

AnalisisSensibilidad

Análisis de sensibilidad de la mortalidad natural

```
system('~/.admb-12.2/admb LBPA')
system('./LBPA')

data <-read.rep('LBPA.rep')

dat <- readLines("lbpa.dat",encoding="UTF-8")
dat2<-dat

M <- c(seq(0.1,0.38,0.02),0.24)

par<-as.numeric(strsplit(dat[3],"\t")[[1]])
par[3]

## [1] 0.24

for(i in 1:length(M)){
  dat2[3]<-paste(60.400, 0.250, M[i], -7.825, 2.950, 43.500, 53.000, 0.875,sep="\t")

  cat(dat2,file=(can<-file("lbpa.dat","wb",encoding="UTF-8")),sep="\n")
  close(can)

  system('./LBPA')

  rep<-readLines("LBPA.rep",encoding="UTF-8")
  cat(rep,file=(can<-file(paste("LBPA",i,".rep",sep=""),"wb",encoding="UTF-8")),sep="\n")
  close(can)
}

tabla <- matrix(ncol=7,nrow=16)

for(i in 1:16){
  data <-read.rep(paste('LBPA',i,'.rep',sep=""))
  tabla[i,] <- round(data$F_L50_slope_a0_cv_Lr_Ftar,2)
}

tablafin<-cbind(M,tabla)
colnames(tablafin) <- c("M","F Current", "L50", "Slope", "a0", "cv", "Lr", "F Target")
kable(tablafin)
```

M	F Current	L50	Slope	a0	cv	Lr	F Target
0.10	2.95	55.47	9.00	0	0.1	34.37	0.30
0.12	3.00	55.68	8.99	0	0.1	34.39	0.39
0.14	3.07	55.90	8.98	0	0.1	34.41	0.50
0.16	3.14	56.13	8.96	0	0.1	34.43	0.63
0.18	3.21	56.35	8.94	0	0.1	34.45	0.78
0.20	3.29	56.58	8.93	0	0.1	34.48	0.96

M	F Current	L50	Slope	a0	cv	Lr	F Target
0.22	2.43	56.16	9.50	0	0.1	31.30	0.92
0.24	3.47	57.05	8.89	0	0.1	34.53	1.44
0.26	3.57	57.28	8.87	0	0.1	34.56	1.75
0.28	3.68	57.52	8.85	0	0.1	34.58	2.13
0.30	3.80	57.77	8.82	0	0.1	34.61	2.59
0.32	3.93	58.01	8.80	0	0.1	34.64	3.15
0.34	1.91	53.29	6.75	0	0.1	39.65	1.85
0.36	2.04	53.20	6.46	0	0.1	40.06	1.79
0.38	4.38	58.76	8.72	0	0.1	34.74	5.65
0.24	3.47	57.05	8.89	0	0.1	34.53	1.44

```

age      <- seq(1,10) #this age depend of your specie
BinLen   <- data$Length_bins
NObsFre  <- length(data$Observed_frequencies[,1]) #this numbers of observations depend of the own data
ObsFre   <- data$Observed_frequencies
PredFre  <- data$Predicted_frequency
CatchLFre<- data$Catch_length_frequency
ProbLen  <- data$Probability_of_length
Nage     <- length(data$Probability_of_length[,1])

