SUPPLEMENTARY MATERIALS

Functional Characteristics

This study used 12 characters to define the ecological roles of organisms in ancient reef environments. The characters are listed in bold with a brief description of why each is included. Characters states are in italics with an explanation for how to code for each character. In some instances, an organism may fall into more than one state and was coded as the state in which the organism spends the majority of its time. Colonial organisms were coded based on colony characteristics. Based on Novack-Gottshall (2007) and Dineen et al. (2014).

1. **Substrate Composition –** Describes what type of surfaces an organism can live on and whether it can build (encrust) on other organisms. *Biotic* describes organisms that can attach to any living or dead material produced by other organisms. *Lithic* describes organisms that predominantly attach to inorganic surfaces. *Either* describes organisms that show no or equal preferences. (0) Biotic; (1) Lithic; (2) Either

2. **Substrate Attachment** – Organisms can have a solid connection to their substrate or move around their environment freely. *Attached* organism will have holdfasts or other attachment apparatus to keep them stationary in their environments. *Free-living* organism do not attach to substrate at any time in their adult forms. (0) Attached; (1) Free-living

3. **Substrate Microhabitat –** Organisms can stratify themselves to utilize a greater proportion of their environment. As a result, they either disturb the sediment or retard water flow in their immediate environment. *Erect* means that the organism extends their body or appendages into the water column a significant distance. *Epifaunal* means the organism remains within the benthic environment and does not extend into the water column. *Infaunal* describes organisms that burrow into their substrate. (0) Erect; (1) Epifaunal; (2) Infaunal

4. **Sediment Consolidation Ability** – Organisms that cause sediment to collect or form around them will be more likely to produce the large topographic relief necessary for reef formation. This can occur by the organism producing sticky material that glues together sediment, buildup of material from dead skeletons, or by baffling moving seawater to cause sediment to deposit in the area. *High* consolidating organisms produce large amounts of topographic relief. *Low* consolidating organisms do not produce large relief. (0) High; (1) Low

5. **Mobility** – Organisms that move around their habitats will affect a greater area within their ecosystem compared to those that cannot move. *Sessile* organism cannot move in their adult stage. *Vagile* organism can move throughout their lifecycle. (0) Sessile; (1) Vagile

6. **Condition of Food –** This character refers to the form of an organism's food, regardless of how this food is collected and processed. Organisms that collect the same type of food may be in competition with one another. *Incorporeal* organisms are able to produce food within their own bodies by combining the needed chemical molecules. *Particle* refers to

organisms that eat indiscriminate organic material. *Bulk* refers to organisms that eat all or part of macroscopic organisms. (0) Incorporeal; (1) Particle; (2) Bulk

7. Feeding Habit – Describes how an organism collects and manipulates food. *Ambient* feeders collect raw inorganic material needed to produce their own food sources internally. *Filter* feeders select and pick out organic material from the water column. *Deposit* feeders sift through loose sediment to select out organic or decaying material. *Mass* feeders gather resources by either consuming portions of, or attaching to, other organisms. (0) Ambient; (1) Filter; (2) Deposit; (3) Mass

8. Diet – Organisms can breakdown food via different metabolic pathways and consume food of different nutritional value. *Autotrophs* produce their resources by photosynthesis. *Microbivores* consume microscopic organisms. *Carnivores* consume food as predators. (0) Autotroph; (1) Microbivore; (2) Carnivore

9. Feeding Energetics – Organisms expend large amounts of energy while collecting food. Organisms that expend less energy can therefore devote more energy reserves to reproduction and defensive traits. *Passive absorption* organisms absorb their resources without any external macroscopic appendages moving. Often this is done through cellular membranes. *Passive entrainment* describes organisms that allow water to flow through their bodies and internally separate fluid from their desired resource. *Active entrainment* describes organisms that extend appendages (lophophores, mucus, tentacles) into the water column to collect their food. *Active searching* denotes organisms that expend large amounts of time searching for and hunting prey. (0) Passive absorption; (1) Passive entrainment; (2) Active entrainment; (3) Active searching

10. Rigidity – Some organisms are more effective as attachment sites for encrusting organisms and provide more structure to a reef framework. *Rigid, non-permeable* organisms are completely incapable or bending or flexing. *Rigid, permeable* organisms do not flex or bend, but do allow water to pass through their bodies. *Flexible* organism can bend in response to increases in energy level. (0) Rigid and non-permeable; (1) Rigid and permeable; (2) Flexible

11. Wave Resistance – Reefs experience constant disturbance from wave energy and certain organisms may provide shelter for other organisms. *High stress* organisms can attach to substrate securely or have large hypercalcifying skeletons that resist breakage. *Intermediate stress* organisms have hard skeletons, however, they tend to break in shallow water high energy environments. These organisms are often found in between normal and storm wave base. *Low stress* organisms can easily break or be destroyed by waves and live below storm wave base, in burrows or in secluded cavities. (0) High stress; (1) Intermediate stress; (2) Low stress

12. Size – Organisms with a greater biovolume can often be of greater functional importance to and define the processes occurring within an ecosystem. *Large* organism are greater than 10 $cm^{3.}$ *Small* organisms are between 1 and 10 cm^3. *Microscopic* organisms are smaller than 1 cm^3. (0) Large; (1) Small; (2) Microscopic

SUPPLEMENTARY TABLE 1—Coding for ecological characters for functional analysis.

