A close up of a map

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Figure 1: NMDS ordination of fish communities in ten coastal prairie streams in South Texas. Sites are grouped according to Annual Precipitation. Distances between sites are proportional to compositional differences in community. The explanatory power of environmental factors is indicated by the length and direction of the arrows. Labeled llustrations indicate the location of various species within the ordination space.

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Figure 2: Shannon Index values of ten fish communities are plotted against Ammonia concentrations. A least square regression indicates Shannon Index value declines (slope = -4.64) with increasing ammonia concentrations (R2 = 0.445, p = 0.035)

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Figure 3: Shannon Index values of ten fish communities are plotted against the mean annual precipitation for each site’s watershed from 1971-2000. A least square regression indicates Shannon Index value increases (slope = 0.017) with increasing ammonia concentrations (R2 = 0.602, p = 0.008)

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Figure 4: NMDS ordination of macroinvertebrate communities in ten coastal prairie streams in South Texas. Sites are grouped according to Annual Precipitation (Semi-arid < 80 cm/yr, Mesic <100 cm/yr, sub-humid <125 cm/yr). Distances between sites are proportional to compositional differences in community. The explanatory power of environmental factors is indicated by the length and direction of the arrows. Labeled Illustrations indicate the location of various genuses within the ordination space.

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Figure 5: Shannon Index values of ten macroinvertebrate communities are plotted against log transformed conductivity (originally measured in µS/cm). A least square regression indicates Shannon Index value declines (slope = - 0.386) with increasing ammonia concentrations (R2 = 0.163, p = 0.218)

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Figure 6: Shannon Index values of ten macroinvertebrate communities are plotted against log transformed phosphate concentrations (originally measured as ppm). A least square regression indicates Shannon Index value increases (slope = 0.351) with increasing phosphate concentrations (R2 = 0.178, p = 0.197)