HERRING BRINE

Relatively inexpensive, easy to use and producing uniform, repeatable consistency of baits batch after batch, commercial brines take the guesswork, mess and hassle out of preparing top quality baits. By ERIC MARTIN



lupea pallasi. The Pacific herring.
Ranging in distribution from the Baja
Peninsula to the Arctic Ocean, the west coast of the North
America to Japan and Korea, they number in the tens of millions, can live over fifteen years and reach an average size of just 12 inches. Do you

know what happens when you're only 12 inches long and live in the ocean? Nearly everything will eat you. Chinook included. In fact, research performed in the 1990s of the coast of Washington state determined that upwards of 62 percent of the diet of chinook salmon consisted of but a single prey species: Pacific

herring.

Having long been heralded as the quintessential bait when targeting salmon, the effectiveness of a properly presented herring fished in ocean and estuarial fisheries where fish are still actively feeding is without rival. However, their "superbait"

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The Breakdown

- Brines that drew the most bites received higher scores than those that sent me home skunked. Just kidding. There are too many variables that play into on-the-water tests to base results off how full the fish box was at the end of the day. Instead, baits were brined in accordance with their respective manufacturer recommended procedures, then subjected to a controlled flow channel of uniform velocity and temperature water for two hours, receiving evaluations on grading criteria every 15 minutes.
- Only herring were tested.
 All herring brined were taken from the same tray to avoid possible discrepancies in bait quality (3 herring/tray for each brine).
 Samples of whole herring
- Samples of whole herring as well as pre plug cut (entrails removed) were brined.

EASE OF USE

How simple and straightforward is the brining process.

DURABILITY

Baits subjected to strong currents need to be firm and resist flaring out the beveled front cut or tearing out the belly, which alters the roll, appearance and presentation of the bait.

SCALE COLOR

If the brine is tinted, how resilient is the color over time. If the brine is not tinted, how well does it preserve the natural color and appearance

SCALE RETENTION

Rated on scale loss in the brine as well as scale durability and retention during the water tests.

BRINING TIME

Amount of time needed for optimal brining. If you only have a couple hours notice before a fishing trip, will your baits be ready?









BAITMASTERS MAGIC BRINE

SIZE 8 oz. **AVAILABLE COLORS** 1

Ease of use	****
Durability	****
Scale color	****
Scale retention	****
Brining time	****
MSRP	\$2.00
Cost per tray of herring	\$2.00

baitmasters.com

A relative unknown on the Pacific Northwest salmon scene, Baitmasters of South Florida has long been billed as one of the premier suppliers of offshore baits and supplies to top tournament anglers around the world.

If you think trolling herring in the Columbia is hard on bait, try pulling large mackerel rigged with 12/0 hooks at 7 knots in 72 degree water for marlin. To prepare baits for such demanding applications, Baitmasters rely on a little magic — MagicBrine.

MagicBrine is an all natural brining powder that works with all baitfish. It proved excellent at creating firm baits with great scale retention and natural sheen. Another plus is that brining takes only four hours.

The 8-ounce bottle is perfect for two dozen herring when mixed with one gallon of water. An 8-pound tub is also available for only \$8. Producing great looking natural baits, you can easily add commercially available scents and dyes should you feel like tweaking things a bit.

PAUTZKE FIRE BRINE™

SIZE 32 oz.	
AVAILABLE COLORS	6

Ease of use	****
Durability	***
Scale color	****
Scale retention	***
Brining time	***
MSRP	\$5.99
Cost per tray of herring	\$3.00

pautzke.com

Yet another addition to the popular Fire line of baits, scents and cures by bait-guru's Pautzke Bait Co., Fire Brine™ packs a special blend of scents, color and preservatives into a pre-mixed, easy to use one step brine. The only step: add bait.

Fire Brine™ scored high in all categories, with only slight deductions for durability and scale retention. However, still very respectable considering that baits were subjected to conditions exceeding those typically experienced while fishing. One aspect I particularly enjoyed was that Fire Brine™ can be used on a wide array of baits, from shrimp meat to skeins of eggs. All you prawn spinner fanatics out there, did you catch that?

The brining process takes a minimum of 24 hours, so plan ahead and gets baits soaking the day before a scheduled trip. Additional tips and tricks for using and customizing Fire Brine™ can be found on the company's website.

MIKE'S BRITE & TIGHT 3-IN-1 HERRING FORMULA

SIZE 32 oz. **AVAILABLE COLORS** 5

Ease of use	****
Durability	***
Scale color	****
Scale retention	***
Brining time	***
MSRP	\$6.99
Cost per tray of herring	\$2.33

atlasmikes.com

The Brite & Tight 3-In-1 Herring Formula from Mike's ® is another great one step solution to simplified bait brining. Available in vibrant blue, green, chartreuse and red, as well as clear for natural baits, the 32-ounce bottles contain enough brine for three dozen herring. An added benefit is that directions are given on how to reuse the brine for multiple batches of bait by simply re-charging the solution with a little non-iodized salt, making it very economical.

