Uncovering depth and spatial patterns of soil eDNA in arid regions

Community Ecology

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Online Resource 3

Relative Contribution Diversity Values by Sample, April 2022 Field Collections

Contribution diversity metric designations and calculations follow Lu et al. (2007). Sample names include the abbreviated habitat type (HT) designation, transect number, distance from transect center, orientation of sampled transect arm, and depth class of sample. For example, DESRT.1.32.N.B refers to a bottom level sample taken from the 32-meter point along the north-oriented arm of the transect in Transect 1 in Desert habitat. A "U" listed for transect arm orientation indicates that the arm of the transect was not recorded and is "unknown." Tables OR3-1a-d describe patterns in overall amplified sequence variant (ASV) richness. Tables OR3-1e-h describe the patterns only for key ASVs, which are those that were considered to have the greatest potential to emerge as HT-indicator ASVs, should a more sampling-intensive study than ours be conducted in the region.

Table OR3-1a. Contribution diversity ($\boldsymbol{\gamma}_{S(k)}$) and relative contribution diversity ($\boldsymbol{C}_{\boldsymbol{\gamma}S(k)}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of classifiable animal, plant, and fungal ASVs for the Desert habitat type (HT). For the purposes of calculating $\boldsymbol{C}_{\boldsymbol{\gamma}S(k)}$, $\bar{\gamma}_S$ = 302.704 and γ_{ST} = 8,173.

Sample	$\boldsymbol{\gamma}_{S(k)}$	$\boldsymbol{C}_{\boldsymbol{\gamma}S(k)}$	HT	Transect	Sample Point	Sample Depth Class
DESRT.1.0.C.B	409.357	0.013	Desert	1	0C	Bottom
DESRT.1.0.C.M	453.278	0.018	Desert	1	0C	Middle
DESRT.1.0.C.T	87.610	-0.026	Desert	1	0C	Top
DESRT.1.32.N.B	482.117	0.022	Desert	1	32N	Bottom
DESRT.1.32.N.M	538.884	0.029	Desert	1	32N	Middle
DESRT.1.32.N.T	558.288	0.031	Desert	1	32N	Top
DESRT.1.32.W.B	626.733	0.040	Desert	1	32W	Bottom
DESRT.1.32.W.M	363.447	0.007	Desert	1	32W	Middle

DESRT.1.32.W.T	146.774	-0.019	Desert	1	32W	Top
DESRT.2.2.W.B	18.643	-0.035	Desert	2	2W	Bottom
DESRT.2.2.W.M	37.102	-0.032	Desert	2	2W	Middle
DESRT.2.2.W.T	54.989	-0.030	Desert	2	2W	Top
DESRT.2.32.SE.B	24.782	-0.034	Desert	2	32SE	Bottom
DESRT.2.32.SE.M	88.827	-0.026	Desert	2	32SE	Middle
DESRT.2.32.SE.T	14.401	-0.035	Desert	2	32SE	Top
DESRT.2.8.W.B	39.762	-0.032	Desert	2	8W	Bottom
DESRT.2.8.W.M	47.110	-0.031	Desert	2	8W	Middle
DESRT.2.8.W.T	7.721	-0.036	Desert	2	8W	Top
DESRT.3.128.W.B	492.500	0.023	Desert	3	128W	Bottom
DESRT.3.128.W.M	471.009	0.021	Desert	3	128W	Middle
DESRT.3.128.W.T	753.326	0.055	Desert	3	128W	Top
DESRT.3.2.N.B	639.122	0.041	Desert	3	2N	Bottom
DESRT.3.2.N.M	231.725	-0.009	Desert	3	2N	Middle
DESRT.3.2.N.T	358.458	0.007	Desert	3	2N	Top
DESRT.3.8.W.B	231.321	-0.009	Desert	3	8W	Bottom
DESRT.3.8.W.M	299.536	0.000	Desert	3	8W	Middle
DESRT.3.8.W.T	696.179	0.048	Desert	3	8W	Top

