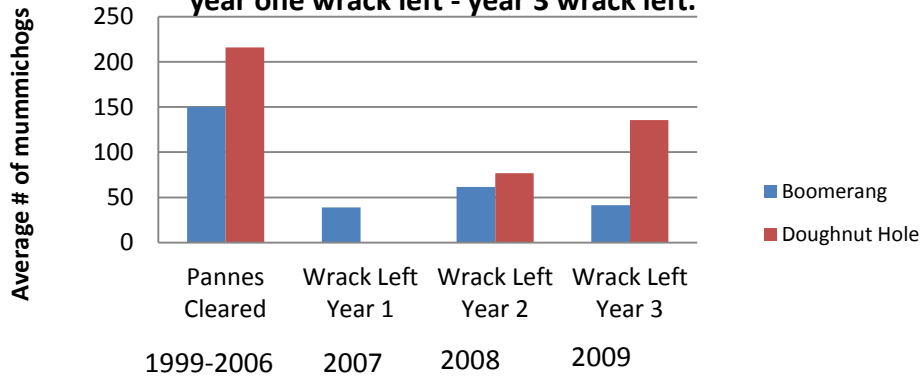
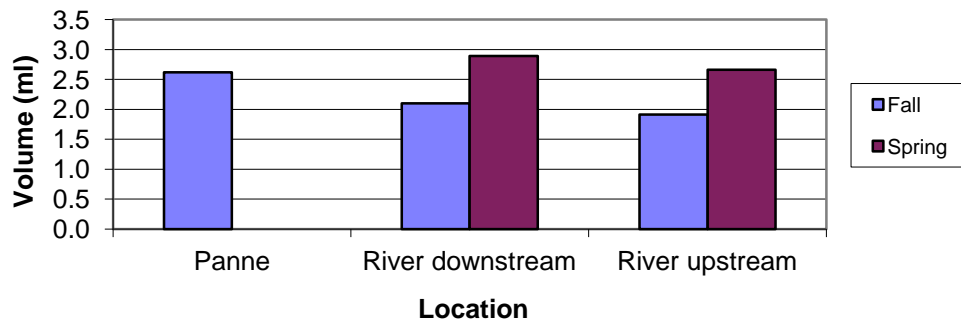


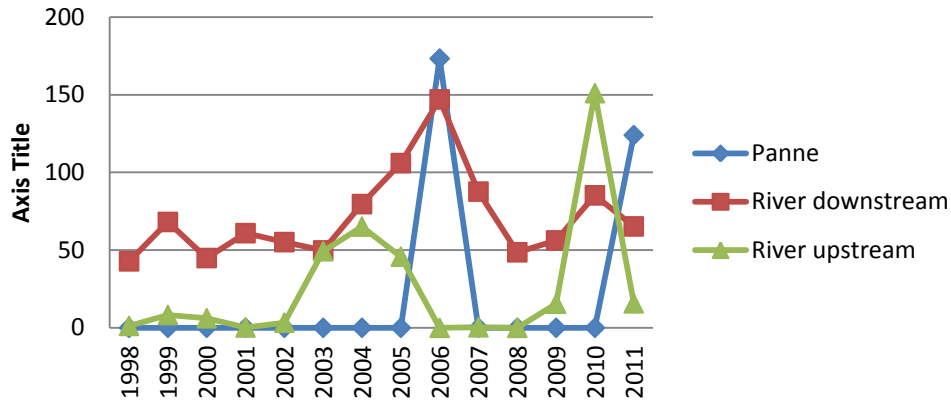
Average # of mummichogs in pannes at Joppa: Comparing pannes cleared of wrack vs year one wrack left - year 3 wrack left.



Joppa Flats, Newburyport Average Mummichog Volume Comparison 1998-2011



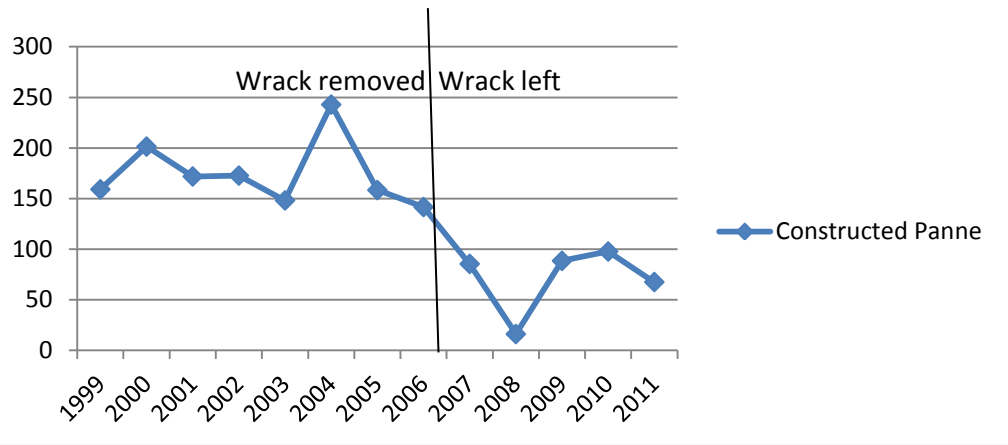
Average number of Mummichogs at Joppa Flats by location and year

