

2024

Coral Spawning Predictions
for the Southern Caribbean

Key to Abbreviations and Colors on Page 3

Spring Corals

Scientific name (and spawning window)	Common Name	NAFM	10	11	12	13					10	11	12	13					10	11	12	13
		DATE	Fri 3-May	Sat 4-May	Sun 5-May	Mon 6-May					Sun 2-Jun	Mon 3-Jun	Tue 4-Jun	Wed 5-Jun					Mon 1-Jul	Tue 2-Jul	Wed 3-Jul	Thu 4-Jul
		SUNSET	6:50 PM	6:50 PM	6:50 PM	6:50 PM					6:57 PM	6:58 PM	6:58 PM	6:58 PM					7:04 PM	7:04 PM	7:04 PM	7:04 PM
<i>Diploria labyrinthiformis</i> (70 MBS–10 MAS)	Grooved Brain Coral*			5:40–7:00 PM								5:46–7:06 PM							5:53–7:13 PM			

*Monthly "DLAB" spawning has been seen from April to October in Curaçao, Bonaire, DR, and Mexico. Does this occur across the entire region? New observations needed!

July Corals

Scientific name (and spawning window)	Common Name	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		DATE	Sun 21-Jul	Mon 22-Jul	Tue 23-Jul	Wed 24-Jul	Thu 25-Jul	Fri 26-Jul	Sat 27-Jul	Sun 28-Jul	Mon 29-Jul	Tue 30-Jul	Wed 31-Jul	Thu 1-Aug	Fri 2-Aug	Sat 3-Aug
		SUNSET	7:03 PM	7:03 PM	7:03 PM	7:03 PM	7:03 PM	7:02 PM	7:02 PM	7:02 PM	7:02 PM	7:01 PM	7:01 PM	7:01 PM	7:00 PM	7:00 PM
<i>Diploria labyrinthiformis</i> (70 MBS–10 MAS)	Grooved Brain Coral*													5:52–7:12 PM		
<i>Montastraea cavernosa</i> (15–225 MAS)	Great Star Coral						7:18–10:48 PM (Peaks in first 90 min)									
<i>Colpophyllia natans</i> (25–115 MAS)	Boulder Brain Coral								7:27–8:57 PM							
<i>Pseudodiploria strigosa</i> (Early group 30–90 MAS)	Symmetrical Brain Coral**								7:32–8:32 PM							
<i>Dendrogyra cylindrus</i> (90–160 MAS)	Pillar Coral			8:33–9:43 PM												
<i>Acropora palmata</i> (140–190 MAS)	Elkhorn Coral			9:23–10:13 PM (Spawning is possible on any of these dates: this species is not highly predictable in our region)												
<i>Acropora cervicornis</i> (150–190 MAS)	Staghorn Coral			9:33–10:13 PM												
<i>Montastraea/Orbicella annularis</i> (185–250 MAS)	Lobed/Boulder Star Coral							10:08–11:13 PM								
<i>Montastraea/Orbicella faveolata</i> (185–255 MAS)	Mountainous Star Coral							10:08–11:18 PM								
<i>Pseudodiploria strigosa</i> (Late group 200–270 MAS)	Symmetrical Brain Coral**							10:22–11:32 PM								

**This year's mystery: Does *P. strigosa* spawn in two distinct groups or all night long? Please help watch this species during ANY spawning dive and send your observations of spawning and NOT spawning to v.chamberland@secore.org. Thank you!

August Corals

Scientific name (and spawning window)	Common Name	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		DATE	Mon 19-Aug	Tue 20-Aug	Wed 21-Aug	Thu 22-Aug	Fri 23-Aug	Sat 24-Aug	Sun 25-Aug	Mon 26-Aug	Tue 27-Aug	Wed 28-Aug	Thu 29-Aug	Fri 30-Aug	Sat 31-Aug	Sun 1-Sep
		SUNSET	6:53 PM	6:52 PM	6:52 PM	6:51 PM	6:51 PM	6:50 PM	6:49 PM	6:49 PM	6:48 PM	6:48 PM	6:47 PM	6:46 PM	6:46 PM	6:45 PM
<i>Diploria labyrinthiformis</i> (70 MBS–10 MAS)	Grooved Brain Coral*													5:40–7:00 PM		
<i>Montastraea cavernosa</i> (15–225 MAS)	Great Star Coral						7:06–10:36 PM (Peaks in first 90 min)									
<i>Colpophyllia natans</i> (25–115 MAS)	Boulder Brain Coral							7:14–8:44 PM								
<i>Pseudodiploria strigosa</i> (Early group 30–90 MAS)	Symmetrical Brain Coral**							7:19–8:19 PM (Peak in first 30 min)								
<i>Dendrogyra cylindrus</i> (90–160 MAS)	Pillar Coral			8:23–9:33 PM												
<i>Dichocoenia stokesii</i> (85–160 MAS)	Pineapple Coral			8:18–9:33 PM (Expected nightly from mid-Sept through mid-Nov: please help us discover if and when they spawn in August)												
<i>Acropora palmata</i> (140–190 MAS)	Elkhorn Coral			9:13–10:03 PM (Spawning is possible starting Aug 17: this species is not highly predictable in our region)												
<i>Acropora cervicornis</i> (150–190 MAS)	Staghorn Coral***			9:23–10:03 PM												
<i>Montastraea/Orbicella annularis</i> (185–250 MAS)	Lobed/Boulder Star Coral							9:56–11:01 PM								
<i>Montastraea/Orbicella faveolata</i> (185–255 MAS)	Mountainous Star Coral							9:56–11:06 PM								
<i>Pseudodiploria strigosa</i> (Late group 200–270 MAS)	Symmetrical Brain Coral**							10:09–11:19 PM								

