

Bait & Chum: As all ocean fishermen know live baitfish make for the best chum and large party boats carry plenty of it. Typical live bait available from bait barges in Northern Baja/Southern California would include Squid, Anchovy's Sardines and Mackerel. These baitfish make great chum and hook bait for casting and line drifting.



Fish live in a "eat or be eaten" world wherein they are constantly foraging for food, (meaning proteins) by scent, vision and sound, the same attributes that help them avoid being food for bigger fish. Fish are attracted to vibrations in the water, their lateral line sensors being the locator/acquisition sense detectors, thus if something sounds, looks and is moving like a familiar food source they check it out and maybe bite, but if it sounds, looks, moves and smells like a familiar food, has the right "scent signature", they will go for it. Smaller 6 pack charter boats and private sport fishing boats have limited live chum capabilities thus the need for an alternative quick and easy to prepare on-board chum product:

California Market Squid are a well-known top performing bait, they contain high amounts of amino acids, the building blocks of proteins, when cut and impaled on a hook they "bleed" amino acid, tryptophan is one of the amino acid proteins found in squid. We find strong evidence that tryptophan may be the magic ingredient in squid responsible for its universal attraction. Scientific studies undertaken at the Kewalo Research Facility in Hawaii found that Yellowfin tuna were particularly attracted to tryptophan, this suggests that all tuna species and other pelagic ocean gamefish may be equally attracted. Everyone has heard the story that sharks can smell one drop of blood in an Olympic sized swimming pool (660,000 gallons), we now know that what they smell is the amino acids in the blood and most likely it is tryptophan.



Captain Gene with a nice Yellowfin Tuna

The following chum formula utilizes tryptophan in a natural form (fresh egg whites) to "boost" a typical mix of chum products. From a scientific viewpoint this is a potent "Mega Protein" formula providing the scent fish are seeking: This is a "toss overboard" product used to draw game fish to the boat when at a "stop", at anchor or drift fishing, it is probably too expensive to use as a trolling chum, pure Menhaden Oil with fresh egg whites in an Automatic Dispenser would be a better choice.



Menhaden Oil Dispenser

As to the Ingredient mix: The exact amount of each ingredient in a batch is not critical but do buy the good stuff, the cheaper substitutes may not work as well:

- .Purina Game Fish Chow – Available on-line.
- .Menhaden Oil – Many brands available on-line.
- .Egg Whites Fresh – Available at Supermarkets.
- .Egg Whites Powered – Available at many markets and on-line – Fresh is better.
- .California Market Squid – Use fresh netted or unprocessed frozen bait squid.
- .Mackerel – Fresh netted live mackerel or unprocessed frozen bait mackerel.

Note: Squid and mackerel processed as "Food Grade" or for "Human Consumption" are usually fresh water washed and treated with various chemical products that clean and eliminate the fishy odor necessary for this formula.

Purina Game Fish Chow is a high protein product, it is in a granular form that provides a good bulk base that will take-on and absorb the liquid ingredients and the texture of the product makes for easy use. Menhaden Oil is manufactured from fish stock, it is high in protein and a very popular troll chum. In this formula the oil/eggwhite mixture is used as the binder to infuse/coat the chow and squid/mackerel morsels.

Egg Whites: As previously noted carefully controlled studies indicate that Yellowfin Tuna can detect extremely small concentrations of tryptophan, like "one drop in trillions of drops". Tryptophan, one of the twenty amino acids, may prove to be the key fish attractant element of the amino acid family. Small concentrations of tryptophan are found in many food products such as turkey, chicken, fish, etc., thus any meat product most probably contains a bit of tryptophan. Why one chum or chunk bait product is more effective than another may be due to the tryptophan concentration therein. Fresh and Powdered Egg Whites contain very high concentrations of Tryptophan making them ideal chum additives.

Squid and Mackerel: As previously noted California Market Squid contain high amounts of Tryptophan as does Mackerel, another high performing baitfish, in this formula the squid and/or mackerel are chopped or course ground and then mixed with the oil/egg chow.