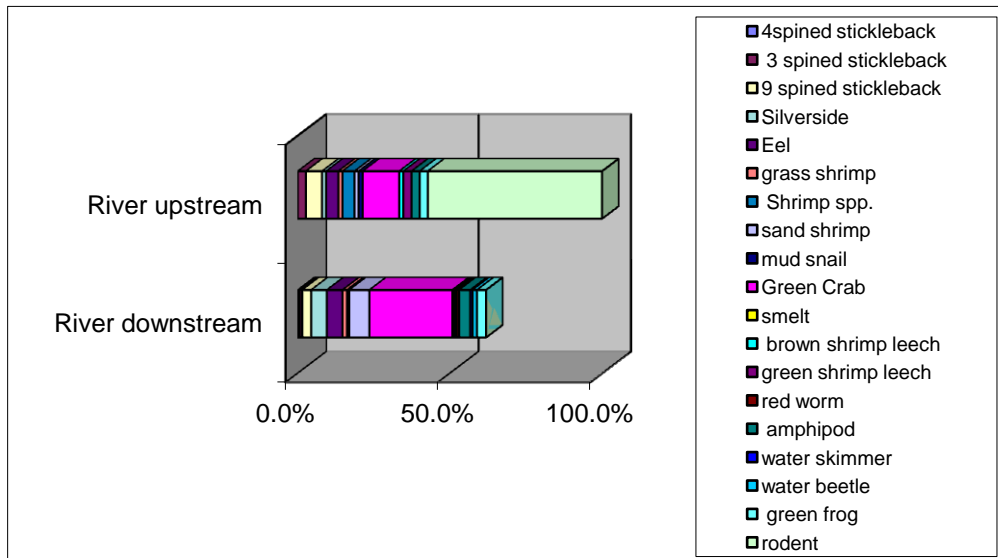
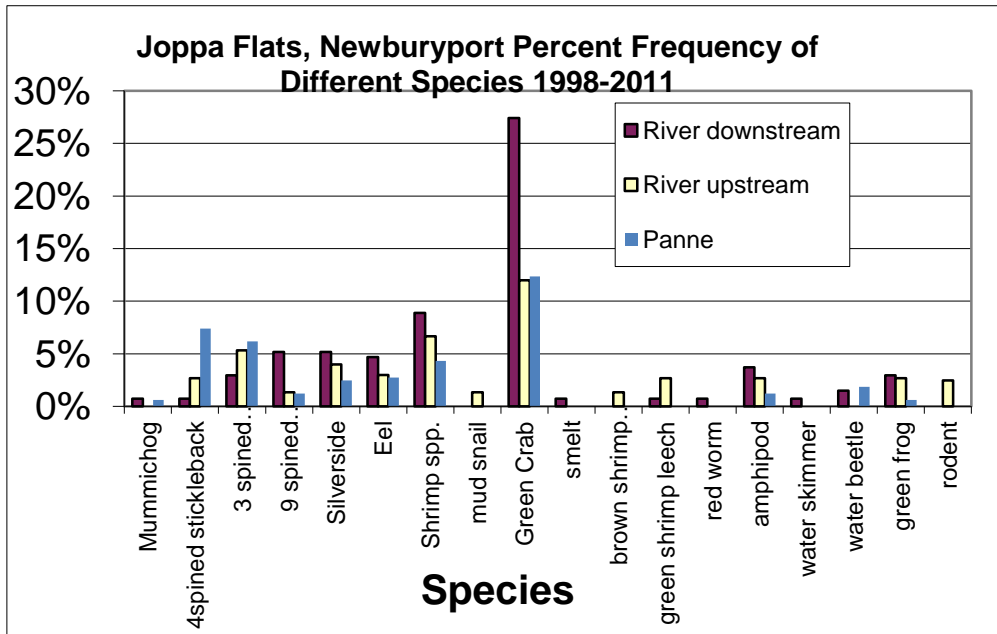


Average number of Mummichogs at Joppa Flats by location



Average # of Mummichogs in Joppa Flats Pannes (Boomerang & Doughnut Hole)





**Joppa Flats Percent Frequencies of Different Species vs. Season
1998-2011**