Table OR3-1b. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of classifiable animal, plant, and fungal ASVs for the Grassland habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 605.667 and γ_{ST} = 16,353.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
GRASS.1.128.NE.B	691.297	0.005	Grassland	1	128NE	Bottom
GRASS.1.128.NE.M	940.973	0.021	Grassland	1	128NE	Middle
GRASS.1.128.NE.T	584.976	-0.001	Grassland	1	128NE	Top
GRASS.1.128.SE.B	1026.377	0.026	Grassland	1	128SE	Bottom
GRASS.1.128.SE.M	380.020	-0.014	Grassland	1	128SE	Middle
GRASS.1.128.SE.T	443.977	-0.010	Grassland	1	128SE	Top
GRASS.1.8.NE.B	866.025	0.016	Grassland	1	8NE	Bottom
GRASS.1.8.NE.M	1065.093	0.028	Grassland	1	8NE	Middle
GRASS.1.8.NE.T	785.654	0.011	Grassland	1	8NE	Top
GRASS.2.0.C.B	542.919	-0.004	Grassland	2	0C	Bottom
GRASS.2.0.C.M	1077.627	0.029	Grassland	2	0C	Middle
GRASS.2.0.C.T	429.351	-0.011	Grassland	2	0C	Top
GRASS.2.2.SE.B	593.546	-0.001	Grassland	2	2SE	Bottom
GRASS.2.2.SE.M	482.837	-0.008	Grassland	2	2SE	Middle
GRASS.2.2.SE.T	334.440	-0.017	Grassland	2	2SE	Top
GRASS.2.32.NE.B	731.569	0.008	Grassland	2	32NE	Bottom
GRASS.2.32.NE.M	605.887	0.000	Grassland	2	32NE	Middle
GRASS.2.32.NE.T	423.731	-0.011	Grassland	2	32NE	Top
GRASS.3.2.E.B	515.797	-0.005	Grassland	3	2E	Bottom
GRASS.3.2.E.M	514.850	-0.006	Grassland	3	2E	Middle
GRASS.3.2.E.T	482.652	-0.008	Grassland	3	2E	Top
GRASS.3.2.NW.B	494.774	-0.007	Grassland	3	2NW	Bottom
GRASS.3.2.NW.M	285.484	-0.020	Grassland	3	2NW	Middle
GRASS.3.2.NW.T	655.263	0.003	Grassland	3	2NW	Top
GRASS.3.32.NW.B	558.783	-0.003	Grassland	3	32NW	Bottom

GRASS.3.32.NW.M	385.838	-0.013	Grassland	3	32NW	Middle
GRASS.3.32.NW.T	453.262	-0.009	Grassland	3	32NW	Top

