Oceanography House
Raritan Estuary Research Cruise

Fall 2015
Morning and Afternoon Cruise
Weather Conditions October 14th, 2015

Average temperature 62 °F
Cruise (7:30 am) 55 °F
Afternoon Cruise (2:00 pm) 67 °F
Humidity 64%
Wind speeds 5mph

Partially cloudy with various times of sunshine

Last rainfall: October 9th
Amount: 0.31 in.

Conclusion: Low fresh water flow due to little rain
Conclusion: In the morning, the high tide created a slight increase in salinity upstream and a great increase in salinity downstream.
Conclusion: As we move downstream, temperature of the water increases
Conclusion: There is a mixing curve in the morning during the inflow of the tide. In the afternoon the salty water is not flowing out in such an orderly manner.
Conclusions

-Salinity increases as we moved downstream and toward the ocean
-There is also a significant increase in salinity as depth increases
-We ran two separate research cruises, one beginning at 7am with a rising tide and one beginning at 2pm with a falling tide.
-Low freshwater flow causes an increase in water salinity
-Temperature slightly increased downstream, decreased with depth