Explore Fish Density 2017-2018: Figures

Sean Kinard

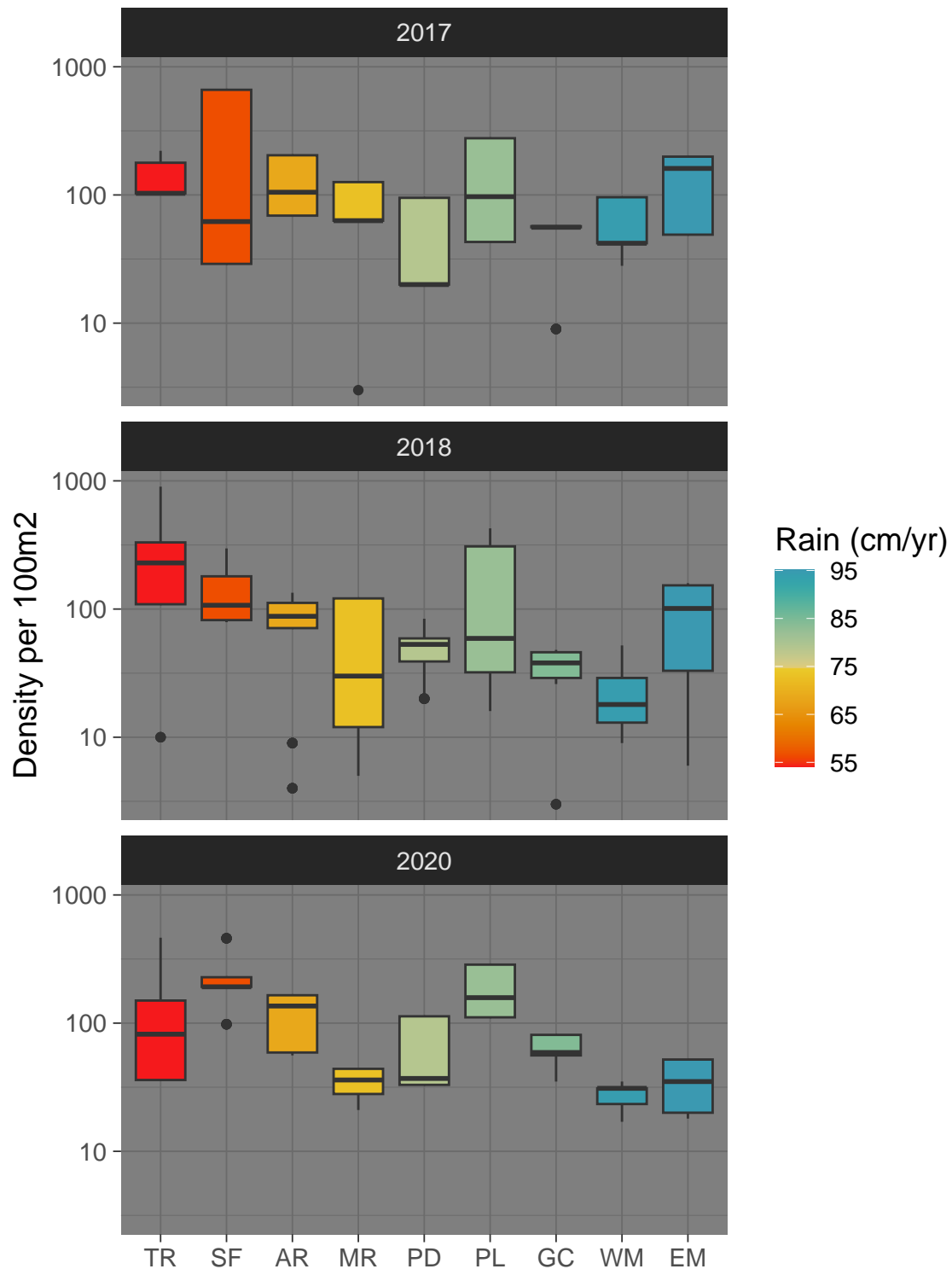2023-02-07

Figure 1 - Density vs Rainfall: Boxplot

Figure 1. Density of fish ($100m^{-2}$) 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.
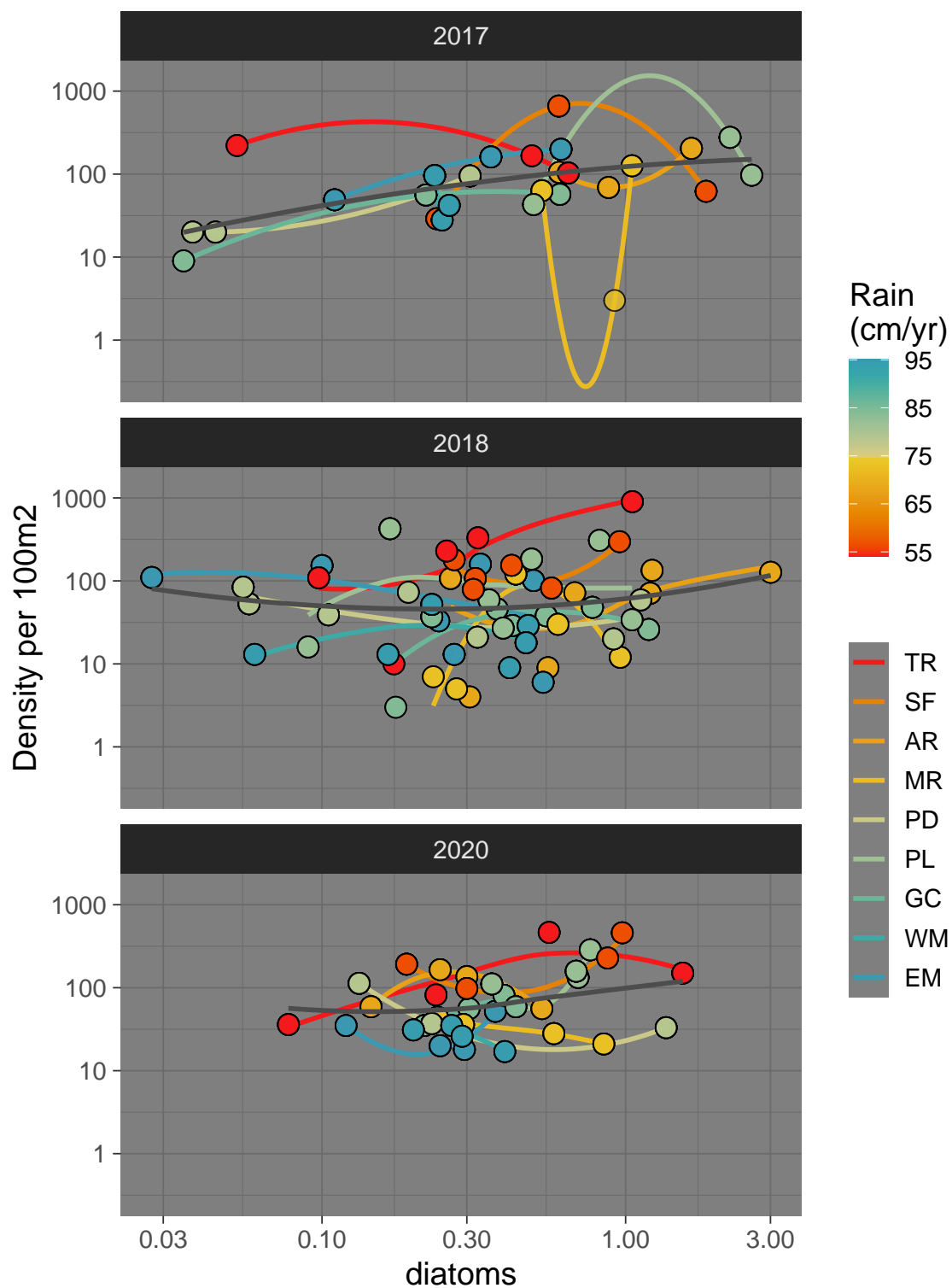
