

White Seabass Lure - This paper describes a design for an advanced White Seabass Lure.

Most WSB fisherman use a combination of Dropper Loops, Sliders and Light Irons. The Loops or Sliders would be the principal rigs and the Iron as secondary lures usually dropped over and left unattended. This WSB Lure requires attention; it is a hands-on Jig meaning that you must work it, like vertical and a bit of horizontal jigging. Essentially the WSB Lure is a 4 ounce Iron Jig with a #3/0 Treble Hook, think of a SUMO or TADY casting iron with the addition of aural, visual and scent refinements keyed to the WSB foraging sensors.

As a rule White Seabass forage and feed both day and night close inshore on the incoming tide, water visibility is usually poor, just how these fish are able to find their prey typically the small California Market Squid which have the ability to change color to match the environment in these dark and murky conditions is quite amazing; with scent and sight limited by particulate matter in the water it is thought that their lateral lines (motion sensors) provide the basic presence and directional sense however others theorize that these fish may use a type of sonar to locate prey. WSB have the "hardware" (croaking sounds and superior hearing) to transmit sound waves and receive the returning echoes, but do they have the "software" to analyze the data? It is recognized that the small California Market Squid has the density of the surrounding water environment meaning that they may be almost invisible to a sonar pulse, on a good high resolution color fish finder these little squid may be detected by a faint blue dot which is the return echo of the head/beak area.

Investigators have identified five distinct WSB sounds/sound patterns, four appear to be directly associated with spawning as they are the predominate sounds heard during the March thru July spawning season, the fifth sound, known as a "Hydrodynamic Boom" is an intense sound in the audible range of 20 to 300 Hz with a duration of about one-half second, it is heard throughout the year. This is a perfect sonar pulse, thus it leads to speculation that this hydrodynamic boom may be used during foraging, if not used as a dedicated sonar pulse than maybe a sound wave to "stir up" small prey in the area, get them moving, making little underwater sound waves that are detectable by the WSB lateral sense lines, thus not "sonar" as we generally perceive it but detecting motion in the water (sound waves). The design of this WSB lure took into consideration the possibility that underwater sound waves play a role in foraging, thus the overall criteria for the lure considers refinements that would make the lure more noticeable to WSB receptors such as sound, sight, scent and their lateral sense lines, the latter detects movement and vibrations in the surrounding water which is why it is important to "jig" this lure.

In consideration of the possibility that WSB utilize a type of sonar to locate prey the body of the lure was designed to return a distinct sonar signature, it is constructed from a four inch length of standard three quarter inch 90 degree angle iron. The resulting body has three reflecting surfaces, two flat sides and one 90 degree corner reflector; this configuration will reflect underwater sound waves coming from any direction directly back to the original source more effectively than conventional smooth Iron designs. The unconventional design of the lure, a 90 degree angle iron, offers much resistance thus it will "move" in relation to small currents and sound waves. To further take advantage of WSB superior hearing the lure is fitted with a McCoy "Rattle" which is activated by vertical jigging action. Jigging also creates necessary vibrations in the surrounding water.

To enhance the visual presentation the lure is fitted with a small Dakota Blade in Hammered Nickel; the blade moves freely in the current, jigging enhances the action. In bright sunlight, depending upon water conditions, the Blade will produce "grating light flashes", a beacon for predator fish. For night fishing the lure contains a super bright epoxy glow bead, jigging produces (to the fish eye) a blurred moving target, like maybe a luminous trail thru plankton-rich water leading to a squid, or maybe a small night foraging lanternfish, a tasty midnight snack for all predators. When it comes to scent it is hard to beat a fresh cut squid on the hook, they "bleed" amino acid, a protein building bloc that predator fish find irresistible. So do skates, rays and other bottom foraging creatures so keep the lure well off the bottom, catching a big ray can ruin your evening.

Typically the lure would be dropped straight down along the side of a "quite" boat, hold the lure several feet off the bottom and "jig" it. During daylight WSB often seek kelp beds and kelp paddy's where they

can expect to find prey, kelp also provides a kind of "security blanket", when hooked they will quickly head for the kelp. A "quite" boat would look from below as a dense kelp paddy attracting the fish for a "look-see". WSB can hear Fish Finder sonar pulses, in fact should a WSB cross just under the sonar transducer it would be like a hammer hit to the head, shutting off the Fish Finder may be a good idea?

For an informative discussion concerning fishing and tackle for White Seabass you are invited to review Captain Jerry Barber's excellent paper: <http://www.charkbait.com/article/RAjbwsb.htm>



