

Figure S1. Non-metric multidimensional scaling (NMDS) of species composition grouped in convex hulls by nutrient treatment type on a barrier island grassland community. Points represent individual experimental plots in species space with stars indicating calculated centroids for each group. Colors and symbols are matched to nutrient treatment (C = control, P = phosphorus, N = nitrogen, and NP = nitrogen + phosphorus). Centroids can be viewed as mean community compositions.

Table S1. Directional correlations of each functional trait along PC1 and PC2 (Figure 3). Goodness-of-fit is represented as r^2 and correlates with vector lengths in Figure 2. Bold indicates p < 0.05. Traits include height, specific leaf area (SLA), leaf carbon content (%C), leaf nitrogen content (%N), and leaf nitrogen isotope ratio (δ^{15} N).

Trait	PC 1	PC 2	r2	<i>p</i> –value
Height	-0.94	0.34	0.80	0.001
Specific leaf area (SLA)	-0.18	0.98	0.71	0.001
Leaf N content (%N)	-0.33	-0.94	0.61	0.001
Leaf C content (%C)	-0.86	-0.51	0.71	0.001
Leaf 15N	-0.99	0.15	0.61	0.001

Table 2. Pairwise comparisons via PERMANOVA results for species composition between nutrient enrichment treatments in coastal grassland. Bold indicates p < 0.05, using FDR correction.

Comparison	F-value	<i>p</i> –value
C vs P	3.14	0.033
C vs N	4.32	0.021
C vs. NP	8.89	0.026
P vs N	2.52	0.033
P vs NP	4.35	0.021
N vs NP	2.77	0.033

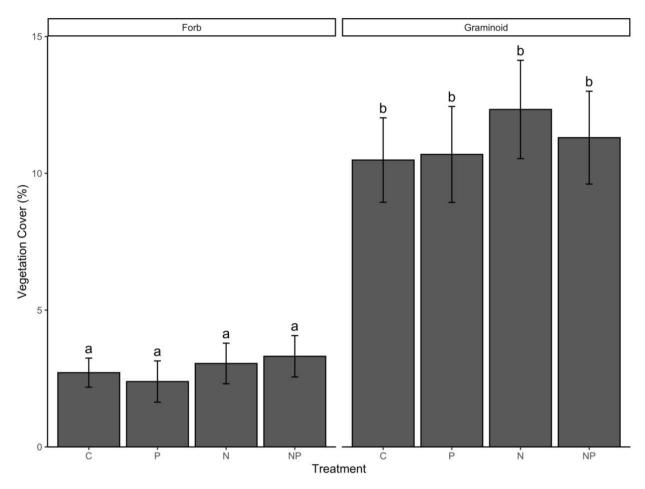


Figure S2. Mean percent cover \square SE of forb and graminoid lifeforms in each nutrient treatment group on a barrier island grassland community. Bars are grouped by lifeform type as well as nutrient treatment level (C = control, P = phosphorus, N = nitrogen, and NP = nitrogen + phosphorus). Letter codes represent significant differences, such that bars with different letter codes are significantly different (Tukey HSD, p < 0.05).