

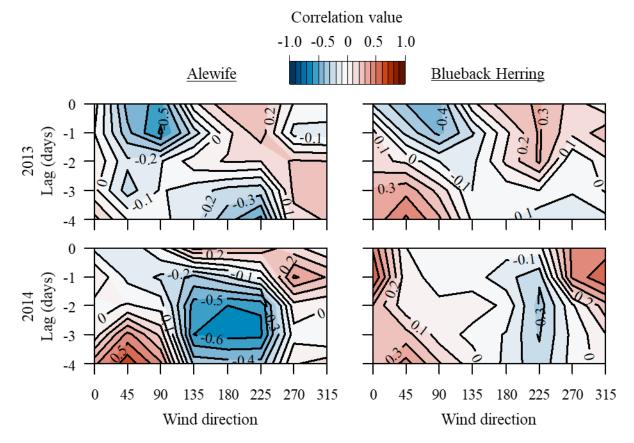
Supplementary Figure 1. Cross-correlation analysis between the $\log_{10}+1$ daily mean estimated rate (fish/hour) of fish migrations (alewife left, blueback herring right) and wind stress (τ) from directions at 45° intervals in the Choptank River 2014-2017. Contours and colors (red to blue) represent correlation values.

Deer Creek—Wind stress Correlation value -1.0 -0.5 0 0.5 1.0 Alewife

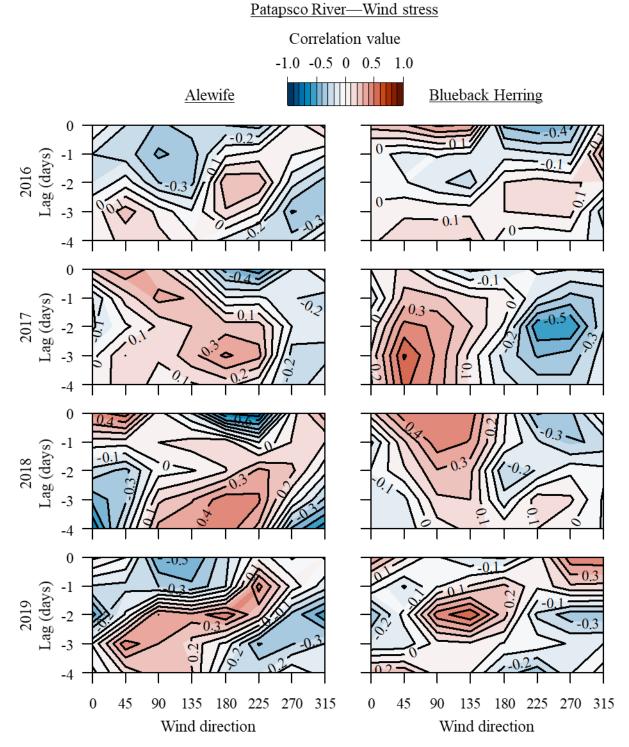
9 45 90 135 180 225 270 315
Wind direction

Supplementary Figure 2. Cross-correlation analysis between the $\log_{10}+1$ daily mean estimated rate (fish/hour) of the alewife migration and wind stress (τ) from directions at 45° intervals in Deer Creek 2015. Contours and colors (red to blue) represent correlation values.

Marshyhope Creek—Wind stress



Supplementary Figure 3. Cross-correlation analysis between the $\log_{10}+1$ daily mean estimated rate (fish/hour) of fish migrations (alewife left, blueback herring right) and wind stress (τ) from directions at 45° intervals in Marshyhope Creek 2013-2014. Contours and colors (red to blue) represent correlation values.



Supplementary Figure 4. Cross-correlation analysis between the $\log_{10}+1$ daily mean estimated rate (fish/hour) of fish migrations (alewife left, blueback herring right) and wind stress (τ) from directions at 45° intervals in the Patapsco River 2016-2019. Contours and colors (red to blue) represent correlation values.