Taxa	***Ch. 1***	***Ch. 2***	***Ch. 3***	***Ch. 4***	***Ch. 5***	***Ch. 6***	***Ch. 7***	***Ch. 8***	***Ch. 9***	***Ch. 10***	***Ch. 11***	***Ch. 12***
Harklessia	2	0	1	0	0	2	3	2	2	0	0	0
Echinoderms	1	0	0	0	0	1	1	1	2	2	2	1
Trilobites	1	1	1	1	1	1	2	1	3	0	2	1
Renalcis	2	0	1	0	0	0	0	0	0	2	0	2
Lingulid	1	1	2	1	1	1	1	1	2	0	2	1
Arch. gen. 1	2	0	1	0	0	1	1	1	1	1	1	1
Arch. gen. 2	2	0	1	0	0	1	1	1	1	1	1	1
Arch. gen. 3	2	0	1	0	0	1	1	1	1	1	1	1
Arch. gen. 4	2	0	1	0	0	1	1	1	1	1	1	1

All taxa except archaeocyaths were found to be unique functional groups. Ch. 1 = character 1

SUPPLEMENTARY TABLE 2—Raw point count data from White-Inyo Mountains petrographic thin sections.

Loc.	El. (m)	Mi	Sp	Cl	An	Ar - Di	Ar - St	Cn	Gi	Re	Ec	Ar	Li
Gold Point Hills	1.81	115	13	14	1	3	0	30	0	23	0	1	0
	1.77B	63	11	5	0	91	0	3	0	27	0	0	0
	1.77A	111	15	8	0	0	0	60	0	6	0	0	0
	1.72B	117	14	21	0	29	0	4	0	13	0	2	0
	1.72A	92	15	12	1	29	36	12	0	1	1	1	0
	1.35	98	26	33	0	0	1	0	0	2	29	10	1
	1.01	13	0	164	2	0	0	0	0	21	0	0	0
	0.84	22	4	160	1	0	0	0	0	13	0	0	0
	0.05	1	0	190	5	0	0	0	0	4	0	0	0
	Coral Float	26	55	3	3	0	0	106	0	3	4	0	0
Westgard Pass (White-Inyo)	64.49	195	3	0	0	0	0	0	0	0	2	0	0
	50.93	130	0	0	0	0	0	0	0	66	4	0	0
	49.36	198	1	0	0	0	0	0	0	0	1	0	0
	46.84	168	31	0	0	0	0	0	0	1	0	0	0
	45.89	185	3	0	0	0	0	0	0	9	2	1	0
	43.46	199	0	0	0	0	0	0	0	0	1	0	0
	40.20	172	0	0	0	0	0	0	0	27	1	0	0
	34.41	179	7	0	0	0	10	0	0	0	4	0	0
	28.23	195	0	0	0	0	0	0	0	0	5	0	0
	26.97	193	3	0	0	0	0	0	0	0	4	0	0
	24.00	191	4	0	0	0	0	0	0	5	0	0	0
	18.71	196	2	0	0	0	0	0	0	0	2	0	0
	17.76	196	4	0	0	0	0	0	0	0	0	0	0
	13.73	198	2	0	0	0	0	0	0	0	0	0	0
	6.33	195	0	0	1	0	0	0	0	0	4	0	0
	4.78	191	0	0	0	0	0	0	0	7	2	0	0
	2.36	96	0	0	0	0	0	0	0	104	0	0	0
	1.32	196	3	0	0	0	0	0	0	1	0	0	0
	0.01	177	3	0	0	0	8	0	0	3	9	0	0
Stewart's Mill – North Face	56.03	187	0	0	0	2	0	0	0	10	1	0	0
	50.51	171	1	0	0	7	0	0	0	18	2	1	0
	44.60	53	24	0	0	60	0	0	0	62	0	1	0
	43.22	133	19	0	0	28	0	0	0	0	18	2	0
	34.80	120	20	0	0	26	0	0	0	25	7	1	1
	16.80	182	4	0	0	0	0	0	0	11	2	1	0
	15.92	191	0	0	0	0	0	0	0	9	0	0	0
	14.56	193	0	0	0	0	0	0	0	5	2	0	0
	13.54	138	0	0	0	0	0	0	0	50	2	0	0

