## Explore Fish Diversity 2017-2018: Figures

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Figure 1 - Diversity vs Rainfall: Boxplot

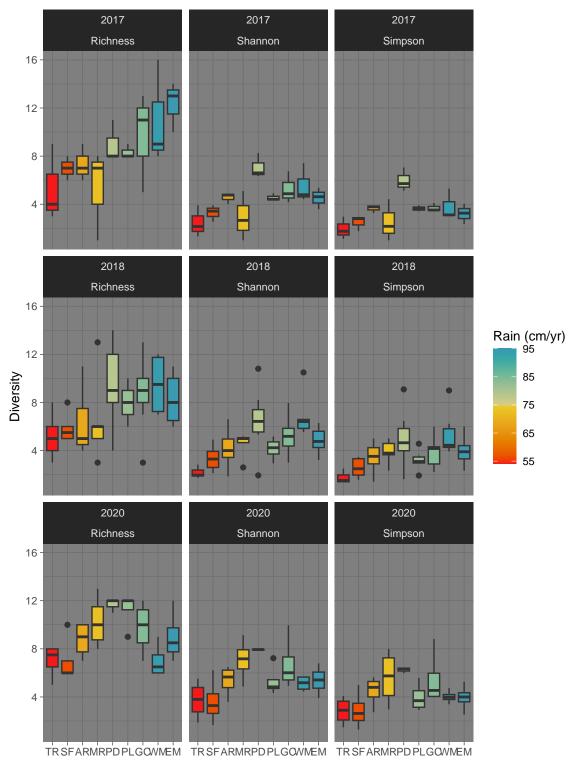


Figure 1. Diversity of fish (species richness, Shannon-Wiener Index, and Simpon's Index) at each sampling location from from 2017, 2018, and 2020. 2017 contains 3 months following hurricane Harvey, 2018 contains monthly samples from January through October, and 2020 contains quarterly sampling.

Figure 2 - Diversity vs Diatom Concentration

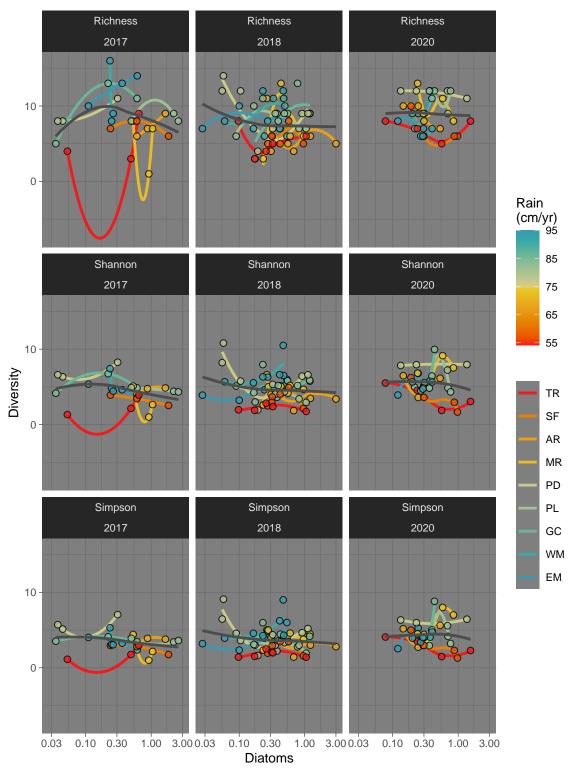


Figure 2. Community diversity versus diatom chlorophyll concentrations for 2017, 2018, and 2020. To aid visualization, the horizontal axis is log transformed.