Table OR3-1c. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of classifiable animal, plant, and fungal ASVs for the Encincal Woodland habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 638.296 and γ_{ST} = 17,234.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
ENCNL.1.128.SE.B	497.562	-0.008	Encinal	1	128SE	Bottom
ENCNL.1.128.SE.M	420.280	-0.013	Encinal	1	128SE	Middle
ENCNL.1.128.SE.T	560.761	-0.004	Encinal	1	128SE	Top
ENCNL.1.2.SE.B	560.903	-0.004	Encinal	1	2SE	Bottom
ENCNL.1.2.SE.M	685.200	0.003	Encinal	1	2SE	Middle
ENCNL.1.2.SE.T	990.635	0.020	Encinal	1	2SE	Top
ENCNL.1.8.N.B	767.436	0.007	Encinal	1	8N	Bottom
ENCNL.1.8.N.M	555.200	-0.005	Encinal	1	8N	Middle
ENCNL.1.8.N.T	598.830	-0.002	Encinal	1	8N	Top
ENCNL.2.0.C.B	398.022	-0.014	Encinal	2	0C	Bottom
ENCNL.2.0.C.M	829.794	0.011	Encinal	2	0C	Middle
ENCNL.2.0.C.T	491.129	-0.009	Encinal	2	0C	Top
ENCNL.2.128.NW.B	527.706	-0.006	Encinal	2	128NW	Bottom
ENCNL.2.128.NW.M	821.841	0.011	Encinal	2	128NW	Middle
ENCNL.2.128.NW.T	571.917	-0.004	Encinal	2	128NW	Top
ENCNL.2.2.SW.B	339.346	-0.017	Encinal	2	2SW	Bottom
ENCNL.2.2.SW.M	687.895	0.003	Encinal	2	2SW	Middle
ENCNL.2.2.SW.T	553.387	-0.005	Encinal	2	2SW	Top
ENCNL.3.2.W.B	1184.685	0.032	Encinal	3	2W	Bottom
ENCNL.3.2.W.M	368.105	-0.016	Encinal	3	2W	Middle
ENCNL.3.2.W.T	666.033	0.002	Encinal	3	2W	Top
ENCNL.3.32.W.B	550.858	-0.005	Encinal	3	32W	Bottom
ENCNL.3.32.W.M	594.227	-0.003	Encinal	3	32W	Middle
ENCNL.3.32.W.T	528.907	-0.006	Encinal	3	32W	Top
ENCNL.3.8.W.B	622.674	-0.001	Encinal	3	8W	Bottom
ENCNL.3.8.W.M	402.146	-0.014	Encinal	3	8W	Middle
ENCNL.3.8.W.T	1458.522	0.048	Encinal	3	8W	Top

Table OR3-1d. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of classifiable animal, plant, and fungal ASVs for the Pine-Oak habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 681.333 and γ_{ST} = 18,396.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
PNOAK.1.2.SE.B	664.52	-0.001	Pine-Oak	1	2SE	Bottom
PNOAK.1.2.SE.M	712.37	0.002	Pine-Oak	1	2SE	Middle
PNOAK.1.2.SE.T	2953.07	0.123	Pine-Oak	1	2SE	Top
PNOAK.1.8.SE.B	792.53	0.006	Pine-Oak	1	8SE	Bottom
PNOAK.1.8.SE.M	618.65	-0.003	Pine-Oak	1	8SE	Middle
PNOAK.1.8.SE.T	614.29	-0.004	Pine-Oak	1	8SE	Top

PNOAK.1.8.SW.B	654.89	-0.001	Pine-Oak	1	8SW	Bottom
PNOAK.1.8.SW.M	484.42	-0.011	Pine-Oak	1	8SW	Middle
PNOAK.1.8.SW.T	1063.33	0.021	Pine-Oak	1	8SW	Top
PNOAK.2.128.NW.B	464.39	-0.012	Pine-Oak	2	128NW	Bottom
PNOAK.2.128.NW.M	594.53	-0.005	Pine-Oak	2	128NW	Middle
PNOAK.2.128.NW.T	609.52	-0.004	Pine-Oak	2	128NW	Top
PNOAK.2.32.NW.B	508.72	-0.009	Pine-Oak	2	32NW	Bottom
PNOAK.2.32.NW.M	495.40	-0.010	Pine-Oak	2	32NW	Middle
PNOAK.2.32.NW.T	560.56	-0.007	Pine-Oak	2	32NW	Top
PNOAK.2.8.SW.B	644.26	-0.002	Pine-Oak	2	8SW	Bottom
PNOAK.2.8.SW.M	485.60	-0.011	Pine-Oak	2	8SW	Middle
PNOAK.2.8.SW.T	416.67	-0.014	Pine-Oak	2	8SW	Top
PNOAK.3.128.SW.B	487.15	-0.011	Pine-Oak	3	128SW	Bottom
PNOAK.3.128.SW.M	776.14	0.005	Pine-Oak	3	128SW	Middle
PNOAK.3.128.SW.T	665.40	-0.001	Pine-Oak	3	128SW	Top
PNOAK.3.2.W.B	387.67	-0.016	Pine-Oak	3	2SW	Bottom
PNOAK.3.2.W.M	819.23	0.007	Pine-Oak	3	2SW	Middle
PNOAK.3.2.W.T	480.20	-0.011	Pine-Oak	3	2SW	Top
PNOAK.3.32.SW.B	365.22	-0.017	Pine-Oak	3	32SW	Bottom
PNOAK.3.32.SW.M	459.71	-0.012	Pine-Oak	3	32SW	Middle
PNOAK.3.32.SW.T	617.56	-0.003	Pine-Oak	3	32SW	Top

