Further otes on comparing indices

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Last modified: 2022-01-21 17:01:47

## read in stratified estimates from Hugues and Dan

```r
csv.fn <- "sGSL RV survey indices_fish_Jan2022.csv"
hugues.df <- read.csv(csv.fn)

## for group of species, use the same species codes
hugues.df[which(hugues.df$species==306), "species"] <- '880'
hugues.df[which(hugues.df$species==500), "species"] <- '503'
hugues.df[which(hugues.df$species==642), "species"] <- '598'
hugues.df[which(hugues.df$species==713), "species"] <- '712'


csv.fn <- "sGSL-RV-data-for-Elise-2021-10-12-C-stratified-matrix.csv"
t.df <- read.csv(csv.fn)
dan.df <- as.data.frame(t(t.df[,2:51]))
names(dan.df) <- as.character(t.df[,1])
dan.df$year <- 1971:2020

## compare cod
hugues.cod <- hugues.df[which(hugues.df$species==10),]
dan.cod <- dan.df[,c(53,11)]

plot(hugues.cod$year, hugues.cod$avgcatch, type='b', pch=19)
lines(dan.cod$year, dan.cod$`10`, type='b', col="red", pch=19)
```
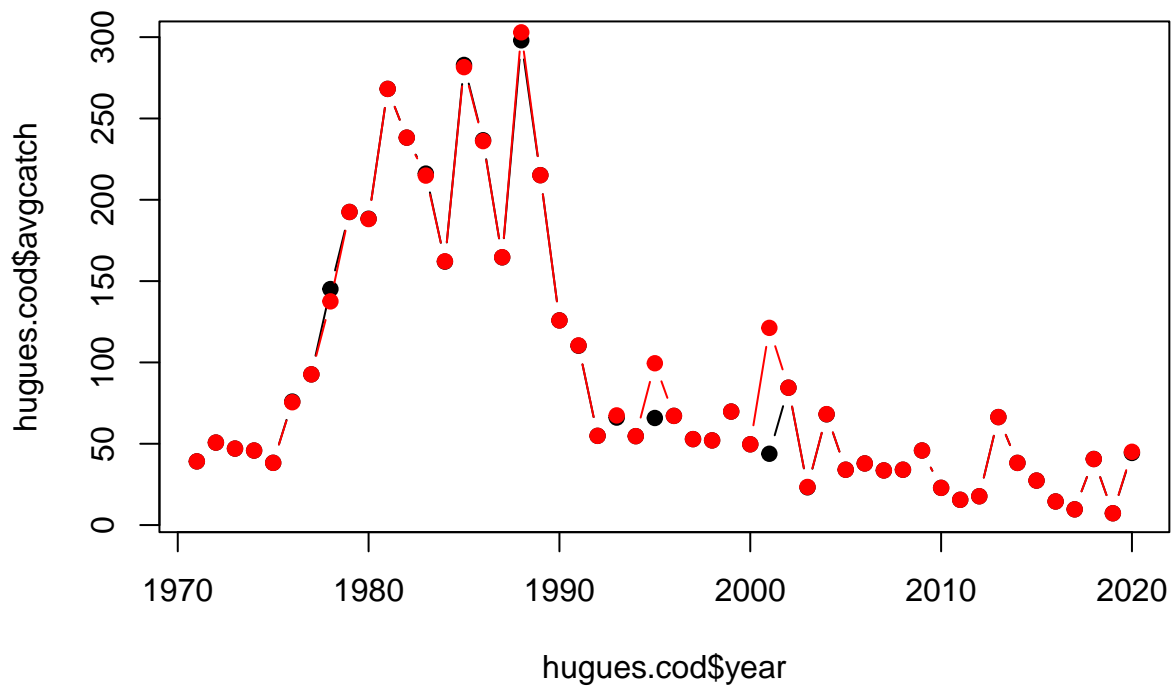
time-series for all species

```
species <- as.numeric(names(dan.df)[1:52])

setdiff(species, unique(hugues.df$species))
```

numeric(0)

```
for(i in 1:length(species))
{
  hugues.this.sp <- hugues.df[which(hugues.df$species==species[i]),]
  plot.tit <- paste0(species.str(species[i]), " - species code ", species[i])
  my.ylim <- c(0,max(max(hugues.this.sp$avgcatch), max(dan.df[,i])))
  plot(hugues.this.sp$year, hugues.this.sp$avgcatch, type='b', pch=19, ylim=my.ylim, main=plot.tit)
  lines(dan.df$year, dan.df[,i], type='b', col="red", pch=19)
  legend('topleft', c("SAS","R"), col=c("black","red"), lty=1, pch=19)

}
```

