

2024 USVI SeaVentures Strike Team Annual Summary Report

Total Project time period: March 2022 - December 2024 (33 mos)
Annual Report time period: January 2024 - December 2024 (12 mos)
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Summary:

In the United States Virgin Islands (USVI) SeaVentures has two active coral disease strike teams funded by NOAA Coral Reef Conservation Program project “Coral Disease Response in the US Caribbean”. These teams work to apply antibiotics (Base2B:Amoxicillin ratio 8:1) to active stony coral tissue loss disease lesions at multiple sites across the territory (Hull Bay, Cane Bay, Northstar, Carambola, Butler Bay, and Frederiksted Pier, Sprat Hole). Treatments began in March 2022 and as of December 2024, a total of 4,157 corals have been treated across the 7 sites (Figure 1).

Treated species composition has shifted slightly over time (Figure 2). However, *Orbicella* species continue to be the most frequently treated coral, mostly due to its widespread abundance compared to other species (Figure 2). In addition, a thermal bleaching event impacted all sites, for the second year in a row, which reduced the number of corals that need treatment both due to the inability to distinguish between bleaching and disease stress, as well as a decrease in disease lesions presenting overall. In 2024, divers spent approximately 149 cumulative hours underwater (Table 2). On average, each diver treated approximately 5.8 corals per dive (Table 2).

Moving forward into 2025, our teams will work to include additional tasks in our permissible activities. We hope to expand to: stabilizing loose coral fragments, removing coral predators, and cleaning nuisance algae from coral edges. We will work to obtain all necessary permits as well as address federal environmental compliance for these tasks.

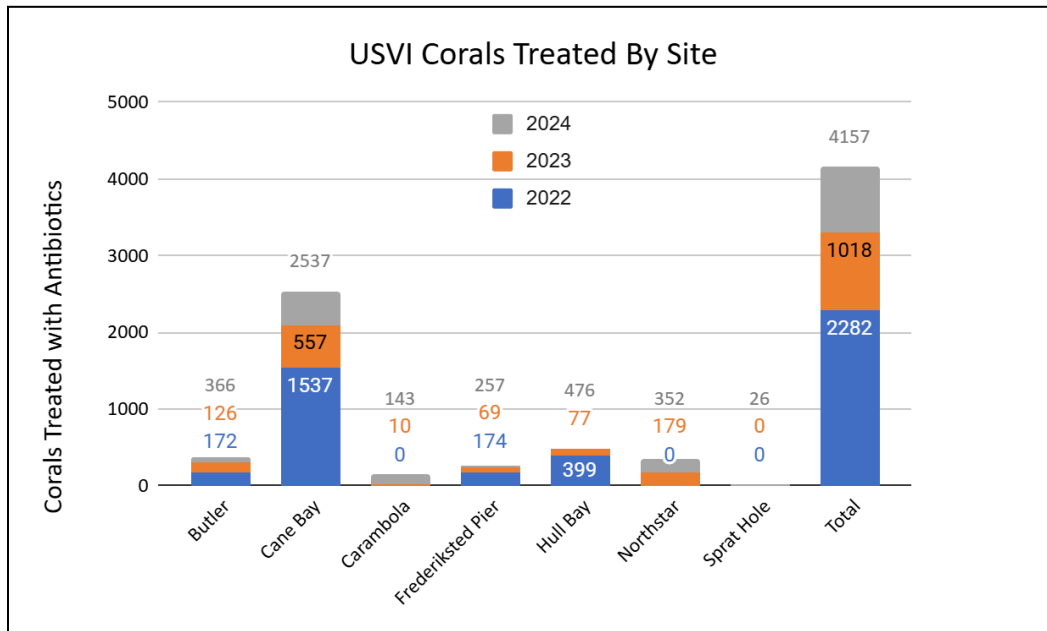


Figure 1: Total corals treated with antibiotics by SeaVentures in the USVI from March 2022 - December 2024. N = 4157

