

SUPPLEMENTARY MATERIAL

TABLE S1

Proportion of appearance of each white spot type of stain per individual of *Aetobatus laticeps* observed in the north Pacific coast of Costa Rica, according to body zone.

Frequent white spots proportions															
Pectoral fins				Back				Head				Pelvic fins			
Single spot	Two close single spots	Two merged single spots	Semi-empty circle	Single spot	Two close single spots	Two merged single spots	Semi-empty circle	Single spot	Two close single spots	Two merged single spots	Semi-empty circle	Single spot	Two close single spots	Two merged single spots	Semi-empty circle
72.296	4.384	22.839	0.000	94.000	2.000	4.000	0.000	100.000	0.000	0.000	0.000	20.000	33.333	40.000	0.000
46.637	15.732	16.414	12.834	58.333	20.833	19.444	0.000	100.000	0.000	0.000	0.000	16.129	12.903	38.710	3.226
28.031	6.560	22.912	35.526	40.678	4.678	3.390	28.814	100.000	0.000	0.000	0.000	3.704	18.519	11.111	25.926
30.791	1.309	6.196	60.656	35.385	1.538	1.538	61.538	91.304	0.000	8.696	0.000	8.333	8.333	12.500	62.500
79.449	2.346	14.657	0.000	100.000	0.000	0.000	0.000	100.000	0.000	0.000	0.000	68.182	0.000	4.545	13.636
68.221	9.864	20.696	0.000	87.234	4.255	8.511	0.000	100.000	0.000	0.000	0.000	25.000	12.500	0.000	0.000
63.595	11.842	21.145	0.000	70.667	4.000	25.333	0.000	100.000	0.000	0.000	0.000	28.000	24.000	0.000	0.000
97.404	2.217	0.379	0.000	100.000	0.000	0.000	0.000	100.000	0.000	0.000	0.000	96.552	3.448	0.000	0.000
82.110	7.198	9.822	0.000	82.353	8.824	8.824	0.000	100.000	0.000	0.000	0.000	53.571	21.429	0.000	0.000
93.823	6.988	9.189	0.000	93.333	5.000	1.667	0.000	88.889	11.111	0.000	0.000	50.000	9.091	18.182	0.000
92.086	3.312	4.603	0.000	96.491	1.754	1.754	0.000	100.000	0.000	0.000	0.000	70.000	20.000	10.000	0.000
64.314	13.188	11.268	0.000	82.927	2.439	14.634	0.000	100.000	0.000	0.000	0.000	18.182	45.455	18.182	0.000
72.630	12.429	13.301	0.000	88.636	4.545	6.818	0.000	83.333	16.667	0.000	0.000	25.000	16.667	25.000	0.000
21.047	14.690	35.041	26.186	19.512	48.780	26.829	4.878	90.000	10.000	0.000	0.000	36.842	5.263	21.053	5.263
84.687	6.660	7.336	0.000	93.023	6.977	0.000	0.000	100.000	0.000	0.000	0.000	36.364	36.364	18.182	0.000
80.944	8.593	10.462	0.000	96.923	1.538	1.538	0.000	100.000	0.000	0.000	0.000	25.000	37.500	31.250	0.000
88.101	7.377	4.522	0.000	88.889	2.222	8.889	0.000	95.238	0.000	0.000	0.000	53.333	26.667	20.000	0.000
74.252	16.847	8.287	0.000	92.308	3.077	4.615	0.000	66.667	13.333	0.000	0.000	40.625	46.875	3.125	0.000
19.405	25.176	30.741	7.796	7.143	38.571	45.714	1.429	84.615	11.538	3.846	0.000	6.667	6.667	16.667	3.333
59.327	4.071	15.513	18.622	77.049	10.672	3.279	0.000	100.000	0.000	0.000	0.000	4.348	17.391	26.087	4.348
29.532	14.427	41.614	8.133	53.333	6.667	38.889	0.000	100.000	0.000	0.000	0.000	29.730	27.027	13.514	0.000
31.919	7.647	36.275	13.067	21.154	11.538	44.231	19.231	100.000	0.000	0.000	0.000	0.000	25.000	8.333	0.000
25.144	15.450	46.912	1.863	10.448	29.851	47.761	2.985	92.857	7.143	0.000	0.000	12.500	12.500	0.000	12.500
33.978	5.629	25.155	4.453	24.000	10.000	32.000	3.000	100.000	0.000	0.000	0.000	5.556	0.000	0.000	0.000
77.507	2.712	18.445	1.336	82.759	0.000	17.241	0.000	100.000	0.000	0.000	0.000	68.750	31.250	0.000	0.000
21.879	54.743	14.036	0.000	23.404	57.447	17.021	0.000	100.000	0.000	0.000	0.000	7.692	30.769	0.000	0.000
82.040	2.690	14.633	0.000	98.630	0.000	1.370	0.000	95.455	4.545	0.000	0.000	31.034	24.138	44.828	0.000
74.191	3.679	22.130	0.000	86.165	0.000	11.203	2.632	85.714	7.143	0.000	0.000	60.000	6.667	33.333	0.000