Atlantic hagfish – species code 241
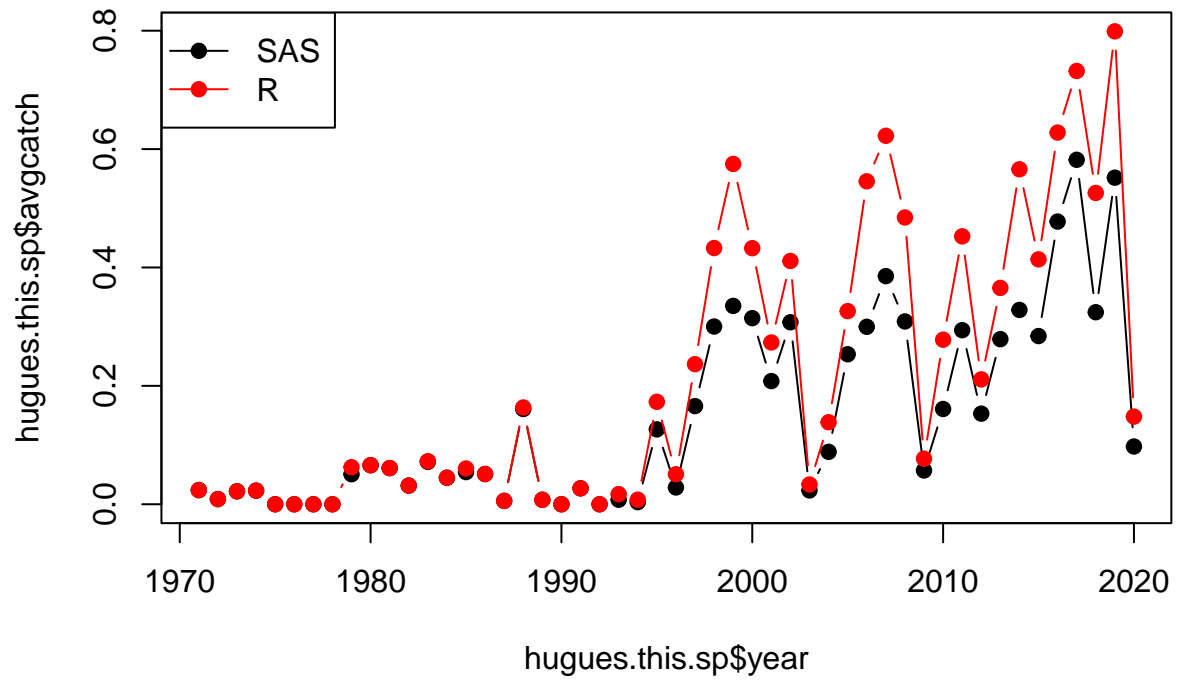
Thorny skate – species code 201
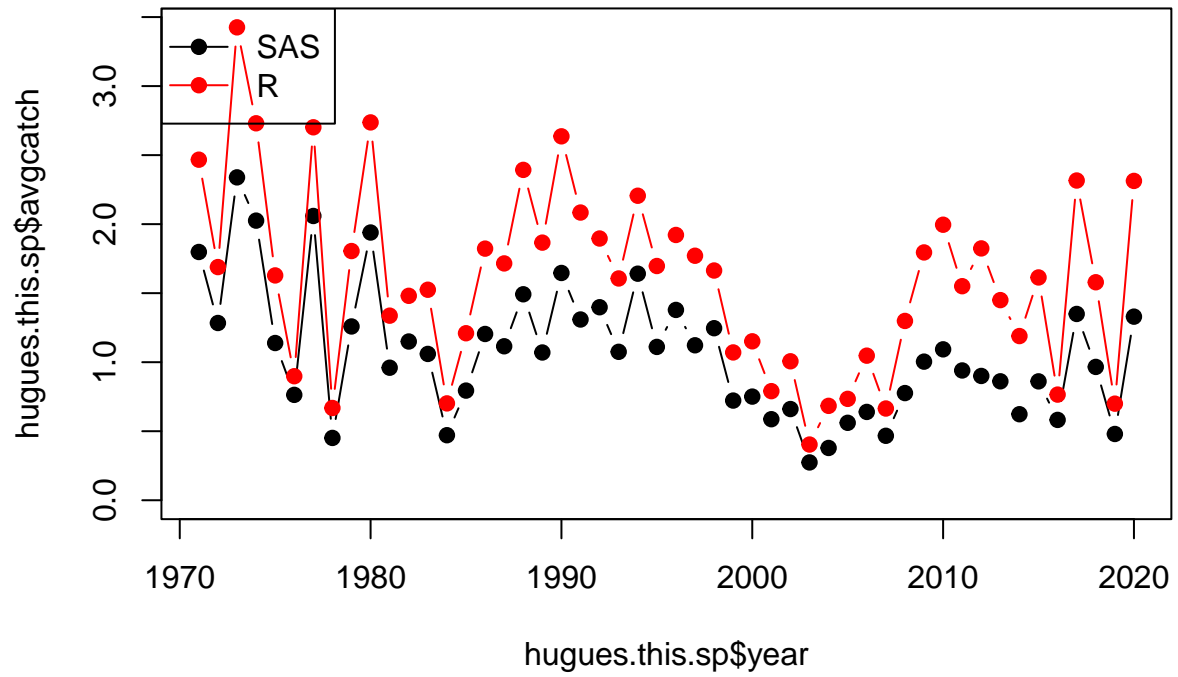
Winter skate – species code 204
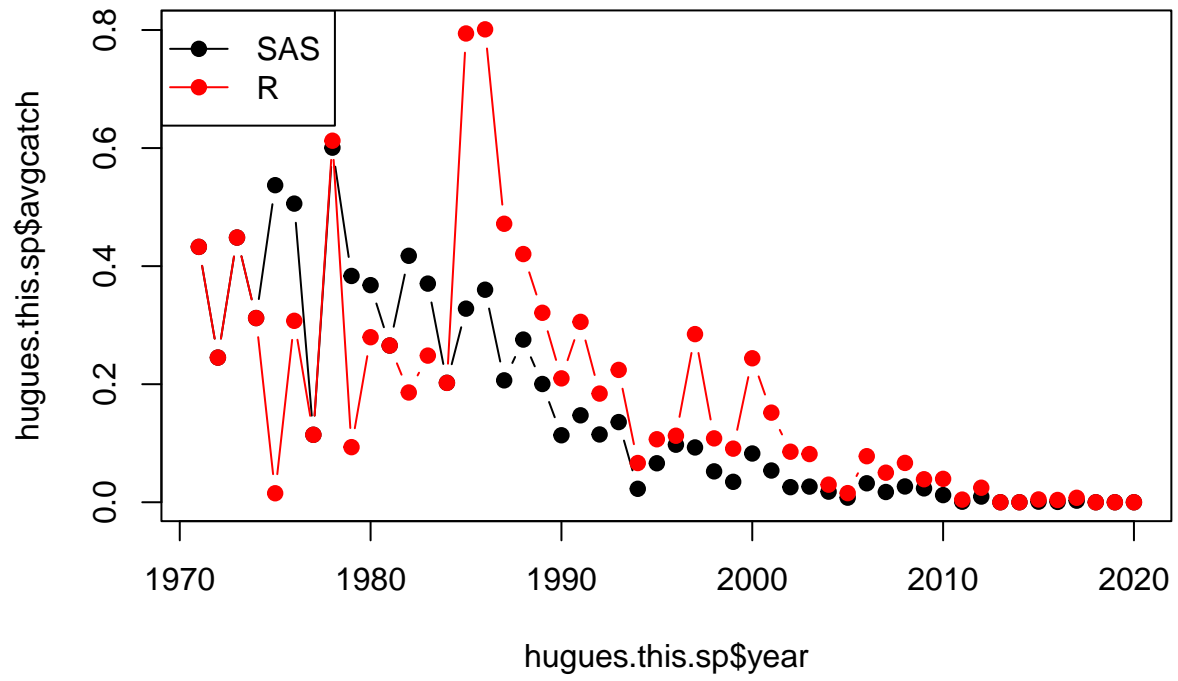
Smooth skate – species code 202
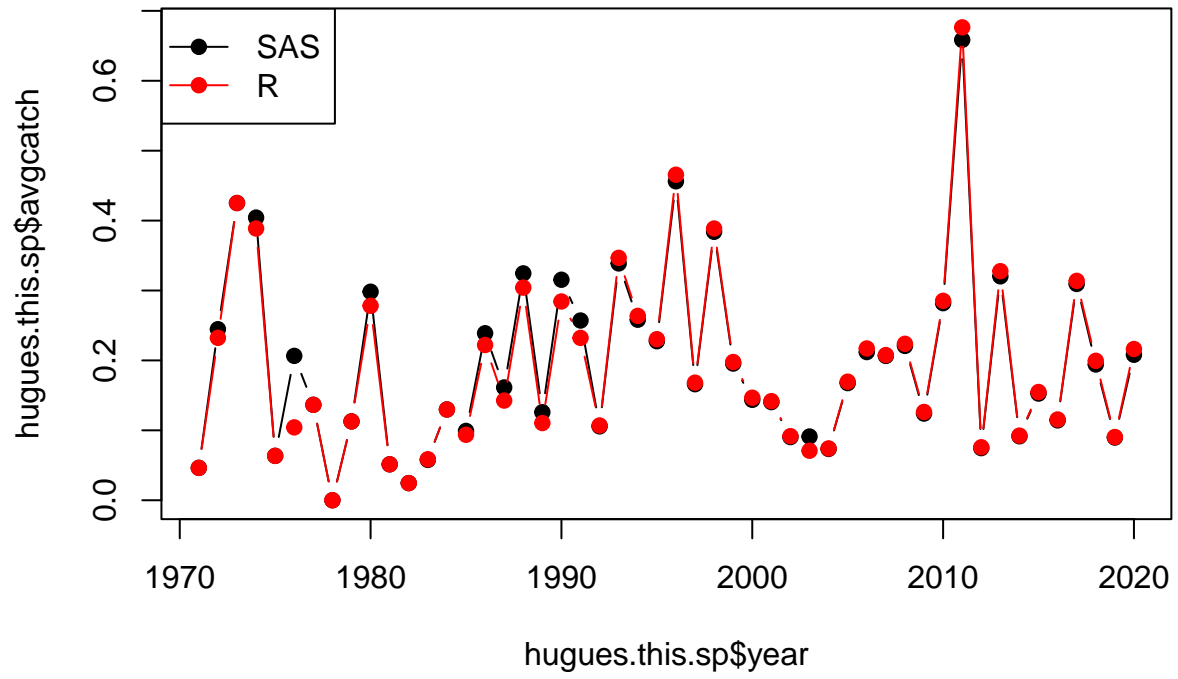
Spiny dogfish – species code 220
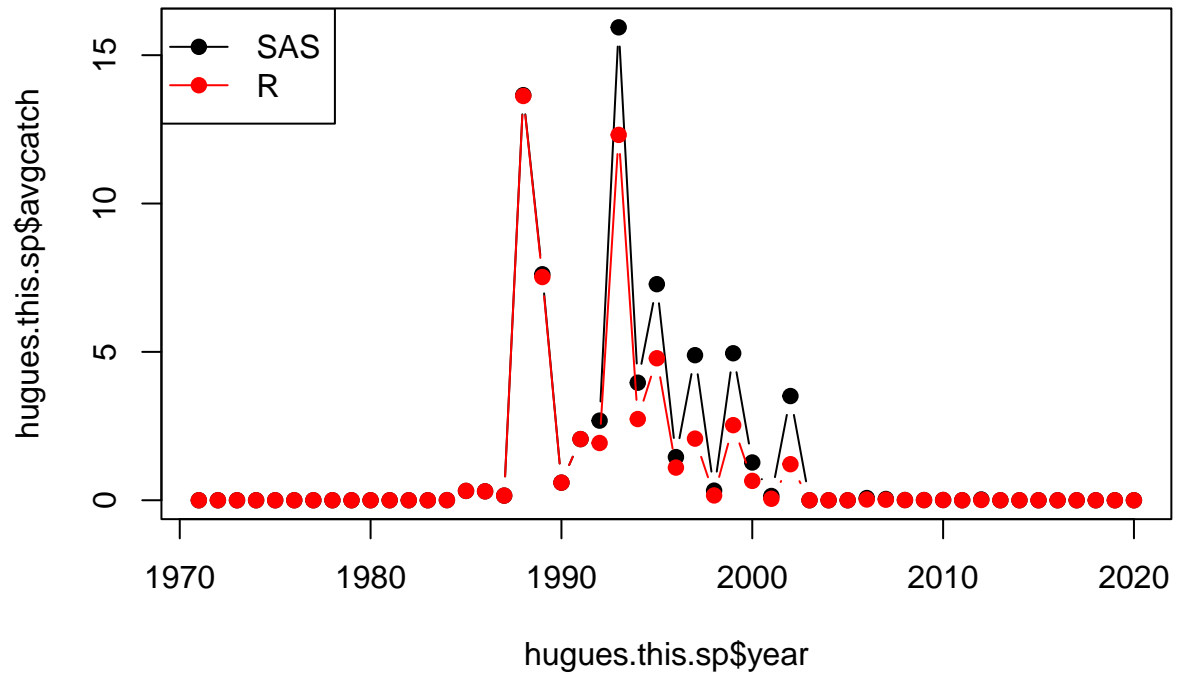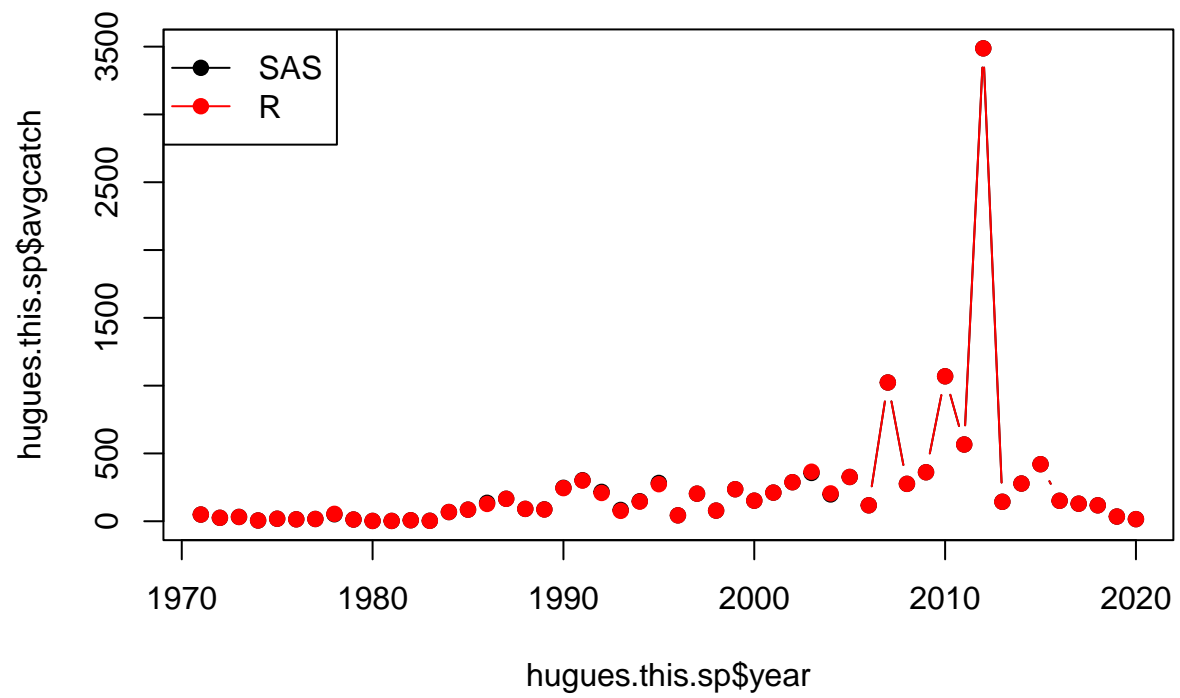
Black dogfish – species code 221