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Coral Spawning Predictions for the Southern Caribbean, continued

Key to Abbreviations and Colors on Page 3

September Corals

Scientific name (and spawning window)	Common Name	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		DATE	Tue 17-Sep	Wed 18-Sep	Thu 19-Sep	Fri 20-Sep	Sat 21-Sep	Sun 22-Sep	Mon 23-Sep	Tue 24-Sep	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep	Mon 30-Sep
<i>Diploria labyrinthiformis</i> (70 MBS–10 MAS)	Grooved Brain Coral*	SUNSET	6:34 PM	6:34 PM	6:33 PM	6:32 PM	6:32 PM	6:31 PM	6:30 PM	6:30 PM	6:29 PM	6:28 PM	6:27 PM	6:27 PM	6:26 PM	6:26 PM
<i>Meandrina meandrites</i> (10–70 MAS)	Maze Coral													5:21–6:41 PM		
<i>Montastraea cavernosa</i> (15–225 MAS)	Great Star Coral															
<i>Colpophyllia natans</i> (25–115 MAS)	Boulder Brain Coral															
<i>Pseudodiploria strigosa</i> (Early group 30–90 MAS)	Symmetrical Brain Coral**															
<i>Eusmilia fastigiata</i> (75–270 MAS)	Smooth Flower Coral															
<i>Montastraea/Orbicella franksi</i> (90–150 MAS)	Boulder Star Coral															
<i>Dendrogyra cylindrus</i> (90–160 MAS)	Pillar Coral															
<i>Dichocoenia stokesii</i> (85–160 MAS)	Pineapple Coral															
<i>Acropora palmata</i> (140–190 MAS)	Elkhorn Coral															
<i>Acropora cervicornis</i> (150–190 MAS)	Staghorn Coral***															
<i>Stephanocoenia intersepta</i> (160–255 MAS)	Blushing Star Coral															
<i>Montastraea/Orbicella annularis</i> (185–250 MAS)	Lobed/Boulder Star Coral															
<i>Montastraea/Orbicella faveolata</i> (185–255 MAS)	Mountainous Star Coral															
<i>Siderastrea siderea</i> (195–280 MAS)	Massive Starlet Coral															
<i>Pseudodiploria clivosa</i> (210–255 MAS)	Knobby Brain Coral															
<i>Pseudodiploria strigosa</i> (Late group 200–270 MAS)	Symmetrical Brain Coral**															
<i>Madracis senaria</i> (All night)	Ten-Ray Star Coral															
<i>Agaricia humilis/Agaricia agaricites</i> (All night)	Lettuce Coral															

October Corals

Scientific name (and spawning window)	Common Name	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		DATE	Thu 17-Oct	Fri 18-Oct	Sat 19-Oct	Sun 20-Oct	Mon 21-Oct	Tue 22-Oct	Wed 23-Oct	Thu 24-Oct	Fri 25-Oct	Sat 26-Oct	Sun 27-Oct	Mon 28-Oct	Tue 29-Oct	Wed 30-Oct
<i>Diploria labyrinthiformis</i> (70 MBS–10 MAS)	Grooved Brain Coral*	SUNSET	6:15 PM	6:15 PM	6:14 PM	6:14 PM	6:14 PM	6:13 PM	6:13 PM	6:12 PM	6:12 PM	6:11 PM	6:11 PM	6:11 PM	6:10 PM	6:10 PM
<i>Meandrina meandrites</i> (10–70 MAS)	Maze Coral															
<i>Montastraea cavernosa</i> (15–225 MAS)	Great Star Coral															
<i>Colpophyllia natans</i> (25–115 MAS)	Boulder Brain Coral															
<i>Pseudodiploria strigosa</i> (Early group 30–90 MAS)	Symmetrical Brain Coral**															
<i>Eusmilia fastigiata</i> (75–270 MAS)	Smooth Flower Coral															
<i>Montastraea/Orbicella franksi</i> (90–150 MAS)	Boulder Star Coral															
<i>Dendrogyra cylindrus</i> (90–160 MAS)	Pillar Coral															
<i>Dichocoenia stokesii</i> (85–160 MAS)	Pineapple Coral															
<i>Stephanocoenia intersepta</i> (160–255 MAS)	Blushing Star Coral															
<i>Montastraea/Orbicella annularis</i> (185–250 MAS)	Lobed/Boulder Star Coral															
<i>Montastraea/Orbicella faveolata</i> (185–255 MAS)	Mountainous Star Coral															
<i>Siderastrea siderea</i> (195–280 MAS)	Massive Starlet Coral															
<i>Pseudodiploria clivosa</i> (210–255 MAS)	Knobby Brain Coral															
<i>Pseudodiploria strigosa</i> (Late group 200–270 MAS)	Symmetrical Brain Coral**															
<i>Madracis senaria</i> (All night)	Ten-Ray Star Coral															
<i>Agaricia humilis/Agaricia agaricites</i> (All night)	Lettuce Coral															