Suggested Batch Mix: In a 5 gallon pail add about two thirds chow, mix a quart of fresh egg whites with about a gallon of Menhaden Oil, pour oil/egg mixture over chow and mix thoroughly, add enough oil/egg until the mix is moist but not over saturated. If using Powered Egg Whites add about 2 cups of the powered egg whites to an oil/chow mix, stir mix until the powder is fully absorbed into the chow. Note that fresh egg whites are easier to use and available at most supermarkets. Finally add about a pound or two of chopped or ground squid and/or mackerel and mix thoroughly. When going for Marlin you do want to add the mackerel, there is just something special about the peculiar scent signature of mackerel that turn Marlin on.

How to use: This is important so do it right. First agitate the water alongside the boat for a few minutes with a high pressure hose, this old but very effective technique creates the sound of a feeding frenzy that can be detected underwater by gamefish at a great distance, then grab a handful of the moist mix, squeeze it a bit and toss it overboard, a few hand full's spread around should do the trick. When scattered on the surface the oil may cause the chum to float awhile so hit it again with the pressure hose then the squid/mackerel morsels will sink entering the visual and scent range of gamefish in deeper waters encouraging (chumming) them up; the water agitation and chum mix provide an unmistakable positive aural, visual and scent attraction. A scented Menhaden Oil slick with a bit of chow will remain drifting on the surface providing a longer local presence.

This mix can be made up several days in advance, be sure to store in fridge or cold box until ready to use. Do not leave this product lying around the boat or in the sun, if your Marina is inhabited with stray cats and raccoons, as many Marinas are, they will find your boat and lots of luck with that.

A note to commercial Party and Charter Boat Operators: Purina Game Fish Chow for fish farming makes excellent chum and is available wholesale in bulk.



Pictures not to size

Fresh and powered egg whites are available in bulk from commercial bakery suppliers. Menhaden Oil is available wholesale in commercial grade lots.



Any scrap meat/fish/poultry product can be made into a good working chum by soaking it in a Menhaden Oil/Egg White mixture.

The high pressure water churning is an important part of this chumming routine. We know from personal experience that this formula and water churning procedure works very well offshore for drawing yellowtail away from kelp paddy's toward the boat and for chumming up tuna that may be dwelling deep below the paddy. This basic churning/chumming technique can trigger a mini feeding frenzy around the boat. Pictured below is our high pressure salt water/oil injector head, it connects to the boats salt water wash-down pump.

It consists of three basic screw-together off-the-shelf Garden Store parts: A Pressure Nozzle, Mixer Valve w/Pick-up Tube and a Flexible Off/On Valve. Pick-up Tube can be inserted into a Menhaden Oil container Removal of the Pick-up tube allows air intake producing a very effective high pressure aerated salt water stream.



The basic chum & churn technique goes back hundreds of years, native fishermen slammed their paddles on the surface to create the sounds, later hand operated pressure water pumps came into play and now electric. This old technique was used extensively by the San Pedro and San Diego tuna fleets from about the mid 1800's right up to the mid 1960's when the tuna departed the area. Below pictures depict traditional bare-hook Jap-Pole'ing of tuna in the feeding frenzy created around the drifting boat following churning & chumming. The big tuna required three to four fishermen with their lines attached to a single hook to hoist and toss the heavy fish aboard. In a wild all-out feeding frenzy a bare hook worked as well as a baited hook. It was said at times the tuna schools were so dense that a fishermen could walk on the backs of tuna from one boat to another and not get his boots wet!



More info: Search >"Pole Tuna Fishing" >Images

Now that you know a lot more about bait and chum than most of your fishing pals one more bit of information is vital if you really want to catch fish: “You must be in a water column wherein hungry fish are biting”. Sounds obvious but finding that location is problematic. Even with the latest rumors from the bait barge guy and with all the advanced technology, current satellite information, a sharp eyed young kid in the tuna tower looking for seabirds, dolphins, porpoises, bait boils and whatever. And with all that we have often trolled all day without a nibble and nothing interesting on the scopes.

In reference to the kid in the tuna tower, take note: We now know that Albatross (common in the Southern Ocean and the North Pacific) can detect the “scent signature” of a fish from the air well out of visual range, they can monitor a mile-wide swath of ocean as they fly in a single direction.



Albatross may be the worlds best fish-finders