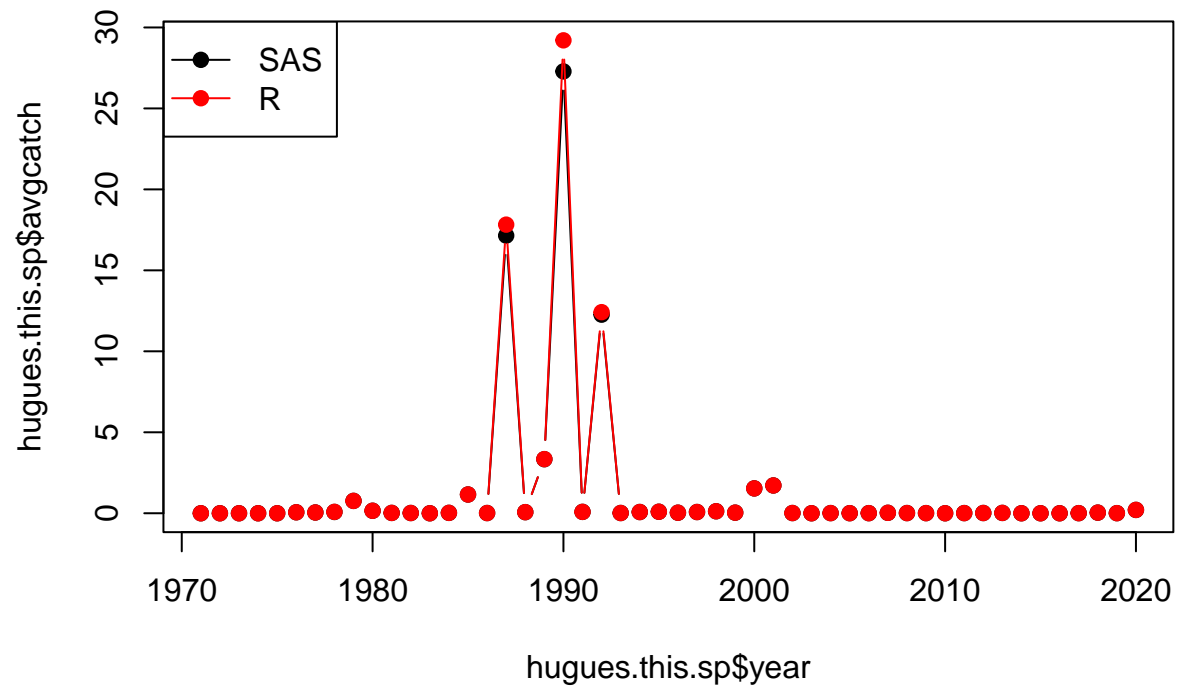
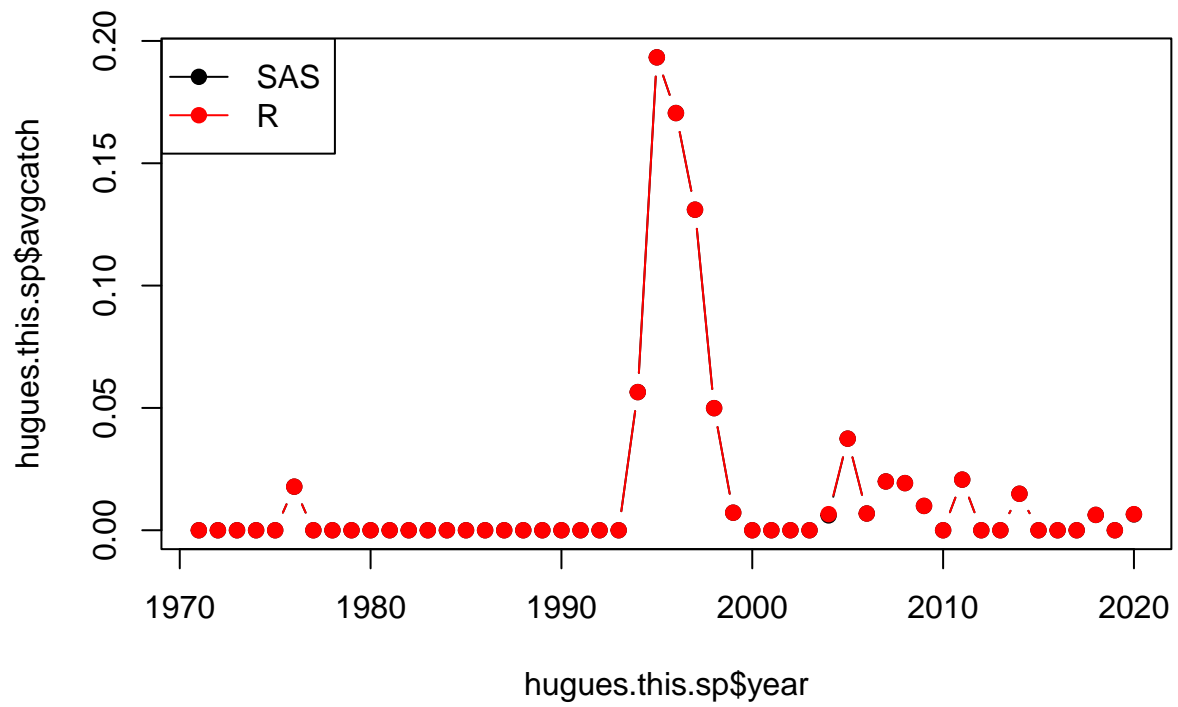**White barracudina – species code 712**
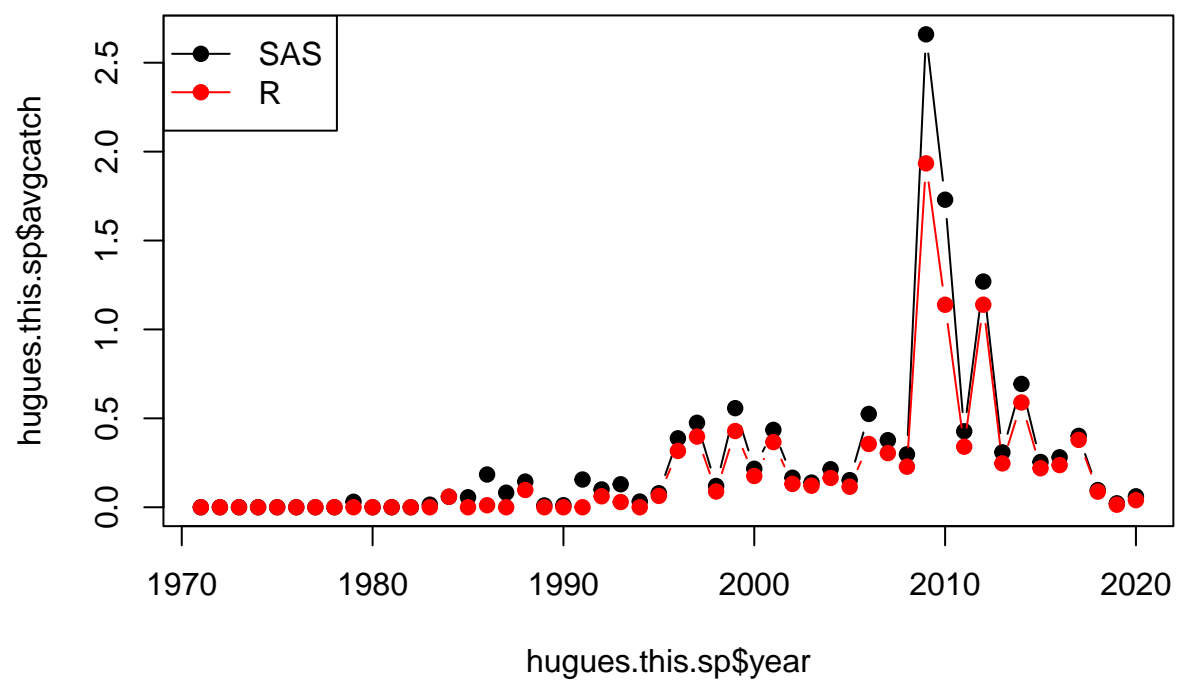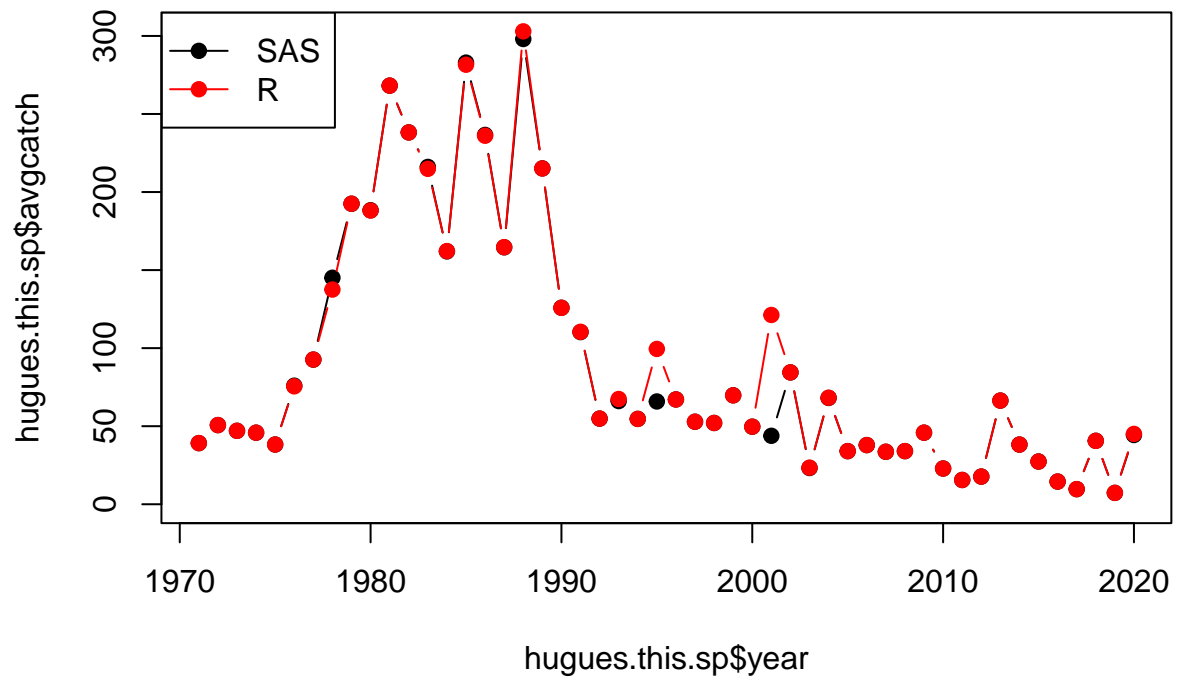
Alewife – species code 62
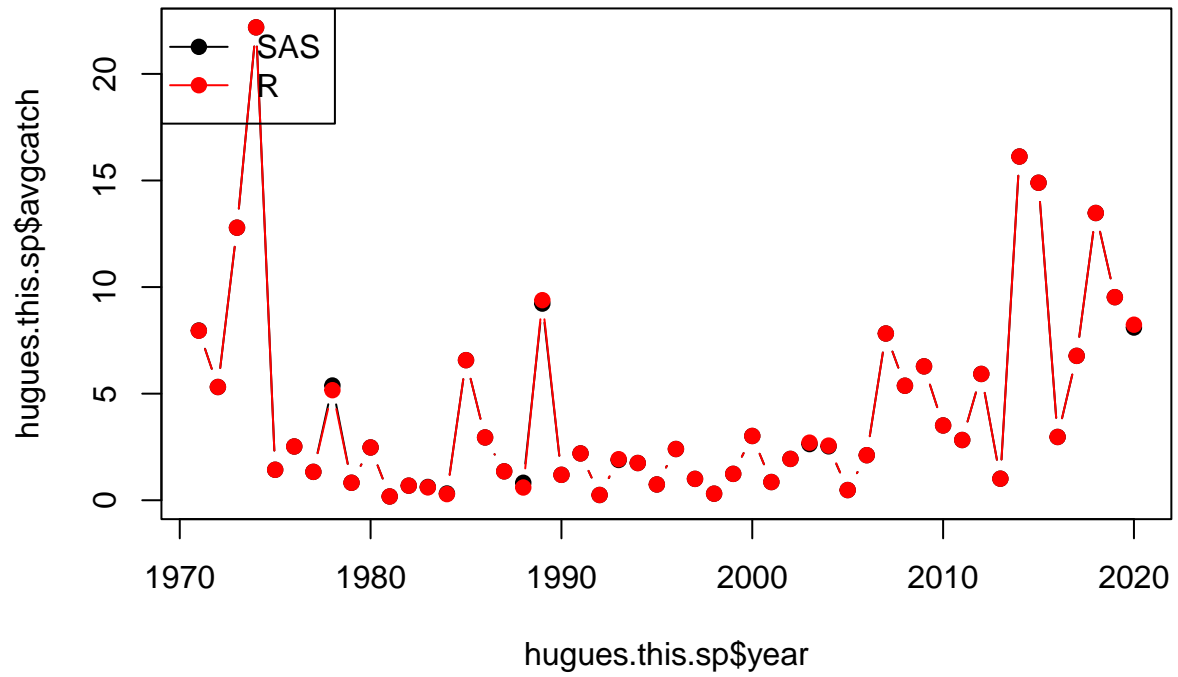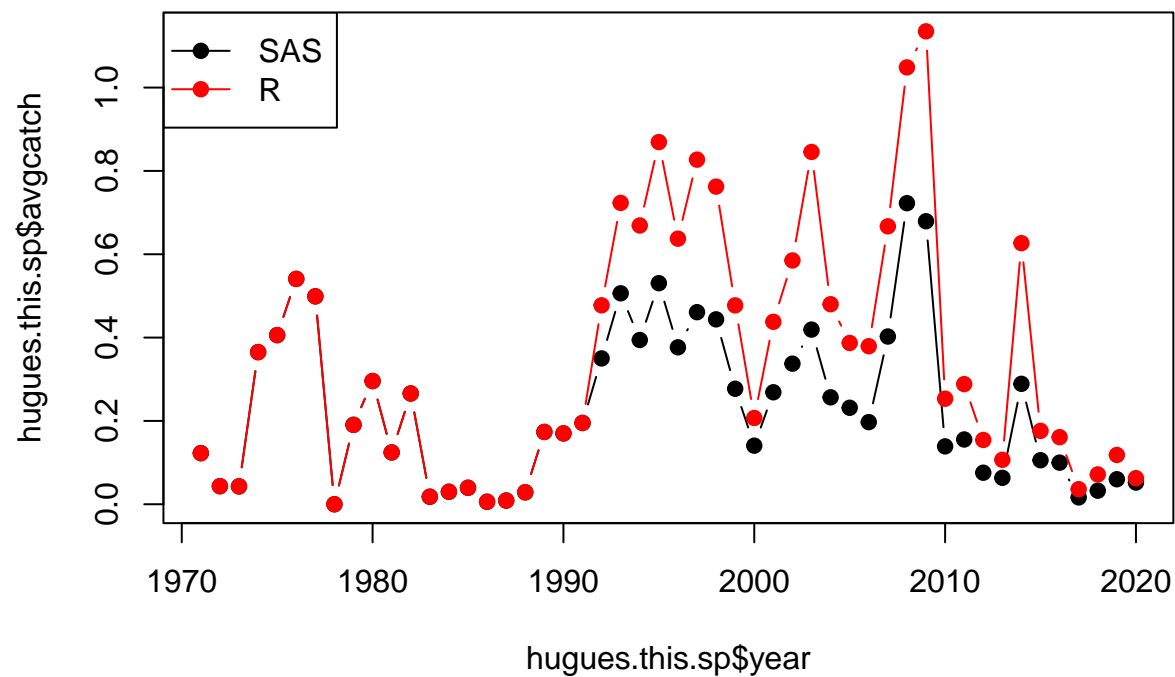
Atlantic herring – species code 60
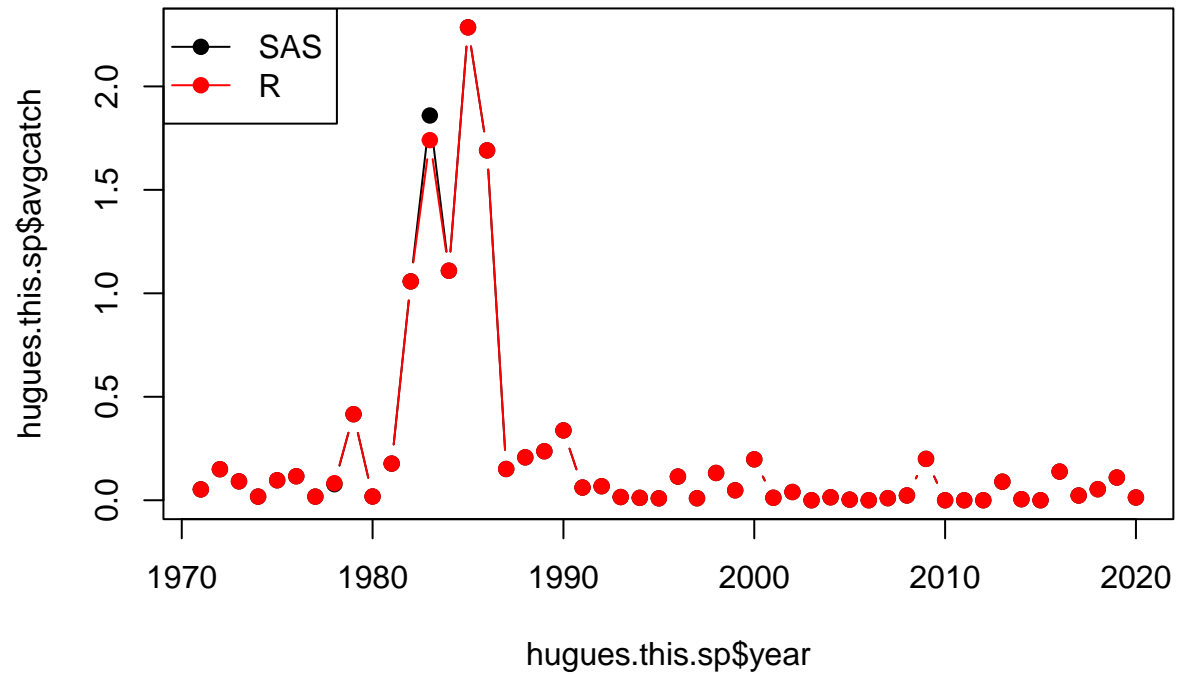
Arctic cod – species code 110

