

Winter Flounder Catch Rates

Fyke Survey Annual Report

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2025-03-22

This report highlights data from survey year:

[1] 2024

Catch rates

Combined index

Figure [1](#) provides an overview of the combined abundance patterns in all three coastal ponds.

Point Judith Pond

This section will introduce Figure [2](#).

Potter Pond

This section will introduce Figure [3](#).

Ninigret Pond

This section will introduce Figure [4](#).

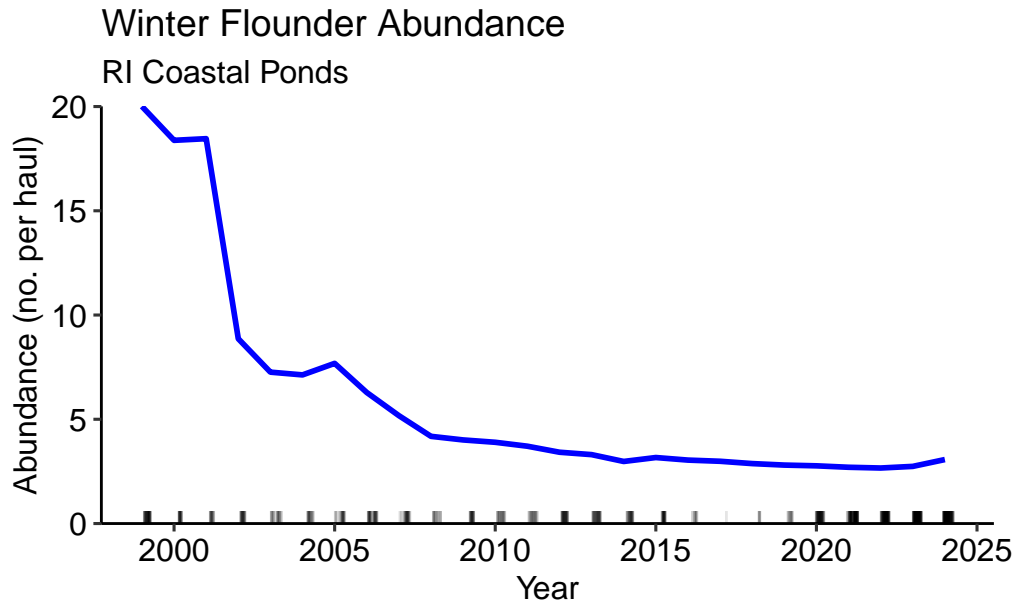


Figure 1: Fishery-independent abundance index for Rhode Island Winter Flounder in all three coastal ponds. The blue line is a partial dependence plot of Winter Flounder abundance on year.

Water temp

This section will introduce Figure 5.

Descriptive stats comparing most recent year's temp in each pond to mean temp for all years prior to 2020.

This section will introduce Figure 6.

This section will introduce Figure 7.

This section will introduce Figure 8.

Station

Compare ALE for last five years with ALE for everything before that. This uses the classification model, i.e. catch probability and not abundance.

Point Judith Pond

This section will introduce Figure 9.