Figure 3 - Diversity vs 2-Week Maximum Discharge

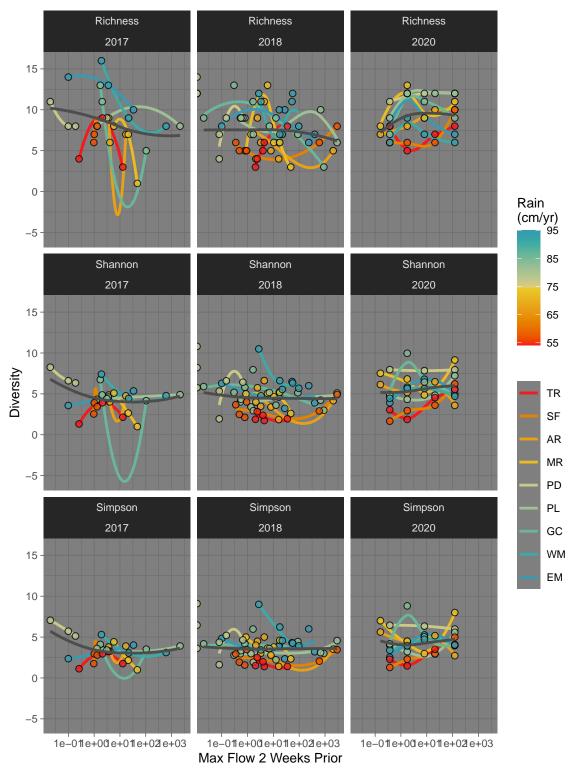


Figure 3. Community diversity versus maximum discharge in the two weeks prior to sampling for 2017, 2018, and 2020. To aid visualization, the horizontal axis is log transformed.

Figure 4 - Diversity vs Nitrate Concentrations

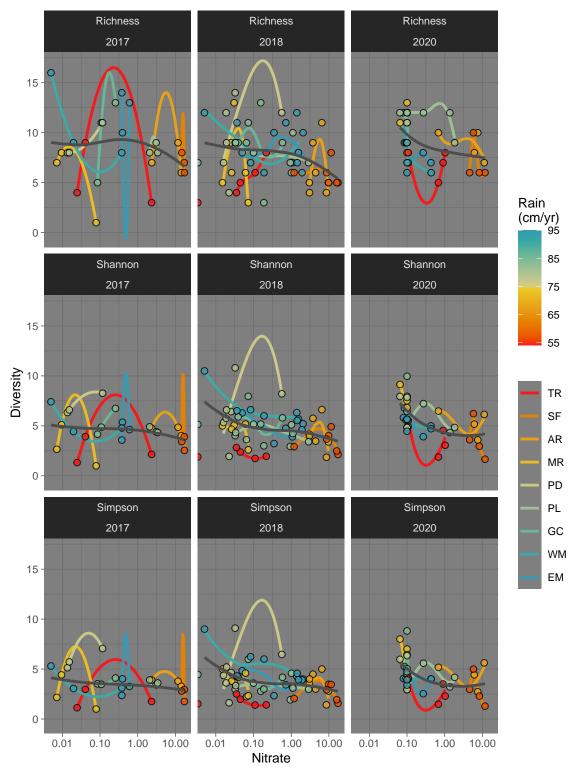


Figure 4. Community diversity versus nitrate concentrations for 2017, 2018, and 2020. Both axes are log transformed.

Figure 5 - Diversity vs Time: Community

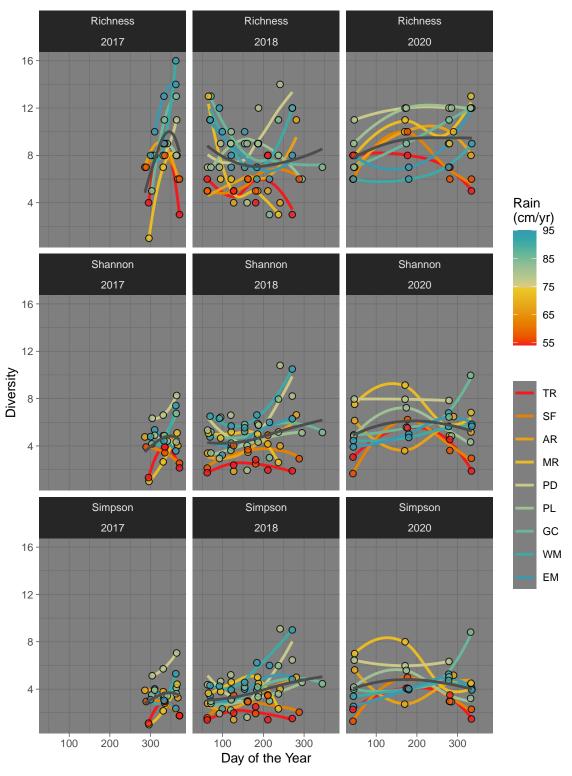


Figure 5. Community diversity versus day of the year for 2017, 2018, and 2020. Densities and smoothed regression curves are are colored by annual rainfall and a region-wide (all sites) smoothed regression is in dark grey.