	12.92	189	1	4	0	0	0	0	0	5	1	0	0
	1.06	192	1	2	0	0	0	0	0	5	0	0	0
Stewart's Mill Northeast Face	89.82	182	8	0	0	0	0	0	0	9	1	0	0
	72.51	99	5	0	0	0	0	0	0	86	9	1	0
	52.79	101	20	0	0	14	0	0	0	63	0	1	1
	50.62	186	10	0	0	2	0	0	0	2	0	0	0
	46.70	132	27	0	0	37	0	0	0	4	0	0	0
	44.14	167	12	0	0	19	1	0	0	1	0	0	0
	39.30	181	13	0	0	3	0	0	0	1	2	0	0
	36.97	183	4	0	0	0	0	0	0	12	1	0	0
	35.12	174	20	0	0	0	0	0	0	1	5	0	0
	30.70	196	2	0	0	0	0	0	0	2	0	0	0
	29.44	193	6	0	0	0	0	0	0	0	1	0	0
	25.79	187	2	0	0	0	2	0	0	4	5	0	0
	16.60	186	0	0	0	0	0	0	0	14	0	0	0
	15.30	86	18	0	0	14	0	0	1	81	0	0	0
	12.78	144	0	0	0	0	0	0	0	45	11	0	0
	8.90	182	0	0	0	0	0	0	0	14	4	0	0
	4.46	169	10	0	0	0	0	0	0	20	1	0	0
	2.45	155	34	0	0	0	0	0	0	8	3	0	0
	0.86	182	3	0	0	0	0	0	0	15	0	0	0
Stewart's Mill South Face	44.24	198	2	0	0	0	0	0	0	0	0	0	0
	36.53	135	3	0	0	0	0	0	0	52	10	0	0
	33.67	162	4	0	0	8	2	0	0	24	0	0	0
	31.16	154	7	0	0	18	0	0	0	19	2	0	0
	29.08	194	1	0	0	0	1	0	0	4	0	0	0
	28.65	188	4	0	0	7	0	0	0	0	1	0	0
	27.72	181	8	0	0	0	0	0	0	10	1	0	0
	24.12	169	0	0	0	9	21	0	0	0	1	0	0
	21.52	170	12	0	0	16	0	0	0	0	2	0	0
	21.17	181	17	0	0	0	0	0	0	2	0	0	0
	17.90	179	21	0	0	0	0	0	0	0	0	0	0
	15.91	192	7	0	0	0	0	0	0	1	0	0	0
	15.01	105	93	0	0	0	2	0	0	0	0	0	0
	12.81	178	21	0	0	1	0	0	0	0	0	0	0
	9.27	152	32	0	0	0	2	0	0	14	0	0	0
	6.77	193	7	0	0	0	0	0	0	0	0	0	0
	2.73	160	40	0	0	0	0	0	0	0	0	0	0
	0.45	160	35	0	0	0	0	0	0	3	2	0	0
Stewar t's Mill Southe	52.45	185	4	0	0	5	4	0	0	2	0	0	0
	45.27	180	3	0	0	10	0	0	0	3	4	0	0
	43.97	187	0	0	0	0	0	0	0	13	0	0	0

Stewart's Mill Southeast	41.54	150	14	0	0	0	5	0	0	29	2	0	0
	41.24	123	3	0	0	2	24	0	0	46	2	0	0
	39.61	190	10	0	0	0	0	0	0	0	0	0	0
	34.68	184	5	0	0	7	0	0	0	4	0	0	0
	33.27	135	46	0	0	0	0	0	0	18	1	0	0
	26.79	141	18	0	0	34	4	0	0	3	0	0	0
	26.72	176	18	0	0	0	0	0	0	6	0	0	0
	22.00	154	38	0	0	0	0	0	0	7	1	0	0
	20.34	143	5	0	0	0	7	0	0	44	1	0	0
	18.23	194	0	0	0	2	0	0	0	4	0	0	0
	13.02	163	28	0	0	0	0	1	0	2	5	1	0
	7.63	194	2	1	0	0	0	0	0	3	0	0	0
	4.33	198	1	0	0	0	0	0	0	1	0	0	0
	3.11	197	0	3	0	0	0	0	0	0	0	0	0
	1.92	191	8	0	0	0	0	0	0	1	0	0	0
	0.92	190	0	0	0	0	0	0	0	4	0	0	6
Bristlecone Trail (White-Inyo)	78.78	192	2	0	0	3	0	0	0	0	3	0	0
	78.54	122	4	0	0	44	11	0	0	7	12	0	0
	78.15	92	0	1	0	0	0	0	0	90	16	1	0
	46.20	193	1	0	0	0	0	0	0	0	6	0	0
	45.94	191	3	0	0	0	0	0	0	0	6	0	0
	45.80	189	0	0	2	0	0	0	0	9	0	0	0
	5.56	186	9	5	0	0	0	0	0	0	0	0	0
	1.16	143	0	2	0	0	0	0	0	40	15	0	0
	1.13	191	0	4	0	0	0	0	0	3	2	0	0

Loc. = locality collected; El. = elevation in meters; Mi = micrite; Sp = sparry calcite; Cl = clasitc material; An = anhydrite gypsum; Ar – Di = archaeocyath with discrete septa; Ar – St = archaeocyath with bubbly septa; Cn = coralomporhs; Gi = *Girvanella*; Re = *Renalcis*-group (some portion may be *Epiphyton*-group); Ec = echinoderms; Ar = trilobite; Li = lingulid

SUPPLEMENTARY TABLE 3—Archaeocyath size distribution data from Stewart's Mill and Gold Point Hills.