Table OR3-1e. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of *key* ASVs from animals, plants, and fungi for the Desert habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 0.222 and γ_{ST} = 6.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
LODST.1.32.N.B	NA	NA	Desert	1	32N	Bottom
LODST.1.32.N.M	NA	NA	Desert	1	32N	Middle
LODST.1.32.N.T	NA	NA	Desert	1	32N	Top
LODST.1.32.W.B	NA	NA	Desert	1	32W	Bottom
LODST.1.32.W.M	NA	NA	Desert	1	32W	Middle
LODST.1.32.W.T	0.125	-0.016	Desert	1	32W	Top
LODST.2.2.U.B	NA	NA	Desert	1	2U	Bottom
LODST.2.2.U.M	NA	NA	Desert	1	2U	Middle
LODST.2.2.U.T	0.458	0.039	Desert	1	2U	Top
LODST.2.32.SE.B	NA	NA	Desert	2	32SE	Bottom
LODST.2.32.SE.M	0.143	-0.013	Desert	2	32SE	Middle
LODST.2.32.SE.T	NA	NA	Desert	2	32SE	Top
LODST.2.8.W.B	NA	NA	Desert	2	8W	Bottom
LODST.2.8.W.M	0.917	0.116	Desert	2	8W	Middle
LODST.2.8.W.T	NA	NA	Desert	2	8W	Top
LODST.3.128.W.B	0.518	0.049	Desert	2	128W	Bottom
LODST.3.128.W.M	0.268	0.008	Desert	2	128W	Middle
LODST.3.128.W.T	0.458	0.039	Desert	2	128W	Top
LODST.3.2.N.B	NA	NA	Desert	3	2N	Bottom
LODST.3.2.N.M	0.333	0.019	Desert	3	2N	Middle
LODST.3.2.N.T	0.125	-0.016	Desert	3	2N	Top
LODST.3.8.W.B	0.143	-0.013	Desert	3	8W	Bottom
LODST.3.8.W.M	0.476	0.042	Desert	3	8W	Middle

LODST.3.8.W.T	0.268	0.008	Desert	3	8W	Top
LODST.1.0.C.B	0.726	0.084	Desert	3	0C	Bottom
LODST.1.0.C.M	0.667	0.074	Desert	3	0C	Middle
LODST.1.0.C.T	0.375	0.025	Desert		0C	Top