Atlantic cod – species code 10

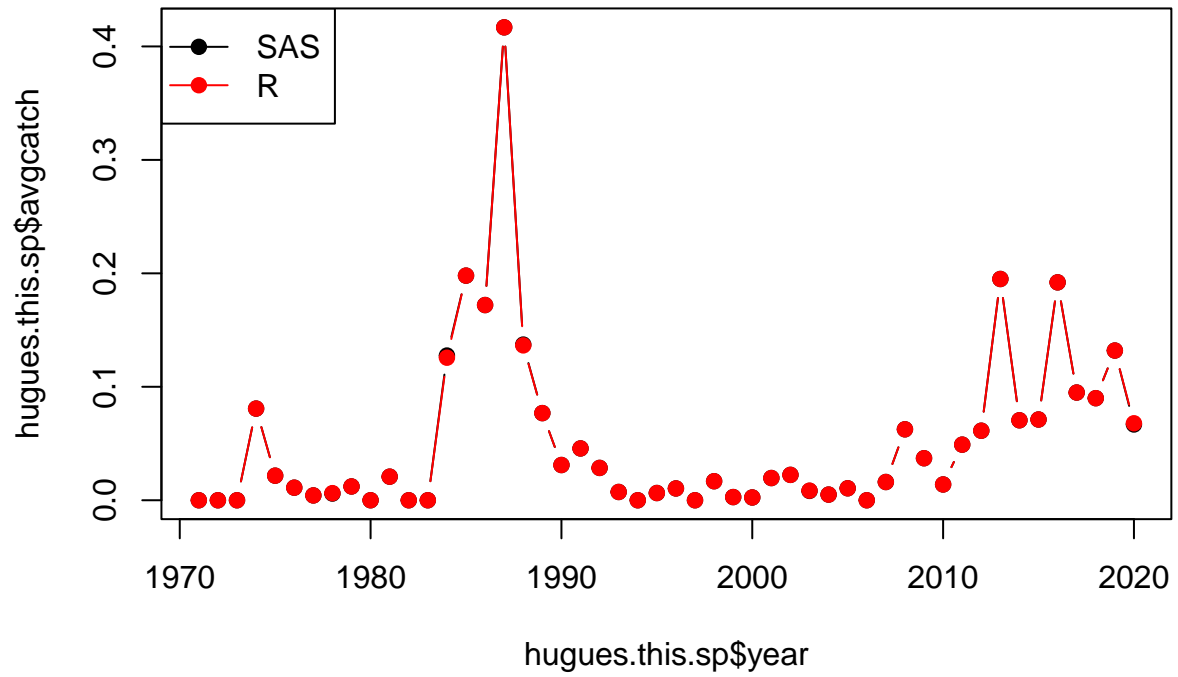Greenland cod – species code 118

Haddock – species code 11

Pollock – species code 16
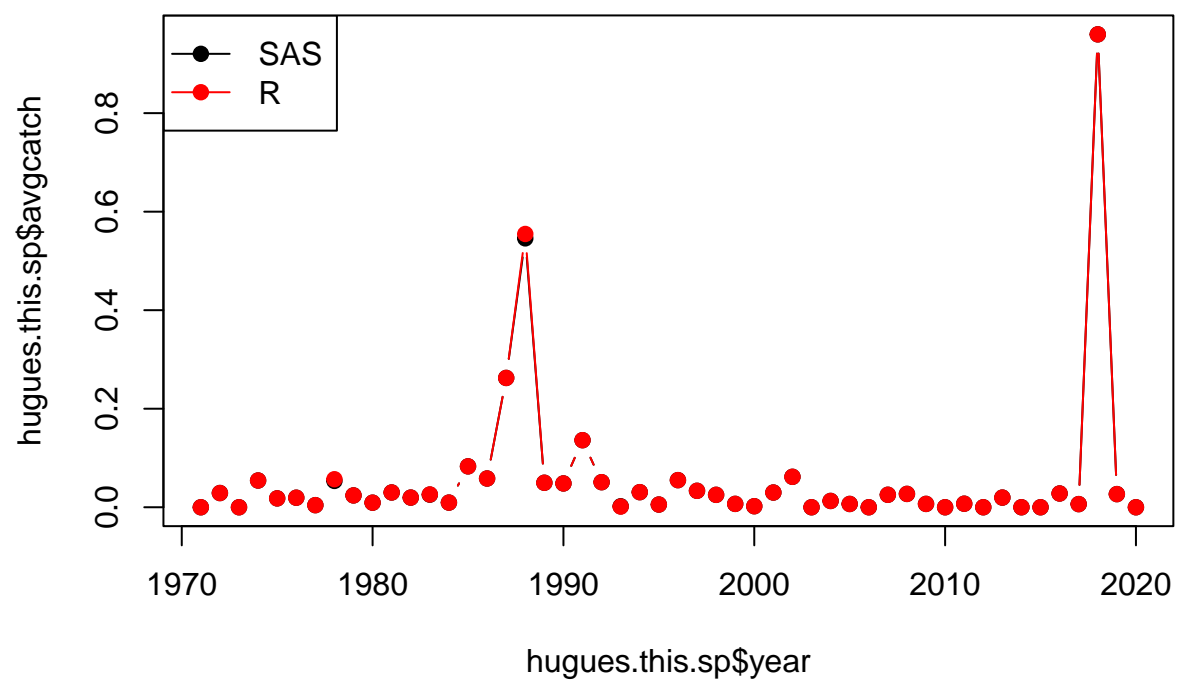
Marlin–spike grenadier – species code 410
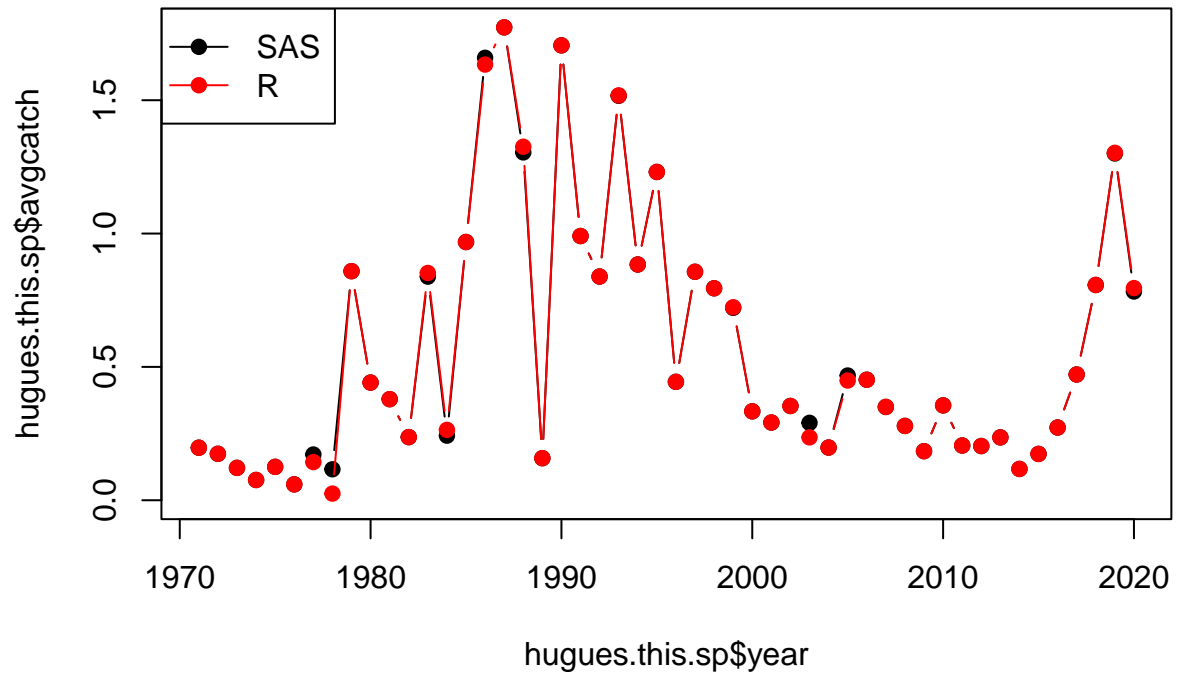
Silver hake – species code 14