Stewart's Mill		N	Body Diameter	SD	Osculum Diameter	SD	OBR	SD
Quadrate 1	Ar 1	57	10.75	3.26	3.83	1.97	0.35	0.13
	Ar 2	19	7.82	2.75	3.03	1.73	0.40	0.17
	Total	**76**	**10.01**	**3.37**	**3.59**	**1.93**	**0.36**	**0.14**
Quadrate 2	Ar 1	58	10.05	3.16	3.34	1.45	0.33	0.10
	Ar 2	20	7.20	6.47	3.75	3.97	0.51	0.15
	Total	**78**	**9.32**	**4.39**	**3.45**	**2.38**	**0.38**	**0.14**
Quadrate 3	Ar 1	34	7.19	2.56	2.93	1.07	0.42	0.13
	Ar 2	35	6.36	2.91	2.66	1.45	0.42	0.14
	Total	**69**	**6.77**	**2.75**	**2.79**	**1.27**	**0.42**	**0.13**
Whole Area	Ar 1	149	9.66	3.35	3.40	1.60	0.36	0.12
	Ar 2	74	6.96	4.13	3.05	2.46	0.44	0.15
	Total	**223**	**8.77**	**3.84**	**3.28**	**1.95**	**0.39**	**0.14**

Gold Point Hills		N	Body Diameter	SD	Osculum Diameter	SD	OBR	SD
Quadrate 1	Ar 3	49	13.26	6.37	5.88	3.54	0.43	0.11
	Ar 4	60	20.33	13.26	12.65	11.43	0.58	0.14
	Total	**109**	**17.15**	**11.25**	**9.71**	**9.49**	**0.52**	**0.15**
Quadrate 2	Ar 3	44	15.59	8.77	6.13	4.33	0.39	0.11
	Ar 4	12	21.04	9.92	12.71	9.79	0.56	0.15
	Total	**56**	**16.76**	**9.22**	**7.54**	**6.42**	**0.42**	**0.14**
Quadrate 3	Ar 3	51	13.05	6.10	5.18	2.71	0.40	0.10
	Ar 4	39	14.03	6.42	8.08	4.72	0.56	0.15
	Total	**90**	**13.47**	**6.23**	**6.43**	**3.96**	**0.47**	**0.15**
Whole Area	Ar 3	144	13.90	7.15	5.70	3.55	0.41	0.11
	Ar 4	111	18.19	11.31	11.05	9.60	0.57	0.15
	Total	**255**	**15.76**	**9.42**	**8.06**	**7.38**	**0.48**	**0.15**

SD = standard deviation; OBR = osculum:body ratio; Ar 1 = archaeocyath gen. 1; Stewart's Mill body diameters do show significant differences across quadrates (Kruskal-Wallis p-value = 8.42 x 10^{-08}). Quadrates in Gold Point Hills were not significantly different (p-value = 0.05) with respect to body size. Archaeocyaths have significantly different average sizes at both Stewart's Mill (Mann-Whitney p-value 2.69 x 10^{-09}) and Gold Point Hills (p-value = 0.0008). OBR across quadrates was also significantly different at Stewart's Mill (p-value = 0.004) and Gold Point Hills (p-value = 0.009). Diameters measured in mm.

SUPPLEMENTARY TABLE 4—Pairwise *p*-values with Bonferroni corrections for fabric analysis (associated with nMDS) below diagonal and pairwise diversity t-tests above diagonal.

	BCT - M	BCT - P	GPH	SM	WGP
BCT – M		**>> 0.001**	**>> 0.001**	**>> 0.001**	**0.035**
BCT – P	**NS**		**> 0.001**	**NS**	**>> 0.001**
GPH	**0.0196**	**NS**		**>> 0.001**	**>> 0.001**
SM	**NS**	**NS**	**>> 0.001**		**>> 0.001**
WGP	**NS**	**NS**	**>> 0.001**	**NS**	

Only significant values with Bonferroni correction shown. See figure 10 for NMDS of same data and sample similarity. NS = not significant.

SUPPLEMENTARY TABLE 5—Geochemical data from White-Inyo Mountains samples. Orange shaded boxes excluded.

Locality	Elevation (m)	$\delta^{13}C$ ‰ (VPDB)	X_{Sr} %	X_{Mn} %	X_{Na+Al} %	X_{Mg} %	X_{Fe} %
Gold Point Hills	**1.81**	-0.75 ± 0.10	0.06	0.23	0.79	0.49	0.79
	1.77A	-	0.08	0.42	1.04	0.87	1.04
	1.72A	-1.92 ± 0.02	0.08	0.12	0.00	1.06	0.66
	1.35A	-1.67 ± 0.04	0.08	0.46	0.22	0.64	1.14
	1.01	-	0.09	0.99	2.49	0.00	1.25
	1.00	-	0.67	3.90	26.96	2.07	14.44
	0.05	-	0.21	0.59	47.82	7.17	25.29
	Coral Float	-3.17 ± 0.10	0.10	0.41	0.32	0.76	1.25
Westgard Pass (White-Inyo)	**64.49**	-	0.13	0.03	0.09	4.50	1.02
	58.29	-	0.15	0.11	0.01	2.66	1.08
	50.93	-0.08 ± 0.05	0.11	0.05	0.46	0.94	1.34
	49.36	-	0.09	0.05	0.40	4.18	2.08
	46.84	-	0.08	0.04	0.24	0.99	0.81
	45.84	-	0.11	0.07	0.33	0.96	1.29
	43.46	-	0.10	0.06	0.42	6.59	2.67
	40.20	-0.19 ± 0.11	0.11	0.04	0.39	1.69	1.50
	34.41	-	0.12	0.04	0.96	7.11	2.65
	28.23	0.01 ± 0.14	0.11	0.05	0.42	3.07	1.75
	26.97	-	0.12	0.04	0.09	0.69	1.10
	24.00	0.09 ± 0.08	0.12	0.05	0.06	1.27	1.17

