## **Diversity\_Exploration**

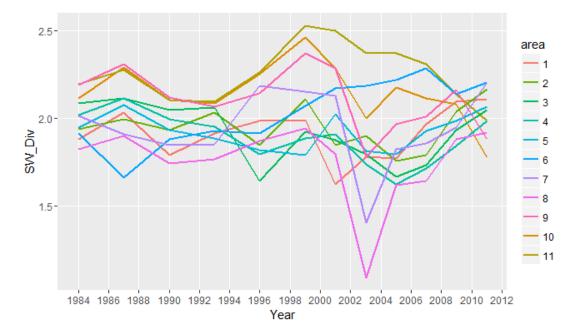
#### Rachael Blake

October 29, 2015

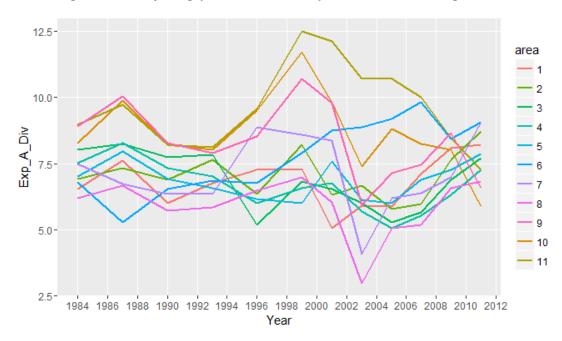
This is an initial exploration of diversity patterns in the shallow Groundfish areas in the central GOA. This uses Ole's model output Species CPUE per area as input data.

We want to look at diversity by area by year (using CPUE per area). Here we calculate Shannon diversity, effective # of species, beta diversity, and gamma diversity.

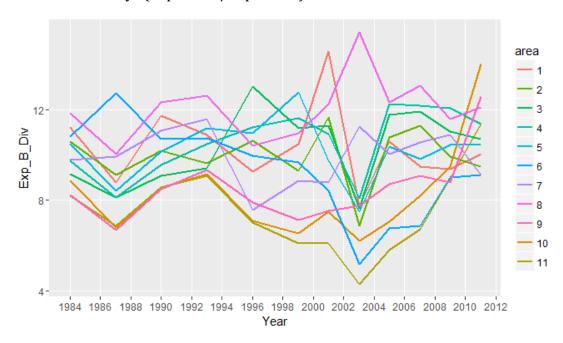
Plot of Shannon-Wiener Diversity:



### Plot of Alpha Diversity "exp(Shannon-Wiener)" ie: effective # of species :



#### Plot beta diversity "(Exp\_G\_Div/Exp\_A\_Div)":



# Plot gamma diversity:

