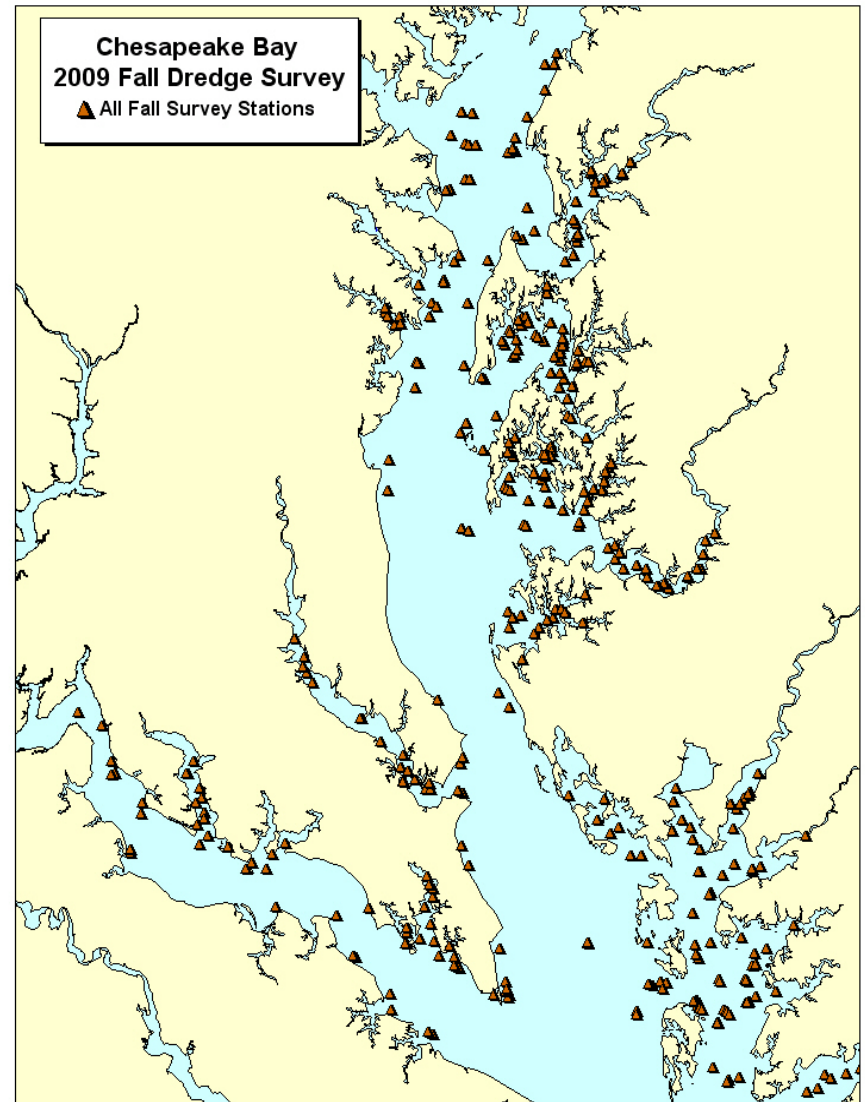


Good News for our Native Oyster

- **Spat set**
- **Disease levels**
- **Survival rates**

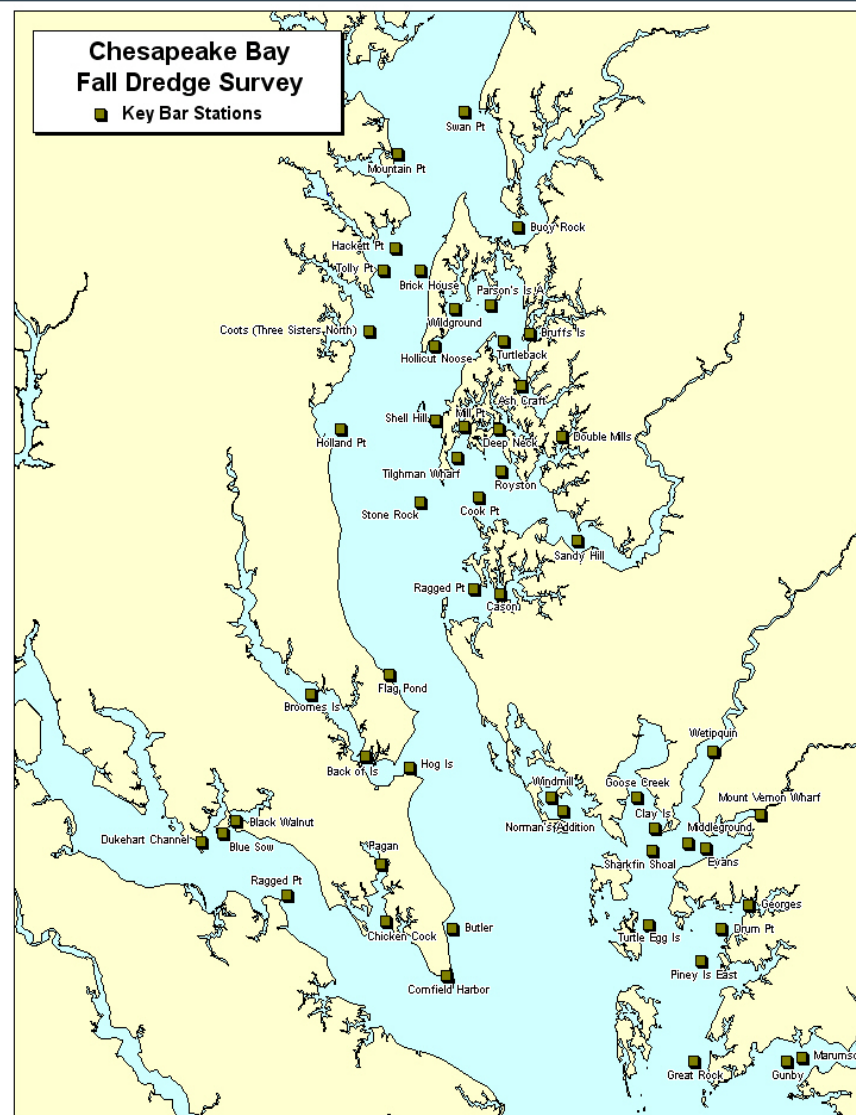
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- Maryland's annual Oyster Survey conducted since 1939
- 260 bars surveyed and 399 samples collected in 2010