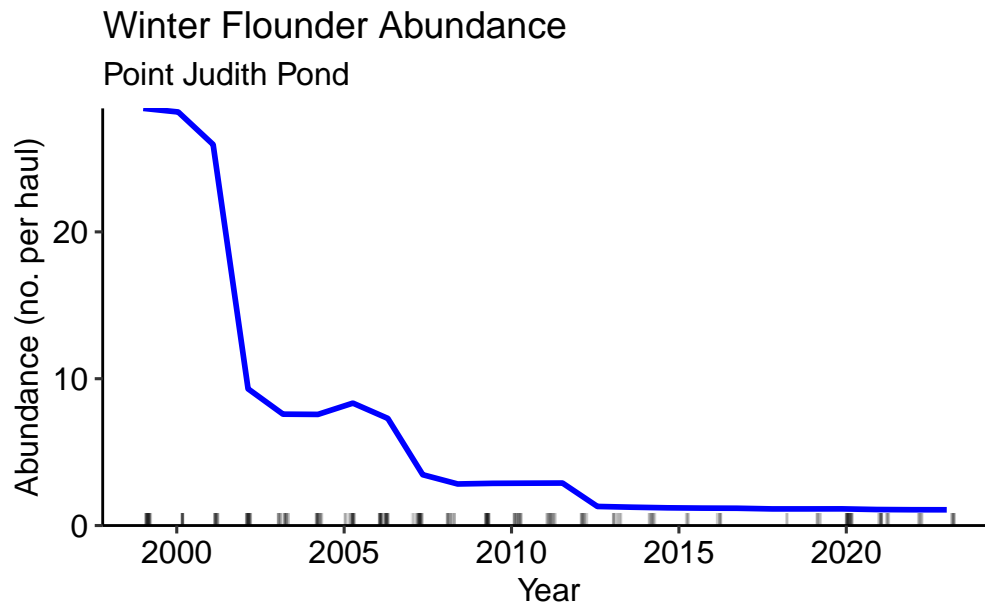


Figure 2: Fishery-independent abundance index for Winter Flounder in Point Judith Pond.
The blue line is a partial dependence plot of Winter Flounder abundance on year.

Potter Pond

This section will introduce Figure 10.

Ninigret Pond

This section will introduce Figure 11.

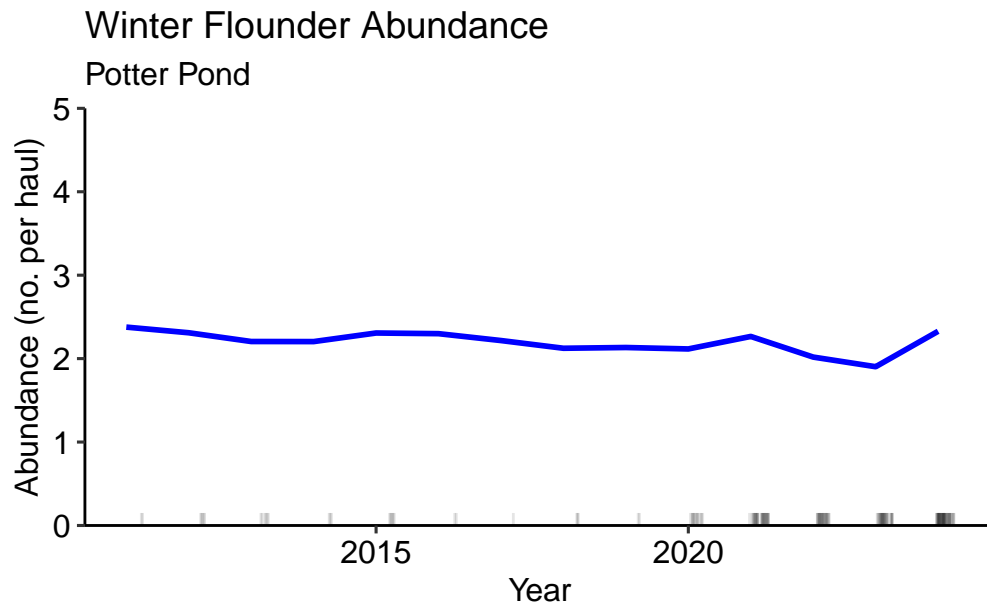


Figure 3: Fishery-independent abundance index for Winter Flounder in Potter Pond. The blue line is a partial dependence plot of Winter Flounder abundance on year.

