points(runif(3,0,10),runif(3,4,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(6,0,10),runif(6,6,8),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,10,20),runif(1,6,8),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,10,20),runif(2,8,10),pch=18, cex=1.3, col=c("coral1"))

points(runif(4,10,20),runif(4,10,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,20,30),runif(1,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,20,30),runif(1,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(14,30,40),runif(14,12,20),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

segments(0,10,4,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(4,10,15,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(15,10,27,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(27,12,32,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(32,12,40,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 3"

plot(c(0,40),c(-0.5,50),type='n')

plot(c(0,40),c(-0.5,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Fall site 3")

points(runif(4,0,10),runif(4,0,10),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,20,30),runif(4,-0.5,0),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

segments(0,3,40,3, pch=22, lty=2, lwd=4, col=("peru"))

"Site 2"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Fall site 2")

points(runif(3,0,10),runif(3,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(11,0,10),runif(11,12,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,10,20),runif(2,3,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,10,20),runif(1,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(12,10,20),runif(12,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(1,20,30),runif(1,6,9),pch=18, cex=1.3, col=c("coral1"))

points(runif(10,20,30),runif(10,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(5,20,30),runif(5,12,20),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

segments(0,12,30,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 1"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Fall site 1")

points(runif(1,0,10),runif(1,5,10),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,0,10),runif(2,10,15),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Gracilaria verrucosa'),pch=c(18),col=c("coral1"))

"Spring"

"For Site 6"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Spring site 6")

"Ulva"

points(runif(5,0,10),runif(5,15,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(40,0,10),runif(40,20,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,10,20),runif(8,18,24),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(36,10,20),runif(36,24,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,18,24),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,20,30),runif(5,24,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(9,30,40),runif(9,15,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(24,30,40),runif(24,20,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,30,40),runif(4,30,40),pch=16, cex=1.1, col=c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(3,0,10),runif(3,10,15),pch=18, cex=1.3, col=c("coral1"))

points(runif(10,0,10),runif(10,20,30),pch=18, cex=1.3, col=c("coral1"))

points(runif(12,10,20),runif(12,24,30),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,30,40),runif(2,30,40),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Ulva','Gracilaria verrucosa'),pch=c(16,18),col=c("cornflowerblue","coral1"))

segments(0,20,40,20, pch=22, lty=2, lwd=4, col=("peru"))

"For Site 5"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Spring site 5")

"Ulva"

points(runif(44,30,40),runif(44,18,24),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(28,30,40),runif(28,24,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(14,30,40),runif(14,30,40),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(96,20,30),runif(96,12,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(16,20,30),runif(16,20,30),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(9,10,20),runif(9,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(112,10,20),runif(112,12,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,0,10),runif(4,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(32,0,10),runif(32,12,20),pch=16, cex=1.1, col=c("cornflowerblue"))

"Codium"

points(runif(12,0,10),runif(12,9,12),pch=17, cex=1.3, col=("aquamarine3"))

"Gracilaria verrucosa"

points(runif(6,30,20),runif(6,9,12),pch=18, cex=1.3, col=c("coral1"))

"Hypnea"

points(runif(24,0,10),runif(24,12,20),pch=19, cex=1.3, col=("firebrick1"))

"Cladophora"

points(runif(24,20,30),runif(24,3,6),pch=19, cex=1.3, col=("darkorchid"))

points(runif(1,20,30),runif(1,6,9),pch=19, cex=1.3, col=("darkorchid"))

points(runif(18,20,30),runif(18,3,6),pch=19, cex=1.3, col=("darkorchid"))

legend(locator(1),c('Ulva','Codium','Gracilaria verrucosa', 'Hypnea', 'Cladophora'),pch=c(16,17,18,19,19),col=c("cornflowerblue","aquamarine3",

"coral1","firebrick1","darkorchid"))

segments(0,12,12,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(12,12,20,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(20,12,35,25, pch=22, lty=2, lwd=4, col=("peru"))

segments(35,25,40,25, pch=22, lty=2, lwd=4, col=("peru"))

"Site 4"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title ("Spring site 4")

"Ulva"

points(runif(6,0,10),runif(6,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(6,0,10),runif(6,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(14,0,10),runif(14,4,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(32,0,10),runif(32,6,8),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(38,10,20),runif(38,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,4,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,10,20),runif(5,6,8),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(26,10,20),runif(26,8,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(12,20,30),runif(12,3,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(27,20,30),runif(27,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(48,20,30),runif(48,12,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,30,40),runif(1,3,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,30,40),runif(1,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(7,30,40),runif(7,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

"Codium"

points(runif(30,10,20),runif(30,10,20),pch=17, cex=1.3, col=("aquamarine3"))

points(runif(120,20,30),runif(120,12,20),pch=17, cex=1.3, col=("aquamarine3"))