Figure 2 - Density vs Diatom Concentration

Figure 2. Community density (100m^{-2}) versus diatom chlorophyll concentrations for 2017, 2018, and 2020. Both axes are log transformed.
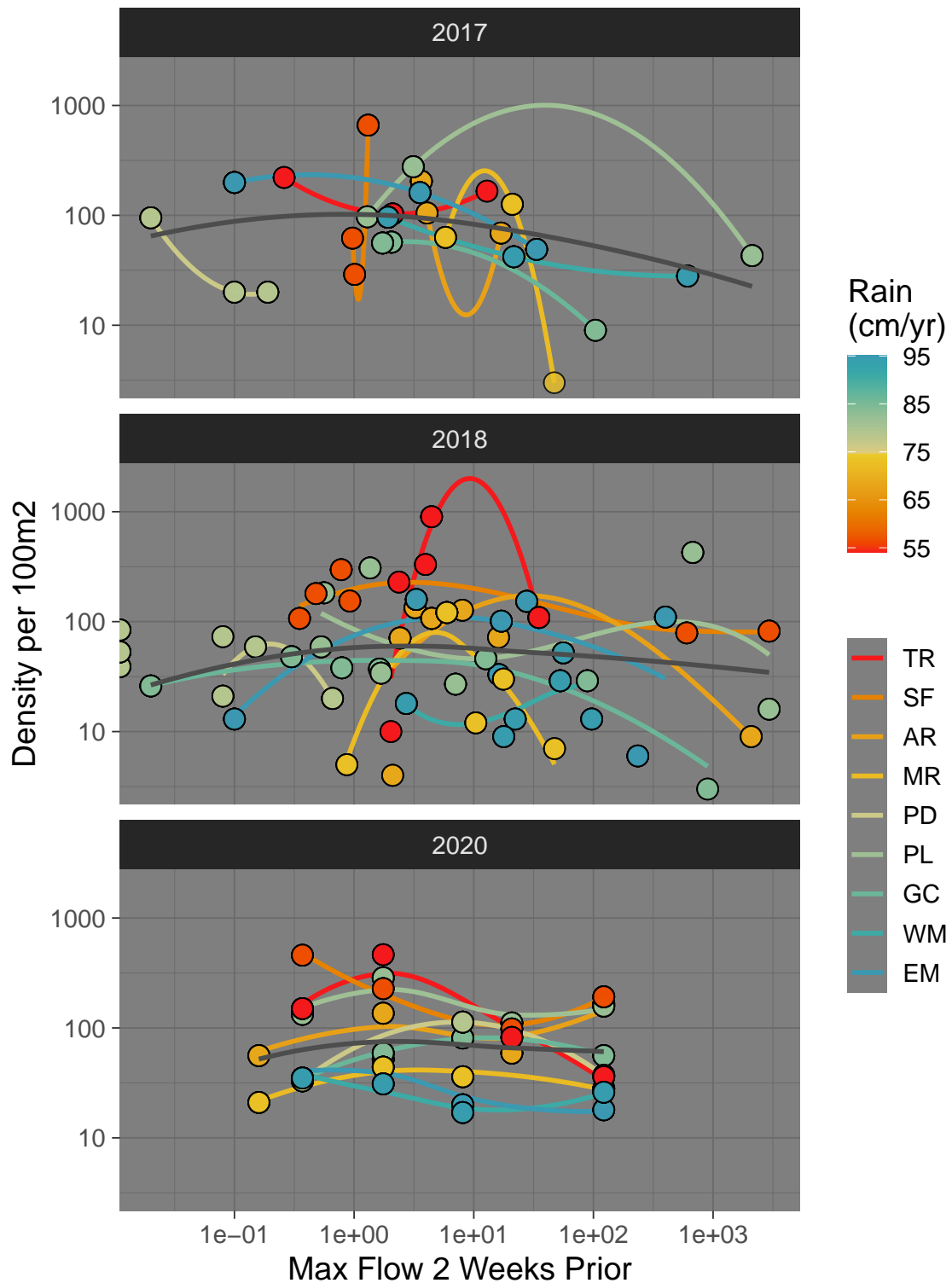
Figure 3 - Density vs 2-Week Maximum Discharge