Fourbeard rockling – species code 114
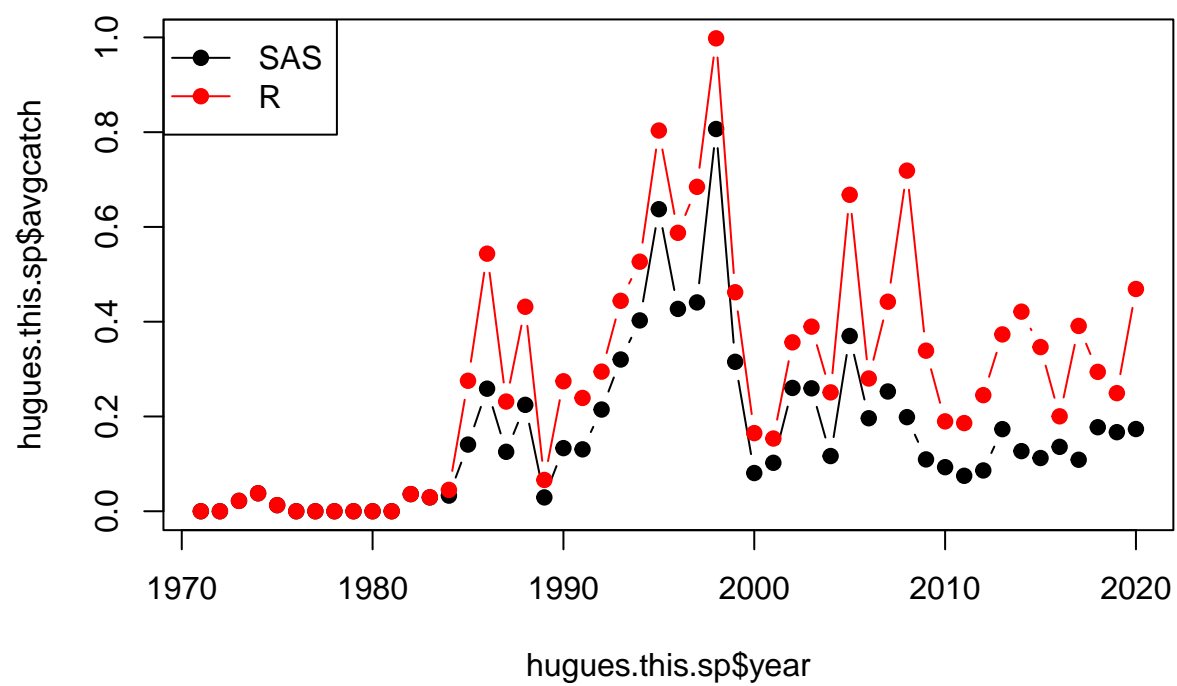
Longfin hake – species code 112
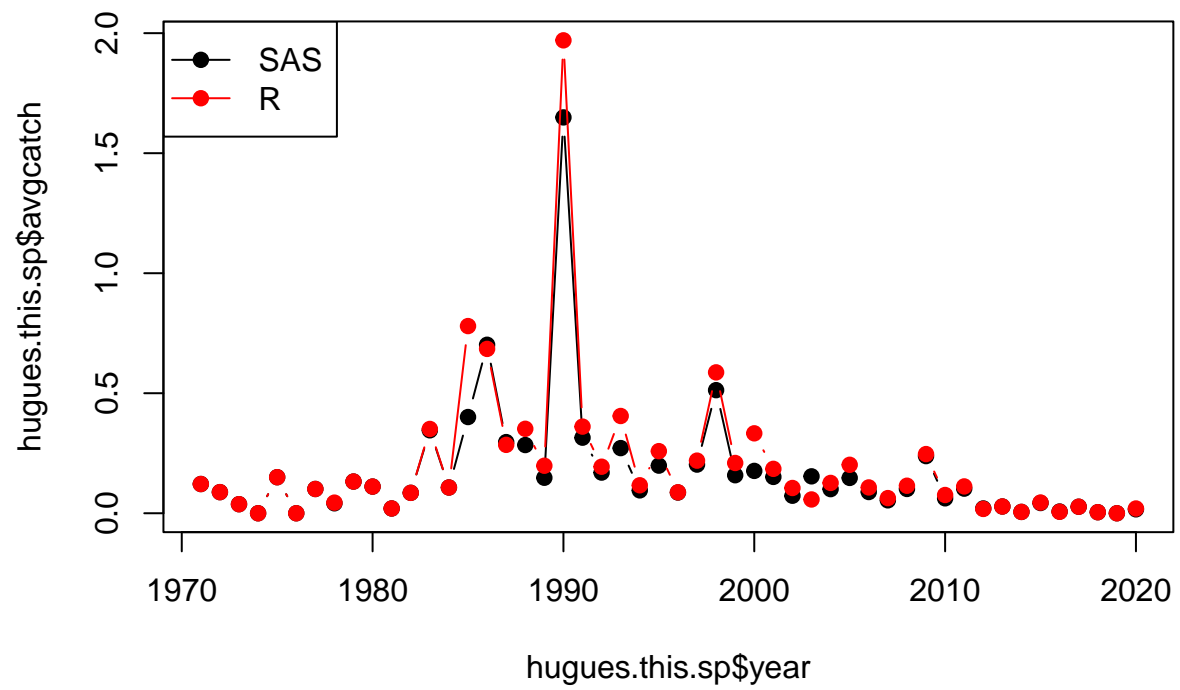
White hake – species code 12
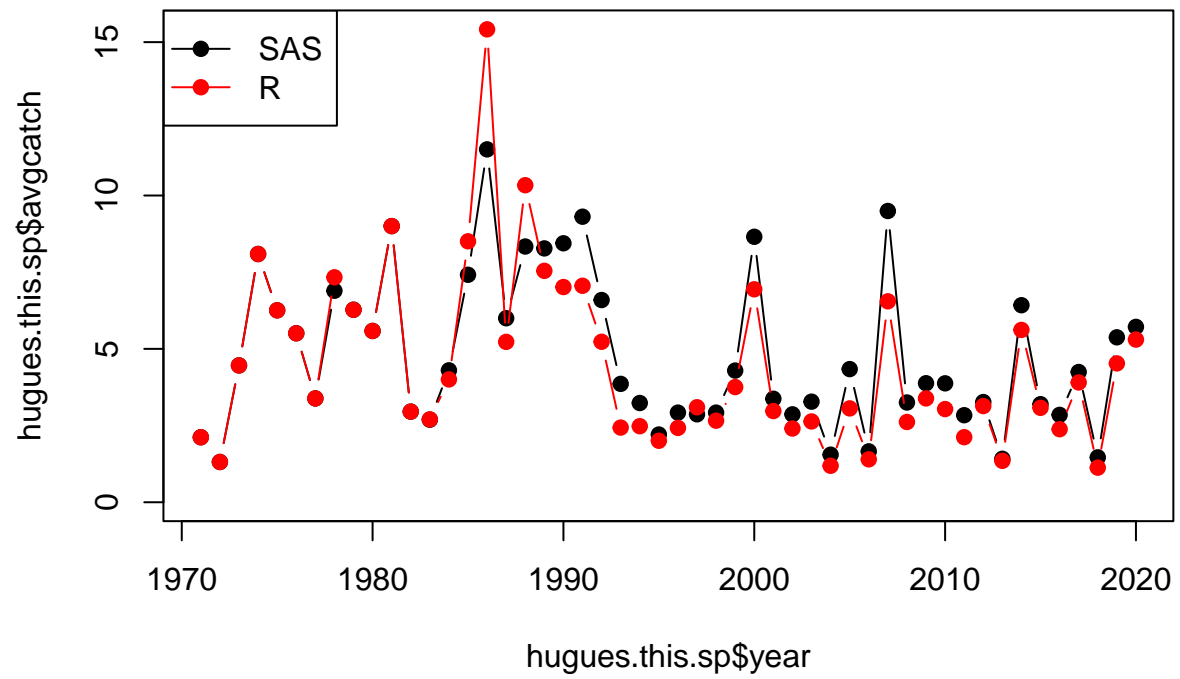
Three−spined stickleback − species code 361
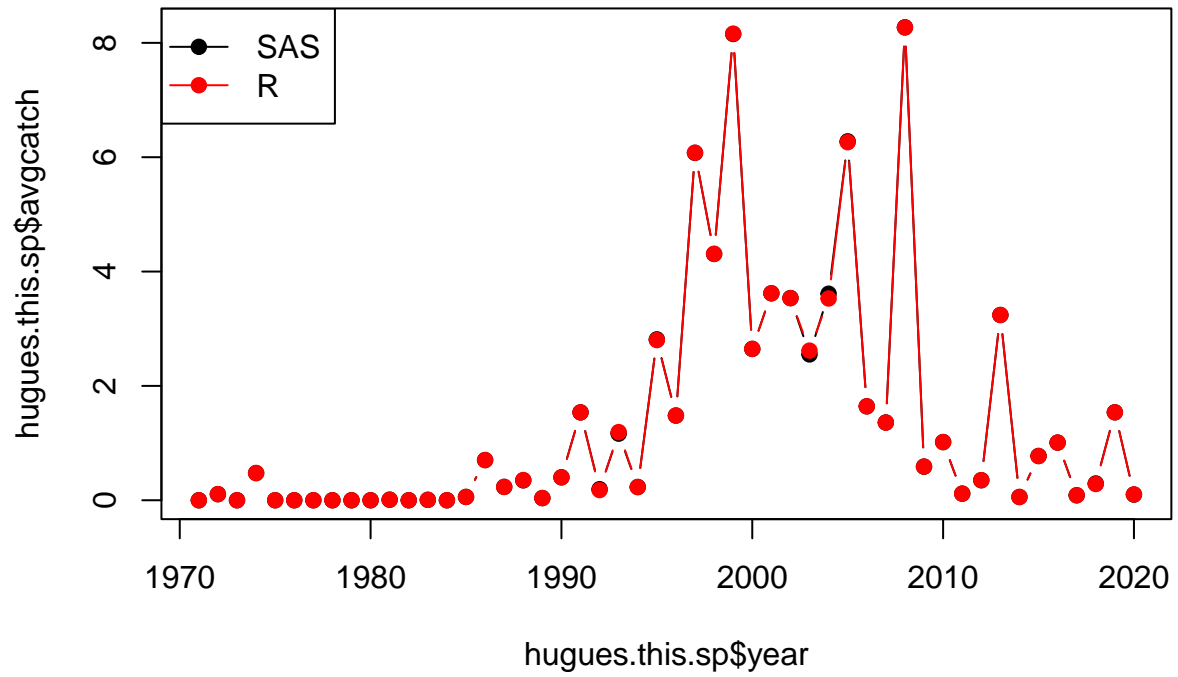
Capelin – species code 64
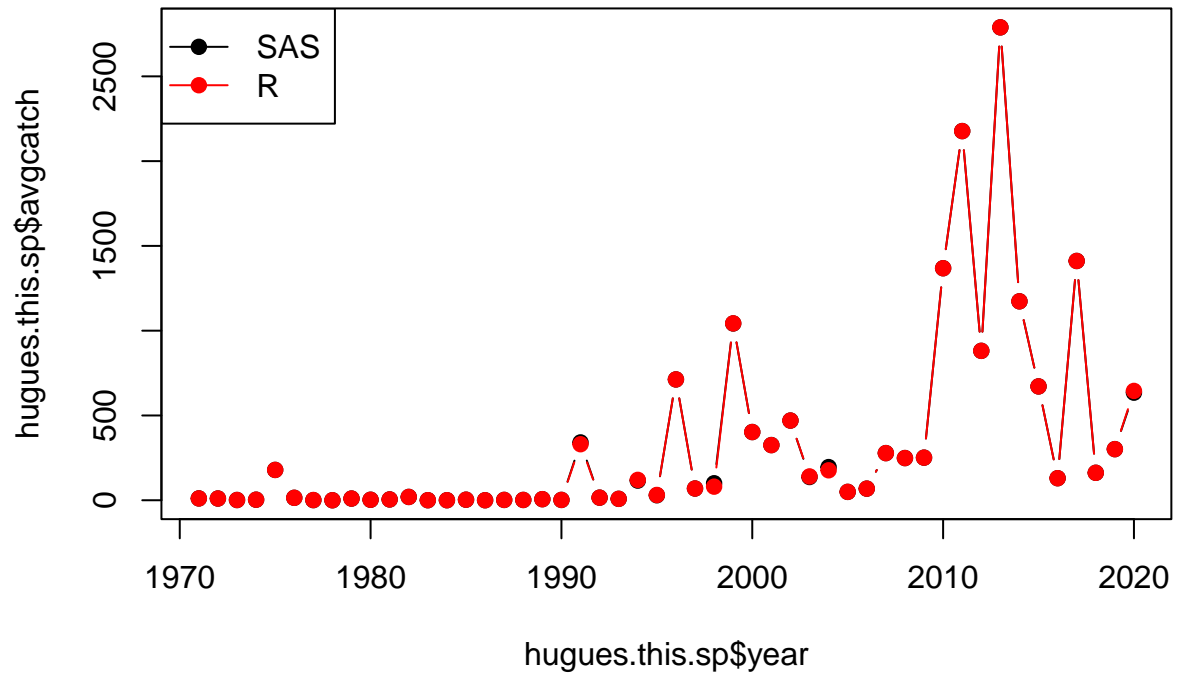
Rainbow smelt – species code 63
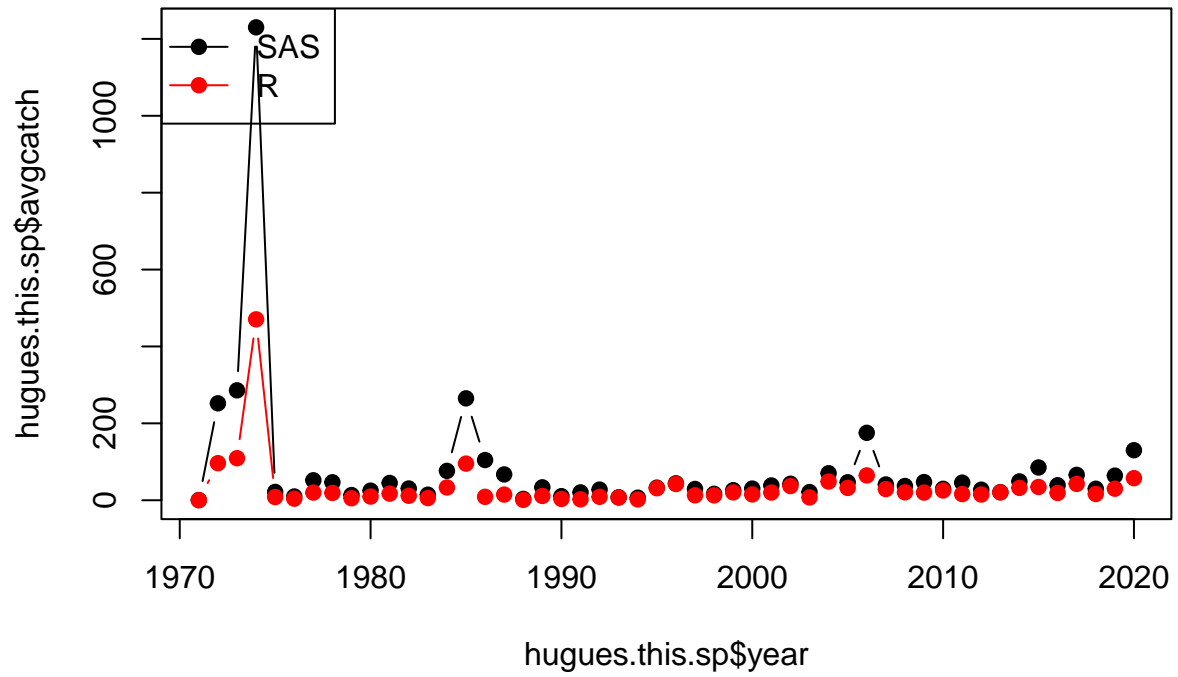
Northern sand lance – species code 610
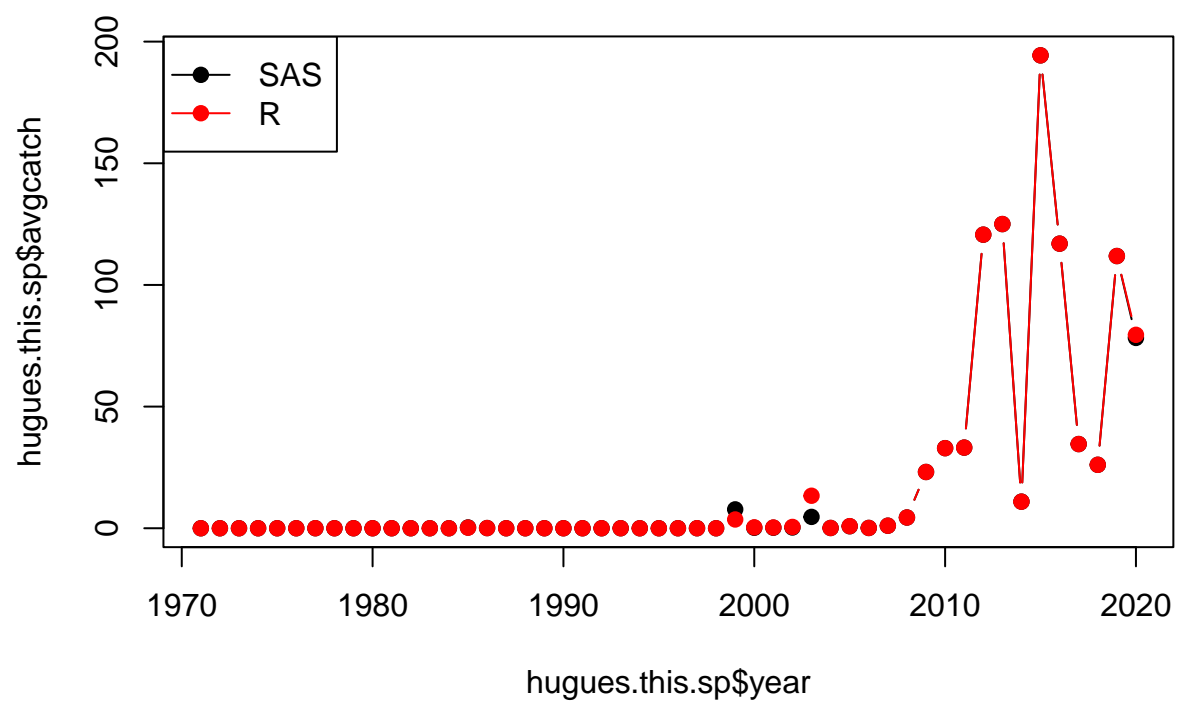
Atlantic wolffish – species code 50

Cunner – species code 122

hugues.this.sp$avgcatch (y-axis)

hugues.this.sp$year (x-axis)