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Coral Spawning Predictions for the Southern Caribbean, continued

November Corals

	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	DATE	Fri 15-Nov	Sat 16-Nov	Sun 17-Nov	Mon 18-Nov	Tue 19-Nov	Wed 20-Nov	Thu 21-Nov	Fri 22-Nov	Sat 23-Nov	Sun 24-Nov	Mon 25-Nov	Tue 26-Nov	Wed 27-Nov	Thu 28-Nov
Scientific name (and spawning window)	Common Name	SUNSET	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:07 PM	6:08 PM	6:08 PM
<i>Meandrina meandrites</i> (10–70 MAS)	Maze Coral									6:17–7:17 PM (Expected every night through at least early December)					
<i>Eusmilia fastigiata</i> (75–270 MAS)	Smooth Flower Coral								7:22–10:37 PM						
<i>Dichocoenia stokesii</i> (85–160 MAS)	Pineapple Coral									7:32–8:47 PM (Has been observed from mid-September to mid-November, new observations are highly encouraged!)					

Fall Sponges, Stars, Gorgs, and More

	NAFM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	DATE	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep
	DATE	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
<i>Holothuria mexicana</i>	Donkeydung Sea Cucumber									12:00–6:00 PM					
<i>Hermodice carunculata</i>	Fire Worm									12:00–7:00 PM					
<i>Diadema antillarum</i>	Long-Spined Sea Urchin									12:00–9:00 PM					
<i>Neofibularia nolitangere</i>	Touch-Me-Not Sponge				2:00–7:00 PM										
<i>Plexaura</i> , <i>Pseudoplexaura</i> , <i>Eunicia</i>	Sea Rods							starting at 7:00 PM							
<i>Plexaura homomalla</i>	Black Sea Rod						7:00–11:00 PM								
Ophiuroidea	Brittle Sea Star/Serpent Star							7:30–11:00 PM							
<i>Pseudopterogorgia</i> spp.	Sea Plume							8:00–11:00 PM							
<i>Spirobranchus giganteus</i>	Christmas Tree Worm							9:00–11:30 PM							

Abbreviations & Colors

NAFM: Nights After the Full Moon

MBS: Minutes Before Sunset

MAS: Minutes After Sunset

Pale Blue: Spawning may be possible but data are sparse:
Please help by diving these dates

Light Blue: Spawning is possible:
Spawning has been observed on these dates

Medium Blue: Spawning is likely:
Spawning is often observed on these dates

Dark Blue: Spawning is very likely:
Spawning is reliably observed on these dates

New color gradient is friendlier to colorblind viewing and grayscale printers
Times are now in AM/PM instead of 24h



Tips for Observers

- Spawning is never guaranteed, especially in a changing climate. When in doubt, go for a dive
- Predictions do not include buffers; we suggest entering the water well before predicted times
- Dive in a place with high coral cover
- Make multiple dives on multiple nights
- Dive shallower than 50' to maximize dive time
- Use a moderately bright dive light
- Scan the water column for clouds of spawn
- Spawn from most brain/star/elkhorn/staghorn corals looks like snow/confetti/polka dots
- Spawn from starlet, pillar, maze, and pineapple corals and male great star corals looks like puffs of smoke or sprays of fine sand
- Spawn from female great star corals looks like chunky vomit (hooray!)
- Spawning depends on local sunset times; to adjust dives based on your local sunset times,

More Resources & How To Get Involved

- **Bonus features and PDF download:** Sign up for our dive tips, access this PDF, get notified when future spawning calendars are released, and help us measure our reach: Please take our quick survey at www.tinyurl.com/CarmabiCal2024.
- **New Coral Breeding Reference Sheets:** This new community resource for coral propagation, led by Val Chamberland, is now available to download here: <https://www.crc.world/resources-propagation-outplanting>.
- **Please share your observations:** Your discoveries help coral research and conservation! A new AGGRA database is under development to collect and distribute regional spawning data. Therefore, if you monitor spawning, please record as many of the following details as possible: Date, location, site name (or lat/long), depth, species, setting time (if seen), spawning start and stop times, area monitored in m2, # of colonies monitored, % of colonies that spawned, # of male/female colonies (if applicable). Photos, partial records, and records of no spawn are all very welcome! Send reports to carmabilog@gmail.com, v.chamberland@secore.org, or kristen@marhaverlab.com. You can also post your observations at <https://www.facebook.com/groups/CoralSpawningResearch>.
- **Huge thanks** to everyone who shared observations over the past 30+ years. The Curacao team wishes you a safe and productive spawning season!
- **Suggested citation:** KL Marhaver, VF Chamberland, and MJA Vermeij, "Coral