Figure 3. Community density (100m^{-2}) versus maximum discharge in the two weeks prior to sampling for 2017, 2018, and 2020. Both axes are log transformed.
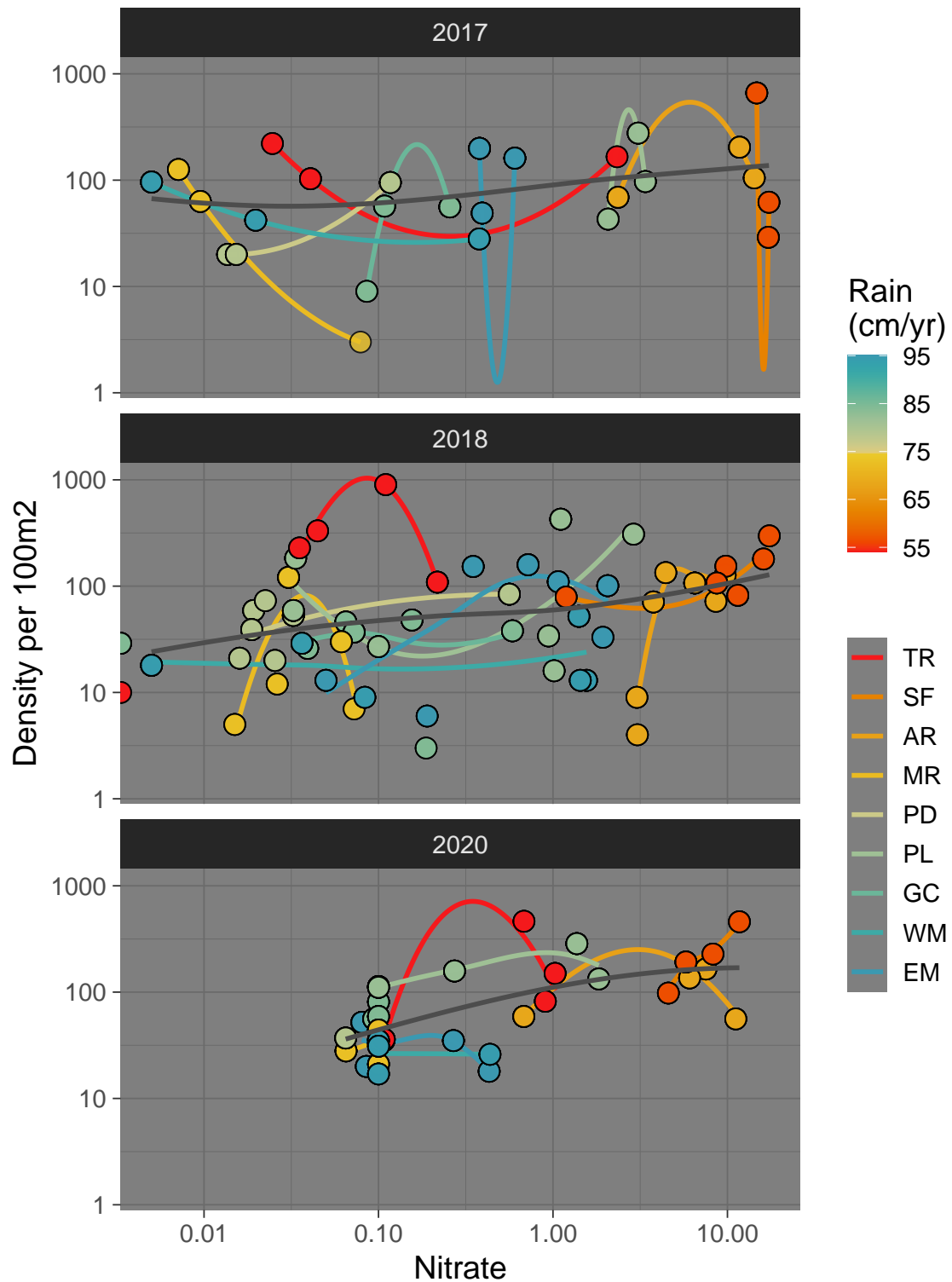
Figure 4 - Density vs Nitrate Concentrations