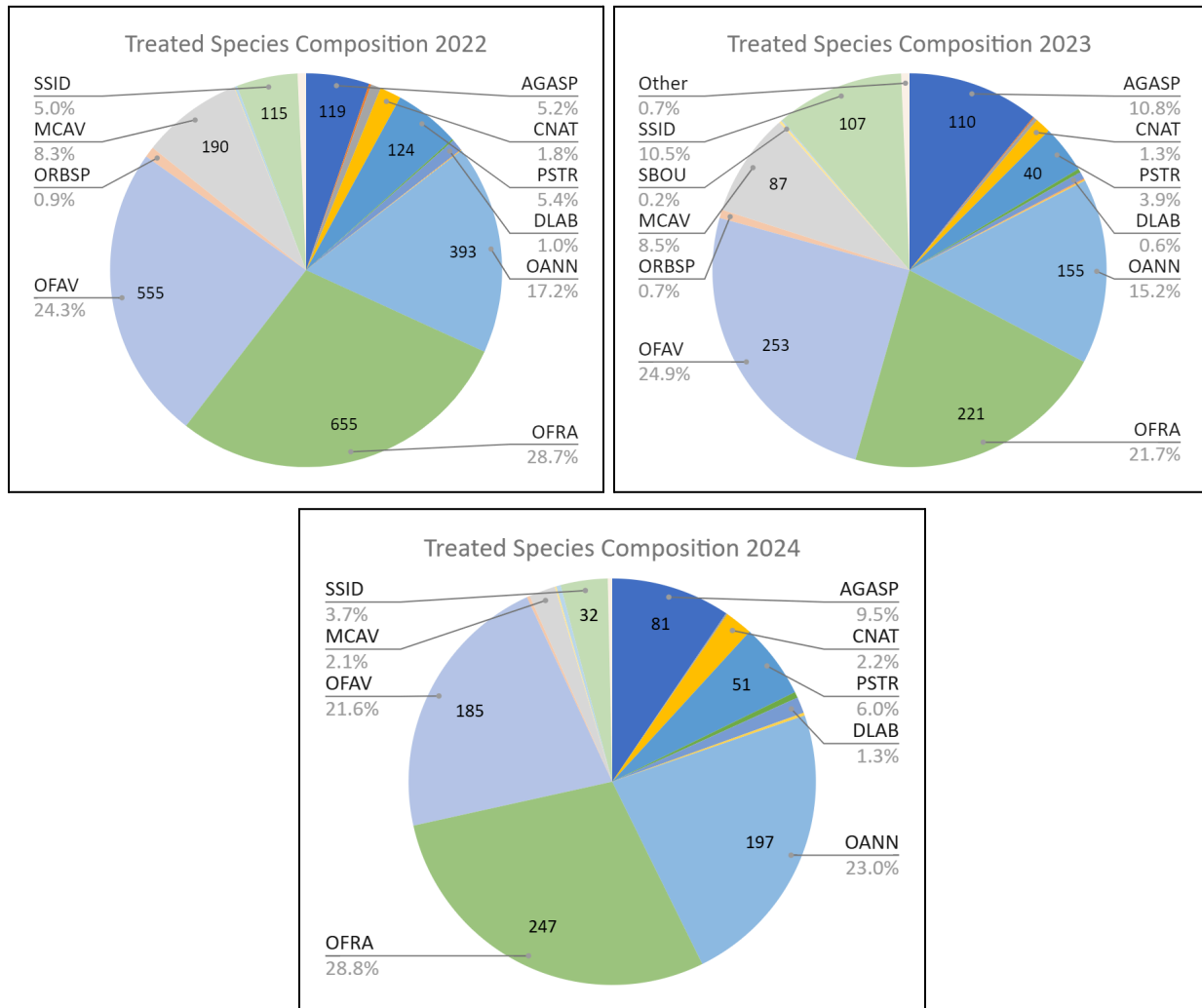


Figure 2: Coral species treated in the USVI from March 2022 - December 2022 (top left) and January 2023 - December 2023 (top right) and January 2024 - December 2024 (bottom). Coral species codes can be found in Table 1 below. N = 4157.

Table 1: USVI coral species codes

Scientific Name	Coral Code
<i>Agaricia</i> species	AGAsp
<i>Colpophylia natans</i>	CNAT
<i>Dendrogyra cylindrus</i>	DCYL
<i>Diploria labyrinthiformis</i>	DLAB
<i>Dichocoenia stokesii</i>	DSTO
<i>Eusmelia fastigiata</i>	EFAS
<i>Montastrea cavernosa</i>	MCAV
<i>Meandrina</i> species	MMEA
<i>Mycetophyllia</i> species	MYCsp

<i>Orbicella annularis</i>	OANN
<i>Orbicella faveolata</i>	OFAV
<i>Orbicella franksii</i>	OFRA
<i>Orbicella</i> species	ORBsp
<i>Pseudodiploria clivosa</i>	PCLI
<i>Pseudodiploria strigosa</i>	PSTR
<i>Solenastrea bournoni</i>	SBOU
<i>Stephanocoenia intersepta</i>	SINT
<i>Siderastrea siderea</i>	SSID

Table 2: Corals treated vs human effort January - December 2024

Site	Number of individual dives (2024)	Total corals Treated (2024)	Average corals treated per diver on a single dive (2024)
Butler Ledge	8	68	8.5
Cane Bay	74	443	6.0
Carambola	24	133	5.5
Frederiksted Pier	10	14	1.4
Northstar	31	173	5.6
Sprat Hole	2	26	13.0
Grand Total	149	857	5.8