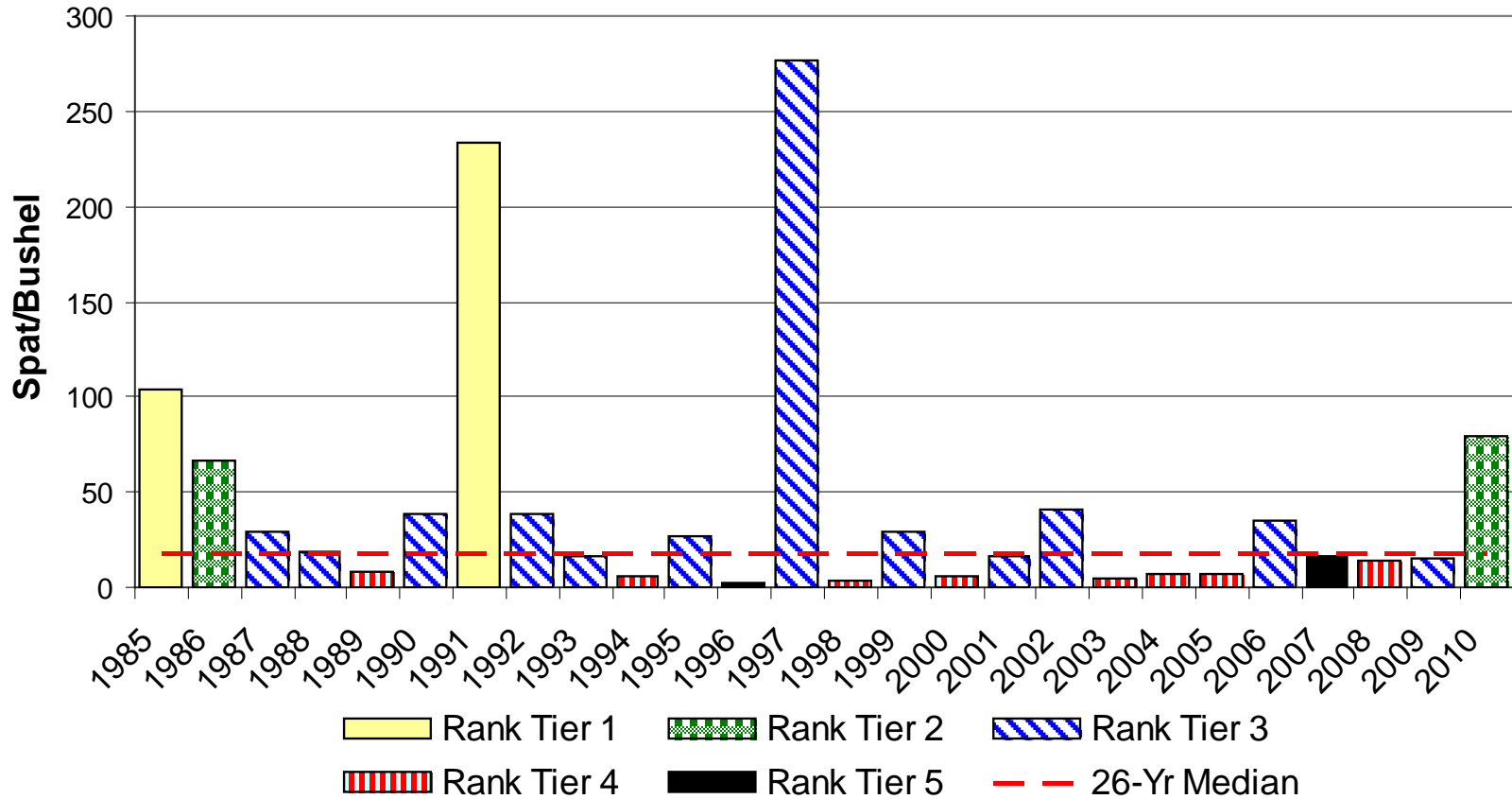


2010 Spat Set

- 53 “Key Bars” used in the spat intensity index
- Spat index of nearly 80 / bushel is the highest since 1997
- About 5 times the 25-year median of 16 spat / bushel
- Some areas had their highest spat counts since 1985
- Spat have been found in lower salinity areas that rarely receive sets
- Increased spat set is an immediate asset to MD’s expanded sanctuary network