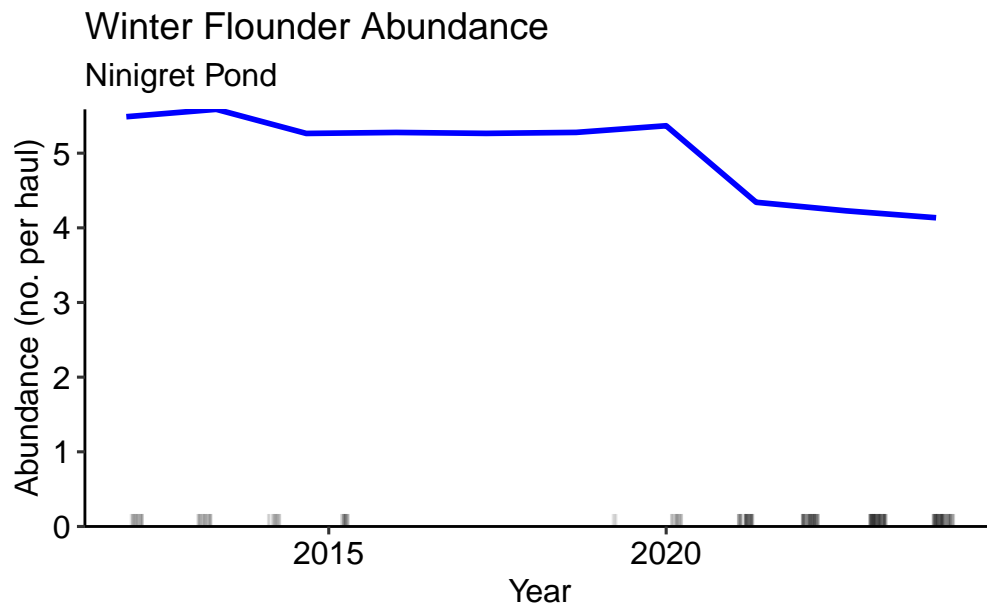


Figure 4: Fishery-independent abundance index for Winter Flounder in Ninigret Pond. The blue line is a partial dependence plot of Winter Flounder abundance on year.

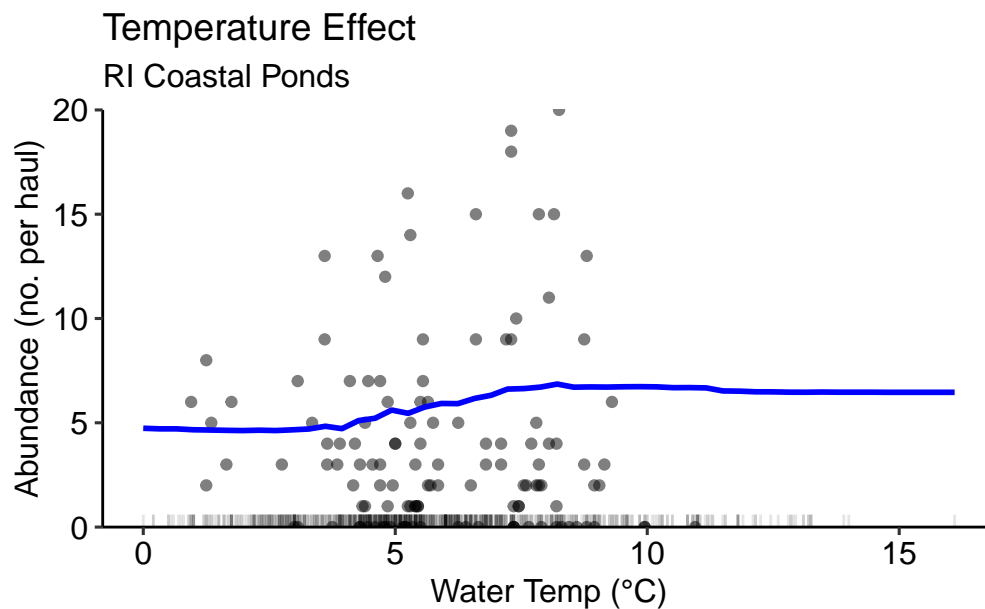


Figure 5: Partial dependence plot of Winter Flounder abundance on water temperature. The blue line is the partial dependence plot, and the gray rug shows the distribution of water temperatures in survey data. Scatter plot points represent the observations made in the most recent survey year.