Legend: SAS, R
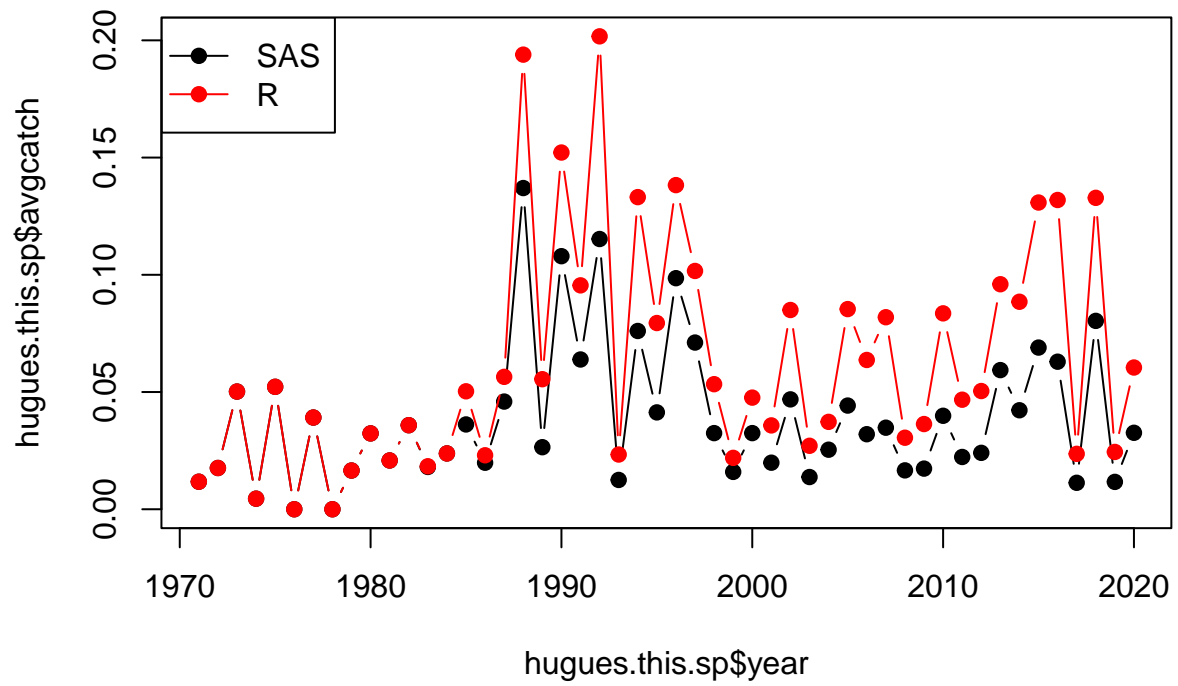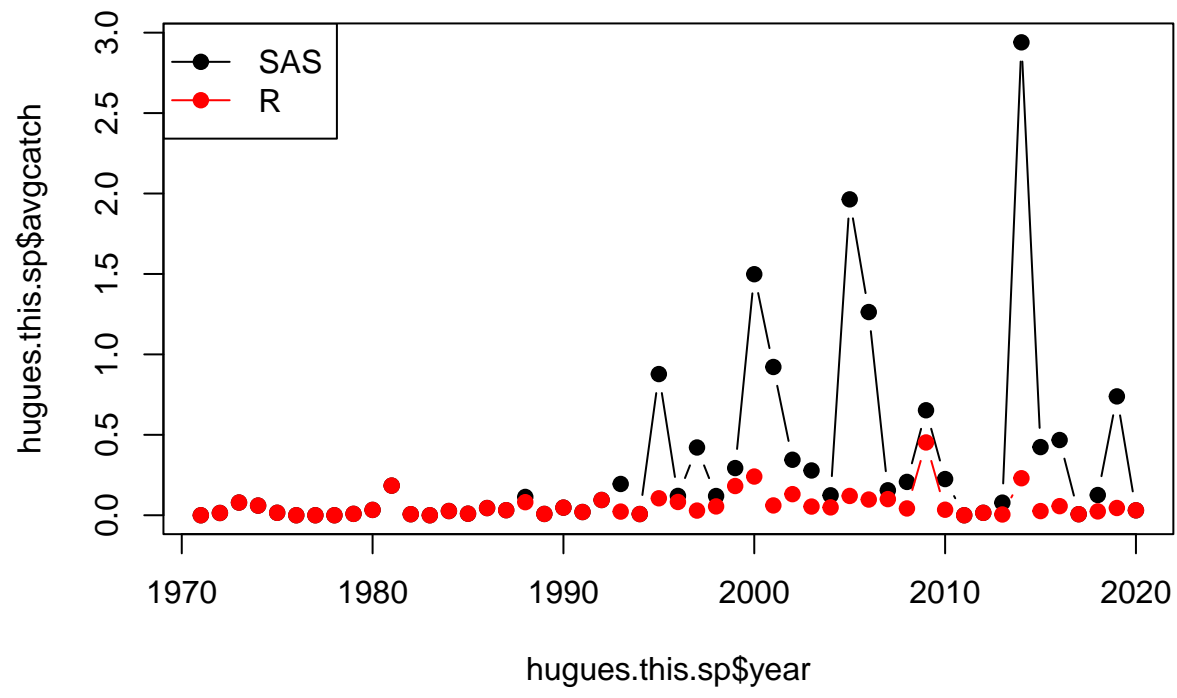
Daubed shanny – species code 623
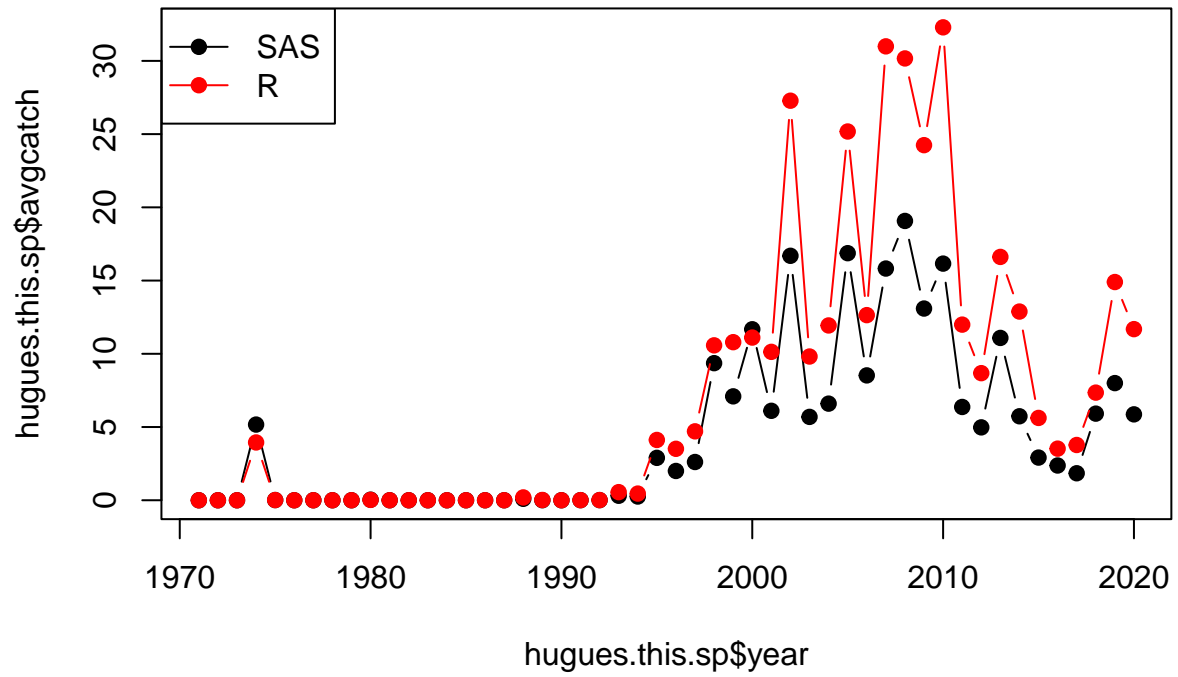
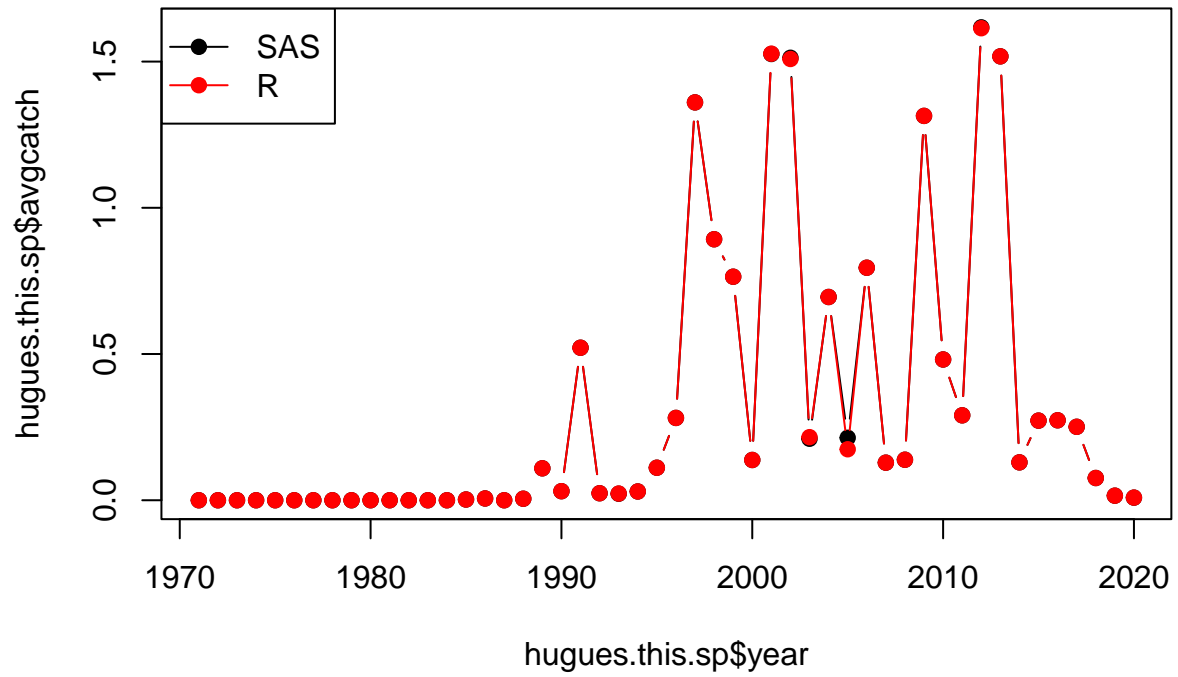# Snakeblenny – species code 622
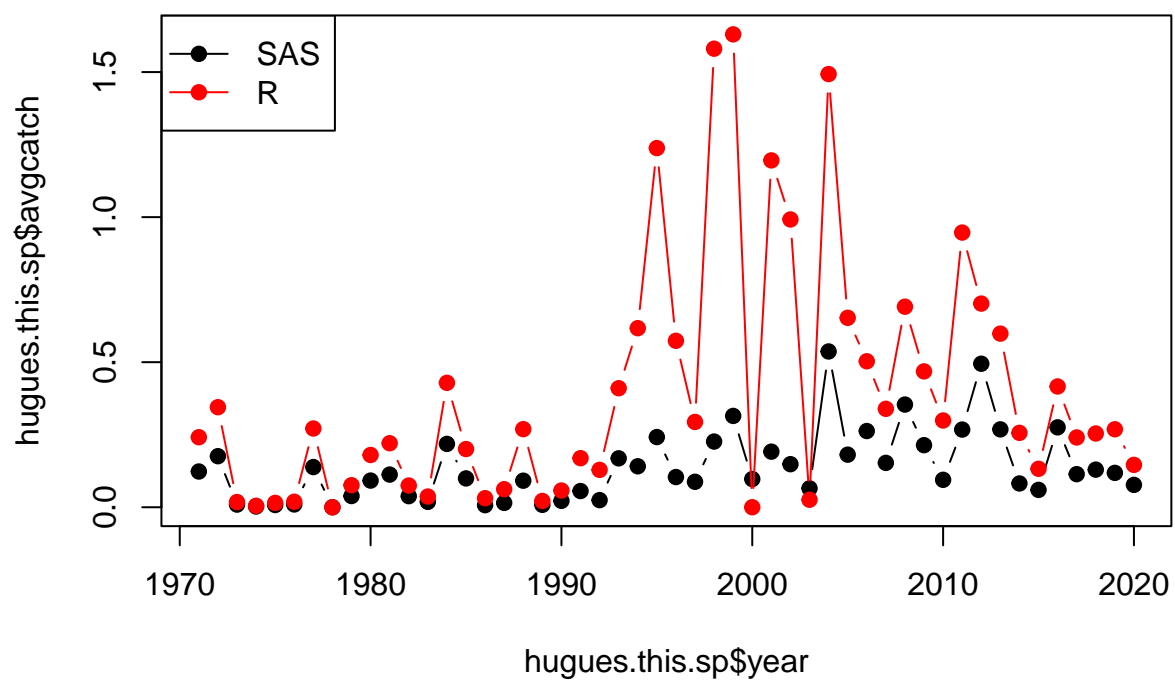
Arctic shanny – species code 624
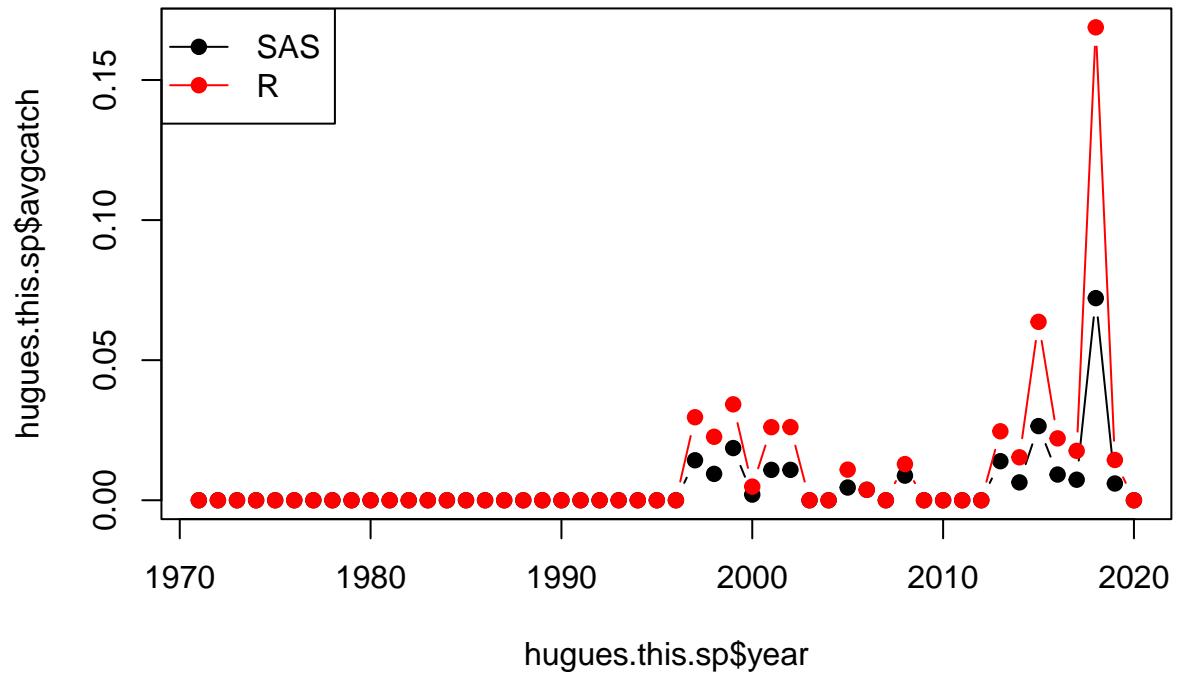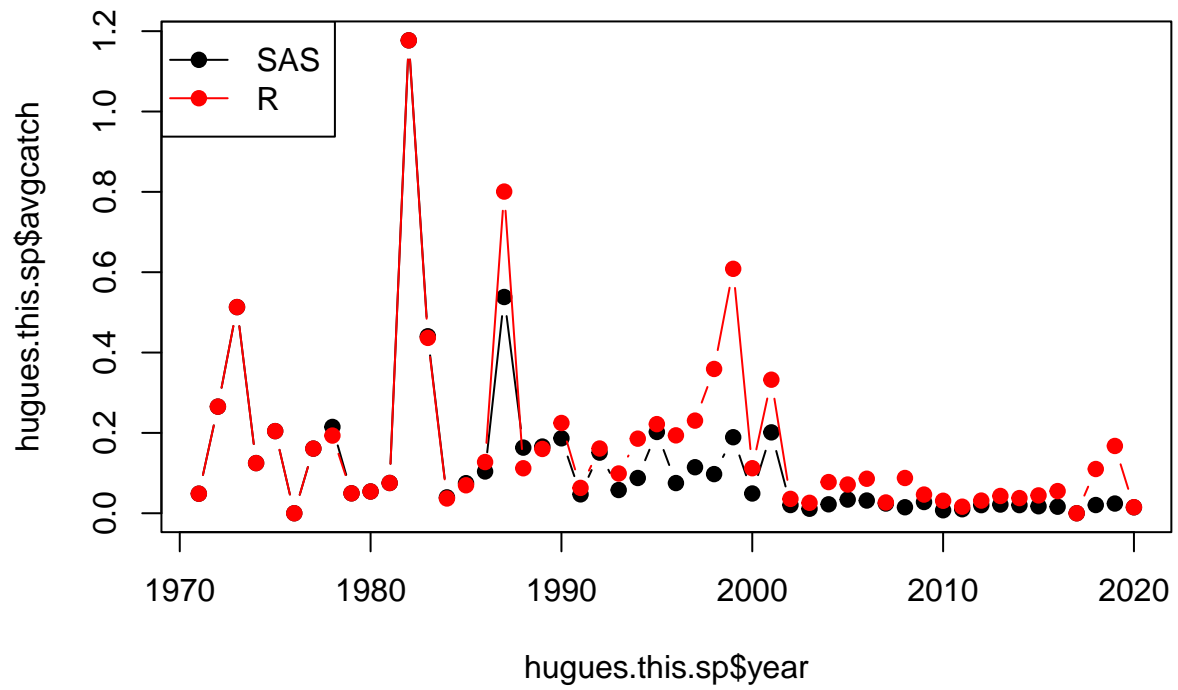
Fish doctor – species code 616
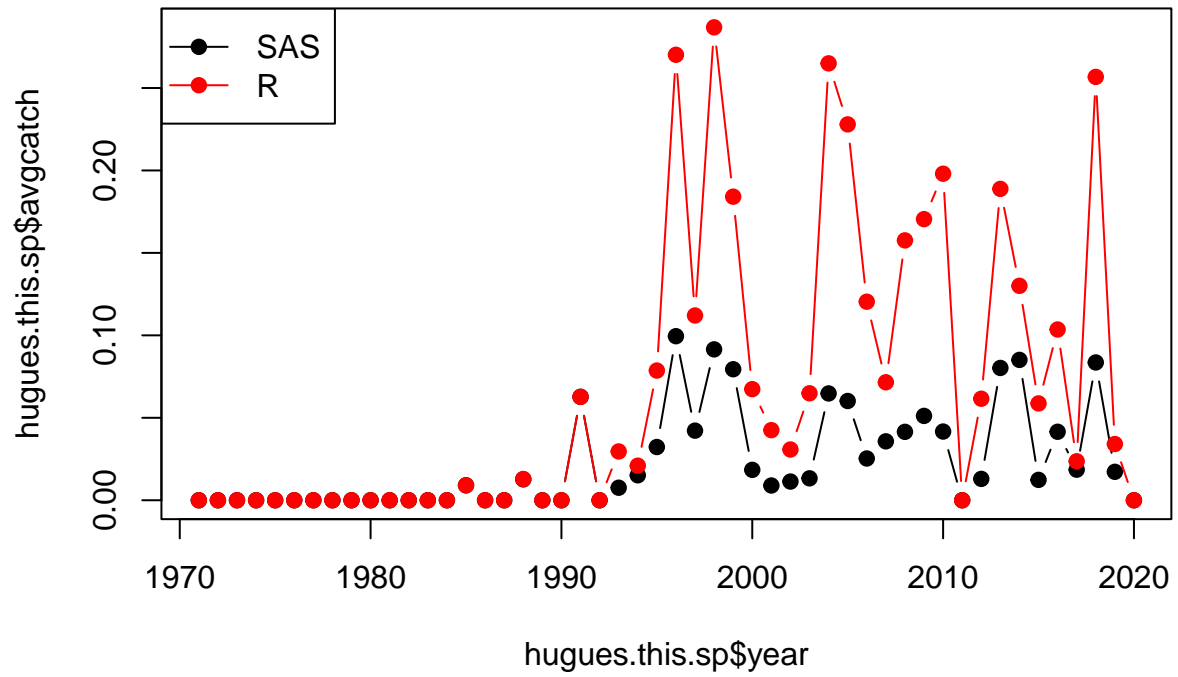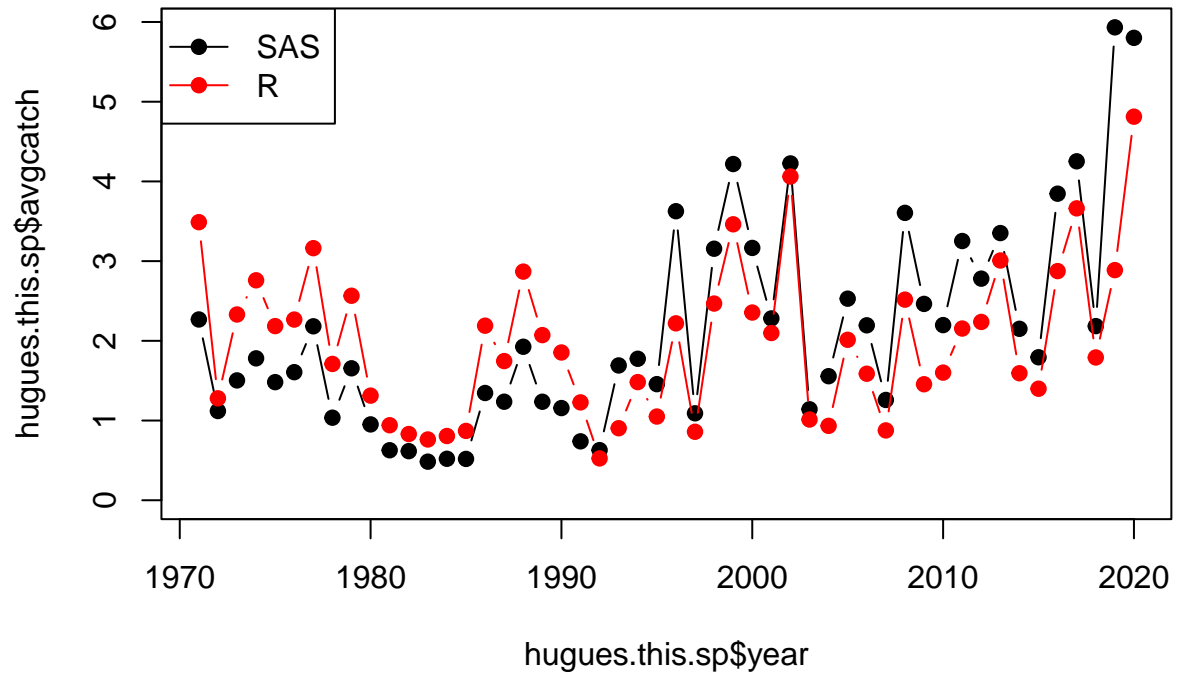
Eelpouts unidentified – species code 598
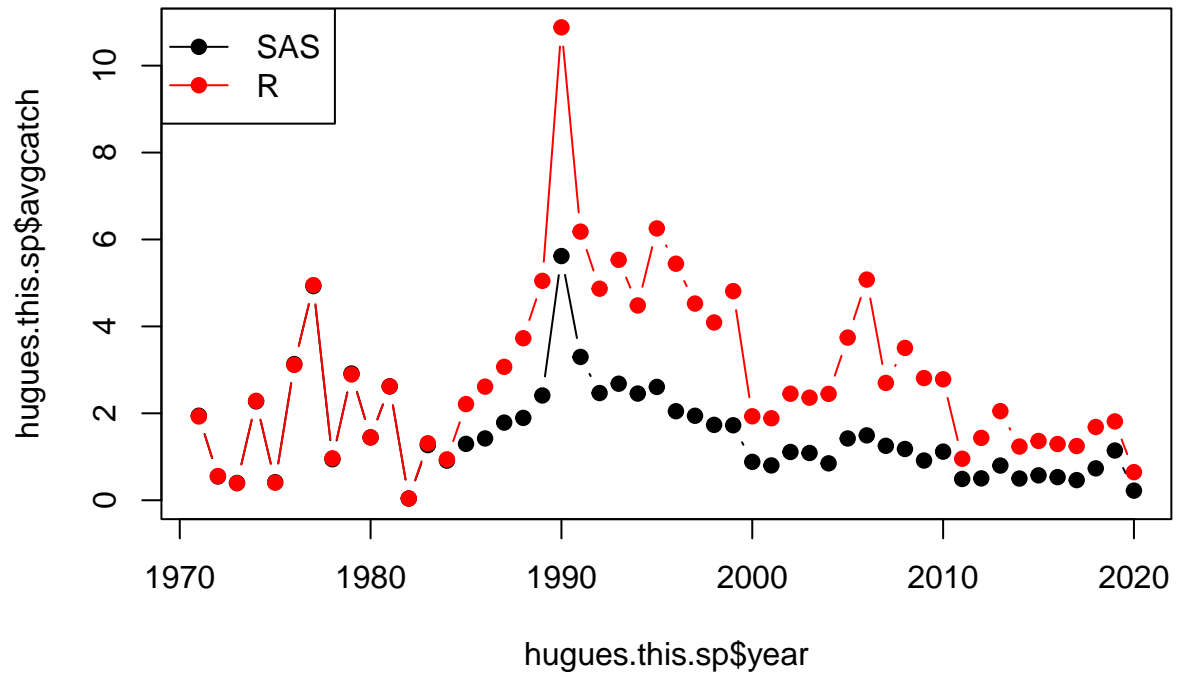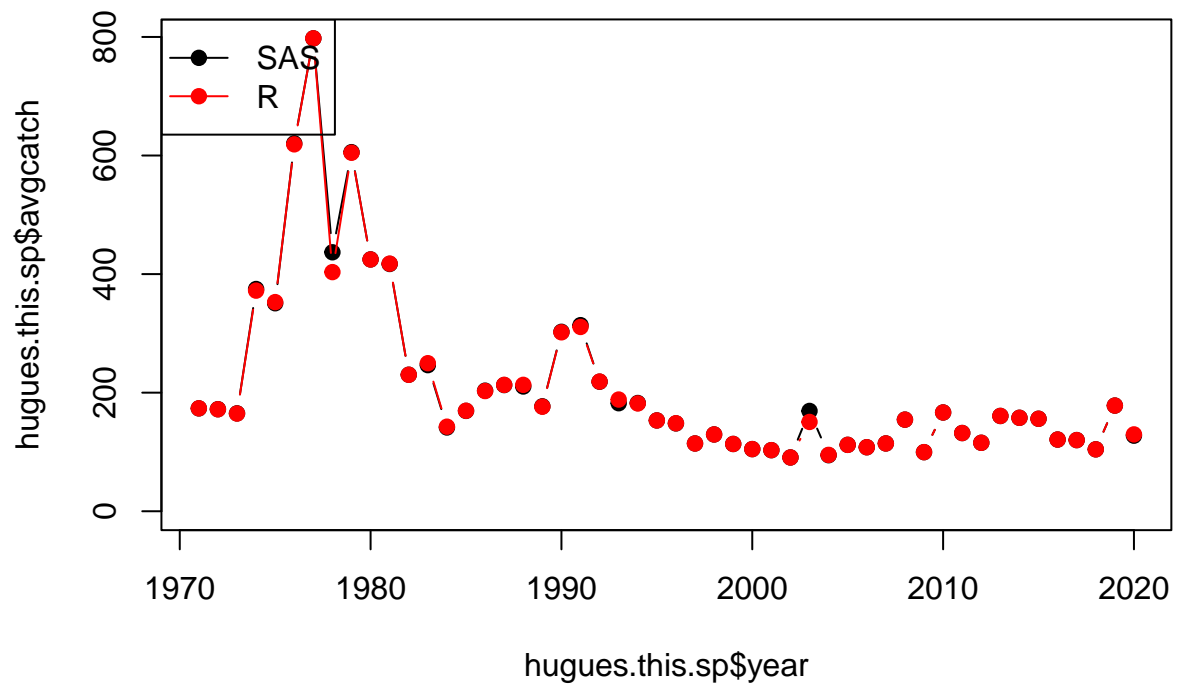
Atlantic soft pout – species code 646
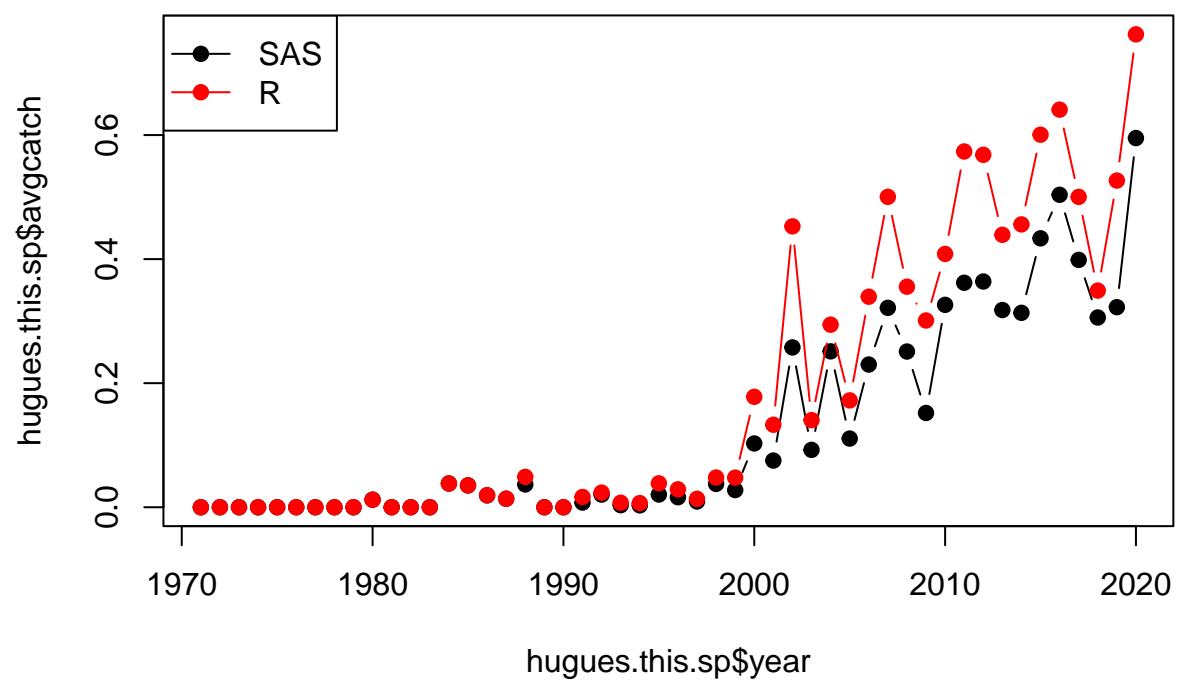
Ocean pout – species code 640