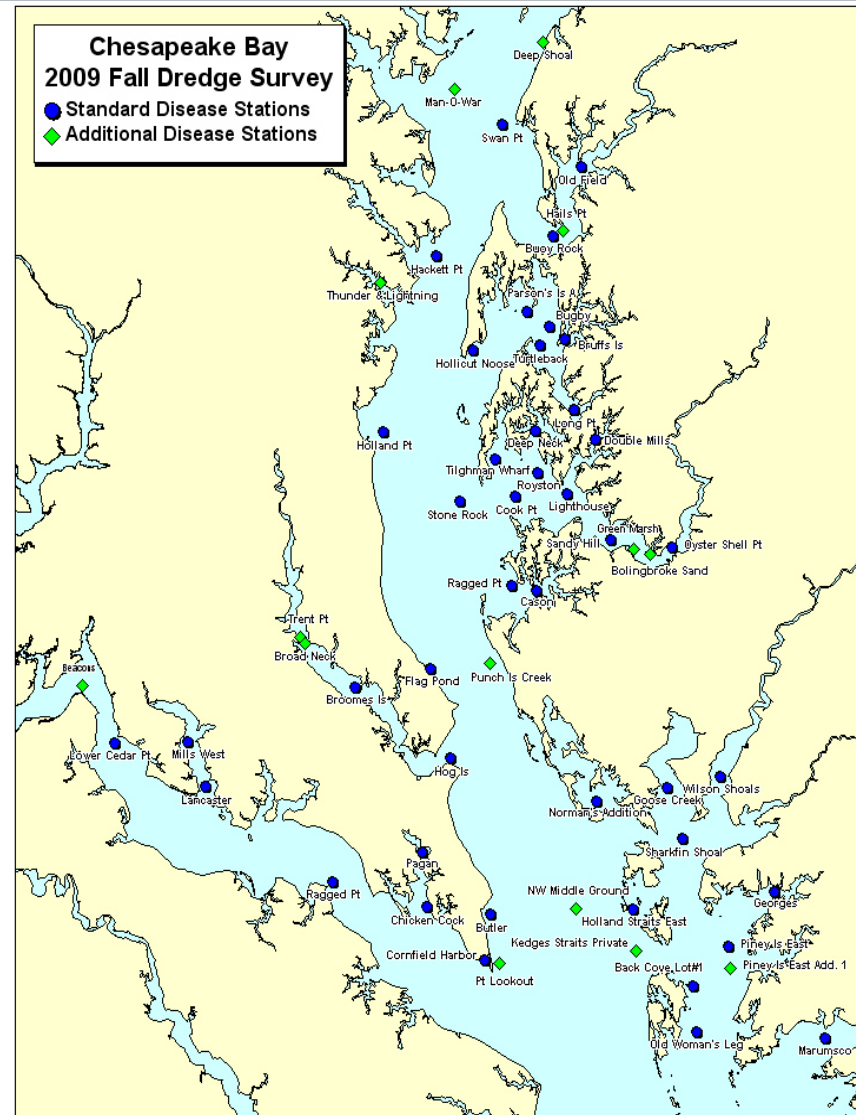


Spatfall Intensity Index, 1985-2010



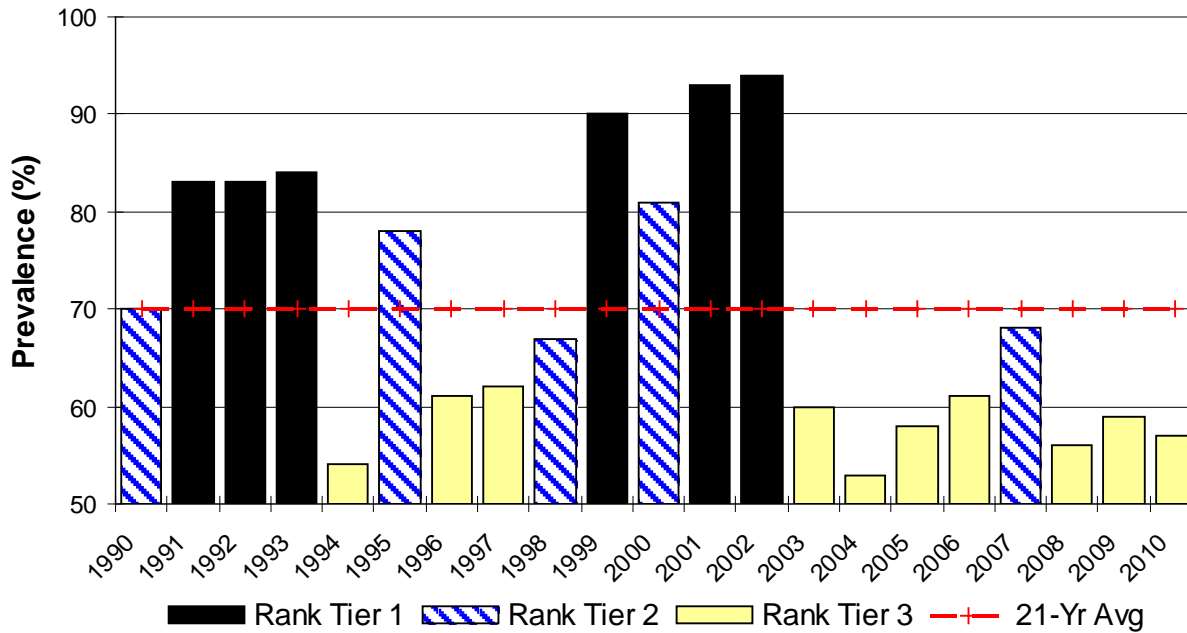
Disease Levels

- 43 standard disease monitoring stations
- Oyster diseases are at relatively modest levels



