



P.O. Box 279, Fulton, TX 78358

www.flatsworthy.com

FlatsWorthy Statement on Sanctuary Reefs

The lowly oyster, submerged under bay waters, has been harvested as a food source for centuries. Coastal Native American tribes, as well as modern man, consider it a delicacy as table fare. The versatile mollusk's value is not limited to the harvest. They are colonial in that reef structures survive as units, which facilitate the survival of spat, providing a solid base for attachment. A mud or sand flat is not sufficient. Centuries of concentrated annual growth yields vertical relief above the surrounding bottom. This structure becomes extremely resilient to the forces of nature.

A vital function of oysters in the ecosystem is filtration. At an optimum, each oyster filters 50 gallons of water per day. This process reduces turbidity, removes particulates, microorganisms, and bacteria. The efficiency of an oyster is directly related to its proximity to the surface. An oyster in five feet of water is not as efficient as one in five inches. The ability of sunlight to penetrate the water is directly related to the clarity of the water, which is essential to the health of all aquatic and marsh vegetation.

Structural value is the most important issue in recognizing the oysters' overall worth. Harvest value should not remain the primary measure of value. Centuries old reef systems, remnants of past geologic anomalies, such as limestone ridges and ancient shorelines, have created flow patterns in the bay which influence currents and velocity. This affects, among other things,

shoreline erosion. Think of a reef as a levee, similar to one in a rice field. Reefs are nature's way of calming and slowing the water currents, while also creating opportunities for fishermen. Five of these systems (Second Chain, Ayers, Third Chain, Cedar, and Carlos) serve as baffles in the movement of water from San Antonio Bay through the subtle venturi in the Straits of Mesquite. They span from the barrier islands of Matagorda and San Jose Islands to the mainland. Excessive oyster harvesting has degraded three of these structures to the point that they no longer function their ecological purpose. To a certain extent, Hurricane Harvey hastened this process.

We must consider the bold action of protecting these systems from destruction, from both man and nature. The recovery period for the integrity of the reefs, estimated to be 50 years, must begin now. Ayers and Cedar Reef must be declared zero-harvest sanctuaries to prevent their further degradation, and their loss of function as a baffle. The adoption of sanctuary reefs can be expanded throughout the system to ensure healthy spat is available for recruitment to surrounding reefs to continue the cycle of recovery.

The time for action is now, so future generations have the opportunity to enjoy the coast as we have. **Oysters are not incidental to the habitat, they are essential.**