Figure 6 - Diversity vs Rainfall (Annually): Regression

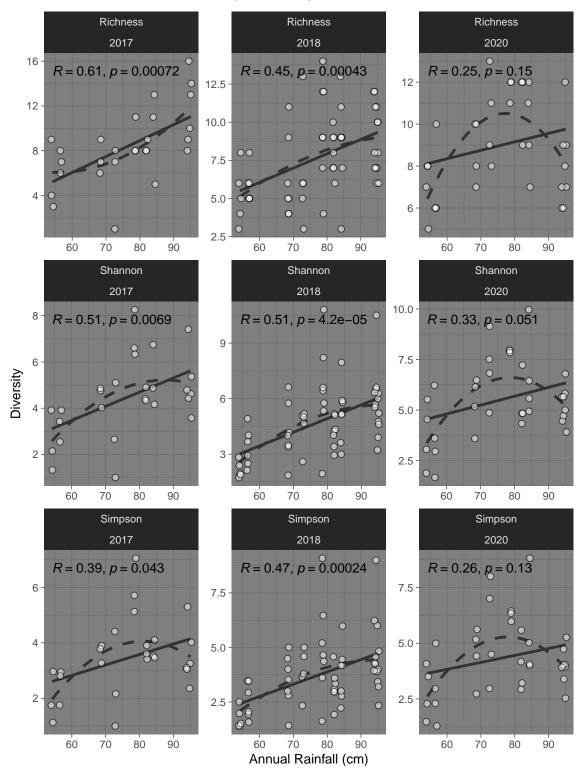


Figure 6. Community diversity versus annual rainfall for 2017, 2018, and 2020.

Figure 7 - Richness vs Rainfall (Quarterly): Regression

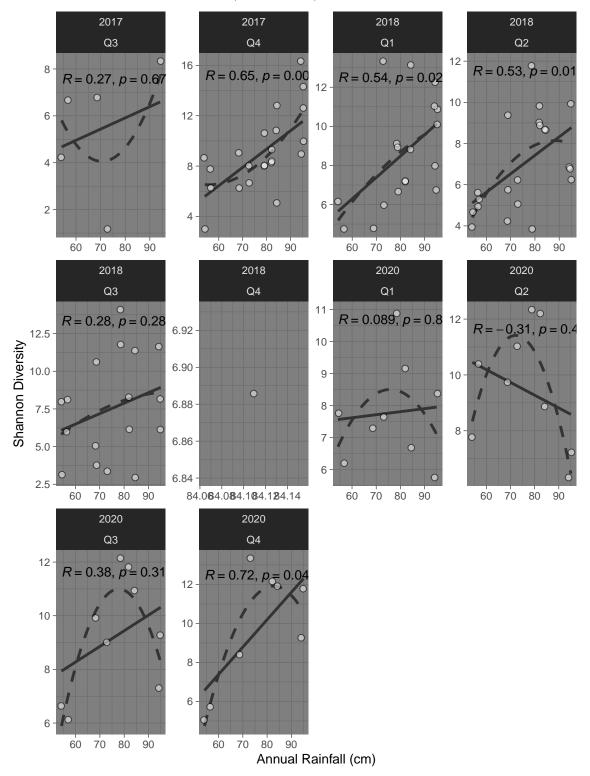


Figure 7. Species richness of fish communities versus annual rainfall for 2017, 2018, and 2020, divided by quarter of the year.

Figure 8 - Shannon vs Rainfall (Quarterly): Regression

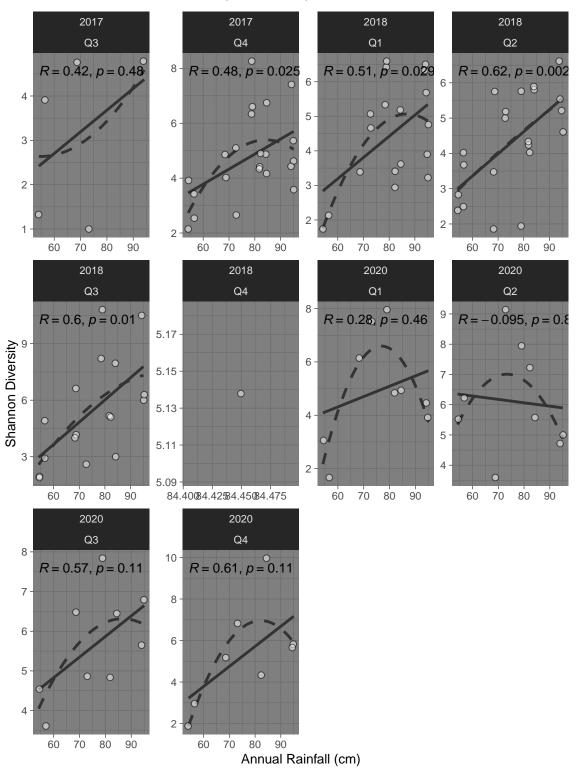


Figure 8. Shannon diversity of fish communities versus annual rainfall for 2017, 2018, and 2020, divided by quarter of the year.