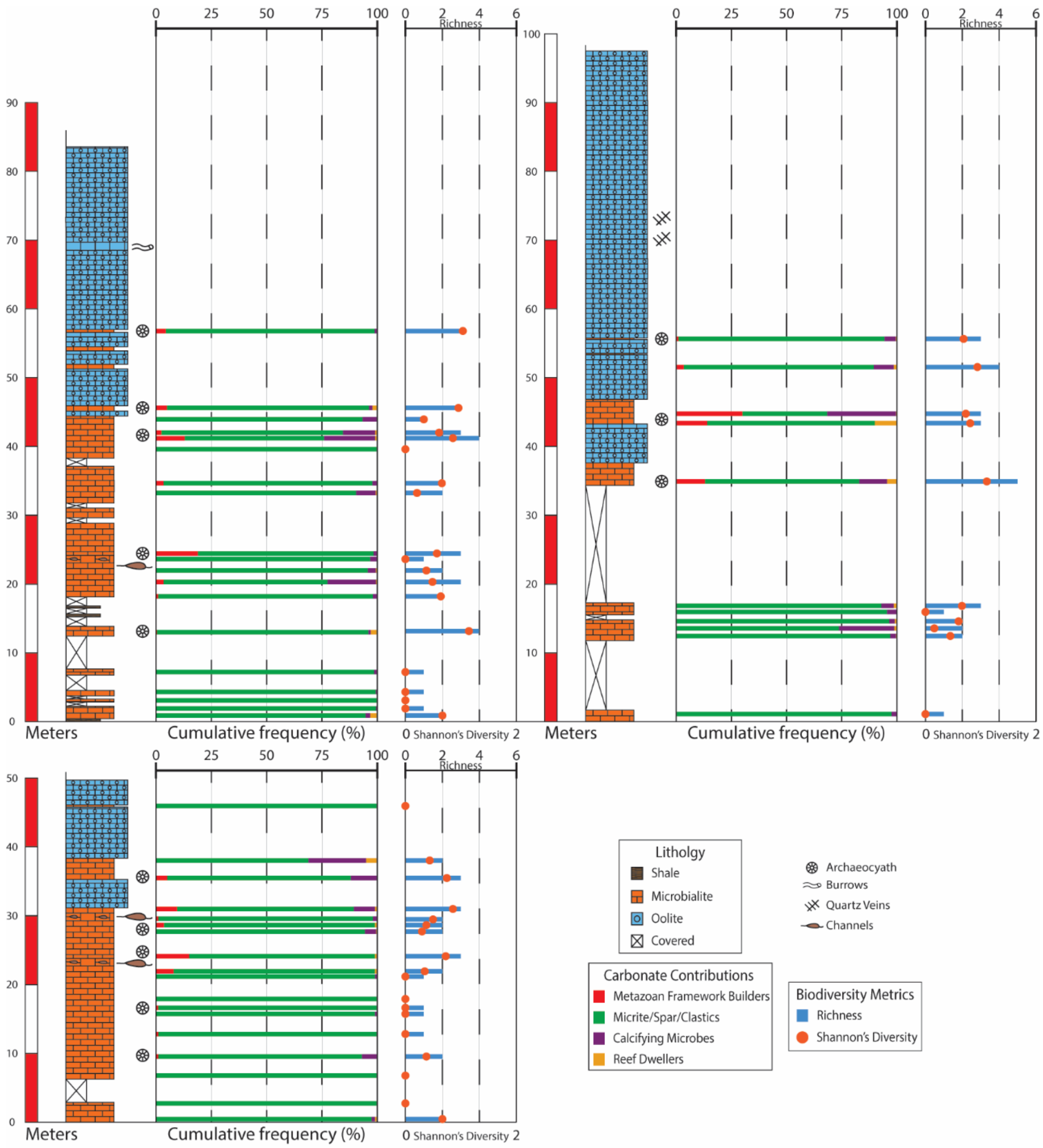
	18.71	-	0.11	0.05	0.40	7.06	2.89
	17.76	-0.04 ± 0.06	0.07	0.03	0.08	0.55	0.97
	13.73	-	0.07	0.04	0.15	0.39	0.93
	6.33	0.86 ± 0.00	0.09	0.03	0.59	8.55	3.27
	4.78	-	0.10	0.04	0.31	0.95	1.18
	2.36	0.01 ± 0.05	0.13	0.08	0.41	8.34	2.55
	1.32	-	0.13	0.11	0.59	6.38	2.24
	0.01	-2.85 ± 0.01	0.05	0.21	0.03	0.16	0.00
Stewart's Mill – Northeast Face	**97.32**	-1.02 ± 0.04	0.11	0.07	0.07	0.73	0.71
	89.82	-0.70 ± 0.02	0.06	0.06	0.91	19.85	2.62
	85.21	-1.24 ± 0.03	0.12	0.07	0.09	4.59	0.85
	77.91	-0.65 ± 0.08	0.10	0.09	0.07	1.64	0.00
	74.52	-0.40 ± 0.03	0.09	0.03	0.11	0.93	0.66
	72.51	-1.30 ± 0.13	0.11	0.07	0.37	1.50	1.01
	70.93	-0.88 ± 0.00	0.09	0.04	0.06	1.14	0.68
	55.43	-0.64 ± 0.10	0.10	0.05	0.10	1.23	0.69
	52.49	-0.60 ± 0.01	0.13	0.05	0.56	8.35	1.67
	50.62	-0.06 ± 0.06	0.10	0.06	0.15	0.81	0.91
	46.70	-0.40 ± 0.01	0.09	0.09	0.79	0.85	0.87
	44.14	-0.80 ± 0.05	0.14	0.08	0.33	2.01	0.95
	39.30	-0.50 ± 0.01	0.14	0.05	0.15	1.01	0.93