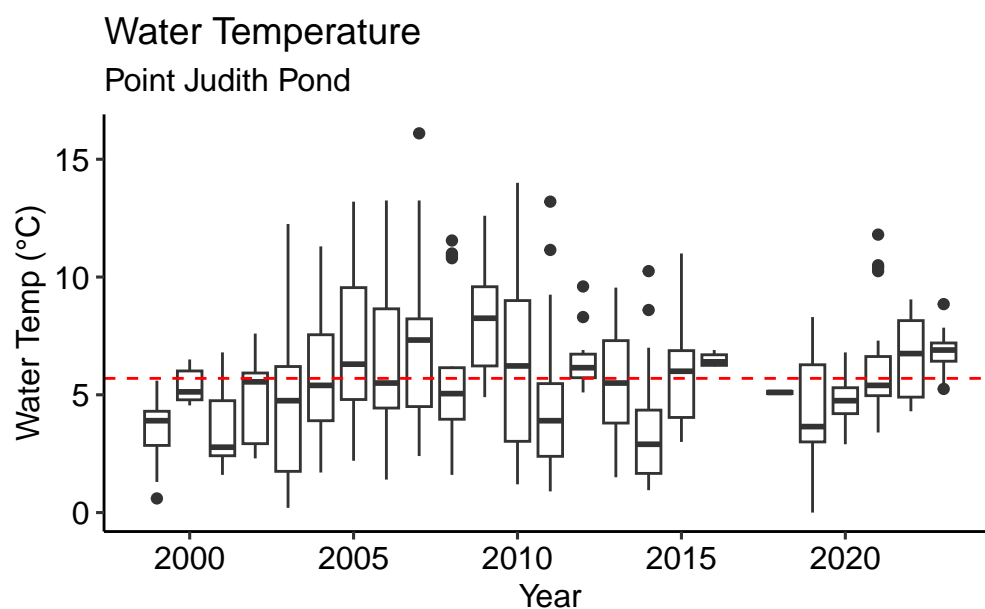


Figure 6: Boxplot of historical water temperature observations in Point Judith Pond. The dashed red line represents the mean water temperature for all years prior to 2020.

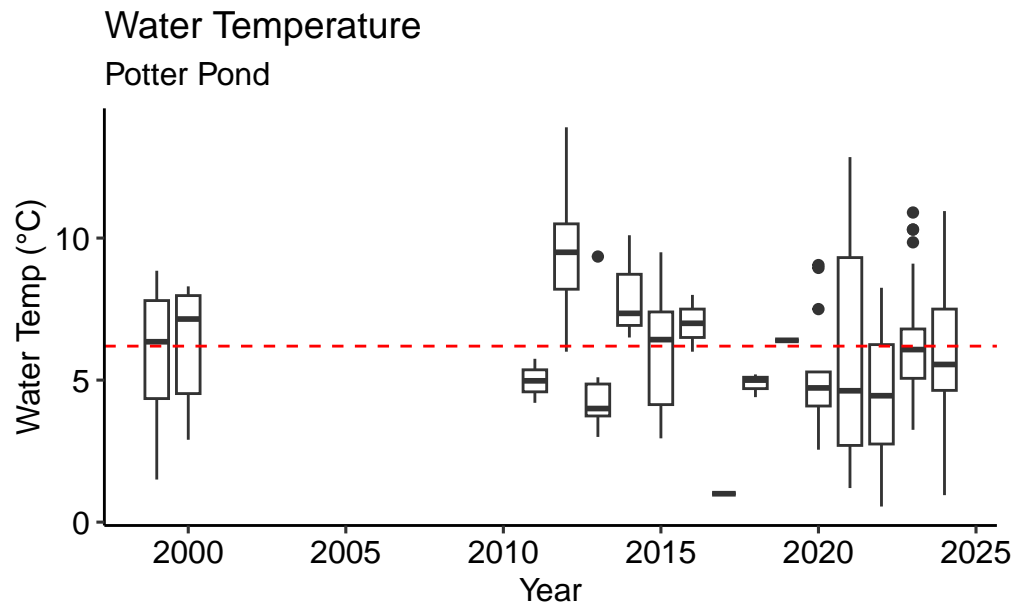


Figure 7: Boxplot of historical water temperature observations in Potter Pond. The dashed red line represents the mean water temperature for all years prior to 2020.