For the review, herring were brined for the minimum recommended amount of time, 24 hours. Directions suggest that for even greater durability, baits should be left in the brine for up to 48 hours, a process that may have yielded even greater performance.

Considering the ease of use, economical aspects and ability for use with a variety of baits from herring and anchovies to prawns and shrimp, Mike's Brite & Tight packs a serious punch.

PRO-CURE BRINE N' BITE COMPLETE BAIT BRINE

SIZE 16 oz. **AVAILABLE COLORS** 4

Ease of use	****
Durability	****
Scale color	****
Scale retention	***
Brining time	****
MSRP	\$6.99
Cost per tray of herring	\$6.99

pro-cure.com

Well known Pro-Cure has taken its proven Brine N' Bite powder a step further, eliminating the need for measuring and mixing. The new Brine N' Bite Complete Bait Brine is a veritable cocktail of bite-inducing salmon attractants including UV enhancement, vivid color pigments, scale brighteners and amino acids. Each 16-ounce bottle contains enough brine to cure two dozen herring, or mix with two cups of non-chlorinated water for up to four dozen herring.

The Brine N' Bite Complete Bait Brine performed very well during the review, earning high marks in all categories. Colors were very vibrant and long lasting (note: DO NOT spill on your kitchen counter!) and scale retention and durability were excellent. Baits were firm and cut well, holding their shape and spin throughout the test period. The ability to brine baits in as little as four hours means you can place it over baits on your lunch break and be on the water after work.

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strengths are not without weakness. A diminutive frame of soft flesh possessing a high content of fats and oils and covered by easily shed scales is a poor match against strong currents and a moving boat. Thus, likely ever since the first herring was skewered on a hook and sent down into the briny deep some untold years ago, anglers have sought ways in which to enhance and extend the usefulness of this highly prized bait.

The earliest example of herring brining experimentation, in my belief, can be seen in a cryptically worded passage by William Shakespeare in Macbeth. Double, double toil and trouble; Fire burn, and caldron bubble. Cool it with a baboon's blood, then the charm is firm and good. The mention of toil and trouble no doubt refers to an au natural plug cut while bubbling caldrons is his version of home brew brine. Baboon's blood is likely an early dye pigment, and then the charm (brined herring) is firm and good. So clear to me, but my professor at the time must have never trolled herring.

Herring brines perform several key functions that act to increase both durability and fish appeal. Increased durability is achieved by using a substance within the brine

to draw excess moisture out of whatever is being subjected to the brine. Early brining methods commonly utilized little more than super saturated salt water or straight dry packing baits in salt, while newer methods may use sulfites or other preservatives. By surrounding muscle fiber cells with a high concentration of salt, the water holding myofibrils contract, releasing water and precipitating proteins out of the cell. How high the concentration of salt in the brine is plays heavily into how fast this process takes place. Too little salt and the opposite occur, as cells within the muscle actually draw in

water through osmosis to balance the solution. Too much salt and you quickly end up with shriveled, dehydrated baits. Finding the perfect balance may take a little experimenting, but the results are well worth the effort. Firm baits will hold a solid bevel cut and spin perfectly, withstanding more prolonged exposure to strong current without tearing the belly or pulling free of the hooks from debris or a light bite.

The next problematic area with herring is scale retention. Herring have relatively large scales in comparison to their overall body size and they easily fall off with handling,



current and even a cross-eyed glance. Though not affecting roll or scent, loss of scales greatly limits the visibility of your bait to nearby salmon. An injured fish, especially those with cranial trauma struggle to maintain upright orientation and will corkscrew through the water. By plug cutting a herring, you create the spin mimicking a crippled, easy meal. With each revolution, the mirror finished side scales and black dorsal scales make an alternating strobe like flash in the water, ringing the dinner bell for all salmon in the area. When you lose scales, you lose this flash.

Quality brines will help

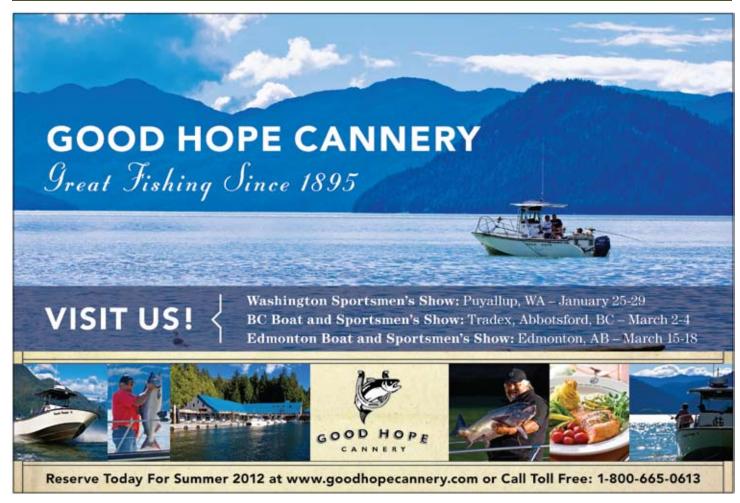
set these fragile scales securely into the skin, while also increasing luster and reflectivity. It has been found that adding ingredients such as powdered milk, borax and laundry whiteners will all increase scale durability and sheen. Another great feature of many commercially available types of brine is a variety of vibrant color options and even ultraviolet (UV) enhancement. There are also numerous commercially produced bait dyes that can be added to existing cures or home recipes to create your perfect bait. Taking the time to study how fish see color and how environmental

factors such as turbid water or overcast conditions effect light penetration of the water column will put more fillets on your barbeque. By brining baits in colors that best suit the conditions and locations you will be fishing greatly increase the visibility of your baits, drawing more bites.