	36.97	-0.70 ± 0.01	0.17	0.06	0.23	1.34	0.86
	35.12	-0.40 ± 0.09	0.20	0.04	0.18	1.80	1.15
	30.20	-0.50 ± 0.09	0.16	0.07	0.30	0.95	1.01
	25.79	-0.10 ± 0.18	0.17	0.04	0.25	1.33	0.83
	24.44	0.10 ± 0.11	0.19	0.07	0.11	0.93	0.92
	16.60	0.30 ±0.03	0.22	0.01	0.18	1.25	0.92
	15.30	1.20 ± 0.02	0.16	0.03	1.24	5.68	2.02
	12.78	0.80 ± 0.15	0.21	0.01	0.29	2.67	1.00
	8.90	1.65 ± 0.22	0.15	0.03	0.36	1.55	0.82
	4.46	1.72 ± 0.19	0.16	0.04	0.60	2.87	0.98
	2.45	0.40 ± 0.05	0.16	0.08	0.56	6.30	2.15
	0.86	0.70 ± 0.08	0.16	0.01	0.44	3.86	1.34
	Diagenetic control	0.44	0.11	0.01	0.00	0.27	0.93
Bristlecone Trail (White-Inyo)	**78.78**	0.23 ± 0.16	0.16	0.06	0.17	3.89	1.50
	78.54	-0.40 ± 0.05	0.13	0.05	0.43	14.98	2.94
	78.15	-1.05 ± 0.01	0.13	0.07	0.21	4.77	1.37
	76.76	0.11 ± 0.10	0.13	0.06	0.34	13.04	3.14
	75.33	-0.49 ± 0.08	0.15	0.03	0.48	1.63	0.82
	71.76	-0.37 ± 0.13	0.15	0.04	0.12	4.22	1.17
	67.65	-0.43	0.13	0.05	0.11	2.07	1.03
	64.65	-0.66	-	-		-	-
	63.95	-0.61 ± 0.27	0.16	0.04	0.17	5.20	1.61

