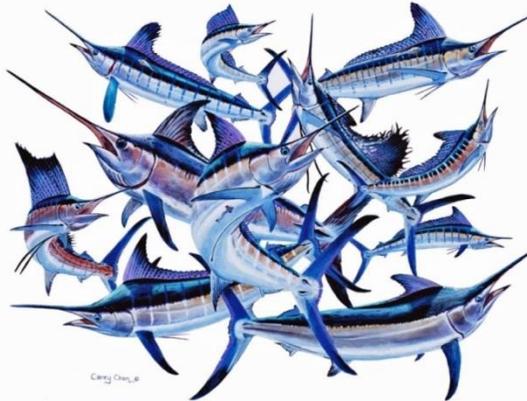


Billfish: To keep it simple the term "billfish" refers to members of two families of marine fish: the swordfish being the single member of one family and the other a family of eleven fish including marlin and sailfish.



Generally speaking there are three schools of thought on trolling for billfish i.e. Synthetic Lures, Live Bait and Dead Bait. In this regard many billfish fisherman hold very strong opinions and preferences as to which option is best. At one time or another they all work and there is no way to scientifically test which one is best so herein we offer just a few basic facts about billfish that will provide background and insight as to which way to go.

The basic foraging and feeding habits of these predators fish, regardless of family, genus, genera or world location are very similar, while foraging a heightened sense of sight, scent and hearing come into play. Billfish are vigorous long range foragers and maintaining that life style requires a large daily protein intake. Billfish like most predators are opportunistic feeders taking whatever baitfish is the most abundant or whatever comes along; although a strong preferences for mackerel and squid seem to top the favorites list.

When baitfish are scarce it is then that they are most likely to take a passing lure or baited hook as they are transversing the area seeking "greener pastures". Billfish are not going to hang around an empty water column waiting for something to show up. All living things have a scent signature, in humans it's known as Body Odor (BO), the scent signature of a fish is primarily made-up of mucus/gill wash and body waste, in a large baitfish shoal this material and scent can often be detected by predators miles down the trail, when a foraging billfish crosses a fresh shoal trail it will turn and track to the source.

Scientific studies have shown that fish "can be trained" meaning that what food source is most available over a period of time (or even their last satisfying meal) becomes a "favorite" food source, the scent signature of which is recognized and quickly taken in preference to other baitfish or synthetic lures, thus the preferred bait or chum scent to use would be the most common baitfish species available in that location at that particular time. If you don't know what's down there use mackerel or squid.

Considering a Marlin in Northern Baja/Southern California waters, a location wherein mackerel are usually present year around, squid are seasonal. In a good season squid often dominate the area and with competition from other Marlin limited (there are not many big fish out there anymore) a Marlin foraging in that area during a good squid season would have developed a strong food preference for squid and that Marlin would be very well fed meaning that the Marlin would view a synthetic lure troll or a mackerel baited hook as a curiosity rather than a food source.

There are many stories about charter boat captains that tell of Marlin tracking their lures for extended periods then just turning away. If a Marlin is just tracking your synthetic lure troll you may want to think about getting a live whole mackerel on a big hook out there ASAP. Enhancing the troll with a bit of scent would certainly better the odds for a bite.

Check: <http://www.scentblazer.com/Products/tabid/292/CatID/106/RtlD/397/Default.aspx>

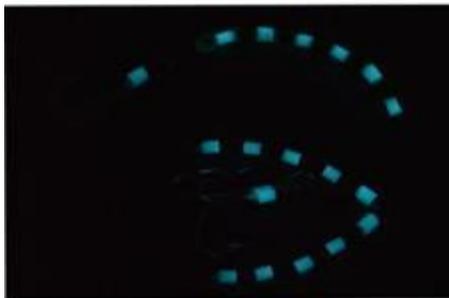
Billfish feed 24/7 and night fishing can be very productive. At night most gamefish feed on lantern fish and other small luminous creachers who come up from the deep at night to feed in the rich upwelling surface waters. When drift fishing at night underwater lights, hooked live bait, glow lures and occasional water churning and chumming would be the way to go. You will be surprised as what you may catch for a late night sushi snack.



Night Glow Lures



Lanternfish



h. Squid

What follows is a link to a very interesting paper undertaken by a team of international fishery scientists for the Spanish Long Line Fishing Industry; they were looking for something cheaper and easier to handle than mackerel. This program was well funded and in my opinion this is one of the best billfish bait/lure comparison studies ever undertaken in real world conditions (in the Atlantic Ocean, U.S. Eastern Seaboard). **The bottom line is that mackerel scent was the scent of choice for swordfish. Plastic squid lures were included in the test but proved of no value.**

SCRS/2004/152 Col. Vol. Sci. Pap. ICCAT, 58(4): 1501-1510 (2005) 1501

VISUAL ACUITY AND OLFACTORY SENSITIVITY IN THE SWORDFISH (*XIPHIAS GLADIUS*) FOR THE DETECTION OF PREY DURING FIELD EXPERIMENTS USING THE SURFACE LONGLINE GEAR WITH DIFFERENT BAIT TYPES.

Summary: *During a total of 20 sets carried out on board a surface longliner, the different degrees of effectiveness obtained in the capture of swordfish were evaluated using 5 different bait types (natural, artificial and mixed). The results point to substantial and significant differences in the CPUEs obtained among the different bait types tested to catch swordfish. However, the results show few mean differences that were not statistically significant between the CPUEs obtained using natural bait (control) or mixed bait consisting of artificial bait on the outside - which in itself was of null effectiveness-*

into which was inserted a piece of natural bait concealed from view. Both types of bait (control and mixed) were effective in the capture of swordfish despite the differences in constitution and properties. On the basis of these results, it is possible to make an indirect assessment of the importance of visual and odor stimuli in the swordfish to detect and carry out the final attack on its prey. **Odor was found to be the key element in this process.**

More information: Type "Billfish", "Swordfish" or "Marlin" in any Search Engine and you will certainly find more than you want to know about these magnificent fish that are quickly disappearing from our oceans: <http://en.wikipedia.org/wiki/Billfish>
<http://www.nwf.org/news-and-magazines/national-wildlife/animals/archives/2009/hooked-on-billfish.aspx>
<http://www-tc.pbs.org/wnet/nature/files/2012/06/BillFish-Infographic-110912.png>