Table OR3-1f. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of *key* ASVs from animals, plants, and fungi for the Grassland habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 7.000 and γ_{ST} = 189.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
Grass.1.128.NE.B	1.504	-0.029	Grassland	1	128NE	Bottom
Grass.1.128.NE.M	0.700	-0.033	Grassland	1	128NE	Middle
Grass.1.128.NE.T	0.663	-0.034	Grassland	1	128NE	Top
Grass.1.128.SE.B	16.943	0.053	Grassland	1	128SE	Bottom
Grass.1.128.SE.M	10.441	0.018	Grassland	1	128SE	Middle
Grass.1.128.SE.T	11.874	0.026	Grassland	1	128SE	Top
Grass.1.8.NE.B	1.392	-0.030	Grassland	1	8NE	Bottom
Grass.1.8.NE.M	1.358	-0.030	Grassland	1	8NE	Middle
Grass.1.8.NE.T	1.720	-0.028	Grassland	1	8NE	Top
Grass.2.0.C.B	7.844	0.004	Grassland	2	0C	Bottom
Grass.2.0.C.M	13.139	0.032	Grassland	2	0C	Middle
Grass.2.0.C.T	8.854	0.010	Grassland	2	0C	Top
Grass.2.2.SE.B	6.645	-0.002	Grassland	2	2SE	Bottom
Grass.2.2.SE.M	6.013	-0.005	Grassland	2	2SE	Middle
Grass.2.2.SE.T	5.385	-0.009	Grassland	2	2SE	Top
Grass.2.32.NE.B	11.493	0.024	Grassland	2	32NE	Bottom
Grass.2.32.NE.M	8.243	0.007	Grassland	2	32NE	Middle
Grass.2.32.NE.T	6.614	-0.002	Grassland	2	32NE	Top
Grass.3.2.E.B	8.972	0.010	Grassland	3	2E	Bottom
Grass.3.2.E.M	8.419	0.008	Grassland	3	2E	Middle
Grass.3.2.E.T	7.784	0.004	Grassland	3	2E	Top
Grass.3.2.NW.B	11.166	0.022	Grassland	3	2NW	Bottom
Grass.3.2.NW.M	1.813	-0.027	Grassland	3	2NW	Middle
Grass.3.2.NW.T	8.913	0.010	Grassland	3	2NW	Top
Grass.3.32.NW.B	7.790	0.004	Grassland	3	32NW	Bottom
Grass.3.32.NW.M	7.732	0.004	Grassland	3	32NW	Middle
Grass.3.32.NW.T	5.587	-0.007	Grassland	3	32NW	Top

Table OR3-1g. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of *key* ASVs from animals, plants, and fungi for the Encincal Woodland habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 0.889 and γ_{ST} = 24.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
OAKSAV.1.128.SE.B	0.267	-0.026	Encinal	1	128SE	Bottom
OAKSAV.1.128.SE.M	0.267	-0.026	Encinal	1	128SE	Middle
OAKSAV.1.128.SE.T	0.860	-0.001	Encinal	1	128SE	Top

OAKSAV.1.2.E.B	0.277	-0.025	Encinal	1	2E	Bottom
OAKSAV.1.2.E.M	0.438	-0.019	Encinal	1	2E	Middle
OAKSAV.1.2.E.T	2.007	0.047	Encinal	1	2E	Top
OAKSAV.1.8.N.B	0.688	-0.008	Encinal	1	8N	Bottom
OAKSAV.1.8.N.M	0.664	-0.009	Encinal	1	8N	Middle
OAKSAV.1.8.N.T	1.725	0.035	Encinal	1	8N	Top
OAKSAV.2.0.C.B	0.587	-0.013	Encinal	2	C	Bottom
OAKSAV.2.0.C.M	0.970	0.003	Encinal	2	C	Middle
OAKSAV.2.0.C.T	0.944	0.002	Encinal	2	C	Top
OAKSAV.2.128.NW.B	0.746	-0.006	Encinal	2	128NW	Bottom
OAKSAV.2.128.NW.M	2.313	0.059	Encinal	2	128NW	Middle
OAKSAV.2.128.NW.T	1.530	0.027	Encinal	2	128NW	Top
OAKSAV.2.2.SW.B	0.450	-0.018	Encinal	2	2SW	Bottom
OAKSAV.2.2.SW.M	0.355	-0.022	Encinal	2	2SW	Middle
OAKSAV.2.2.SW.T	0.811	-0.003	Encinal	2	2SW	Top
OAKSAV.3.2.W.B	0.306	-0.024	Encinal	3	2W	Bottom
OAKSAV.3.2.W.M	0.611	-0.012	Encinal	3	2W	Middle
OAKSAV.3.2.W.T	0.597	-0.012	Encinal	3	2W	Top
OAKSAV.3.32.W.B	1.031	0.006	Encinal	3	32W	Bottom
OAKSAV.3.32.W.M	0.267	-0.026	Encinal	3	32W	Middle
OAKSAV.3.32.W.T	0.517	-0.016	Encinal	3	32W	Top
OAKSAV.3.8.W.B	0.692	-0.008	Encinal	3	8W	Bottom
OAKSAV.3.8.W.M	1.174	0.012	Encinal	3	8W	Middle
OAKSAV.3.8.W.T	2.907	0.084	Encinal	3	8W	Top