	46.20	-0.46 ± 0.03	0.14	0.07	0.10	0.89	0.86
	45.94	-0.32 ± 0.07	0.13	0.11	0.20	1.52	1.11
	45.80	-	0.16	0.08	0.08	1.45	0.90
	5.80	-0.65 ± 0.08	-	-	-	-	-
	5.56	-0.56 ± 0.05	0.17	0.24	0.24	0.68	1.78
	1.16	-1.34 ± 0.05	0.08	0.15	0.02	0.26	0.83
	1.13	-1.33 ± 0.12	0.15	0.24	0.06	0.59	1.34
ICP-MS Standard Deviation per Element			0.02	0.02	0.03	0.05	0.13
Element Average			0.12	0.08	0.31	3.11	1.31

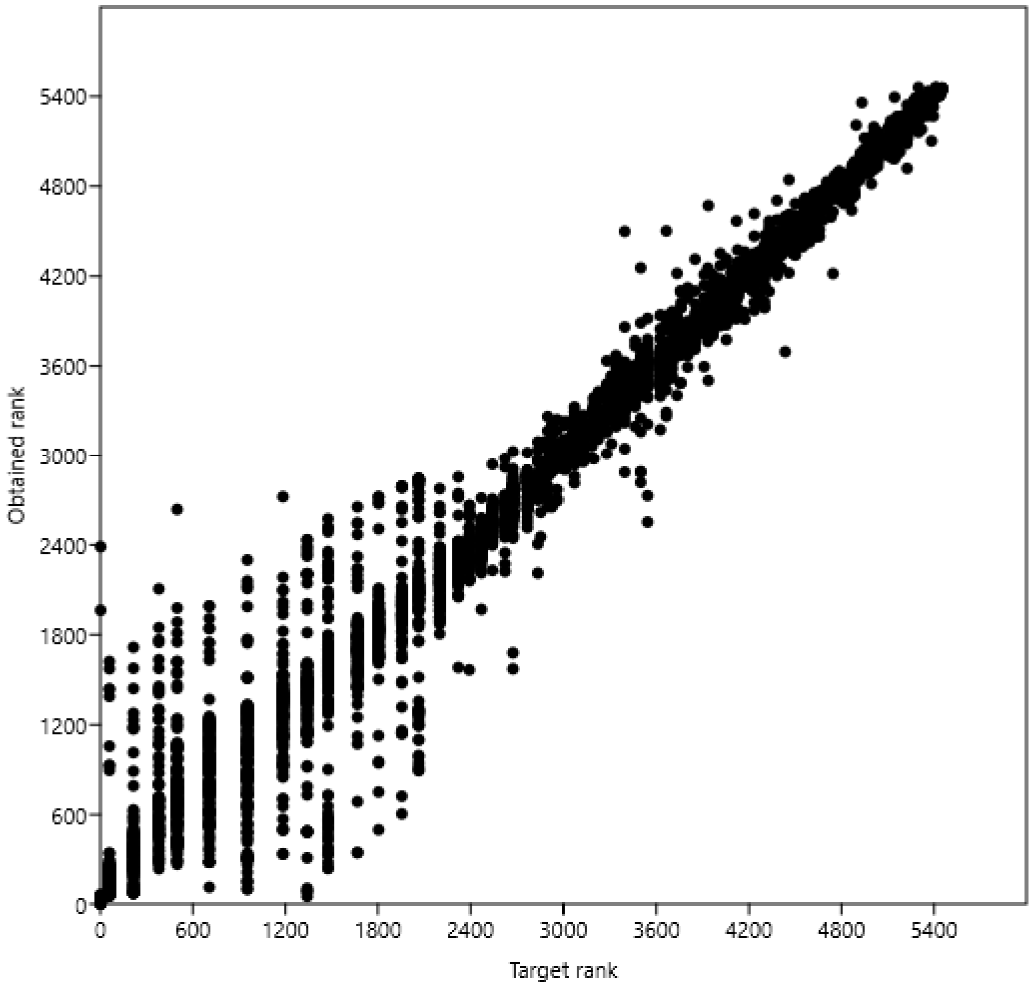
134 **SUPPLEMENTARY TABLE 5**—continued –

Locality	**Elevation (m)**	**X_{Th} ppm**	**X_{U} ppm**	**X_{Mo} ppm**	**Ca+Mg %**
Gold Point Hills	**1.81**	6.24	0.89	2.45	3.01
	1.77A	5.50	0.53	0.00	2.28
	1.72A	0.31	0.63	0.17	4.47
	1.35A	1.87	3.96	0.00	4.36
	1.01	74.30	4.89	9.15	0.71
	1.00	363.86	19.34	10.70	0.11
	0.05	275.66	14.18	0.00	0.10
	Coral Float	1.00	2.46	0.02	3.72
Westgard Pass (White-Inyo)	**64.49**	3.20	0.22	4.10	4.25
	58.29	1.44	0.28	1.69	3.85
	50.93	6.07	0.38	2.29	3.80
	49.36	2.67	0.37	0.53	4.04
	46.84	1.61	0.87	0.17	4.13
	45.84	4.35	0.48	1.60	4.33
	43.46	1.96	0.30	1.60	4.41
	40.20	1.70	0.84	0.00	4.05
	34.41	15.55	1.29	0.25	3.28
	28.23	2.08	0.40	0.00	3.75
	26.97	2.76	0.09	1.27	4.94
	24.00	0.34	0.15	0.00	4.59
	18.71	3.40	0.40	0.00	4.06
	17.76	2.47	0.42	1.37	4.66
	13.73	1.71	0.16	0.00	4.69
	6.33	1.31	0.20	0.00	4.03
	4.78	2.34	0.10	0.06	4.49
	2.36	2.56	0.21	0.00	3.68
	1.32	6.21	0.24	1.52	3.98
	0.01	1.19	0.20	0.01	4.67
	97.32	2.35	0.97	1.55	4.55