43.678	15.517	32.759	8.046	51.099	26.374	14.835	7.692	100.000	0.000	0.000	0.000	36.364	27.273	27.273	0.000
62.994	7.048	25.382	3.321	60.536	4.502	23.515	10.057	95.000	5.000	0.000	0.000	19.048	33.333	14.286	0.000
3.823	1.923	6.699	87.555	15.000	0.000	10.000	75.000	95.833	0.000	0.000	4.167	0.000	11.111	5.556	50.000
71.824	4.625	11.692	11.858	84.344	2.941	12.714	0.000	94.737	5.263	0.000	0.000	35.714	28.571	35.714	0.000
88.991	0.847	9.200	0.962	96.939	1.020	2.041	0.000	100.000	0.000	0.000	0.000	13.043	34.783	30.435	17.391
49.446	14.027	20.394	14.397	41.905	22.857	25.000	8.571	100.000	0.000	0.000	0.000	17.391	34.783	34.783	0.000
1.786	58.036	8.929	9.885	22.500	64.583	6.667	2.083	100.000	0.000	0.000	0.000	4.545	63.636	9.091	0.000
79.933	6.556	12.105	0.671	80.317	2.817	15.476	0.000	100.000	0.000	0.000	0.000	5.882	47.059	23.529	0.000
38.891	9.098	12.897	37.391	47.222	1.923	30.128	18.803	91.667	0.000	8.333	0.000	43.750	37.500	18.750	0.000
25.674	19.240	35.478	3.922	15.613	28.953	46.739	6.522	100.000	0.000	0.000	0.000	20.000	6.667	13.333	0.000
46.658	3.132	10.338	39.545	68.750	3.929	3.929	23.393	95.652	0.000	4.348	0.000	22.222	11.111	0.000	16.667
58.798	22.380	14.920	0.000	75.303	19.091	5.606	0.000	100.000	0.000	0.000	0.000	0.000	58.333	0.000	0.000
39.707	11.684	33.471	14.679	41.667	13.571	17.381	27.381	100.000	0.000	0.000	0.000	0.000	45.455	9.091	0.000
58.798	22.380	14.920	0.000	75.303	19.091	5.606	0.000	100.000	0.000	0.000	0.000	0.000	58.333	0.000	0.000
43.761	29.559	22.521	1.786	86.631	8.957	4.412	0.000	94.118	5.882	0.000	0.000	25.000	50.000	4.167	4.167
60.966	16.909	21.615	0.000	61.888	13.287	22.902	1.923	100.000	0.000	0.000	0.000	22.727	54.545	9.091	0.000
80.580	4.212	15.207	0.000	90.814	6.155	0.000	0.000	100.000	0.000	0.000	0.000	57.692	0.000	30.769	0.000
62.777	11.455	20.449	5.319	93.271	6.729	0.000	0.000	93.750	0.000	0.000	0.000	25.000	37.500	37.500	0.000
73.996	17.685	8.320	0.000	82.237	5.263	12.500	0.000	100.000	0.000	0.000	0.000	77.778	22.222	0.000	0.000
38.021	28.646	33.333	0.000	36.836	39.976	23.188	0.000	100.000	0.000	0.000	0.000	11.765	82.353	0.000	0.000
19.854	6.888	32.728	15.663	20.968	3.226	45.161	27.419	93.750	3.125	3.125	0.000	0.000	0.000	0.000	0.000
54.435	2.802	12.781	29.594	46.774	0.000	8.065	43.548	100.000	0.000	0.000	0.000	11.765	0.000	41.176	23.529
94.640	0.575	1.085	3.700	100.000	0.000	0.000	0.000	92.308	7.692	0.000	0.000	91.667	0.000	8.333	0.000
41.059	23.247	29.716	5.435	37.736	18.868	43.396	0.000	87.500	12.500	0.000	0.000	9.091	81.818	0.000	0.000
16.476	12.999	15.345	16.789	9.091	27.273	16.364	0.000	95.556	2.222	2.222	0.000	4.762	0.000	23.810	0.000
89.912	0.000	10.088	0.000	73.913	0.000	10.870	15.217	100.000	0.000	0.000	0.000	18.750	0.000	25.000	56.250
59.639	0.000	9.477	30.450	80.392	0.000	11.765	7.843	100.000	0.000	0.000	0.000	15.000	0.000	35.000	40.000
11.108	4.450	29.928	51.396	18.750	0.000	59.583	16.667	100.000	0.000	0.000	0.000	12.500	16.667	33.333	16.667
2.878	34.559	30.586	31.241	19.259	53.492	13.122	14.127	100.000	0.000	0.000	0.000	13.793	58.621	20.690	3.448
62.610	3.783	14.519	19.088	62.097	5.000	28.065	4.839	100.000	0.000	0.000	0.000	42.308	15.385	30.769	3.846
86.987	1.083	7.643	2.873	98.148	0.000	1.852	0.000	94.118	5.882	0.000	0.000	66.667	3.333	23.333	0.000
70.564	3.907	24.080	0.000	92.485	2.000	5.515	0.000	100.000	0.000	0.000	0.000	10.526	15.789	68.421	0.000
17.370	3.765	9.062	69.804	6.548	0.000	2.976	90.476	92.308	0.000	0.000	0.000	32.000	24.000	20.000	20.000
86.841	3.595	9.564	0.000	89.015	0.000	10.985	0.000	94.444	0.000	5.556	0.000	70.588	17.647	0.000	0.000