The final area of bait improvement resulting from a quality brine is perhaps the most important. Firm baits with a lot of flash will be of little good if fish are being repelled away by unnatural or unappealing scents. Remember, salmon can detect smells in parts per billion. When you can smell that good and

six out of every 10 meals you eat are the same thing, you develop a very acute ability to detect the real deal from a bad meal.

Brining not only preserves the natural scents of baits but also serves as a marinade to super charge your baits with an olfactory overload of aromas that have a vastly superior fish attracting power over any visual cue. A potent scent trail, distributed by the current, has the potential to be detected and honed in on miles away, long before any fish is close enough to see your new super deluxe flasher and chartreuse tinted treat. Great lengths should be



taken to ensure your baits are free of contaminating odors. Wear gloves when handling bait, both prior to and after brining. Use a fresh, sterile container while brining such as gallon zip top bag. Don't re-use a pickle jar or old pasta sauce bottle and avoid curing or storing batches of baits over and over in the same container. Even when washed and appearing clean, these types of containers can harbor lingering scents that could taint even the best herring.

Many brines come preimpregnated with various scents and amino acids, however that does not mean they are complete or wouldn't benefit from a dose of your favorite, top secret additives. The next time you are out, look at all the surrounding boats and ask yourself what will set your bait apart and bring attention in your area of sound and scent chaos. If you and thirty of your nearby friends are all dunking herring soaked in Stinky Pete's Smashmouth Herring Syrup, a salmon is going to have too many options to choose from and you may miss a bite. Adding unique scents to any brine will create distinct scent trails and set your bait apart from the pack.

In today's fast-paced society, where the duties of life and work often limit the amount of time available for play, utilization of commercially available brines not only serve an economical answer to brining woes, but saves untold amounts of time, effort and frustration. (Not to mention a relationship after your wife catches you mixing your ultimate home brew brine in her favorite mixing bowl!) Top

quality commercial brines can require very little soak time, turning what used to be a multi-day stew in the refrigerator into a four-hour dunk the day of a trip. Tired of getting texts and updates from friends out on the water while you convince yourself that you haven't prepped any quality bait and have more important chores to do? Throw a tray of herring into commercial brine and hit the water! Your bait will be ready by the time you get to the fishing grounds and you can cut the grass some other day. \Box

TRIED AND TRUE HOME BREWS

Long before commercially produced bait brines were available, dedicated anglers played garage chemists, experimenting with everything from laundry additives to cooking spices in order to create unique and effective brines.

The following are a few Pacific Northwest favorites.

The Kitchen Sink

- > 2 quarts distilled water
- 2 cups rock salt
- > 1 cup Carnation dry milk
 - > 1 cup Borax
 - > 1 TBSP MSG

Accent brand in the spice isle

- > 1 TBSP Mrs. Wrights bluing
- > 1 teaspoon pure vanilla

NOTES

This cure has a little of everything and is sure to stand out in a crowd and will cure up to six dozen herring.

Toby Wyatt Two Step

- > 1 gallon zip top bag
- > 1 cup non iodized salt
- > 1 16 oz. bottle of bottled water
 - > 1/2 bottle Pautzke Nectar blue or chartreuse

NOTES

Mix all ingredients in the bag, then add up to two dozen herring and refrigerate for 24 hours.

After 24 hours, remove herring from the brine and plug cut, removing the guts, then place back into the brine for an additional 24 hours.

Rob Endsley's End-All

- > 2 1/2 gallons of water
- ➤ 3 tablespoons Mrs. Stewarts Liquid Bluing
 - > 4 cups non iodized salt canning/pickling
 - > 1 cup powdered milk
 - > 2 tablespoons of pure anise or garlic
 - > Pautzke Liquid Krill

NOTES

A great brine designed to maximize lesser grade, frozen baits which will be trolled. The listed quantities will brine up to twelve dozen baits.

Dick Dennis' Simple 'Suggi'

- > 1 cup non iodized salt
- > ½ cup powdered non fat dry milk
- > ½ cup 20 Mule Team Borax

NOTES

Place ingredients in a one quart wide mouth mason jar and fill three-quarters full with salt water (optimal) or distilled water. Shake well to mix. Plug cut one to two dozen herring and remove the guts, then add to the mixture and place in refrigerator over night.