

Save the Blue

A controversial rule requiring the removal of oil rigs from the Gulf of Mexico stands to cause irreparable harm to fish habitat.

By John Hoffman
Director of Save the Blue, Inc.
and President/CEO Black Elk Energy
TIDE
Nov/Dec 2011

As a diver, fisherman and energy executive, I maintain a unique perspective of many facets of our Gulf of Mexico. My experiences in the Gulf and my personal observations of this wonderful ecosystem of vibrant, thriving, living organisms have brought me to the question: Should we really allow ecosystems to be destroyed because of regulations that were written before regulators could conceive of the life that would develop under the oil and gas platforms?

For hundreds of thousands of years, the Gulf of Mexico has had precious little hard bottom associated in its shallow sunlit waters. The Flower Garden Banks in the northwestern Gulf (110 miles southwest of Galveston) at the edge of the continental shelf are the exception, but up until the 1940s, there was no other shallow hard-bottom in offshore waters of the Gulf.

With the advent of offshore oil and gas drilling, around 6,000 major platforms have been installed with an estimated 3,600 remaining at this time. These platforms have acted as new settling substrate for corals. In fact, a study of platforms within a 50-mile radius of the Flower Garden Banks found that some of the platforms have substantial coral populations on them – of both reef-building and non-reef-building types. The corals seem to be most abundant on the older platforms that have been in place longer than 12 years.

The platforms are also covered with other plants and animals associated with Caribbean coral reefs – algae, sponges, tunicates, crabs, sea fans, and more. They are also home to abundant populations of reef fish and pelagic fish, and over time these artificial structures have become true, living, breathing coral reefs.

KNEE JERK REACTION

Whether the platform is in operation or has been retired and intentionally placed for conservation and fisheries enhancement, a typical four-pile platform jacket (the underwater support structure of an offshore platform) provides two to three acres of living and feeding habitat for thousands of underwater species.

This is a good thing, because the natural bottom of the Gulf of Mexico is a flat plain, comprised of mud, clay and sand with very little natural rock bottom. Without the platforms and other artificial reefs, fish and marine life typically would become widely dispersed, far from ideal conditions for commercial and recreational fishing and diving.

As observed and documented by scientists in the former Minerals Management Service (now known as the Bureau of Ocean Energy Management, Regulation and Enforcement - BOEMRE), invertebrates and plants attach to petroleum platforms within weeks of the placement of structure in the marine environment. Within a year, the platform can be completely covered with plants and sessile invertebrates, attracting mobile invertebrates and fish species, and forming a highly complex food chain.

Some in the environmental community have always had grave concerns about offshore oil platforms, though many have never even seen what lives beneath them. The federal government has had guidelines in place, since the late 1940s to remove inactive rigs. The goal then was to remove the big, ugly, polluting, environmentally hazardous contraptions as soon as they stopped producing. In the wake of the Macondo well disaster in 2010, the “Idle Iron” directive was issued

which became effective on October 15, 2010. According to the directive, oil and gas companies operating in the Gulf of Mexico outer-continental shelf region had 120 days from the effective date to submit a company-wide plan for decommissioning of wells and platforms that are “no longer useful for operations.”

The intent of Idle Iron was an effort to seal inactive wells to prevent potential oil leaks and remove unused, unsafe structures that could create environmental and navigational hazards if left to the elements or toppled during storms. The knee-jerk reaction for everyone witnessing the disaster of Macondo was to do whatever it took to keep this destruction and damage from ever happening again. Though the intention of the plan was good in its efforts to prevent more harm like Macondo, it was short-sighted in the harm it could actually cause to these marine ecosystems.

By issuing guidance that is heavy on removing oil and gas platforms for environmental reasons, Idle Iron is completely dismissing the obvious benefit that the largest artificial reef ever created has provided for fishery resources in the Gulf of Mexico.

UNDERWATER OASIS

Ignored so far in this debate is the fact that marine life has exploded around these huge artificial reefs. A study by the Louisiana Sea Grant College Program, housed at Louisiana State University, shows that 85 percent of Louisiana fishing trips involve fishing around these structures. The same study shows that there is 50 times more marine life around an oil production platform than in the surrounding mud bottoms.

Each platform structure, or jacket, acts like an oasis in the desert for marine life, gathering energy from the surrounding waters. Offshore platforms tend to be more productive than natural reefs because they occupy the entire water column. The fish biomass on some rigs is ten times greater, per unit area, than at the Flower Gardens Fish Sanctuary (Wilson et.al 2003).

At offshore petroleum platforms, shallow-water fish, mid-water fish and deep-water fish are all found at the same location. It has been reported that 10,000 to 30,000 adult fish can reside in an area about half the size of a football field around a platform. Platform jackets create reef habitat that would otherwise not exist over tens of thousands of square miles of soft bottom on the northern continental shelf of the Gulf of Mexico.

Toppled or reefed platforms are not as productive and they tend to produce and/or attract only facilitative reef fish such as snapper, grouper and jacks. Marine invertebrates grow naturally on the underwater portion of the platform. The diversity and abundance of invertebrates drops significantly below 30 meters and often perish when re-oriented in the water column when platforms are reefed or toppled.

PLAN TO LEAVE THE PLATFORMS

Something must be done to prevent the unnecessary destruction of valuable ecosystems in, on and around these structures, which is being conducted in order to fulfill an ill-conceived directive. I and two fellow members of my company, Black Elk Energy, an independent oil and gas company, have launched a Gulf of Mexico initiative called, “Save the Blue.” We have introduced Save the Blue, Inc. as a cooperative effort intended to protect and preserve ecosystems existing around oil and gas structures.

Save the Blue calls for an ecosystem study to be performed near the end of an oil and gas platform’s useful life. If a thriving ecosystem exists, the program recommends that deck, well and pipeline abandonment of the facility be safely conducted as stipulated by regulations, but allows the structure to remain in place to protect and preserve the marine life that has formed a habitat on and around the structure.

According to the Save the Blue initiative, hurricane risk would be mitigated by removal of platform decks, eliminating wave-in-deck failure potential. Navigation aids would be removed from the decks and placed on the structure legs remaining above the water level at a sufficient

height to protect mariners. Anodes would be maintained on the facility to ensure the structural steel is protected against corrosion.

With proper care and protection, these platforms can maintain their integrity for hundreds of years, providing a long-term habitat for marine life. Owners of the platforms would donate the structure and monetary funds into a private trust fund to maintain and preserve the ecosystems for future generations of fishing, diving, education and research.

WHY ACT NOW

The pace of platform removal in the Gulf is only going to increase and already far too many of these valuable habitats have been removed forever. My preference, and the preference of many recreational anglers and divers, is to find a way to leave the platforms in place, and let these platforms continue to provide a service that would cost hundreds of millions of dollars to replace or mitigate.

The stakes are high in this debate, and the problem will likely take time and the voices of many to make true waves of change. Whether or not these habitats can be saved with common-senses measures remains to be seen. Only one thing is for sure – we cannot continue to turn a blind eye to the destruction of critical marine habitat in the Gulf of Mexico. All of us – anglers, divers, conservationists and ordinary citizens – must act to Save the Blue.

To learn more about the Save the Blue initiative, visit www.save-the-blue.org.