



## **HARDTAILS**

By  
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Anyone who has fished at one of the many offshore oil and gas platforms in the Gulf has seen the thousands of blue runners, or as we commonly call them, hardtails, under and around almost every platform. Research done at LSU indicates that 10,000 to 30,000 fish may be associated with a platform and that up to 94 percent of them can be blue runners.

These 12-to 18-inch fish, members of the same family as amberjack and pompano, are seldom targeted by anglers, except to catch for use as bait. Their large numbers would certainly indicate that they are important in the food web however, eating smaller organisms and themselves serving as food for large predators such as barracudas, groupers, cobia, other jacks and even open-water fish such as king mackerel, billfish and tunas that often visit platforms.

Very little research has been done on this common fish. Recently, however, scientists at LSU conducted research on the diet of blue runners in an attempt to understand the food web associated with platforms and whether platforms actually produce more fish than open water/natural bottoms or whether they simply attract fish from those areas.

The researchers sampled blue runners from two platforms, Grand Isle 94B (GI 94B) in 208 feet of water and Main Pass 259A, (MP 259A) in 429 feet of water. GI 94B was sampled in June, July and August, 1999 and MP 259A in June, July and September 1999. At each location, blue runners were caught with rods and reels on artificial lures and their stomachs removed and preserved. The food items were later removed, examined with a microscope and identified.

The researchers found that blue runners, especially those under 14-inches long, fed very heavily on zooplankton, rather than on the plant and animal growth on the platforms. Zooplankters include tiny free-floating animals and the larvae of bigger marine life. As blue runners grew larger, fish became a higher percentage of their diet, but they never stopped eating

zooplankton. Blue runners seemed to feed moderately all day under and near the platforms, but binge before daylight, between 3 a.m. and 7 a.m. The biologists' theory was that the floodlights on the platforms allowed these sight-feeding fish to see well enough to feed at night.

Since the zooplankton in their diets was likely carried by currents to the platforms, rather than produced at the platforms, it would be logical to assume that the platforms do not "produce" fish. However, platforms may still play an important role. Previous research has shown that ocean current speeds can be reduced by 20 percent or more immediately behind a platform and that the platform legs and casings can break the current enough to form eddies behind them. The reduced currents and the eddies can, to a degree, concentrate whatever the currents carry, such as zooplankton. Also some zooplankters which have weak swimming ability tend to move towards lights, which would also tend to concentrate them under lighted platforms at night.

These factors may provide blue runners with increased concentrations of food and the ability to feed around the clock. Such conditions may explain how the large numbers of blue runners and their predators can be sustained in the waters around platforms. Questions on whether platforms, and the increasingly popular artificial reefs, produce more fish to catch or whether they simply concentrate fish, making them easier to overfish, are important fisheries management questions.

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