```

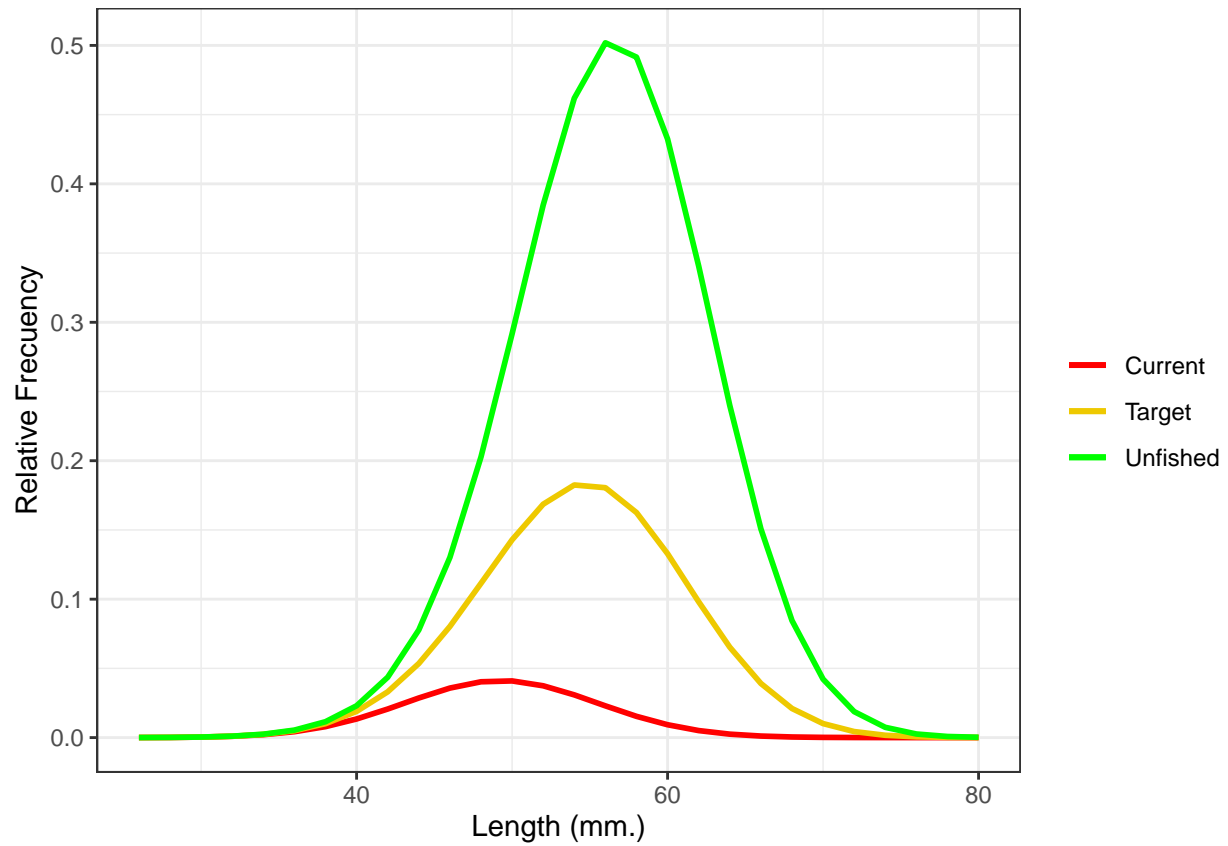


Figure 1: Outputs of different relative Length estimated in LBPA

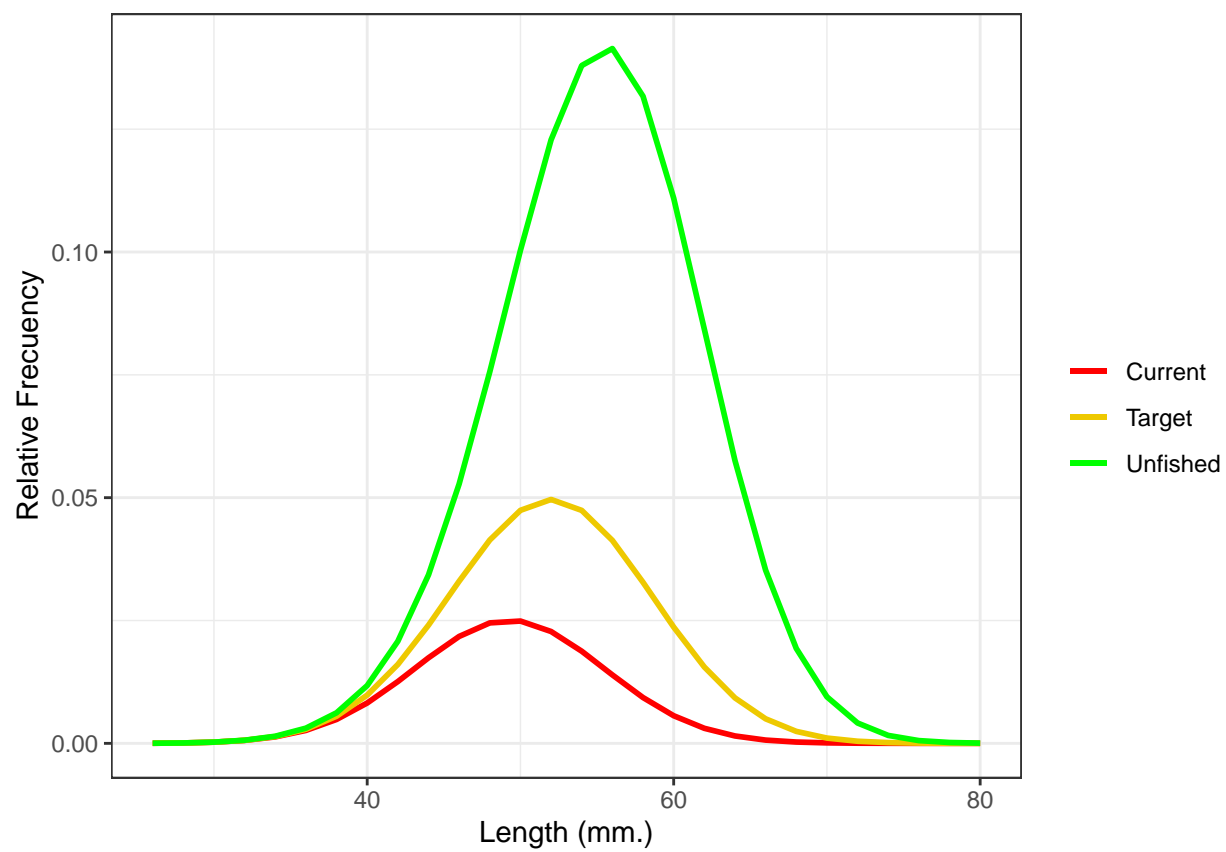