Figure 4. Community density (100m^{-2}) versus nitrate concentrations for 2017, 2018, and 2020. Both axes are log transformed.
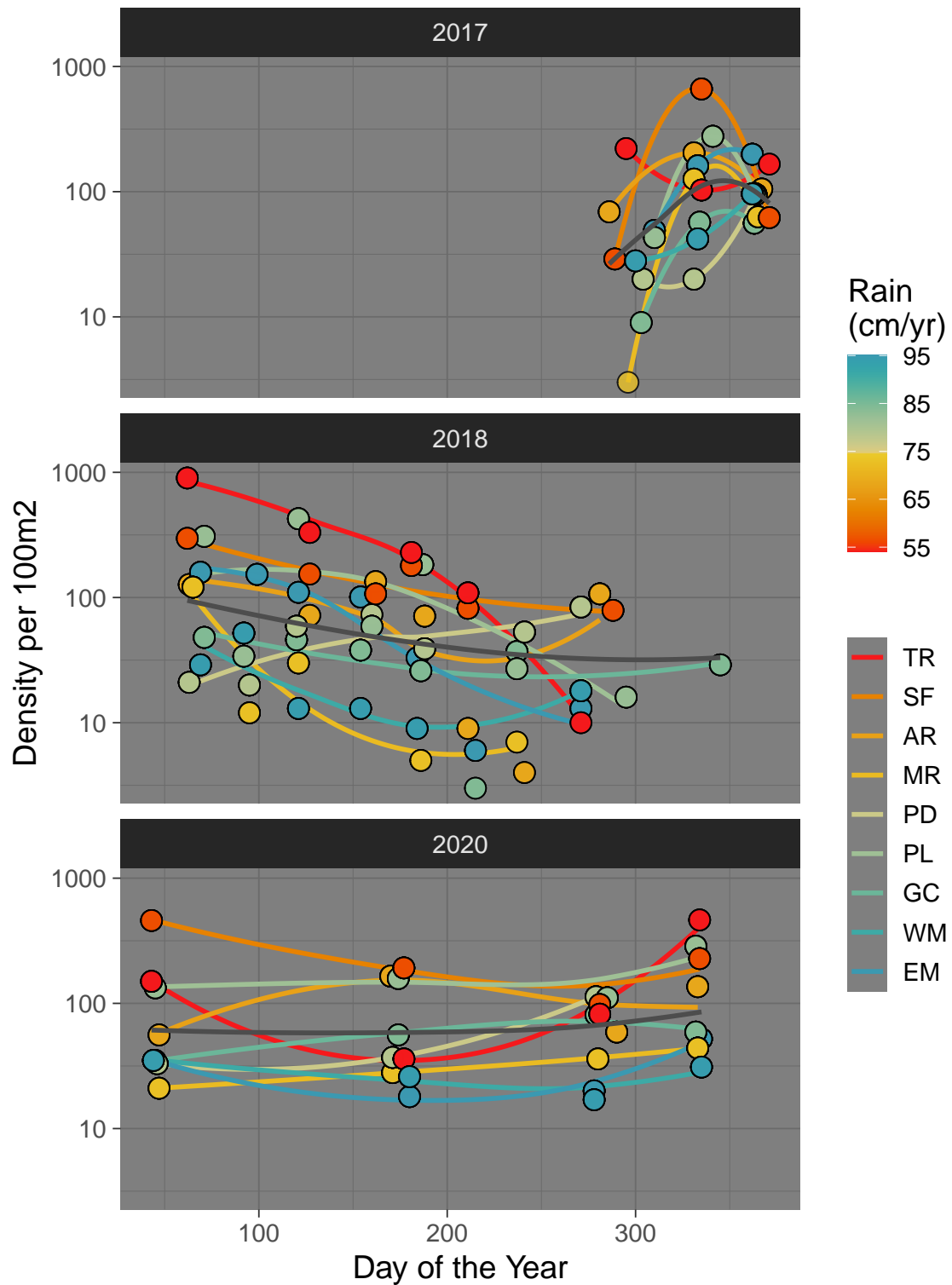
Figure 5 - Density vs Time: Community

Figure 5. Community density (100m^{-2}) 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.
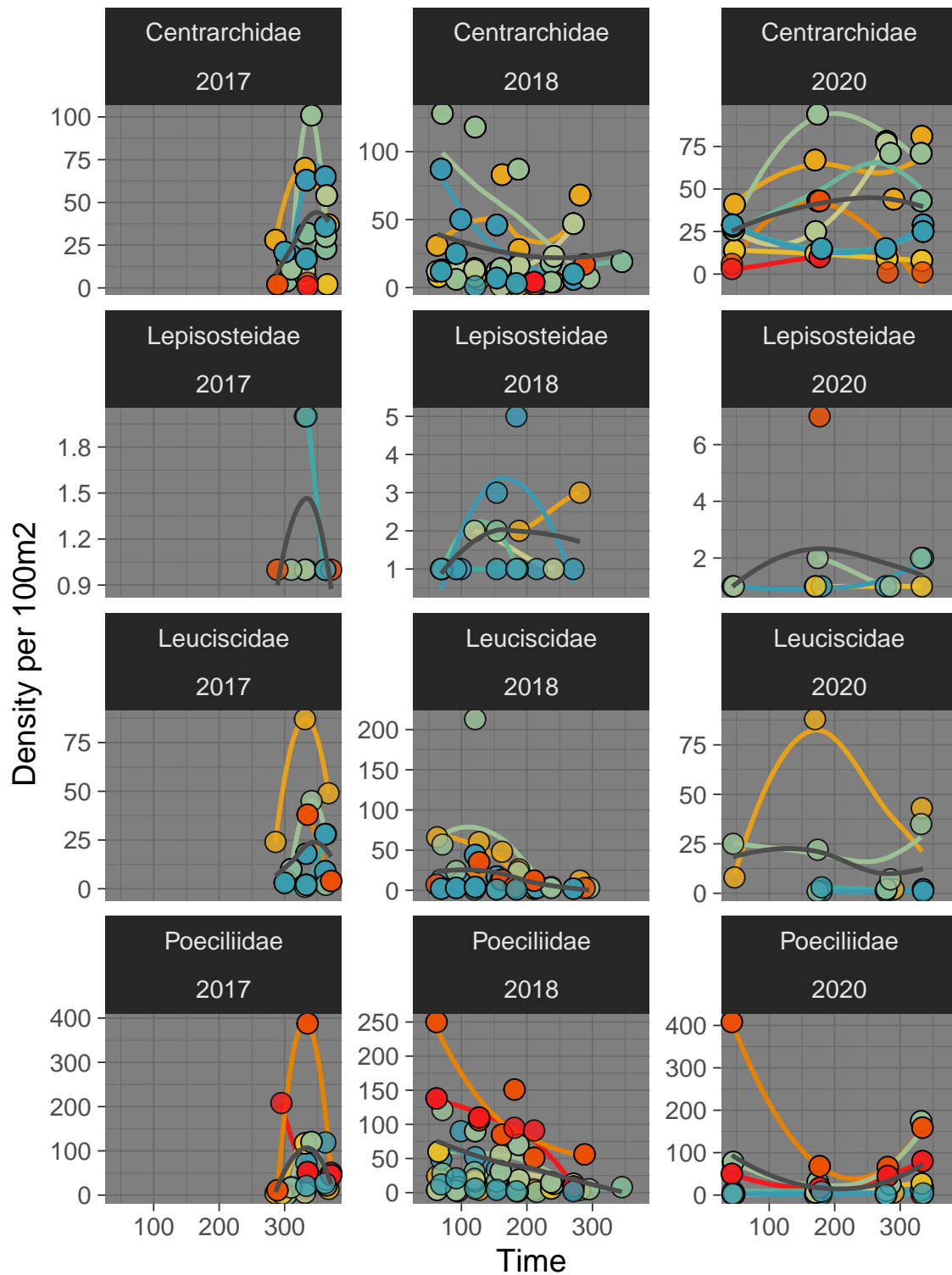
Figure 6 - Density vs Time: Families