Table OR3-h. Contribution diversity ($\boldsymbol{\gamma_{S(k)}}$) and relative contribution diversity ($\boldsymbol{C_{\gamma S(k)}}$) values calculated for the contribution of each sample (transect, point, and depth) to the overall richness (γ) of *key* ASVs from animals, plants, and fungi for the Pine-Oak habitat type (HT). For the purposes of calculating $\boldsymbol{C_{\gamma S(k)}}$, $\bar{\gamma}_S$ = 16.704 and γ_{ST} = 451.

Sample	$\boldsymbol{\gamma_{S(k)}}$	$\boldsymbol{C_{\gamma S(k)}}$	HT	Transect	Sample Point	Sample Depth Class
PNOAK.1.2.E.B	12.045	-0.010	Pine-Oak	1	2SE	Bottom
PNOAK.1.2.E.M	11.366	-0.012	Pine-Oak	1	2SE	Middle
PNOAK.1.2.E.T	30.781	0.031	Pine-Oak	1	2SE	Top
PNOAK.1.8.SE.B	17.895	0.003	Pine-Oak	1	8SE	Bottom
PNOAK.1.8.SE.M	12.589	-0.009	Pine-Oak	1	8SE	Middle
PNOAK.1.8.SE.T	11.673	-0.011	Pine-Oak	1	8SE	Top
PNOAK.1.8.SW.B	18.759	0.005	Pine-Oak	1	8SW	Bottom
PNOAK.1.8.SW.M	18.603	0.004	Pine-Oak	1	8SW	Middle
PNOAK.1.8.SW.T	31.505	0.033	Pine-Oak	1	8SW	Top
PNOAK.2.128.NW.B	10.152	-0.015	Pine-Oak	2	128NW	Bottom
PNOAK.2.128.NW.M	13.451	-0.007	Pine-Oak	2	128NW	Middle
PNOAK.2.128.NW.T	19.069	0.005	Pine-Oak	2	128NW	Top
PNOAK.2.32.NW.B	19.118	0.005	Pine-Oak	2	32NW	Bottom
PNOAK.2.32.NW.M	17.133	0.001	Pine-Oak	2	32NW	Middle
PNOAK.2.32.NW.T	10.280	-0.014	Pine-Oak	2	32NW	Top
PNOAK.2.8.SW.B	20.600	0.009	Pine-Oak	2	8SW	Bottom
PNOAK.2.8.SW.M	16.921	0.000	Pine-Oak	2	8SW	Middle
PNOAK.2.8.SW.T	16.211	-0.001	Pine-Oak	2	8SW	Top
PNOAK.3.128.SW.B	10.682	-0.013	Pine-Oak	3	128SW	Bottom
PNOAK.3.128.SW.M	18.839	0.005	Pine-Oak	3	128SW	Middle
PNOAK.3.128.SW.T	26.986	0.023	Pine-Oak	3	128SW	Top

PNOAK.3.2.W.B	10.768	-0.013	Pine-Oak	3	2SW	Bottom
PNOAK.3.2.W.M	26.052	0.021	Pine-Oak	3	2SW	Middle
PNOAK.3.2.W.T	16.350	-0.001	Pine-Oak	3	2SW	Top
PNOAK.3.32.SW.B	8.031	-0.019	Pine-Oak	3	32SW	Bottom
PNOAK.3.32.SW.M	10.163	-0.015	Pine-Oak	3	32SW	Middle
PNOAK.3.32.SW.T	14.978	-0.004	Pine-Oak	3	32SW	Top

Literature Cited

Lu, H. P., Wagner, H. H., Chen, X. Y. 2007. A contribution diversity approach to evaluate species diversity. *Basic and Applied Ecology* 8,1-12.