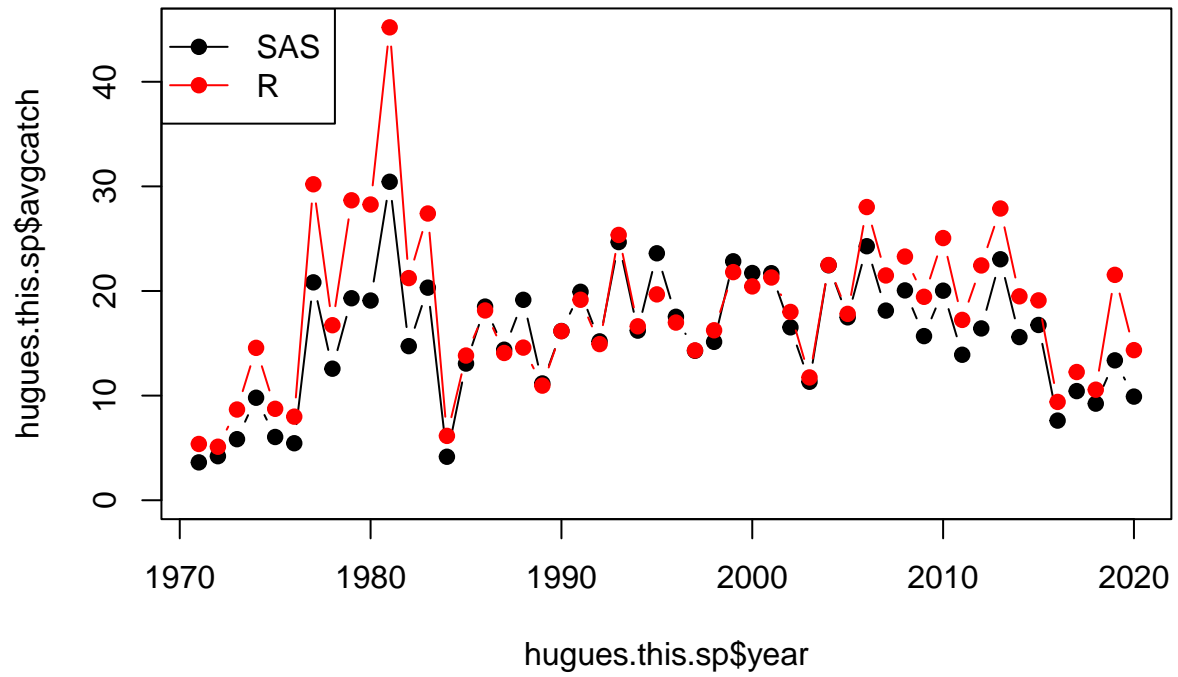# Witch flounder – species code 41

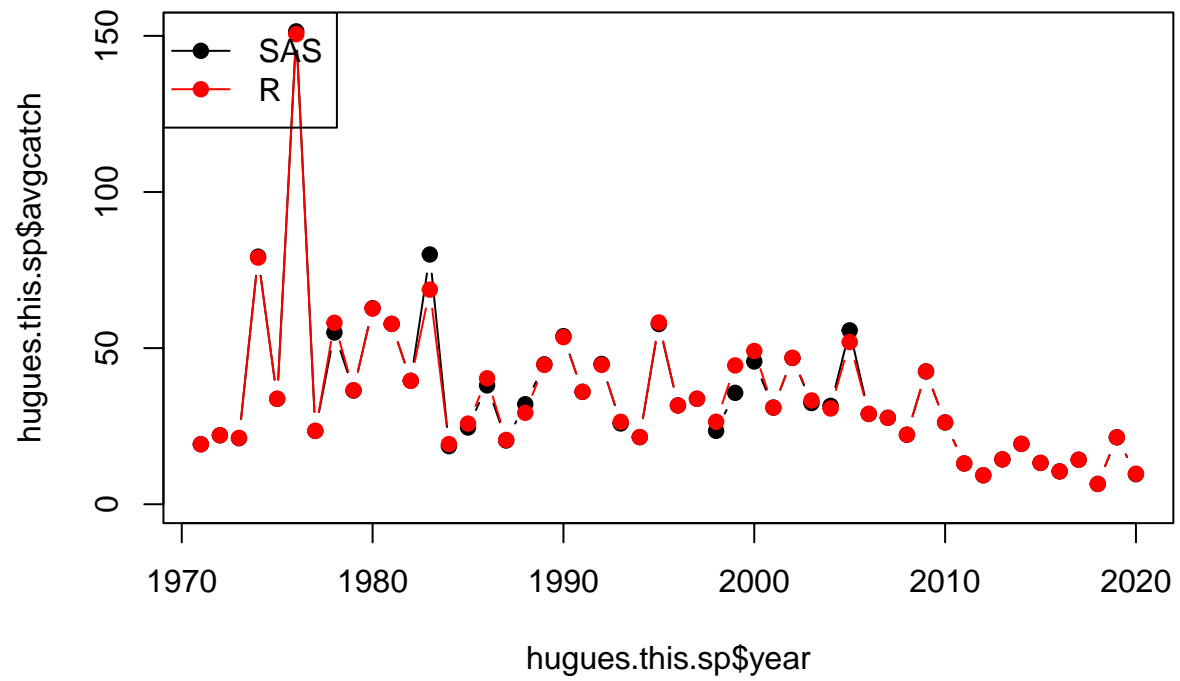American plaice – species code 40

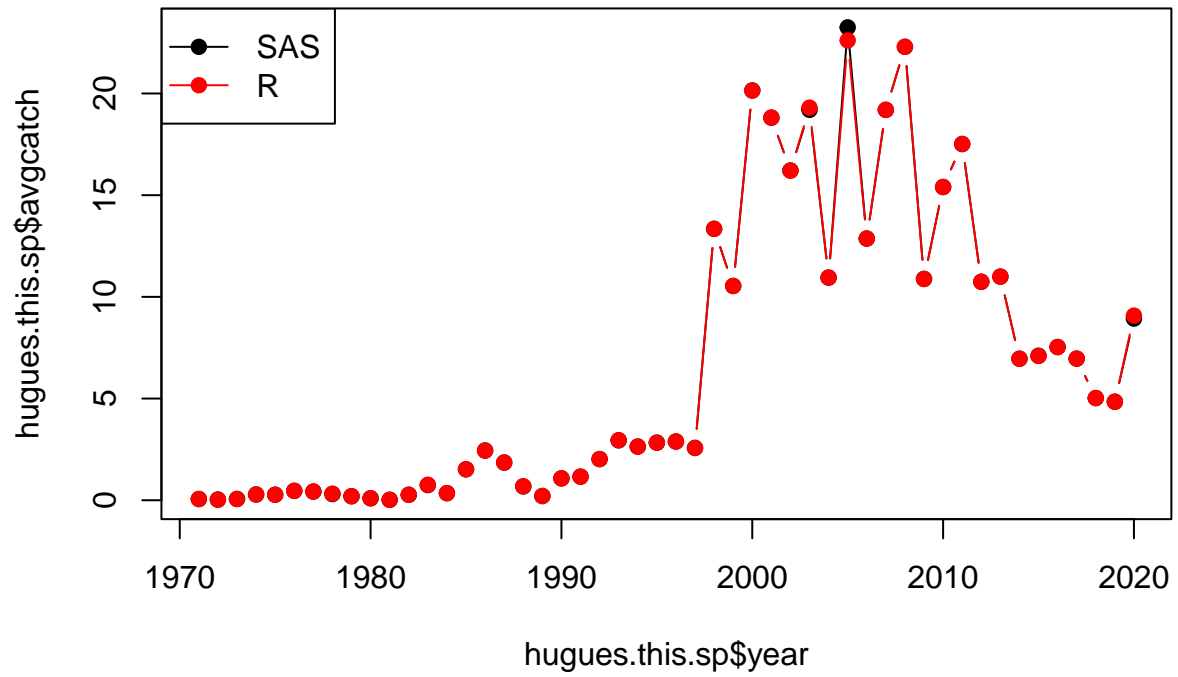# Atlantic halibut – species code 30
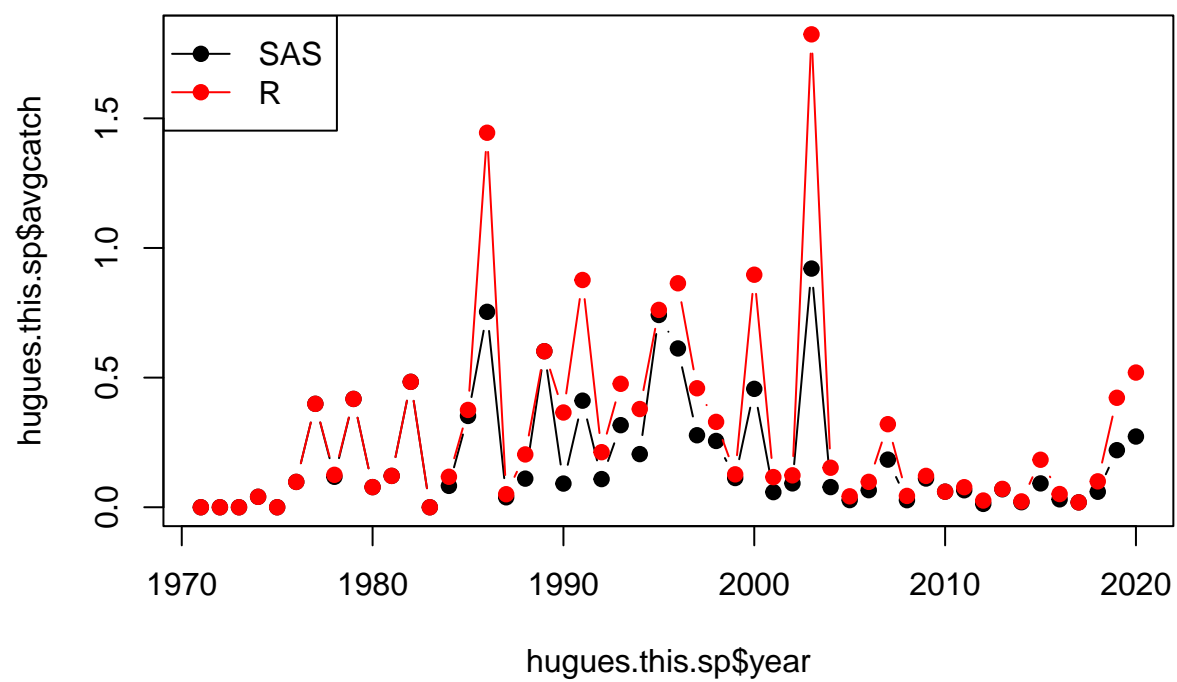
Yellowtail flounder – species code 42
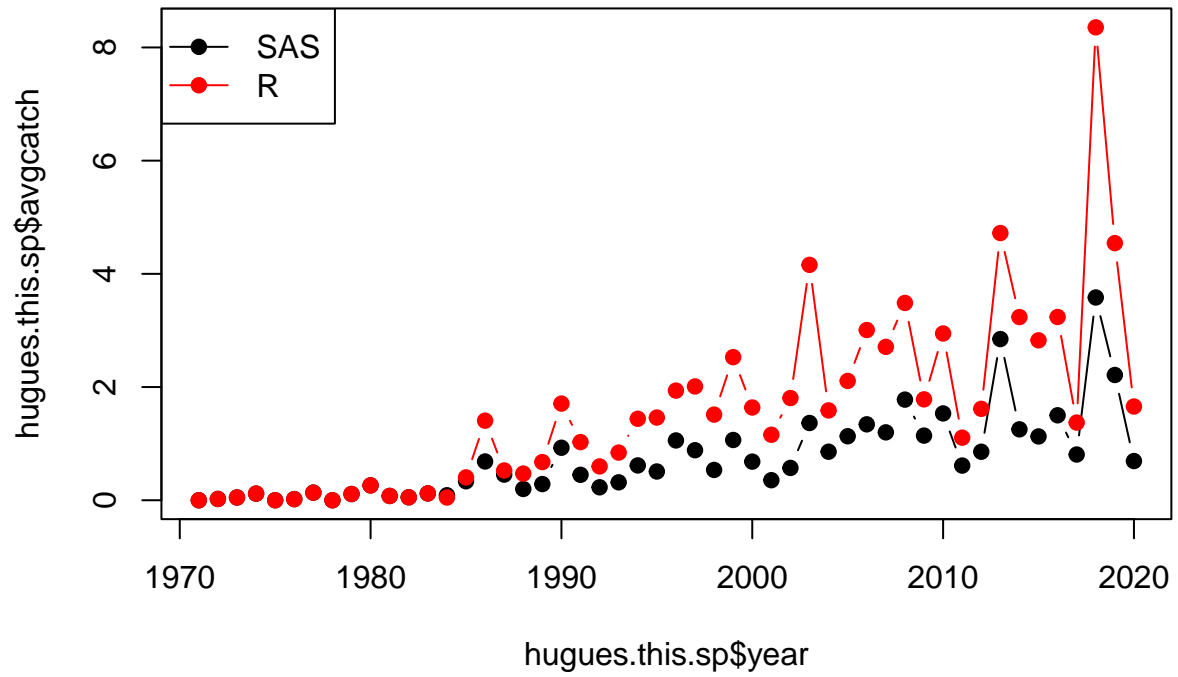
Winter flounder – species code 43
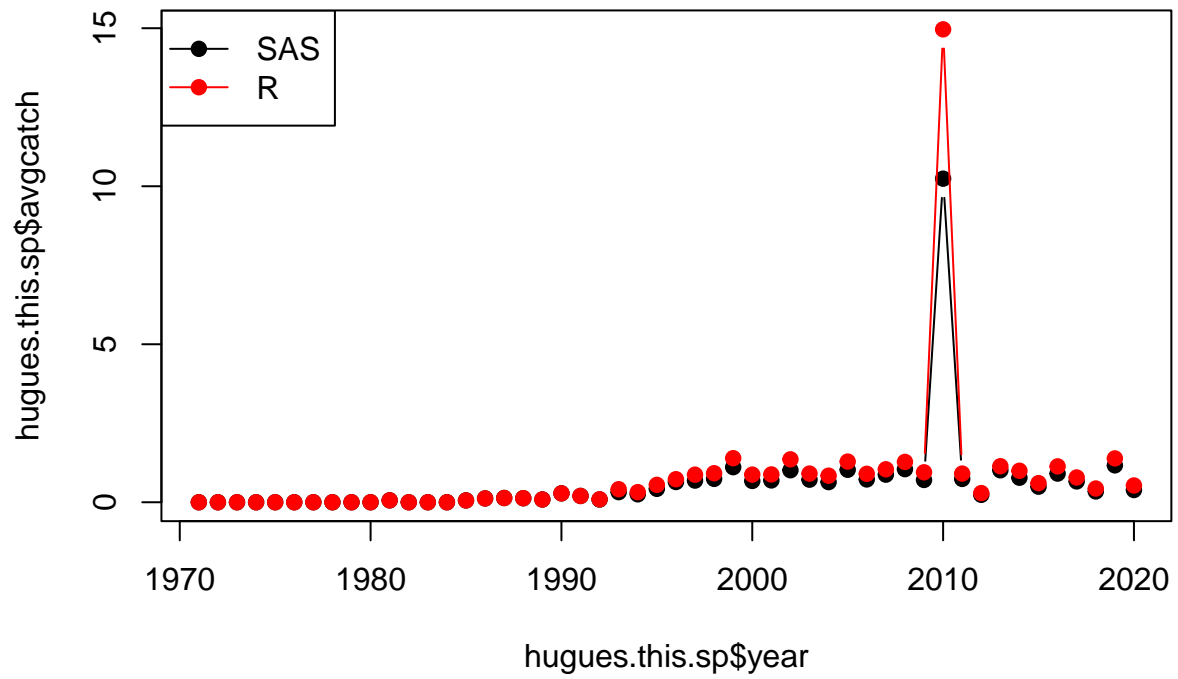
Greenland halibut – species code 31
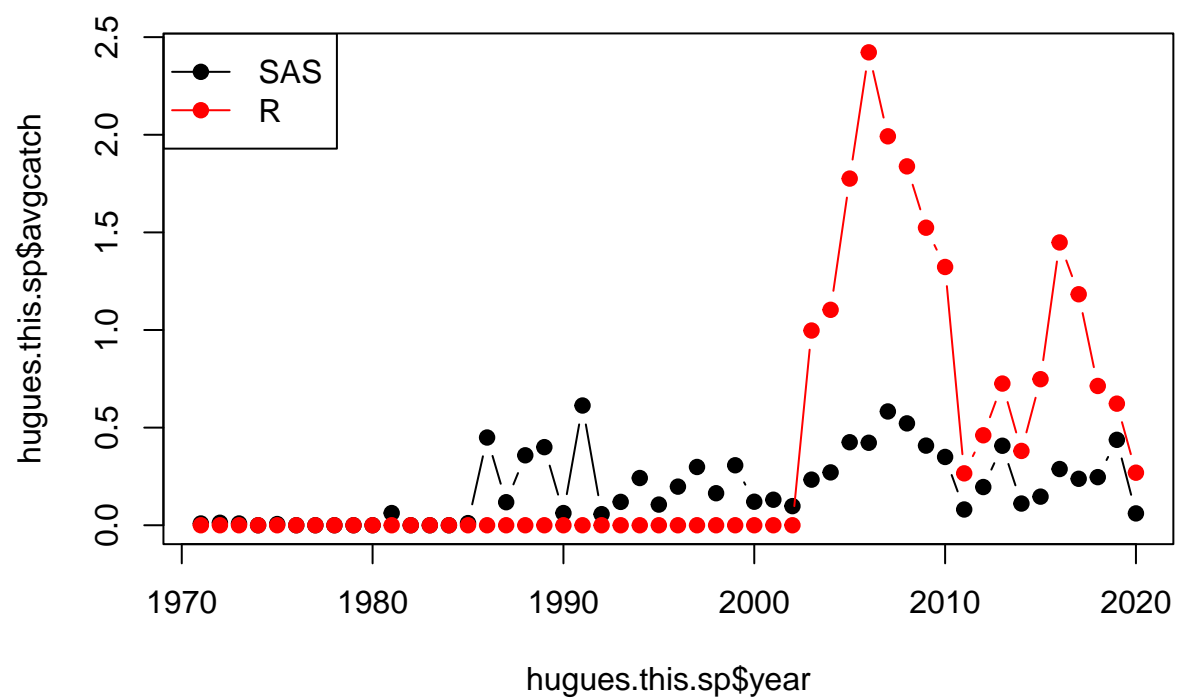
Windowpane flounder – species code 143
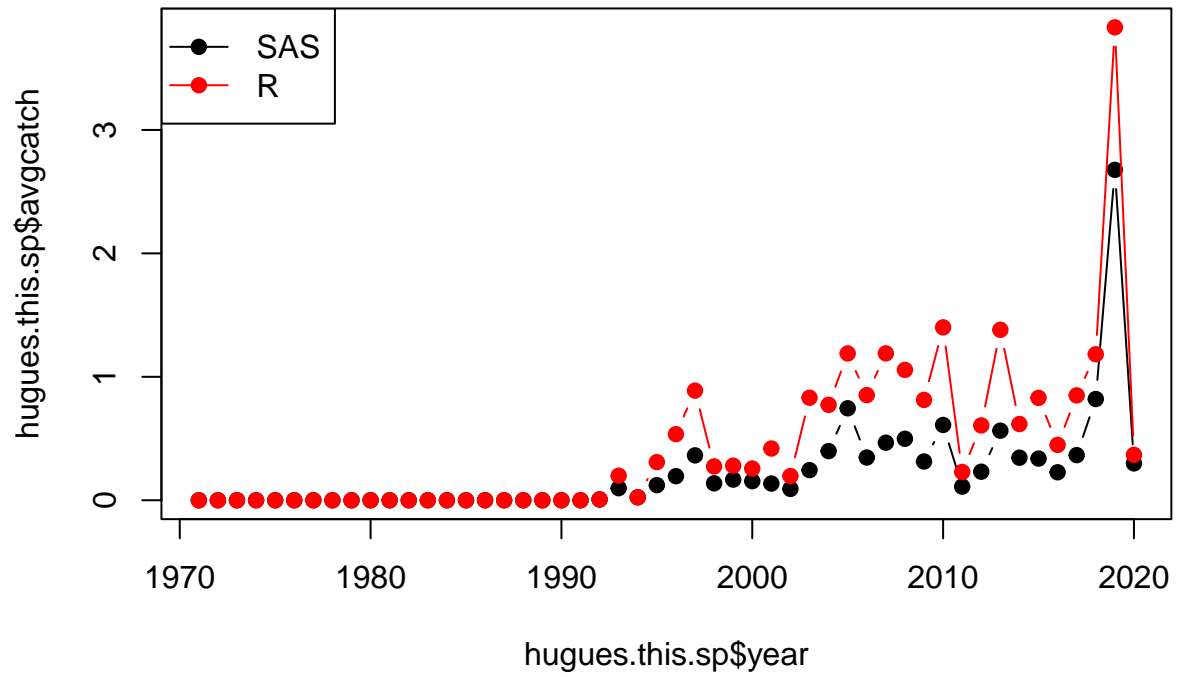
Alligatorfish – species code 340

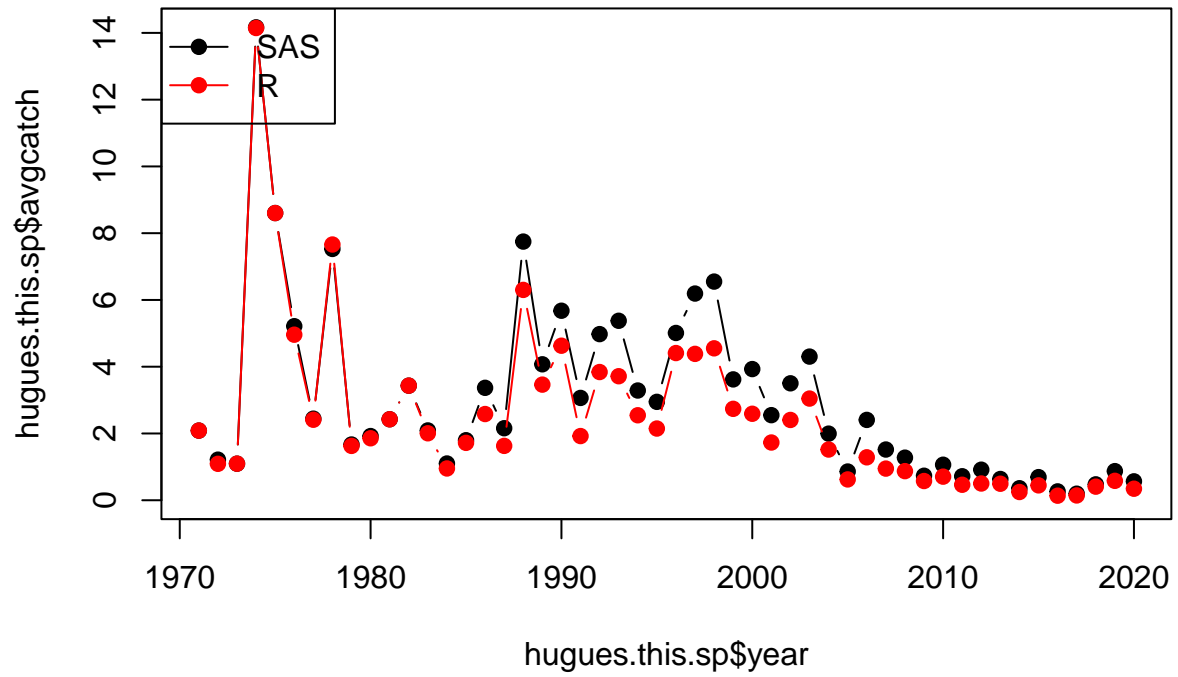# Atlantic poacher – species code 350

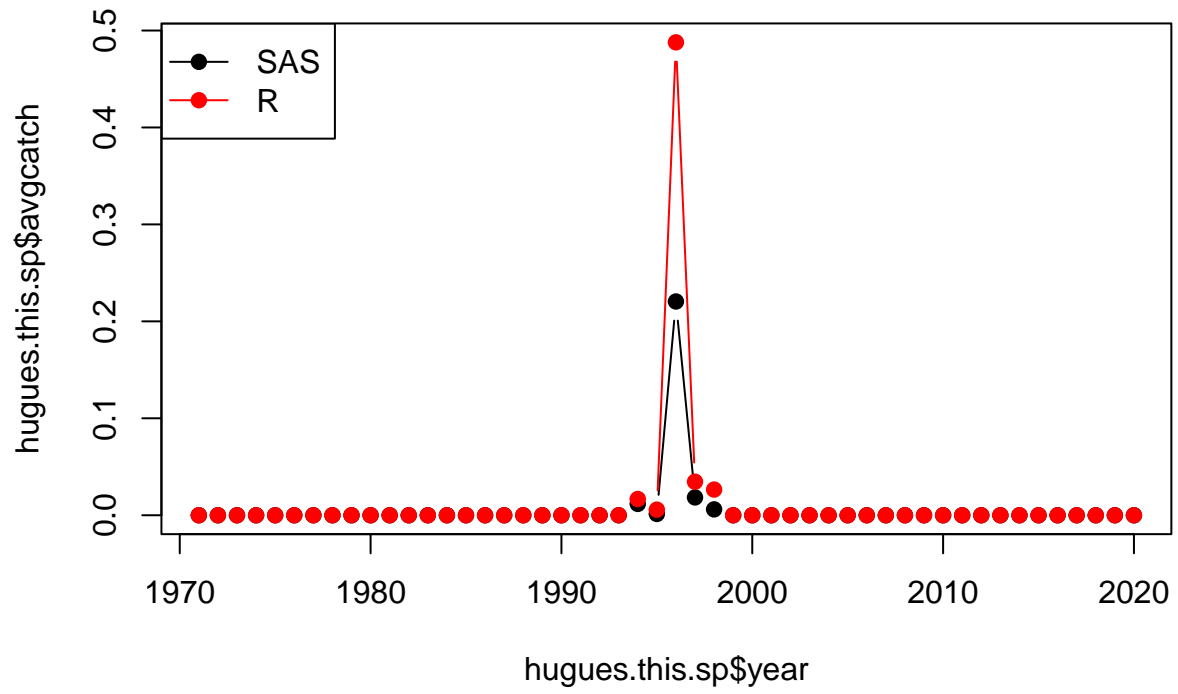# Atlantic hookear sculpin – species code 880

