

Appendix F. Absolute abundance of fossils identified by comparison group and participants

	Participant Labels	Da Bu	Do Es	Kr Ju	C 01	C 02	C 03	C 04	C 05	C 06	C 07	C 08	C 09	C 10	C 11	C 12	G 01	G 02	G 03	G 04	G 05	G 06	G 07	G 08	G 09	G 11	G 12	G 13	I 01	I 02	I 03	I 04	I 05	I 06	I 07	I 08	I 09	I 10	I 11	I 12			
	Institution	MSU	BU	TSU	LV	LV	LV	LV	LV	LV	LV	LV	LV	GS	GS	GS	LV	LV	LV	LV	LV	LV	LV	LV	LV	LV	GS	GS	GS	LV	LV	LV	LV	LV	LV	LV	LV	LV	LV	GS	GS	GS	GS
	Current education level	14	15	14	8	8	8	8	8	8	8	8	13	8	15	15	8	8	8	8	8	8	8	8	8	14	8	9	8	8	8	8	8	8	8	8	8	8	-	9	8	14	
	Found fossil before? 1=Y 0=N	1	1	1	1	0	1	0	0	0	1	0	1	1	1	1	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	-	0	0	1	
	Likert score of interest (0 - 2)	2	2	2	1	1	2	1	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	2	2	-	1	1	2		
Taxon	Common Name																																										
Anthozoa	Corals	15	13	11	2	0	0	0	0	4	2	0	1	0	10	3	0	0	0	3	0	5	1	0	1	5	0	0	0	0	2	0	0	0	0	0	8	-	3	0	0		
Batoidea	Rays	69	71	68	2	1	1	3	1	5	5	1	1	0	2	4	5	0	3	2	2	2	1	0	1	2	0	15	1	5	1	0	0	0	0	0	0	-	2	4	7		
Biota indeterminate	Unidentifiable fossil material	84	123	26	7	1	5	0	20	2	2	3	4	8	6	20	3	0	0	4	0	0	1	0	2	0	12	1	21	15	6	0	11	0	0	26	-	3	6	18			
Bivalvia	Bivalves	51	18	39	0	0	0	1	0	5	1	0	3	0	2	0	0	0	0	0	0	0	1	0	0	1	0	2	1	0	1	0	0	0	0	0	0	-	0	0	0		
Bromalites	Digestion traces	21	16	40	0	0	0	3	0	0	2	4	3	0	3	4	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	3	0	0	-	0	0	2				
<i>Carcharhinus</i> sp.	Requiem sharks	15	13	24	5	0	0	0	0	1	2	0	2	0	4	0	0	1	0	0	0	0	0	0	0	7	0	1	1	5	1	0	0	1	0	-	1	2	0				
<i>Carcharias taurus</i>	Sand tiger shark	0	0	0	0	0	0	1	4	0	1	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	-	0	0	0			
Cirripedia	Barnacles	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	0	0	-	0	1	0			
<i>Cosmopolitodus hastalis</i>	Extinct broad-tooth mako shark	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	3	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	1			
Crocodylia	Crocodiles and alligators	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	-	0	0	0			
Diodontidae	Porcupinefish	8	1	2	0	0	0	2	0	0	0	0	0	1	1	1	2	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	-	0	0	0			
Echinoidea	Urchins	5	7	6	0	3	0	0	2	0	0	0	1	0	2	3	0	3	3	3	1	0	2	0	1	2	0	0	0	0	1	0	0	0	0	0	-	3	0	0			
Elasmobranchii	Unidentifiable shark teeth	38	54	19	4	2	0	6	0	5	1	1	0	10	4	0	0	2	1	1	2	1	2	9	2	2	0	0	0	2	0	2	0	2	3	0	-	2	1	8			
Equidae	Horses	0	0	1	2	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0				
<i>Galeocерdo</i> sp.	Tiger sharks	0	0	3	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	1	0	0				
Gastropoda	Snails	121	122	69	1	2	1	0	2	0	3	0	3	0	1	1	2	4	3	2	1	0	1	2	3	1	0	3	2	4	0	0	0	6	1	0	-	5	0	5			
<i>Ginglymostoma delfortrei</i>	Extinct nurse shark	1	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	-	0	0	0			
Glires	Rodents or rabbits	1	0	0	0	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	1	0	0	-	0	0	0			
<i>Hemipristis serra</i>	Extinct snaggletooth shark	3	3	4	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	4	0	3	0	0	2	2	1	0	-	0	0	0			
Ichnofossil indeterminate	In-filled burrow fragments	51	50	32	3	1	0	5	0	3	0	1	1	4	0	1	0	0	1	0	0	1	0	3	3	3	5	0	2	1	0	0	0	0	0	0	-	1	3	1			
<i>Isurus oxyrinchus</i>	Shortfin mako shark	3	1	9	1	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	0	1	0	1	0	7	2	1	0	0	1	2	0	0	-	0	2	2			
Lepisosteidae	Gar fish	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	-	0	0	0				
<i>Microtus</i> sp.	Voies	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	0	0	0	-	0	0	0			
<i>Negaprion</i> sp.	Lemon sharks	28	11	18	0	0	3	0	1	4	2	0	1	0	0	1	2	3	2	4	5	4	0	1	0	1	0	3	0	1	1	2	0	1	0	1	-	1	1	0			
Ophiomorpha	Pellet-lined burrows	32	29	38	1	1	0	0	0	1	0	3	0	0	0	3	2	0	1	0	0	0	0	0	2	2	2	0	1	2	0	0	0	0	0	0	-	1	1	0			
Osteichthyes	Bony fish	5	1	4	0	0	0	0	0	0	1	1	0	1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	-	0	0	0			
<i>Otodus megalodon</i>	Extinct mackerel shark	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0				
<i>Physogaleus contortus</i>	Extinct ground shark	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	3	0	3	0	0	2	1	1	1	1	1	0	-	0	1	0			
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark	5	1	4	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	1	0	0	0	0	1	0	0	0	0	1	0	0	0	-	1	0	1			
Sciaenidae	Drum fish	9	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	0	0	-	0	0	0			
Serpulidae	Tube worms	6	4	11	1	0	0	0	0	0	3	0	1	0	3	1	0	4	0	0	4	0	0	1	3	3	1	7	1	3	0	0	0	0	00								

Note: Comparison group names are abbreviated “DaBu” for Dava Butler, “DoEs” for Donald Esker, and “KrJu” for Kristopher Juntunen. Anonymized participant labels denote which identification guide the participant tested, C for color photos, G for grayscale photos, and I for illustrations. Institutions are abbreviated “MSU” for Montana State University, “BU” for Baylor University, “TSU” for Tarleton State University, “LV” for La Vega Junior High, and “GS” for Girl Scouts Troop 1587. “Current education level” indicates junior high or high school grade level, with 13 equaling college undergraduate, 14 equaling college graduate, and 15 equaling post graduate. A total of 39 participants provided data; data from 38 participants was used. A total of 2454 fossils were identified.