**OSAC\_fishery\_figures.r**

**Purpose**  This function is used to make the figures for the OSAC and pre-OSAC presentations. This function makes the figures “Fishery\_summary” and “Spatial\_fishery”

**Version Control**  This is the original version of OSAC\_fishery\_figures.r as it incorporates several other scripts.

Required packages PBSmapping; RColorBrewer

**Locally Derived Functions**

1. **fishsum.plt.r**
2. **gridPlot.r**
3. **fishery.dat.r**
4. **ScallopMap.r**

**Section 1**

Several custom functions and a couple of local data files are required to get this function up and running. CPUE is calculated using the fishery.dat.r function with the jackknife method for the error. These data are directly used to get the Fishery\_summary plot. The spatial aspects of the most recent year of fishing are aggregated into grids (default is 1 minute cells) and this is turned into the Spatial\_fishery figure used for OSAC. The data generated is also returned at the end of the function in case this is of interest.

***Argument(s)***

1. fish.dat The fishery data, likely extracted from the survey summary results but could be called

stand alone, default is blank

1. max.date The last date for which QA/QC log data exists. Default = format(Sys.time(), "%Y-%m-

%d"),

1. years The years of fishery data to plot. Default = 1981 format(Sys.time(), "%Y"),
2. bnk The bank(s) from which to extract these data. Default =

c("Ban","Mid","Sab","Ger","BBs","BBn","GBa","GBb"),

1. log.ts Do you want to log transform the survey time series data. (T/F) default = F.
2. grids What size should the catch areas be for the spatial plot. Default = 1/60 which is a 1

minute grid size.

1. fun The function to use for calculations in grids, see gridPlot for options. Default = sum.
2. lvl What are the levels for the spatial plot. Default is

c(10,50,100,500,1000,5000,10000,50000), which will produce bins for total catch of 10kg-50kg... up to 50,000 kg+

1. poly.brd For the spatial plot if you want a border around each cell specify the color here. Default

= NULL (no border)

1. add.titles Add titles to the figures. (T/F) default = T.
2. dirct The directory to save the figures and source the functions from.Default =Y /Offshore

scallop/Assessment/Assessment\_fns/

1. save.fig Do you want to save the figure as image files, or just plot them to screen. (T/F) Default

T which plots to the directory pulled from here- paste(dirct,"Presentations/",yr,"/OSAC/",bnk[i],"/Fishery\_summary.png",sep="")you will need to create the directory for each year/bank combination if it does not already exist.