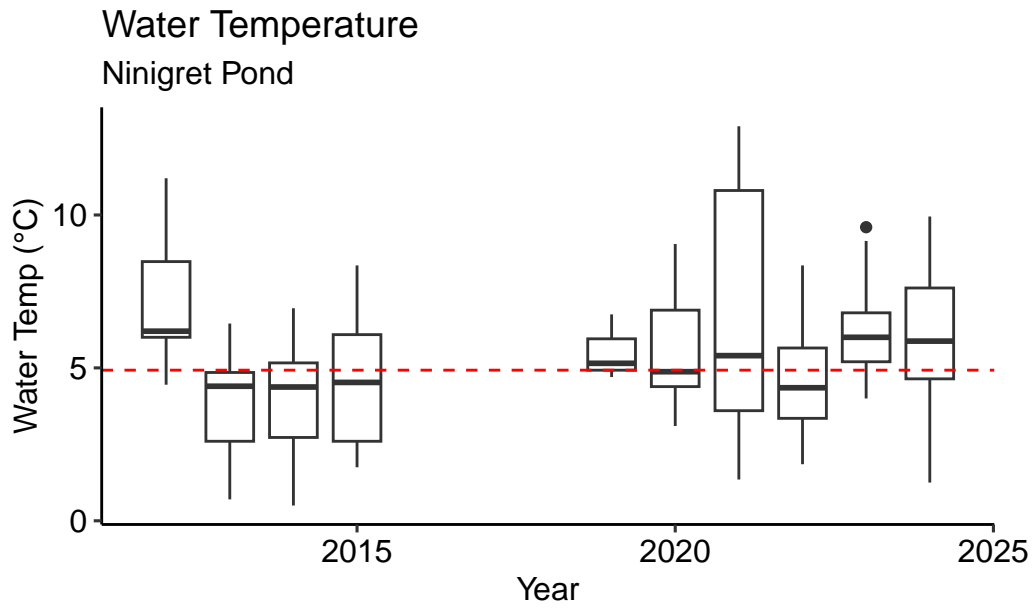


Figure 8: Boxplot of historical water temperature observations in Ninigret Pond. The dashed red line represents the mean water temperature for all years prior to 2020.

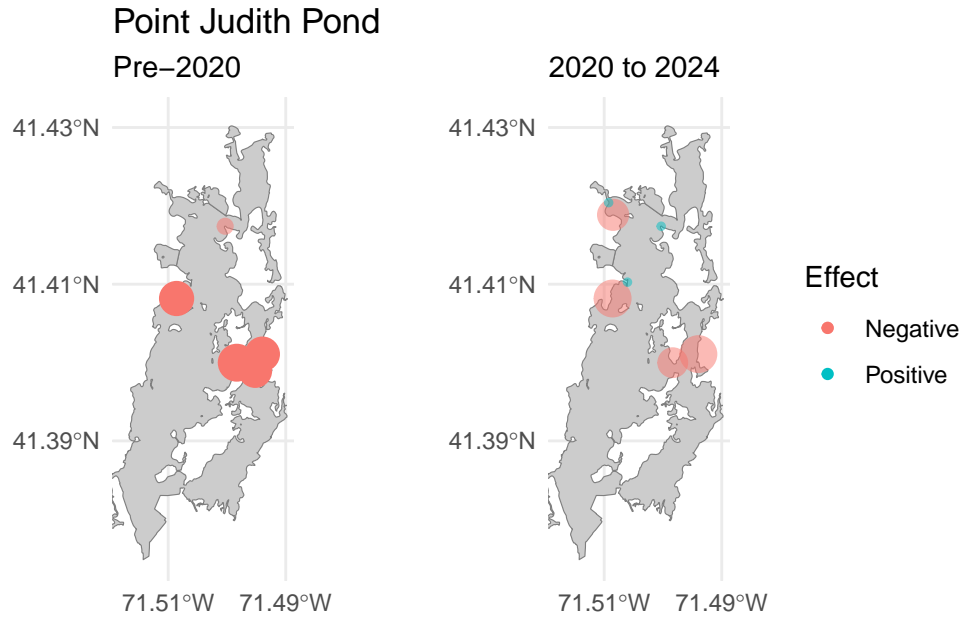


Figure 9: Accumulated local effects (ALE) of station on catch probability in Point Judith Pond. The left panel shows the ALE for all years prior to 2020, and the right panel shows the ALE for the last five years.