Figure 6. Density of fish (100m^{-2}) in prominent taxonomic families plotted against the day of the year in 2017, 2018, and 2020. Vertical axes vary in scale to aid visualization of trends within taxanomic families.
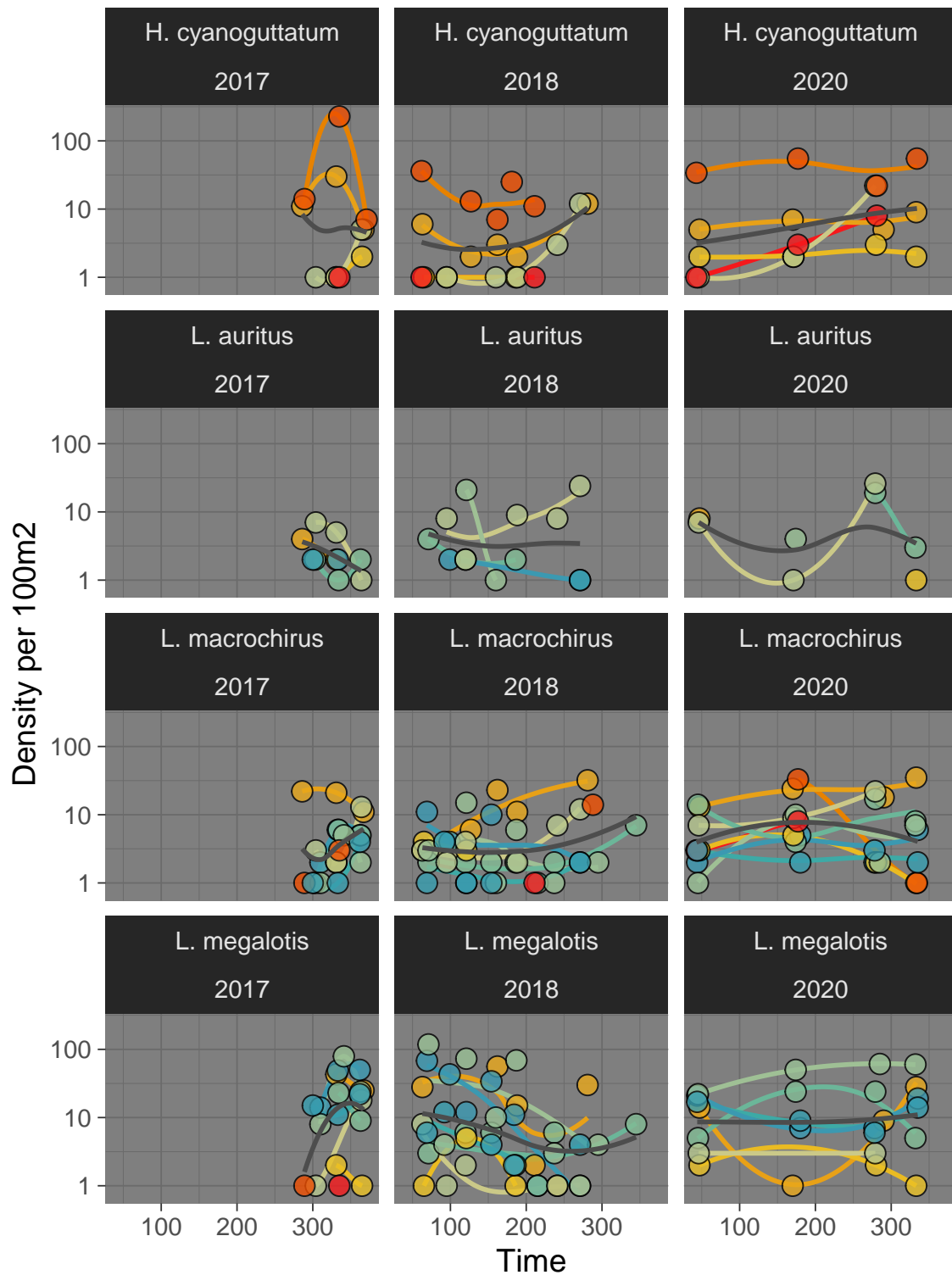
Figure 7. Species-specific densities (100m^{-2}) of small-gape, deep-bodied fish plotted against the day of the year in 2017, 2018, and 2020.