Figure 2: Outputs of different relative Length estimated in LBPA

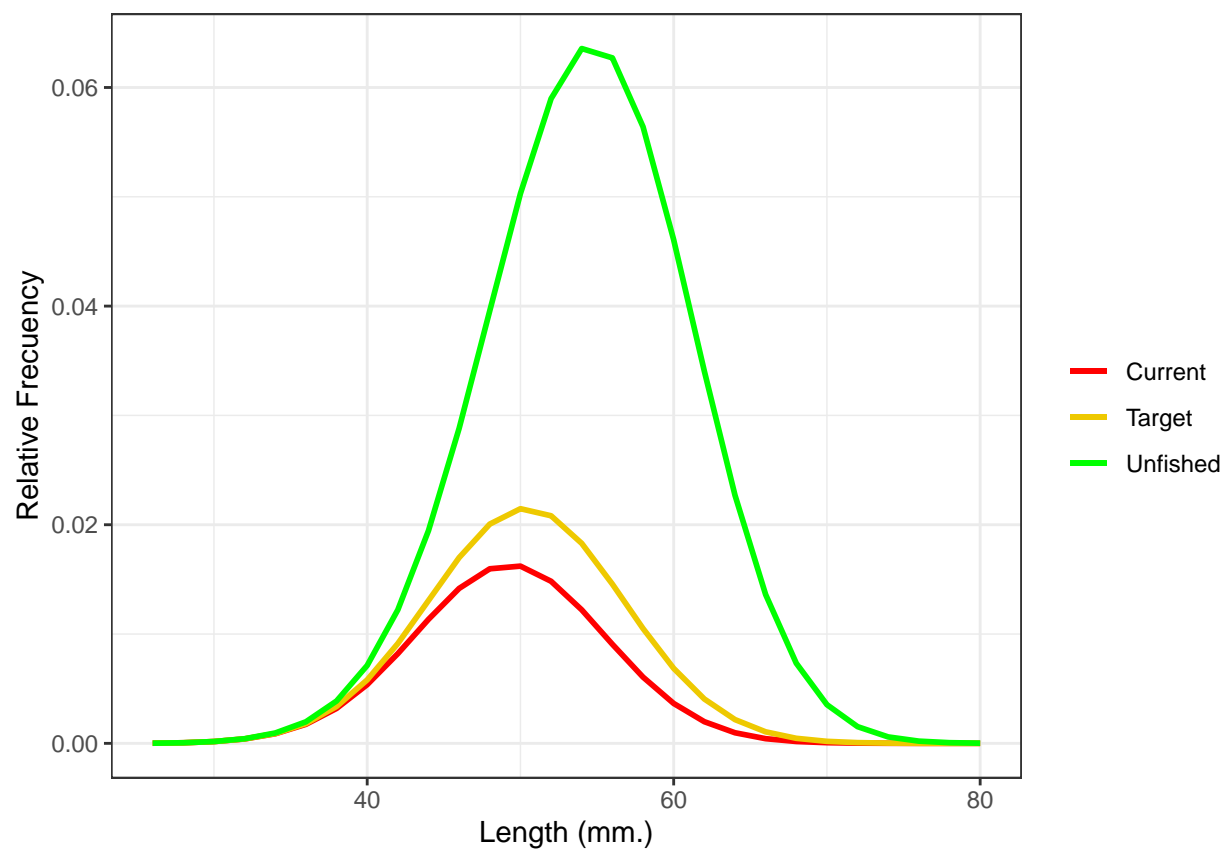


Figure 3: Outputs of different relative Length estimated in LBPA