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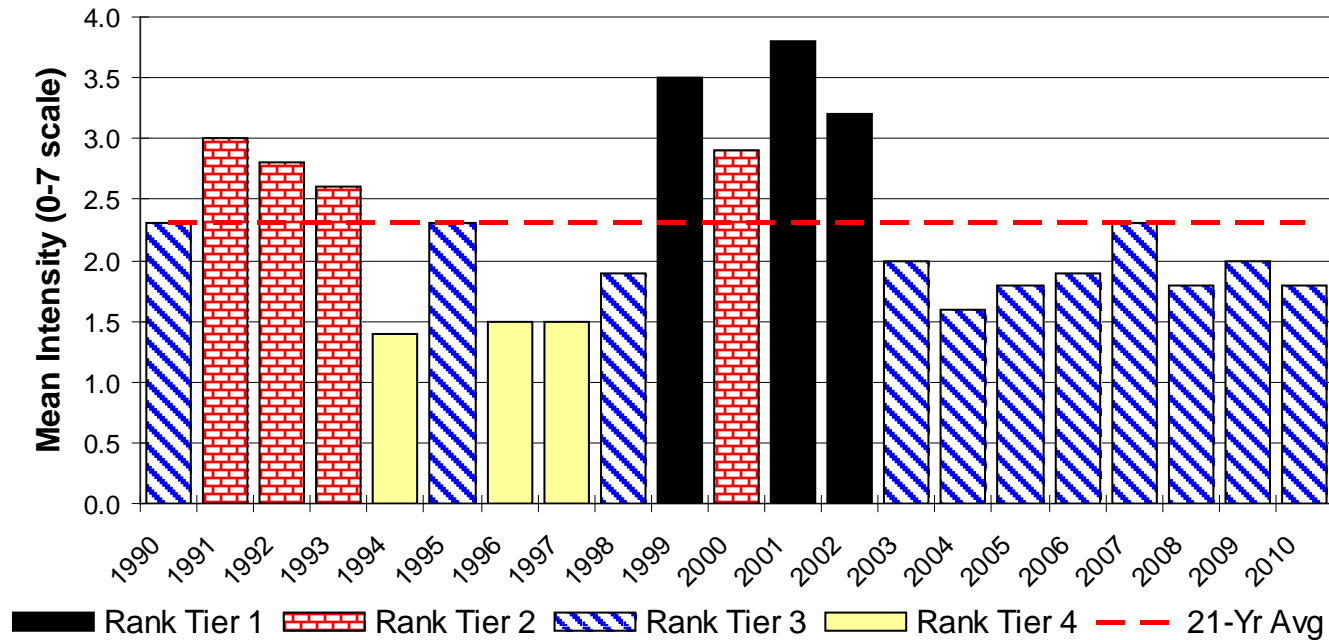
Derma Disease Prevalence



- Derma disease prevalence remains below the long-term average for 8th consecutive year
- Dramatically lower than the sustained highs from 1999-2002 and early 1990s

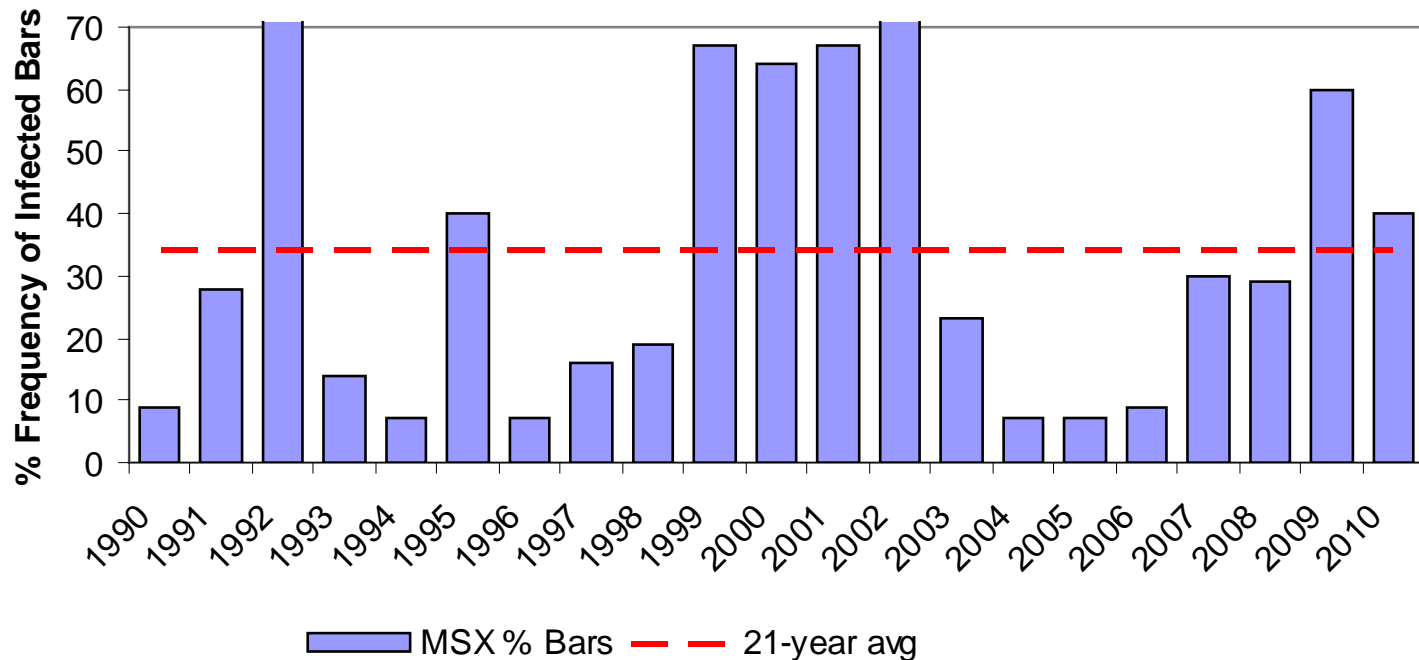
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Derma Disease Intensity