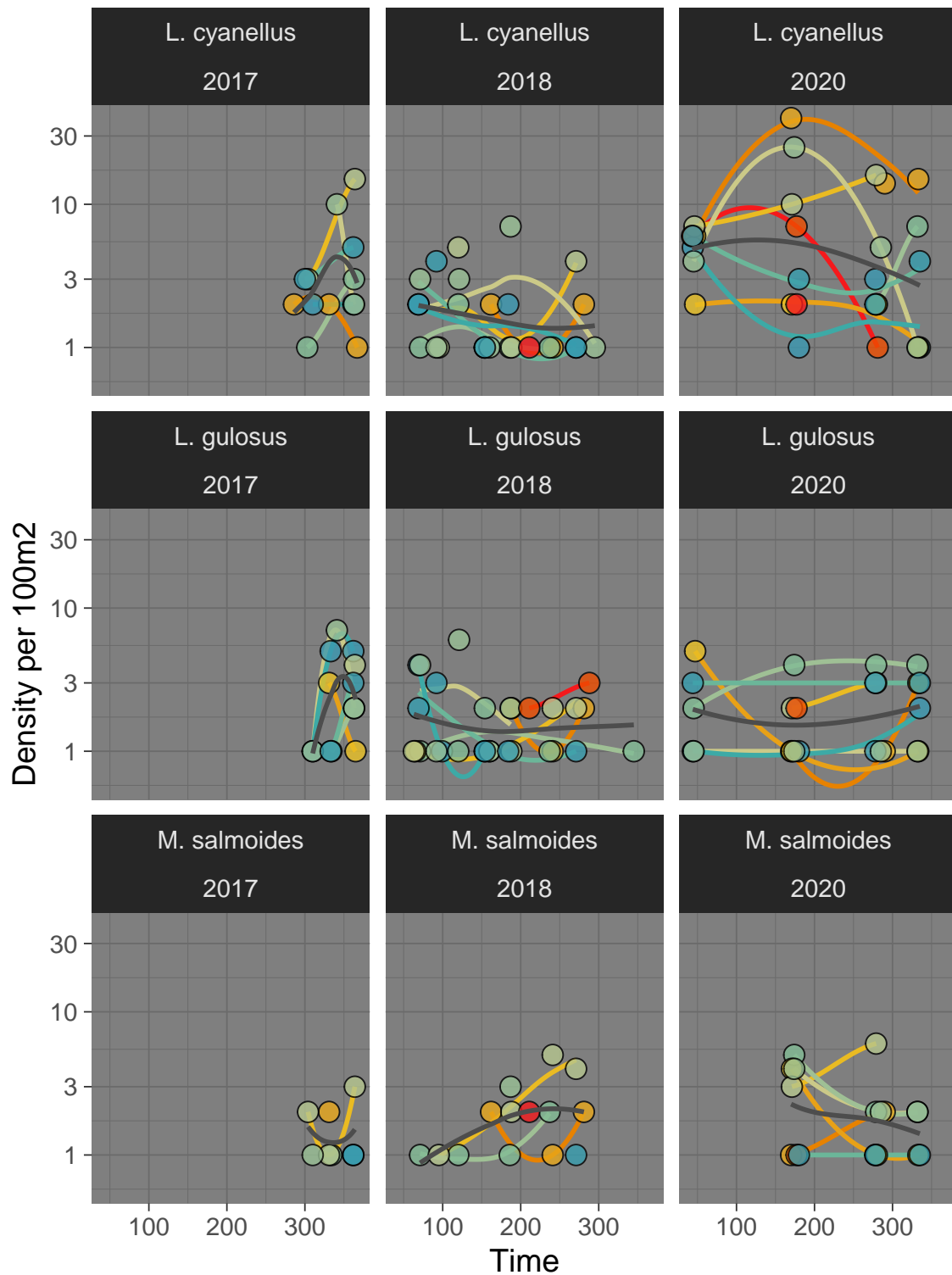**Figure 8 - Density vs Time: Large-Gape, Deep-Bodied Pan Fish**

Figure 8. Species-specific densities (100m^{-2}) of large-gape, deep-bodied fish plotted against the day of the year in 2017, 2018, and 2020.
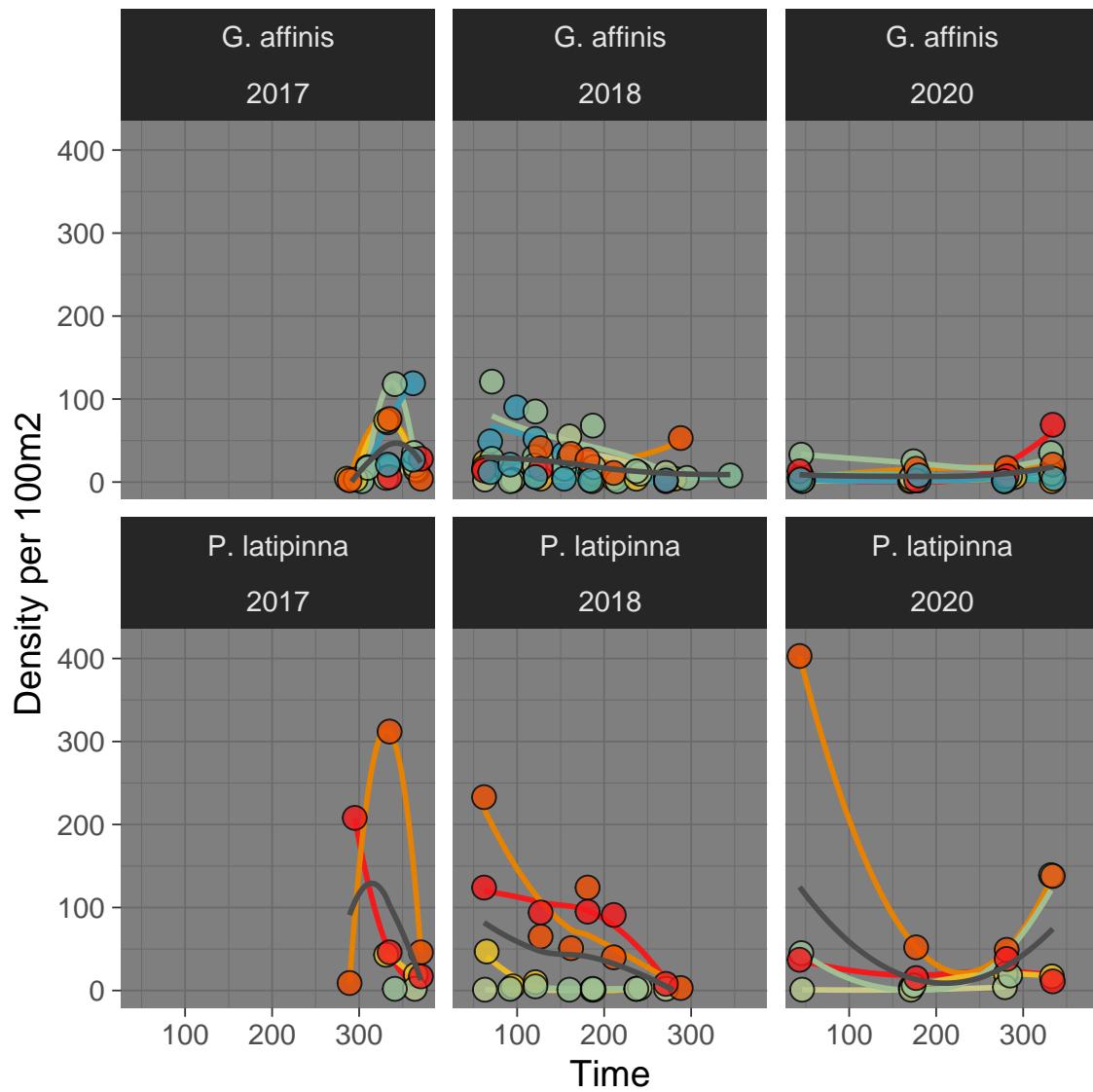
Figure 9 - Density vs Time: Poeciliidae

