

# Conservation

Science-Based Conservation:  
Bonefish and Tarpon Trust / By Glen Zinkus

For decades, our understanding of bonefish, tarpon, and permit populations, life cycles, spawning behavior, and even habitat was limited at best. Populations were dwindling, and certain bonefish populations were almost entirely wiped out from local fishing in some Caribbean and South Pacific locations. By the 1990s, bonefish and tarpon populations in the popular Florida Keys were reportedly down 80 percent from the heydays of a few decades earlier.

In 1998, a group of anglers, guides, and scientists with the intent to support education, conservation, and scientific research of bonefish, tarpon, and permit formed Bonefish & Tarpon Unlimited, which later became the Bonefish & Tarpon Trust (BTT) of today. BTT supports education, conservation, and research in regard to bonefish, tarpon, and permit to develop a greater understanding of these three species; nurture and enhance populations; and educate anglers, guides, and government agencies. BTT provides a repository of information and knowledge related to the life-cycle behavior and well-being of these revered game fish species.

What differentiates BTT from many other conservation organizations is its science-based approach to conservation, research, and advocacy. Considering the immense popularity of these fish, it is amazing how little is actually known about their reproductive behavior and the nursery conditions needed to promote healthy stocks. BTT establishes priorities based on a comprehensive program-management approach to organizing, sharing, and prioritizing the research framework for bonefish, tarpon, and permit. Each life stage of the fish is summarized in a BTT Research Framework table, including the current level of knowledge and the research priorities for that life stage. The spreadsheets are color-coded to represent the status of knowledge based on literature and scientific peer review, and number-coded research priority levels are based upon discussion and review of advances in research and emerging threats to bonefish, tarpon, and permit populations. BTT uses this methodology to determine what knowledge gaps exist and to establish research and advocacy priorities.

Ongoing BTT-sponsored research focuses on bonefish biology, such as bonefish reproduction, juvenile bonefish habitats, effects of catch-and-release on bonefish, and bonefish movements; tarpon biology, including a tarpon satellite tagging program, conventional tagging, tarpon physiology, and juvenile tarpon habitats; and permit biology, including the recently launched Costa Del Mar Permit Tagging Program.



PHOTO BY GLEN ZINKUS

Costa Del Mar and BTT teamed up to launch a first-of-its-kind permit tagging program in Florida, illustrating how BTT reaches out to an entire community of stakeholders to garner support and participation in a high-profile program. The research is funded by sponsor dollars and depends upon active participation by anglers and guides to tag angler-caught permit. Having begun tagging during the 2010 Merkin Permit Tournament, BTT is on the way toward meeting the program goal of tagging 6,000 permit in Florida and the Caribbean over the next five years. These tagging efforts will help fill another information gap. The data will form a sound basis for policy recommendations for future permit protection. These fact-based policy recommendations founded on scientific research are what makes BTT advocacy for these game fish successful. BTT works with regulatory authorities, domestic and foreign government agencies, and the public to shepherd the passage, promulgation, and enforcement of laws that protect these valuable fish.

BTT's advocacy roles include working with the Florida Fish and Wildlife Conservation Commission to redefine, or reinterpret, bonefish catch-and-release; lobbying for federal game fish status for tarpon; and supporting catch-and-release requirements in Belize. BTT is also working on the Bahamas Initiative to conduct research on bonefish populations, the fishery and culture, and the economics of the fishery, and to participate in and conduct conservation and education programs toward effective long-term management.

BTT's education mission includes teaching proper catch-and-release methods, along with habitat education, bonefish and tarpon symposia, detailed fish life-cycle information, and more. The BTT website, [www.tarbone.org](http://www.tarbone.org), is loaded with information. Despite its successes, BTT remains vigilant. Outstanding bonefishing destinations of the past have been harmed by commercial or sustenance fishing and habitat destruction, so anglers should not be lured into thinking flats fisheries are strong and will stay