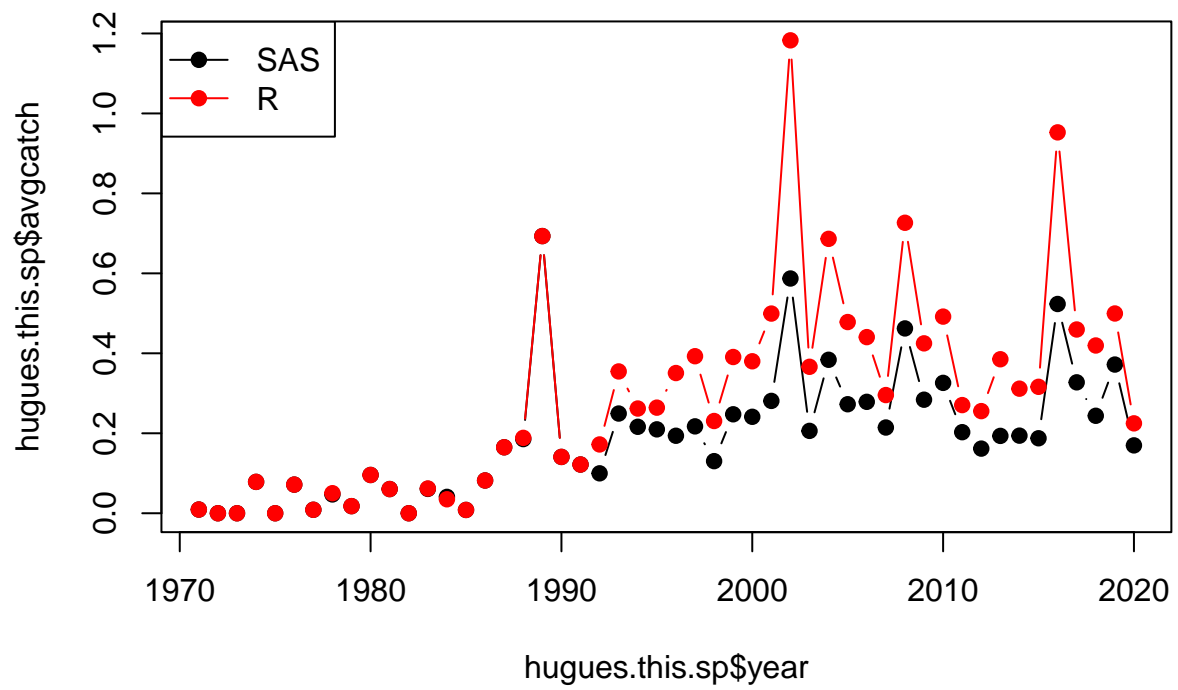# Spatulate sculpin – species code 314
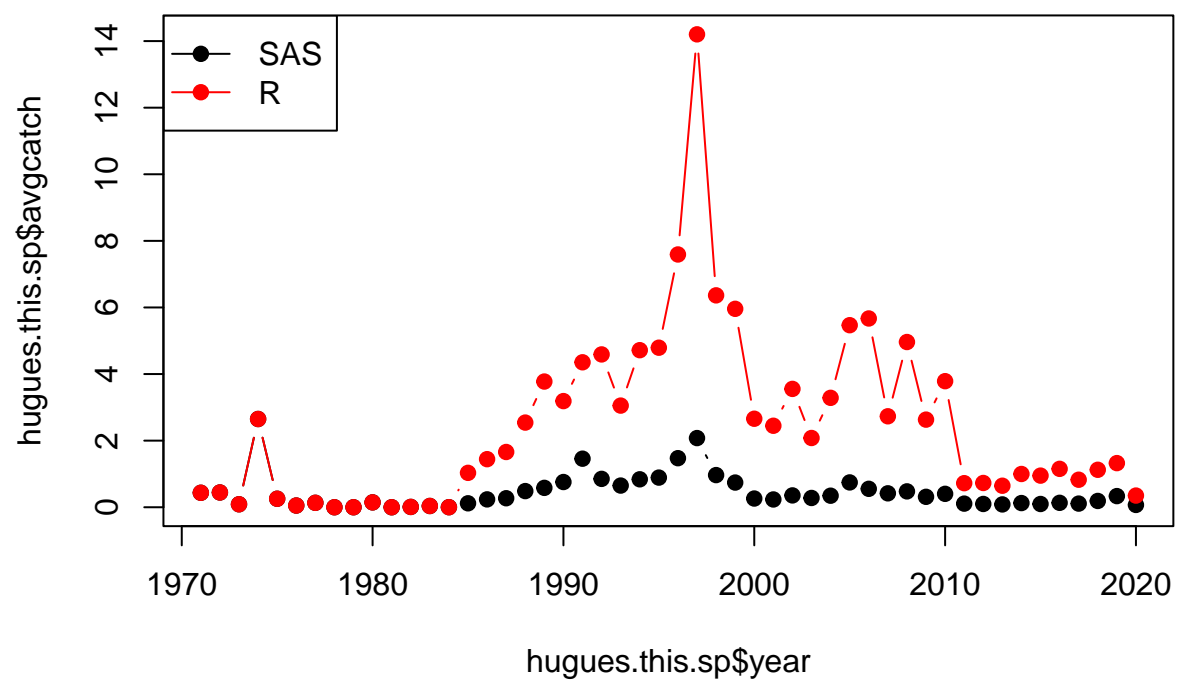
Longhorn sculpin – species code 300
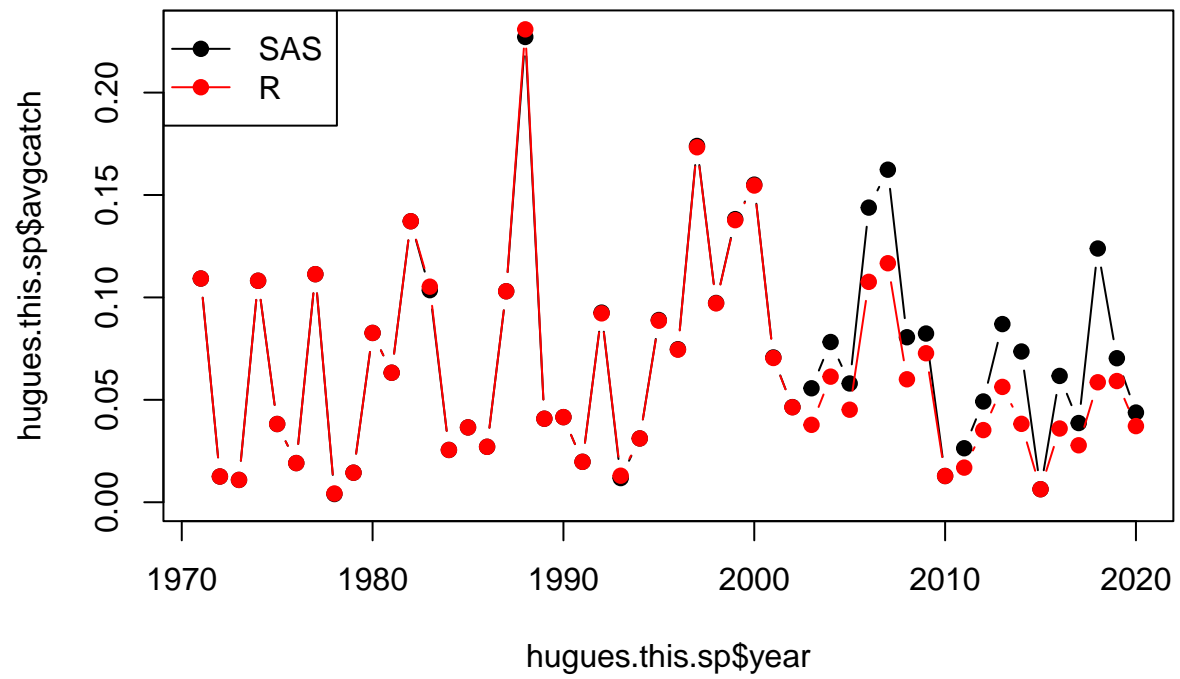
Arctic sculpin – species code 316

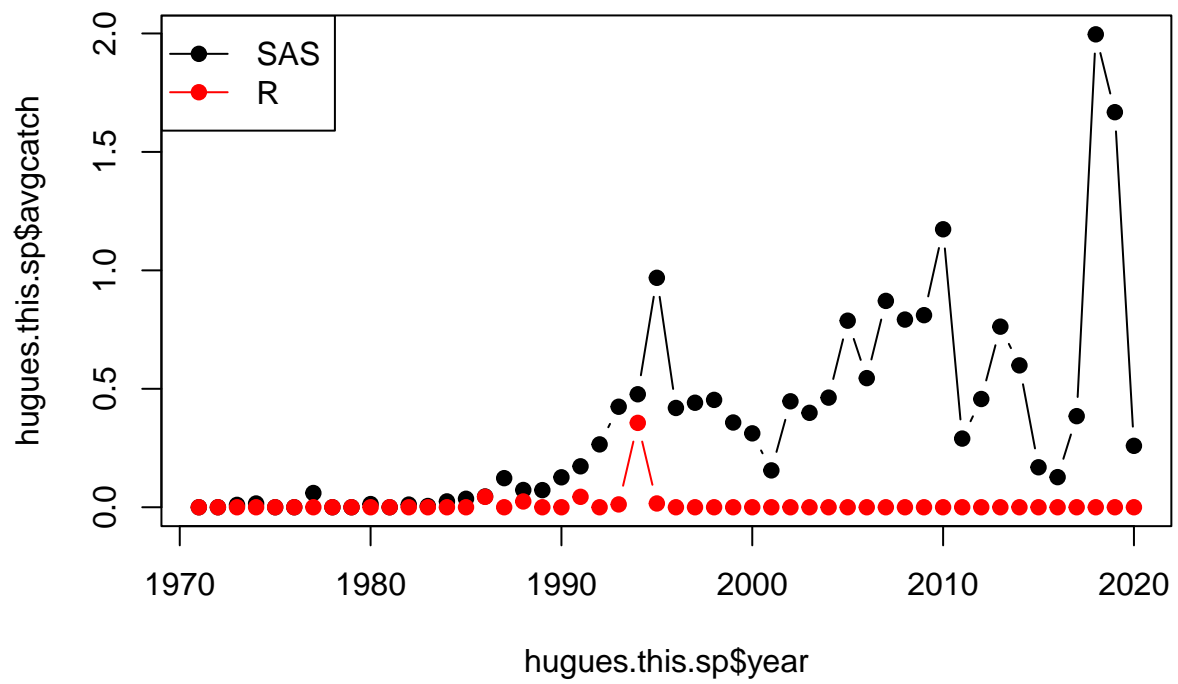# Shorthorn sculpin – species code 301

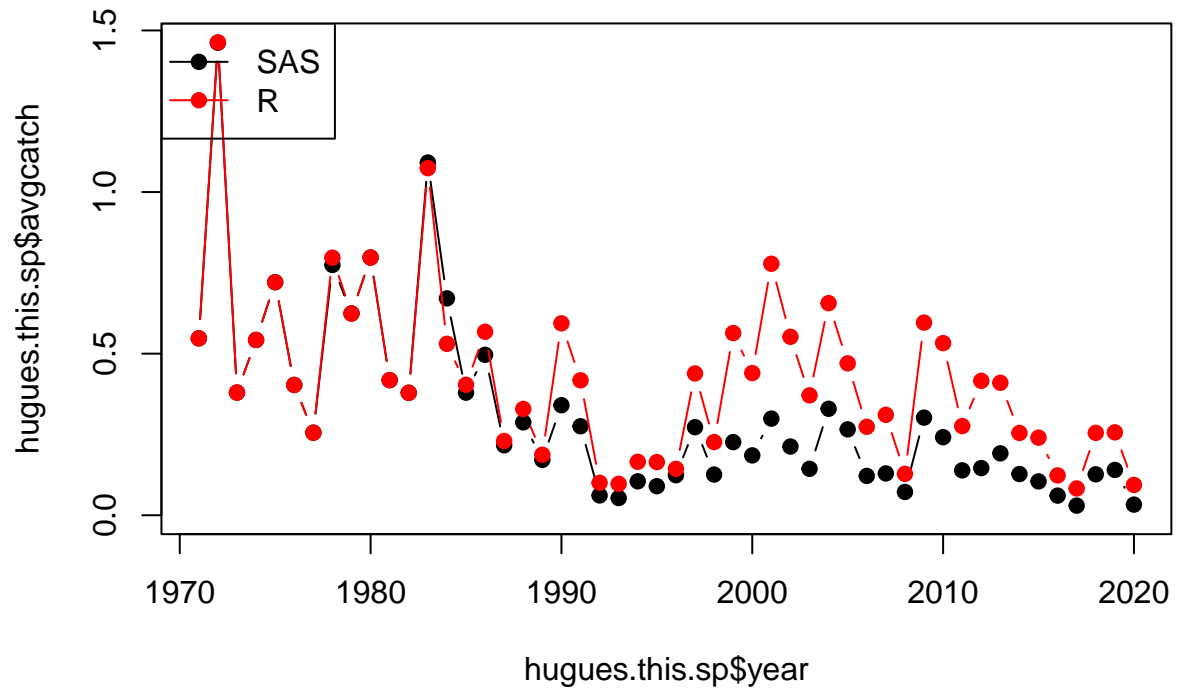# Moustache sculpin – species code 304

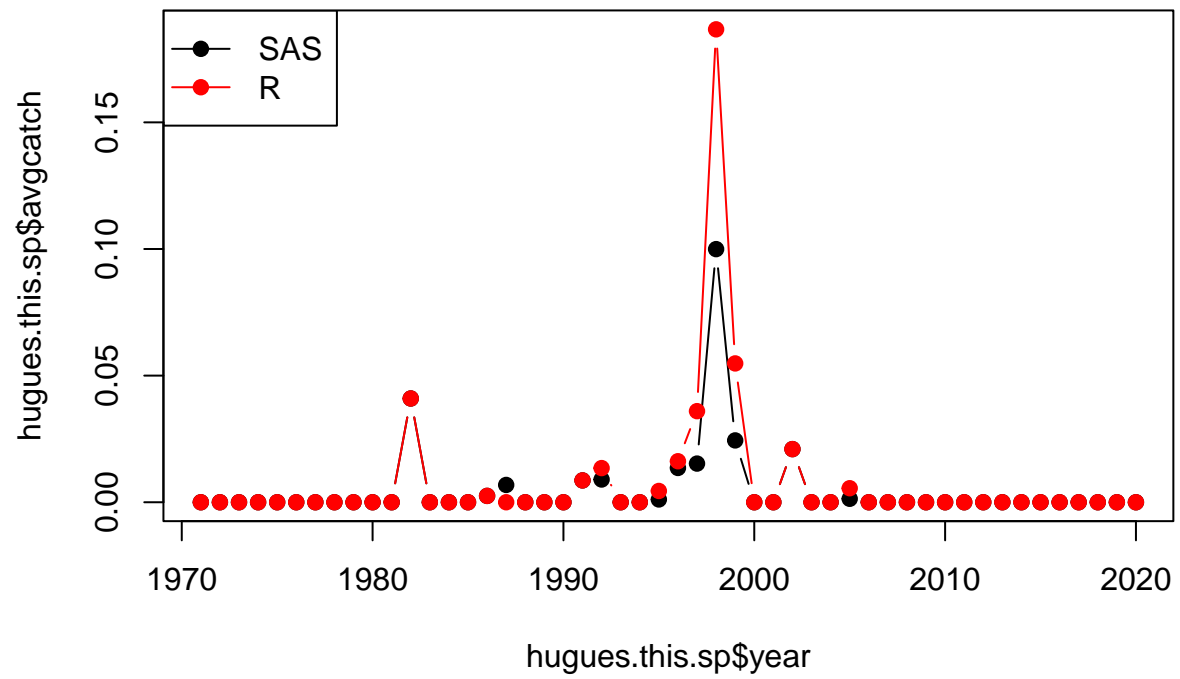# Lumpfish – species code 501

Atlantic seasnail – species code 503

Sea raven – species code 320

Polar sculpin – species code 307

Redfish unidentified – species code 23