Figure 9. Species-specific densities (100m^{-2}) of Poeciliidae plotted against the day of the year in 2017, 2018, and 2020.
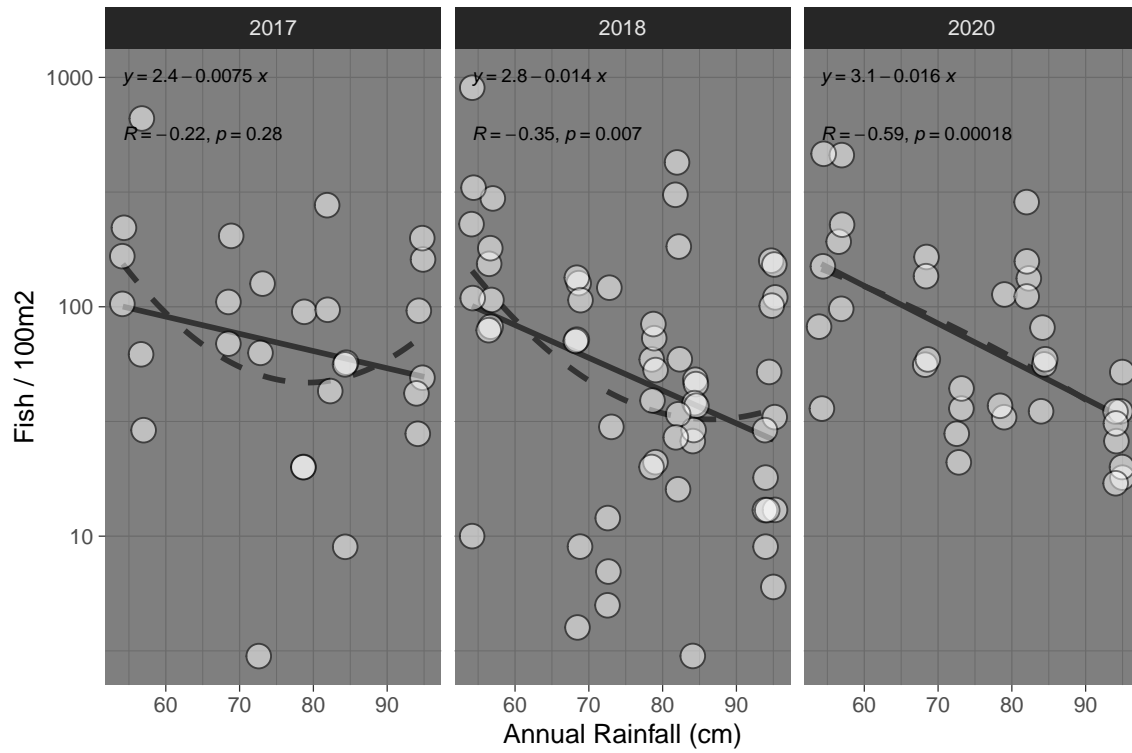
Figure 10 - Density vs Rainfall: Regression Community

Figure 10. Community density (100m^{-2}) versus annual rainfall for 2017, 2018, and 2020.

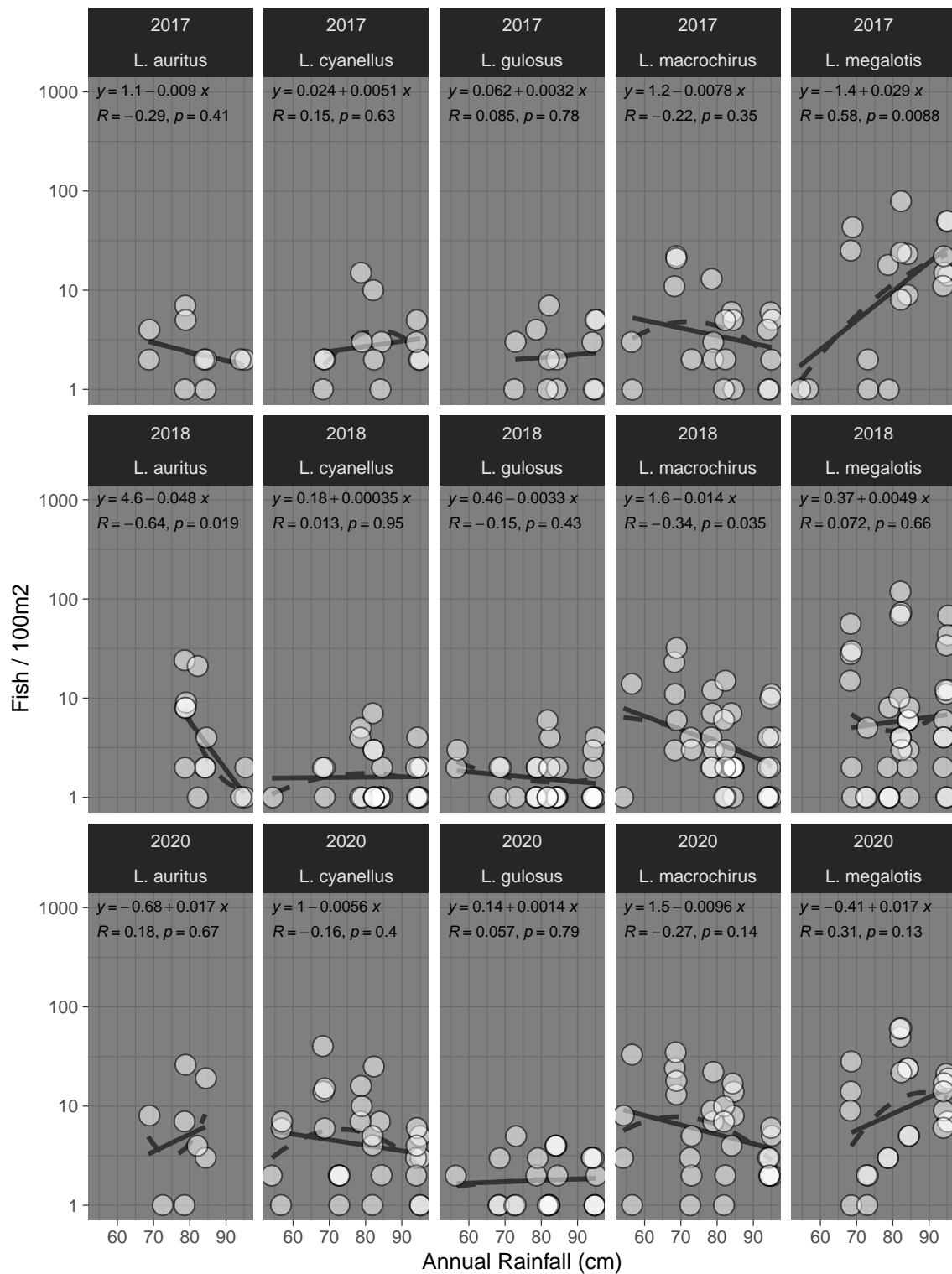# Figure 11 - Density vs Rainfall: Regression Centrarchid

