



# Ocean Trust Members Support Mangrove Research, Reserves, and Restoration

## Research & Restoration

Ocean Trust is actively involved in mangrove research, protection, and reforestation. With the support of membership contributions, Ocean Trust has an ongoing research initiative to demonstrate the value and use of mangroves as nature biofilters for shrimp farm operations. Ocean Trust is working with Harlingen Shrimp Farms, Texas A&M Kingsville, and ACUATAM and ACUACAM farms to establish sedimentation and mangrove areas and monitoring protocols to document the nutrient removal from pond effluent channeled into the research site. The project will provide instructional material on how to establish a mangrove nursery and restoration area, create new mangrove habitat in the 20 acre test site, and offer real evidence on the benefits and techniques for incorporating mangrove conservation into water quality management on shrimp farms.



Mangroves are coastal plants common in tropical and subtropical climates around the world. As late as 1970, mangroves were still seen as waste lands with little intrinsic value, but over the past 30 years the value of mangroves as nursery habitat, sediment traps, nutrient filters and storm buffers has led to greater protection in many coastal nations around the world. Mangroves are still used in some areas for wood, construction, food and medicinal resources.

## Mangrove Alteration

It is estimated that as much as 50% of the world's original mangrove habitat may have been converted for other use or altered by natural events. Mangroves have been used for timber, fuelwood, leather tanning, and charcoal production, chipped for paper production, and reclaimed to provide land for agriculture, aquaculture, and the construction of mines, ports, tourist resorts, and housing. Natural disasters such as typhoons, tropical cyclones, hurricanes, drought leading to hypersaline conditions, and microbial diseases are also important factors controlling mangrove abundance.

## Mangroves & Shrimp Farms

Some environmental groups have sponsored high profile campaigns and reports that mischaracterize shrimp aquaculture as a leading cause of mangrove loss. Analysis from Auburn University refutes these claims. Boyd and Massaut (1997) reported that even if all ponds had been converted from mangrove land, shrimp farms would represent less than 4% of the total mangrove historical resource. Past shrimp pond conversions include ex-mangrove, non-forested wetlands, salt pans, other inter-tidal land as well as rice farms and other agriculture and non-agriculture land above the tidal zone. The World Wildlife Fund (Clay 1997) also concluded that "the extent of mangrove destruction worldwide

resulting from shrimp farming is only a tiny fraction of the total lost to date.” This was reiterated in a June 1998 issue of *Scientific American* that reported “...shrimp farming alone appears to be responsible for less than 10% of the global loss (of mangroves).”

## Mangrove Reserves

Ocean Trust takes pride in working with the shrimp industry to address environmental issues in the field through cooperative research and restoration efforts. Working directly with shrimp farms in Tamaulipas, Mexico, Ocean Trust recognized commitments made by ACUACAM and ACUATAM to set aside over 200 acres of mangrove habitat on their farms as a protected reserve in conjunction with Ocean Trust.

### ACUACAM Reserve



*These areas set aside by the Ramos family at ACUACAM and by Javier Garza on behalf of the owners at ACUATAM will be protected as natural mangrove habitat.*

### ACUATAM Reserve



## Mangrove Reserve Registration

Collectively, shrimp farmers may own some of the largest acreage of mangrove habitat providing benefits for farm operations and local estuaries. Let Ocean Trust help protect mangrove habitat on your farm or coastal property by registering these areas as private mangrove reserves. Send acreage of mangrove areas you are committed to setting aside to Ocean Trust along with photographs (tif. format for email) or area diagrams by mail, fax (703) 450-9853, or email ([tjlassen@oceantrust.org](mailto:tjlassen@oceantrust.org)) and receive the recognition and partnership signage you deserve by officially listing your reserve with Ocean Trust. Include company/farm name, address, email, and contact information. The Ocean Trust mangrove registration program is provided at no cost and as a service to recognize the worldwide industry commitment to coastal conservation.

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