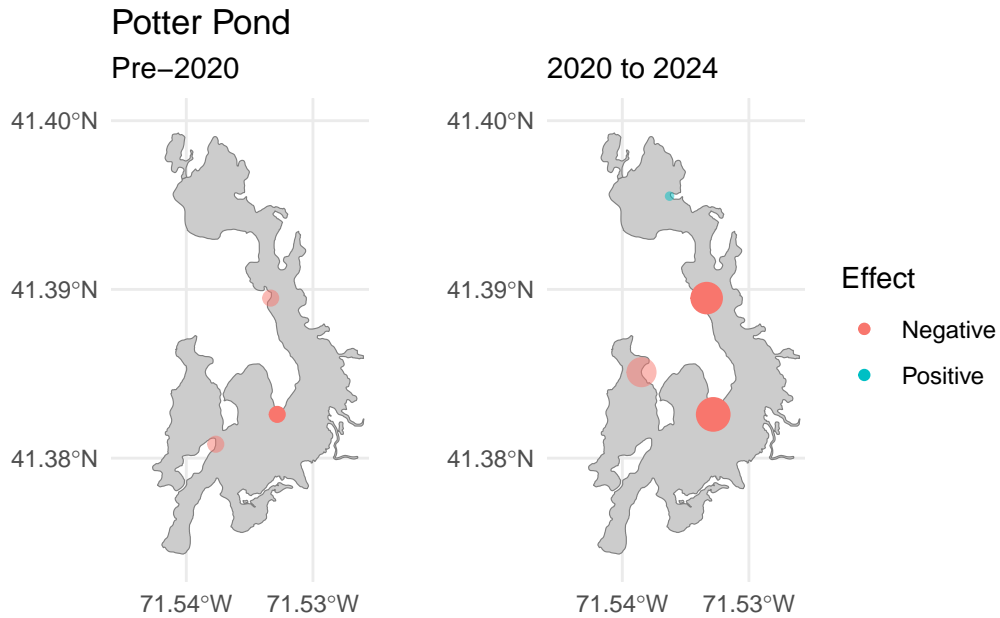


Figure 10: Accumulated local effects (ALE) of station on catch probability in Potter Pond. The left panel shows the ALE for all years prior to 2020, and the right panel shows the ALE for the last five years.

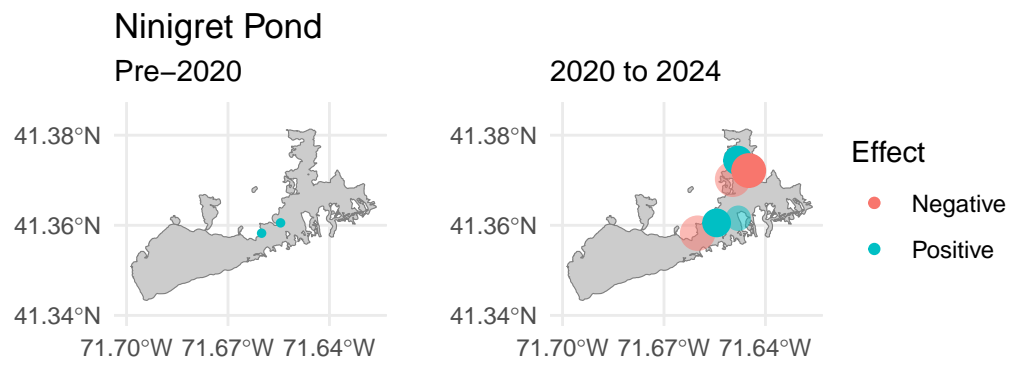


Figure 11: Accumulated local effects (ALE) of station on catch probability in Ninigret Pond. The left panel shows the ALE for all years prior to 2020, and the right panel shows the ALE for the last five years.