Figure 11. Species-specific densities of Centrarchidae (100m^{-2}) versus annual rainfall for 2017, 2018, and 2020.
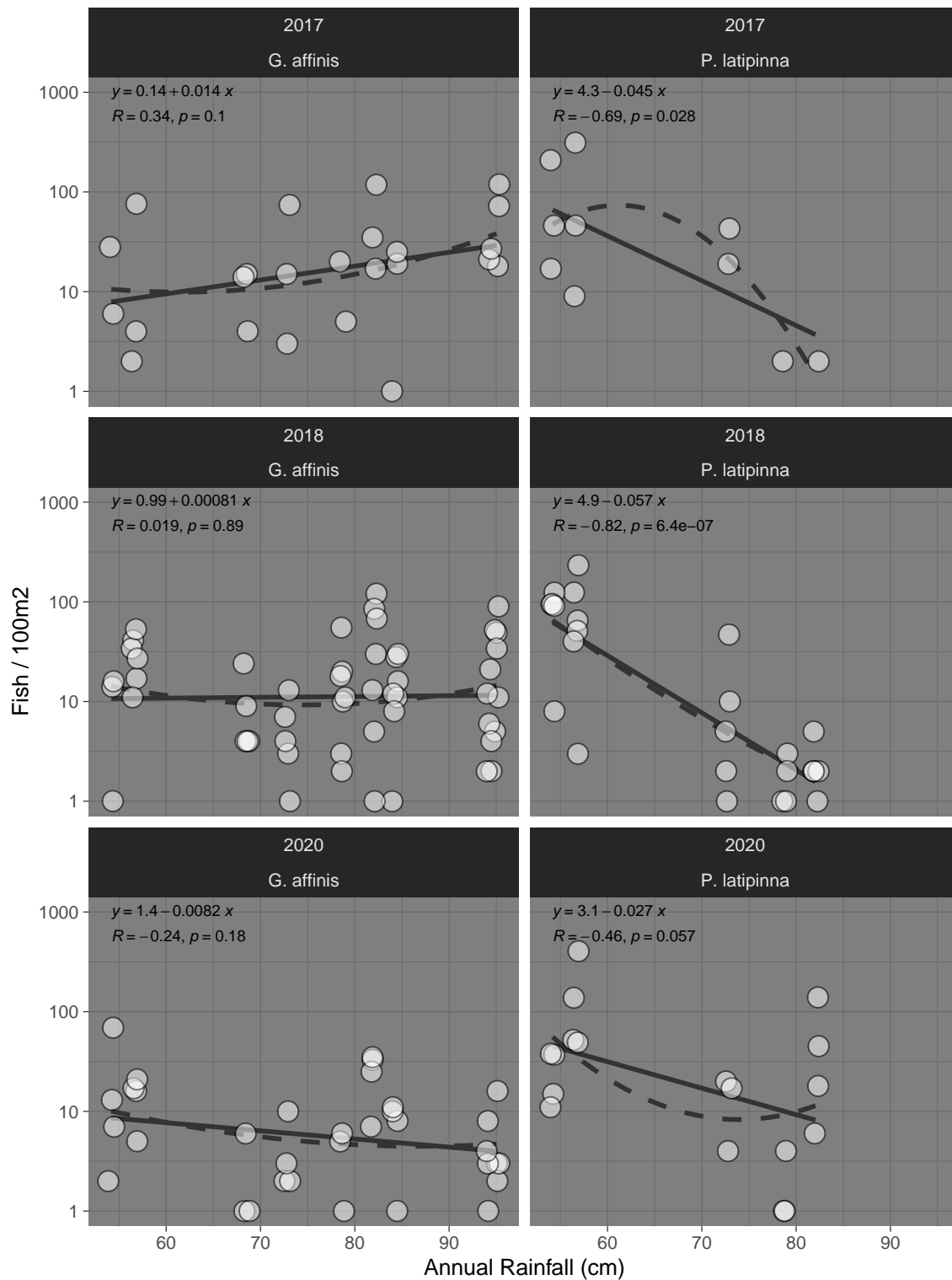
Figure 12 - Density vs Rainfall: Regression Poeciliid

Figure 12.Species-specific densities of Poeciliid (100m^{-2}) versus annual rainfall for 2017, 2018, and 2020.