- Derma disease intensity has also been below average for the past eight years
- Less than half of the record-high levels in 2001

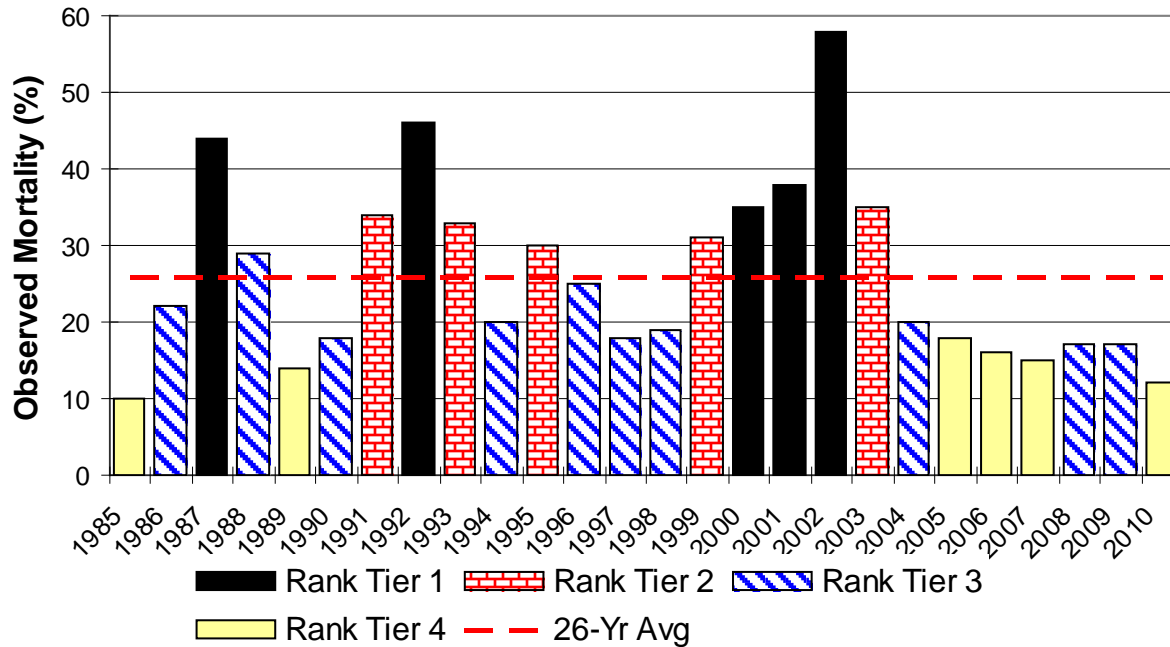
MSX Disease in Maryland



- MSX disease has declined from last year's levels
- While above average, MSX related mortalities are not being observed

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Total Observed Mortality



- Oyster survivorship is the highest since 1985, before disease put a stranglehold on the population
- This is more than four times lower than the record disease year of 2002
- Continues the recent trend of below average mortalities following the four year drought of 1999 – 2002 suggesting possible increases in disease resistance

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Power Dredging is not the solution...

Of the 11 "Key" oyster bars that received either the highest or second highest spatsets over the past 26 years in 2010, 6 were in power dredge areas and 5 were outside of power dredge areas.

Five geographic regions that contain areas both with and without power dredging were compared. Three of the areas- Honga River, Manokin River, and Broad Creek had higher average spatfalls on the non-power dredged bars. The other two- Tangier Sound and Harris Creek, had higher spatfalls on power dredged bars. When these areas were combined and compared, the average spatfalls were not statistically different between dredged and non-dredged areas.

Summary

- 2010 spat set is the highest since 1997
 - Increased spat set is an immediate asset to Maryland's expanded sanctuary network
- 2010 disease levels and natural mortality remain below average
 - This may reflect increases in disease resistance among oysters following severe disease pressures of the 1999-2002 drought.
- The 2010 spat set is not a response from power dredging.
 - No significant difference with spat sets in and outside of power dredging areas.
- This good news provides encouraging signs regarding the potential to restore the Bay's native oyster, but challenges remain and recovery, particularly development of disease-resistance, will require a multiple-decadal timeframe.

Multitude of Good News for our Native Oyster

- **Spat set**
- **Disease levels**
- **Survival rates**

Questions / Comments