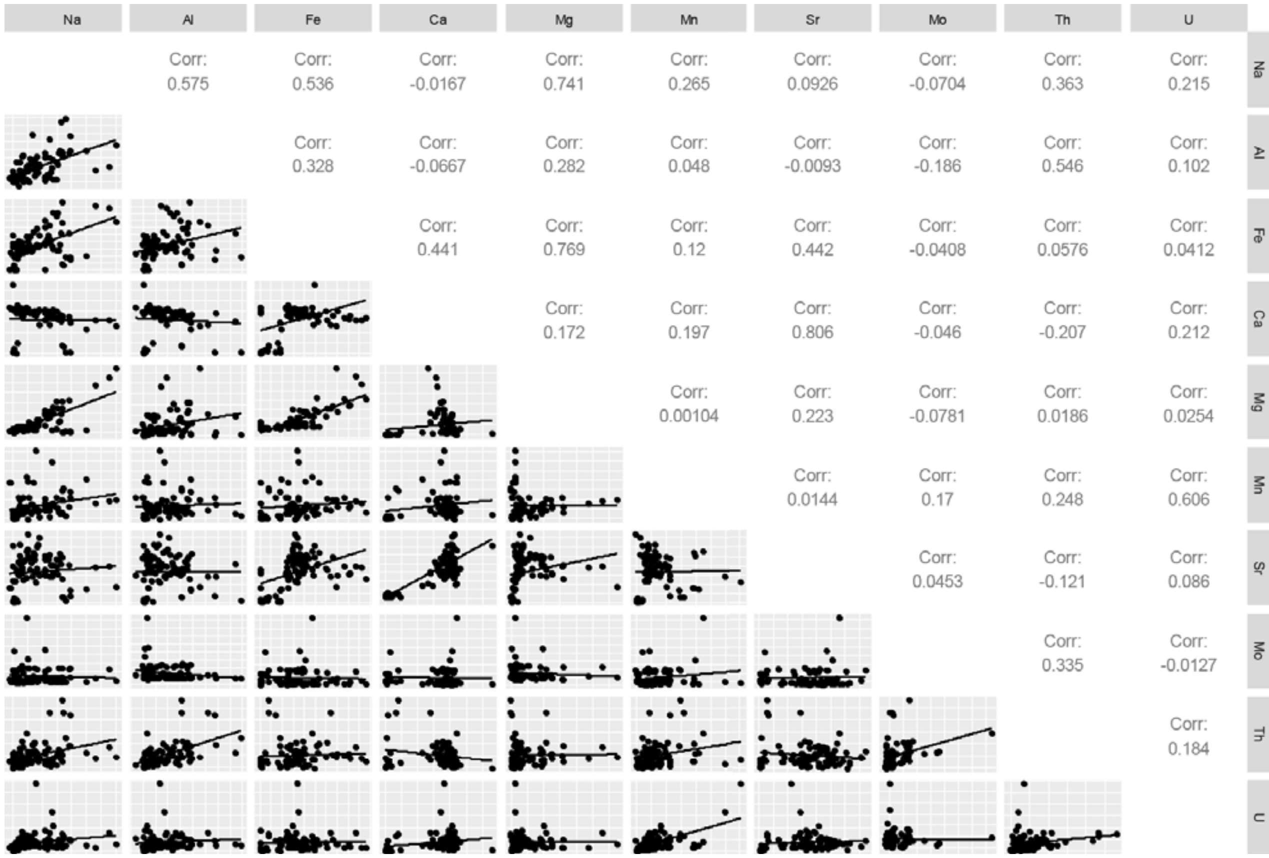
Stewart's Mill – Northeast Face	**89.82**	2.51	0.45	0.00	3.31
	85.21	0.89	1.23	0.00	4.89
	77.91	0.68	1.12	0.41	4.18
	74.52	1.10	0.54	0.00	4.91
	72.51	5.38	1.01	1.71	3.73
	70.93	0.49	0.41	0.00	4.14
	55.43	0.09	0.75	0.00	5.02
	52.49	4.84	0.66	1.56	4.21
	50.62	1.74	0.37	0.00	4.98
	46.70	5.05	0.33	0.00	3.62
	44.14	3.43	0.78	0.15	4.24
	39.30	1.06	0.17	0.00	4.69
	36.97	0.80	0.40	0.00	4.53
	35.12	3.14	0.48	1.64	4.08
	30.20	3.46	0.53	0.21	4.51
	25.79	1.31	0.36	0.00	4.31
	24.44	0.60	0.45	0.00	4.34
	16.60	3.22	0.53	1.55	4.34
	15.30	3.77	0.43	0.00	3.56
	12.78	2.06	0.24	0.13	4.06
	8.90	0.97	0.46	0.00	4.40
	4.46	4.43	0.75	1.94	3.90
	2.45	2.72	0.63	0.38	3.77
	0.86	0.52	0.34	0.00	3.67
	Diagenetic control	0.00	0.03	0.00	6.35
Bristlecone Trail (White-Inyo)	**78.78**	0.57	0.17	0.00	3.50
	78.54	4.71	1.08	1.65	3.96
	78.15	0.33	0.58	0.00	4.47
	76.76	2.07	0.23	0.20	4.31
	75.33	4.74	0.78	0.00	4.04
	71.76	3.85	0.64	1.55	4.11
	67.65	2.62	0.34	0.29	4.89
	64.65	-	-	-	-
	63.95	1.70	0.30	0.00	4.12
	46.20	0.60	0.18	0.20	4.50
	45.94	3.34	0.43	1.88	3.87
	45.80	1.06	0.24	0.23	4.12
	5.80	-	-	-	-
	5.56	5.33	0.37	0.63	5.30
	1.16	1.10	0.81	1.15	4.26
	1.13	6.57	0.48	8.36	4.64
Standard Deviation		1.02	0.05	1.28	0.24
Average		2.69	0.51	0.66	3.95



SUPPLEMENTARY FIGURE 1—Additional transects at Stewart's Mill showing lithology, carbonate contribution, and biodiversity. Top left = southeast face; top right = north face; bottom left = south face.



SUPPLEMENTARY FIGURE 2—Shepard's plot for NMDS ordination. R^2 equals 0.9174.



SUPPLEMENTARY FIGURE 3—Scatterplot matrix for ICP-MS data with scatterplots (lower) and Pearson's *r* values (upper) for intersecting variables along top and right axes. Figure made using *ggpairs()* function in *R*.