"Gracilaria verrucosa"

points(runif(1,0,10),runif(1,6,8),pch=18, cex=1.3, col=c("coral1"))

points(runif(60,10,20),runif(60,10,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(40,20,30),runif(40,12,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(10,30,40),runif(10,9,12),pch=18, cex=1.3, col=c("coral1"))

points(runif(6,30,40),runif(6,12,20),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Ulva','Codium','Gracilaria verrucosa'),pch=c(16,17,18),col=c("cornflowerblue","aquamarine3","coral1"))

segments(0,10,4,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(4,10,15,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(15,10,27,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(27,12,32,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(32,12,40,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 3"

plot(c(0,40),c(-0.5,50),type='n')

plot(c(0,40),c(-0.5,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

"Ulva"

points(runif(1,0,10),runif(1,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,0,10),runif(8,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,0,10),runif(8,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(22,0,10),runif(22,4,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(10,0,10),runif(10,6,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(7,10,20),runif(7,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(34,10,20),runif(34,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(6,10,20),runif(6,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,10,20),runif(8,4,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(8,20,30),runif(5,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(5,20,30),runif(4,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,20,30),runif(4,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(10,20,30),runif(10,40,50),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(6,30,40),runif(6,-0.5,0),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(40,30,40),runif(40,0,2),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,30,40),runif(4,2,4),pch=16, cex=1.1, col=c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(4,0,10),runif(4,4,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(64,0,10),runif(64,6,10),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,10,20),runif(2,0,2),pch=18, cex=1.3, col=c("coral1"))

points(runif(28,10,20),runif(28,2,4),pch=18, cex=1.3, col=c("coral1"))

points(runif(4,10,20),runif(4,10,20),pch=18, cex=1.3, col=c("coral1"))

points(runif(18,20,30),runif(18,2,4),pch=18, cex=1.3, col=c("coral1"))

points(runif(19,20,30),runif(19,4,6),pch=18, cex=1.3, col=c("coral1"))

points(runif(46,20,30),runif(46,6,10),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,30,40),runif(2,2,4),pch=18, cex=1.3, col=c("coral1"))

"Hypnea"

points(runif(40,20,30),runif(40,30,40),pch=19, cex=1.3, col=c("firebrick1"))

legend(locator(1),c('Ulva','Gracilaria verrucosa','Hypnea'),pch=c(16, 18,19),col=c("cornflowerblue","coral1","firebrick1"))

segments(0,3,40,3, pch=22, lty=2, lwd=4, col=("peru"))

title ("Spring site 3")

"Site 2"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title ("Site 2")

"Ulva"

points(runif(2,0,10),runif(2,0,3),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,0,10),runif(4,3,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,0,10),runif(3,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,0,10),runif(3,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(12,10,20),runif(12,0,3),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,10,20),runif(2,3,6),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(4,10,20),runif(4,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(3,10,20),runif(3,18,20),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(2,20,30),runif(2,6,9),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(1,20,30),runif(1,9,12),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(18,20,30),runif(18,12,16.5),pch=16, cex=1.1, col=c("cornflowerblue"))

"Gracilaria verrucosa"

points(runif(74,0,10),runif(74,12,17),pch=18, cex=1.3, col=c("coral1"))

points(runif(2,20,30),runif(2,18,23),pch=18, cex=1.3, col=c("coral1"))

legend(locator(1),c('Ulva','Gracilaria verrucosa'),pch=c(16, 18),col=c("cornflowerblue","coral1"))

segments(0,12,30,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 1"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

"Ulva"

points(runif(20,0,10),runif(20,0,10),pch=16, cex=1.1, col=c("cornflowerblue"))

points(runif(20,10,20),runif(20,10,20),pch=16, cex=1.1, col=c("cornflowerblue"))

"Codium"

points(runif(40,10,20),runif(40,10,20),pch=17, cex=1.3, col=c("aquamarine3"))

points(runif(40,0,10),runif(40,0,10),pch=17, cex=1.3, col=("aquamarine3"))

legend(locator(1),c('Ulva','Codium'),pch=c(16,17),col=c("cornflowerblue","aquamarine3"))

title("Spring site 1")

"Summer"

"For Site 6"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 6")

segments(0,20,40,20, pch=22, lty=2, lwd=4, col=("peru"))

"For Site 5"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 5")

segments(0,12,12,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(12,12,20,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(20,12,35,25, pch=22, lty=2, lwd=4, col=("peru"))

segments(35,25,40,25, pch=22, lty=2, lwd=4, col=("peru"))

"Site 4"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 4")

"Unknown"

points(runif(8,10,20),runif(8,10,20),pch=16, cex=1.3, col=c("springgreen4"))

legend(locator(1),c('Cyanobacteria'),pch=c(16),col=c("springgreen4"))

segments(0,10,4,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(4,10,15,10, pch=22, lty=2, lwd=4, col=("peru"))

segments(15,10,27,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(27,12,32,12, pch=22, lty=2, lwd=4, col=("peru"))

segments(32,12,40,12, pch=22, lty=2, lwd=4, col=("peru"))

"Site 3"

plot(c(0,40),c(-0.5,50),type='n')

plot(c(0,40),c(-0.5,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 3")

points(runif(4,0,10),runif(4,2,3),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(6,0,10),runif(6,3,10),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(2,10,20),runif(2,2,3),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(6,10,20),runif(6,3,10),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(1,20,30),runif(1,0,1),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(3,20,30),runif(3,1,2),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(1,20,30),runif(1,1,2),pch=16, cex=1.3, col=c("springgreen4"))

points(runif(1,20,30),runif(1,2,3),pch=16, cex=1.3, col=c("springgreen4"))

legend(locator(1),c('Cyanobacteria'),pch=c(16),col=c("springgreen4"))

segments(0,3,40,3, pch=22, lty=2, lwd=4, col=("peru"))

"Site 2"

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 2")

segments(0,12,30,12, pch=22, lty=2, lwd=4, col=("peru"))

“Site 1”

plot(c(0,40),c(0,50),type='n')

plot(c(0,40),c(0,50),type='n',xlab='distance along shore (m)',ylab='distance from shore (m)',las=1)

par(xaxs="i", yaxs="i")

title("Summer site 1")