TABLE S2

Tukey post hoc HSD test values. Differences between mean frequency values among body zones are marked in red.

ANOVAs Tukey's pairwise			
‘Single spot’			
		Q statistic	P value
Pectoral fins	Back	2.427	0.317
Pectoral fins	Head	13.56	< 0.0001
Pectoral fins	Pelvic fins	8.983	0.0001
Back	Head	11.13	0.001
Back	Pelvic fins	11.41	0.001
Head	Pelvic fins	22.54	< 0.0001
‘Two close single spots’			
		Q statistic	P value
Pectoral fins	Back	0.181	0.999
Pectoral fins	Head	5.041	0.001
Pectoral fins	Pelvic fins	7.519	0.001
Back	Head	4.859	0.003
Back	Pelvic fins	7.701	0.001
Head	Pelvic fins	12.56	< 0.0001
‘Two merged single spots’			
		Q statistic	P value
Pectoral fins	Back	1.439	0.739
Pectoral fins	Head	11.53	< 0.0001
Pectoral fins	Pelvic fins	0.685	0.962
Back	Head	10.09	0.001
Back	Pelvic fins	0.753	0.951
Head	Pelvic fins	10.85	0.001

TABLE S3

Spot type percentage for each major body zone. Mean frequencies (Standard Error)

Spot type	Pectoral fins	Back	Head	Pelvic fins
‘Single spot’	55.3 (3.4)	62.7 (3.9)	96.5 (0.7)	28 (3.1)
‘Two close single spots’	11.2 (1.5)	10.9 (2)	2.08 (0.5)	24.8 (2.6)
‘Two merged single spots’	17.9 (1.3)	15.8 (1.9)	0.58 (0.2)	16.9 (1.9)
‘Semi-empty circle’	11.4 (2.3)	9.24 (2.3)	0.07 (0.07)	6.17 (1.7)
Other white spots	4.15 (0.9)	1.41 (0.6)	0.73 (0.3)	24.13 (3.1)