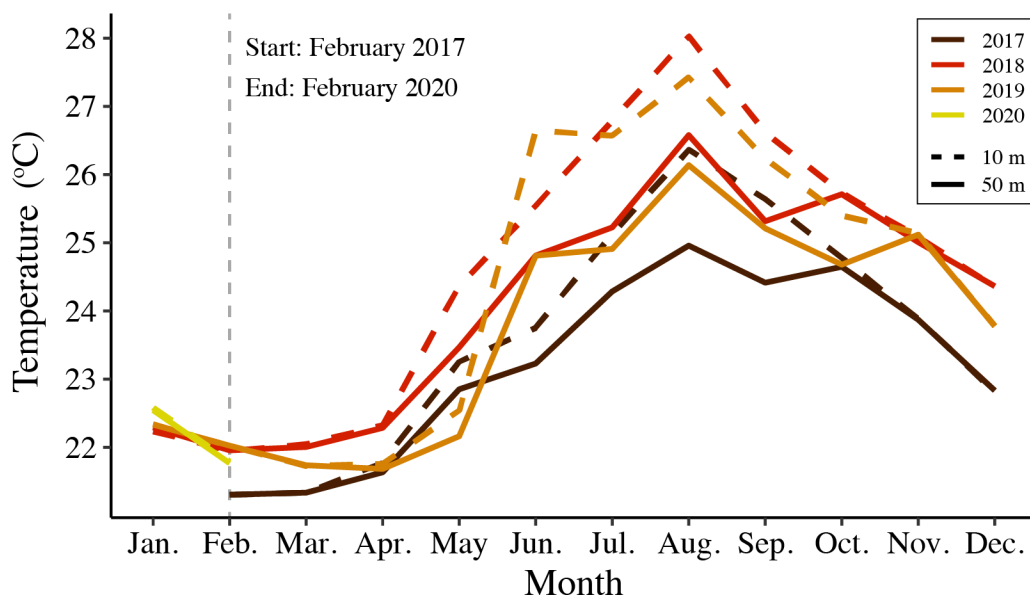


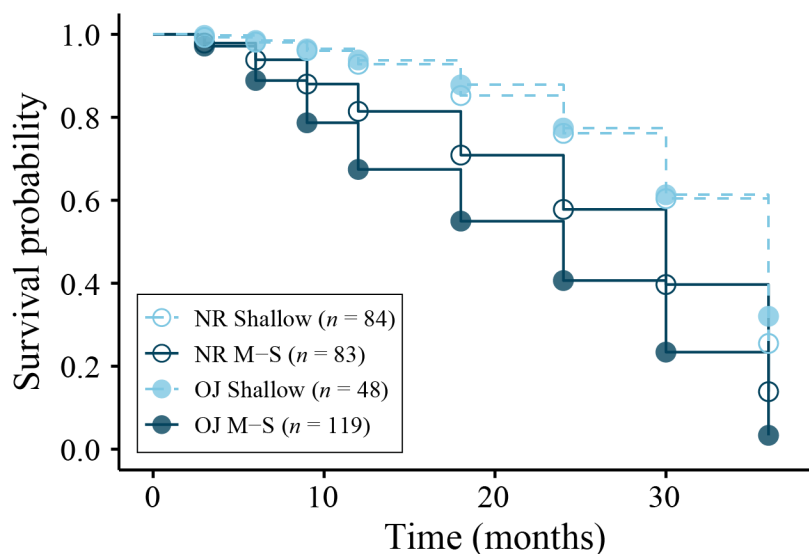
## Supplementary materials

**Table S1.** Number of surviving coral juveniles at the start of the study (0 months) and after 12, 24, and 36 months into the study on shallow and transplanted mesophotic tiles.

Genus	0 (Start)		12		24		36	
	Shallow	Mesophotic	Shallow	Mesophotic	Shallow	Mesophotic	Shallow	Mesophotic
<i>Acanthastrea</i>	-	1	-	1	-	1	-	1
<i>Astreopora</i>	1	6	1	4	1	3	0	3
<i>Concinaraea</i>	-	5	-	0	-	0	-	0
<i>Cynarina</i>	-	1	-	0	-	0	-	0
<i>Cyphastrea</i>	11	8	8	5	8	4	7	3
<i>Dipsastrea</i>	3	-	3	-	3	-	3	-
<i>Echinophllia</i>	2	-	2	-	2	-	1	-
<i>Echinopora</i>	2	-	2	-	2	-	1	-
<i>Favites</i>	7	7	7	3	7	3	5	3
<i>Leptastrea</i>	5	2	4	2	4	2	3	2
<i>Leptoseris</i>	1	2	1	1	1	0	1	0
<i>Pavona</i>	2	2	2	0	2	0	2	0
<i>Plerogyra</i>	-	1	-	1	-	0	-	0
<i>Pocillopora</i>	14	1	10	1	6	1	6	0
<i>Podabacia</i>	-	5	-	0	-	0	-	0
<i>Porites</i>	9	87	1	30	1	17	1	12
<i>Psammocora</i>	5	32	5	27	5	21	3	17
<i>Stylocoeniella</i>	-	2	-	1	-	1	-	0
<i>Stylophora</i>	70	24	57	7	42	6	27	4
Unknown	-	16	-	3	-	3	-	1
<b>Total</b>	<b>132</b>	<b>202</b>	106	86	84	62	60	46



**Figure S1.** Monthly temperature regime (°C) measured in the northern Gulf of Eilat, Red Sea, at 10 m (dashed lines) and 50 m (solid lines) during the study period (Feb. 2017–Feb. 2020). Data was acquired from the The Israel National Monitoring Program (NMP 2017–2020).



**Figure S2.** Assemblage level Kaplan-Meier survival curves of scleractinian coral juveniles during 36 months, for shallow (*light-blue*; dashed lines) and mesophotic-to-shallow transplants ("M-S"; *dark-blue*; solid lines), from the two study sites (filled dots = "NR"; hollow dots = "OJ"). Number of coral juveniles (*n*) are shown in the legend box.

**Reference**

NMP (2017–2020) The Israel National Monitoring Program (NMP) in the Northern Gulf of Eilat. [www.meteo-tech.co.il/EilatYam\\_data/ey\\_surface\\_coastal\\_cruise\\_download\\_data.asp](http://www.meteo-tech.co.il/EilatYam_data/ey_surface_coastal_cruise_download_data.asp)