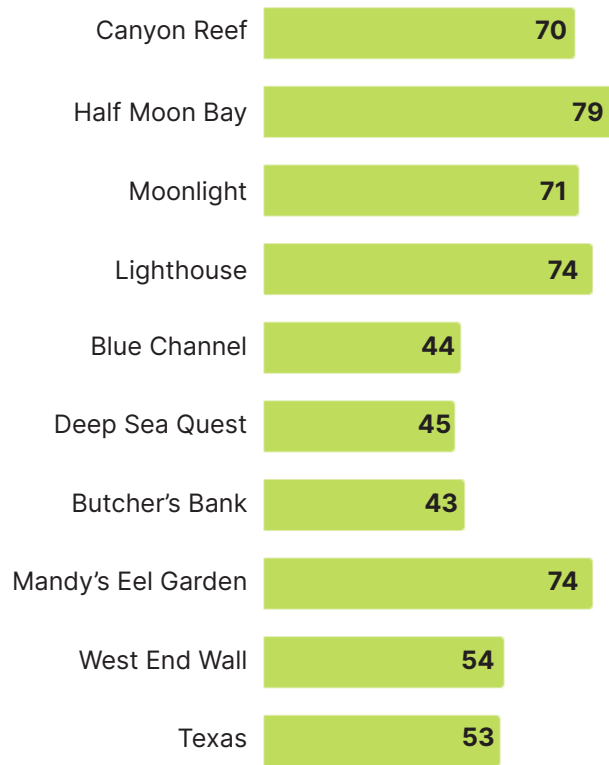
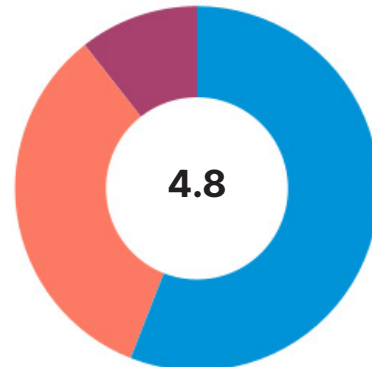


Carrying Capacity Case Study: West End & West Bay, Roatan, Honduras

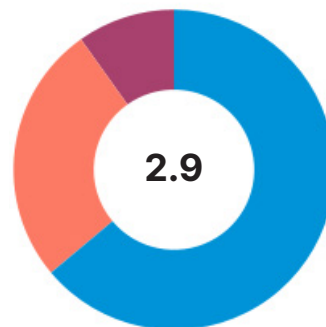
of Contacts with Reef per Dive Site



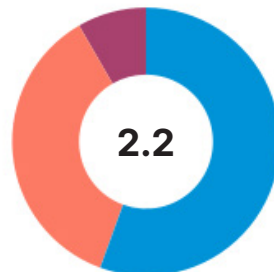
of Contacts with Reef per Certification Level



Open Water Diver



Advanced Diver



Divemaster

■ No Damage ■ Abrasion ■ Breakage

Sustainable # of Divers per Year per Dive Site

5,065	6,779
Half Moon Bay	Lighthouse
7,087	7,842
Mandy's Eel Garden	Moonlight
8,077	14,072
Canyon Reef	West End Wall
14,350	17,266
Texas	Butcher's Bank
18,037	18,350
Blue Channel	Deep Sea Quest

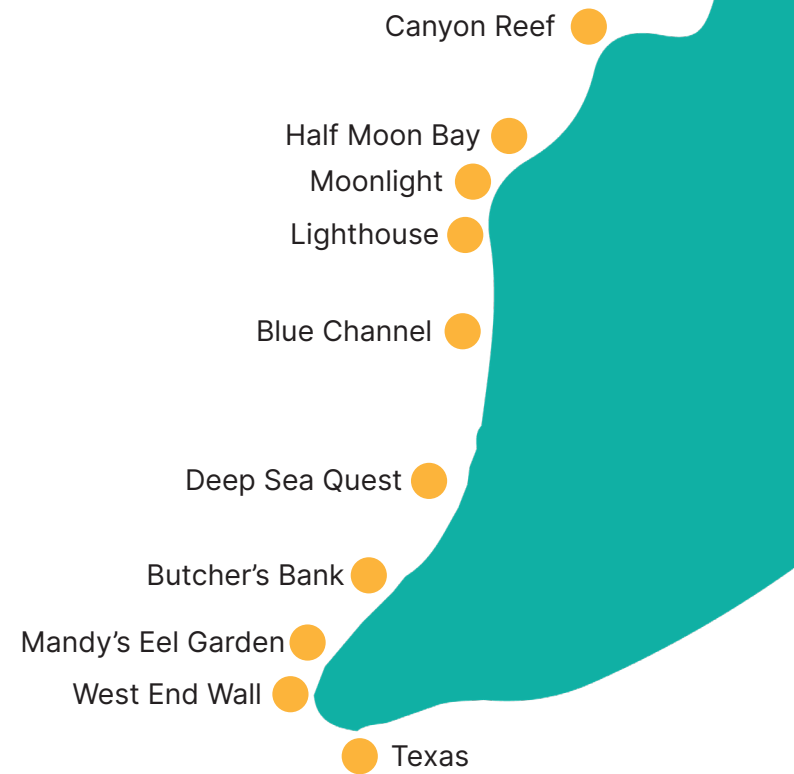
Observations

Lower Certification Levels had a **greater impact** on coral reefs compared to higher and more skilled certification levels.

The presence of a lionfish spear had a **greater impact** on coral reefs due to incorrect use.

Carrying capacity values should be adapted to each dive site since they experience **different magnitudes of impacts** and damage to the reef

Monitored Dive Sites



Recommendations



Raise Awareness on the value of coral reefs through an environmental briefing of all divers before each dive.



Professionals must ensure divers have **proper buoyancy control** and maintain their distance from corals.



All divers hunting lionfish must be an Advanced Diver and receive the **Combating Lionfish Invasion Spearfish Training** from the Roatan Marine Park.



Consider **Carrying Capacity** as a tool to help control diver impacts on the reef.