

Intermediate Disturbance Hypothesis Lab Report

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Coral growth in temperature regimes: 26°C, 28°C, 30°C, & 26 – 30°C

#	Treatment (°C)	Initial (mg/cm^2)	Final (mg/cm^2)	Change (mg/cm^2)
01	26	552	563	11
02	26	341	352	11
03	26	461	467	06
04	26	430	437	07
05	26	312	320	08
06	26	364	374	10
07	26	468	479	11
08	26	449	460	11
09	26	398	415	17
10	26	394	401	07
11	26	360	369	09
12	28	517	528	11
13	28	428	443	15
14	28	407	415	08
15	28	441	452	11
16	28	472	488	16
17	28	383	391	08
18	28	466	479	13
19	28	345	354	09
20	28	382	393	11
21	28	494	503	09
22	30	573	585	12
23	30	354	369	15
24	30	532	545	13
25	30	393	410	17
26	30	269	277	08
27	30	517	526	09
28	30	469	484	15
29	30	306	322	16
30	30	431	446	15
31	26-30	306	312	06
32	26-30	372	378	06
33	26-30	333	344	11
34	26-30	567	578	11
35	26-30	379	392	13
36	26-30	490	505	15
37	26-30	391	401	10
38	26-30	509	523	14
39	26-30	369	377	08
40	26-30	337	351	14
41	26-30	365	373	08

Treatment ($^{\circ}C$)	Average Change	Standard Deviation	Sample Size	Standard Error \pm
26	09.8182	3.0271	11	0.9127
28	11.1000	2.8067	10	0.8876
30	13.3333	3.1225	09	1.0408
26-30	10.5455	3.2362	11	0.9757

1. What was the mean \pm standard error of coral growth (= change mg/cm²) at each of the four temperature categories?

- 26 $^{\circ}C$: 09.82 (mg/cm²) \pm 0.91
- 28 $^{\circ}C$: 11.10 (mg/cm²) \pm 0.89
- 30 $^{\circ}C$: 13.33 (mg/cm²) \pm 1.04
- 26 – 30 $^{\circ}C$: 10.55 (mg/cm²) \pm 0.98

2. Remember that the average water temperature of the coral's natural habitat was 28 $^{\circ}C$. What would happen if global climate change causes the average seawater temperature to increase to 30 $^{\circ}C$?

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