Preparing Cluster Egg Baits
From Salmon and Steelhead Roe

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Salmon and steelhead eggs make good fish bait. Many fishermen save the roe from fresh caught fish for future use as bait. Properly processed and packaged, cluster eggs may be frozen and preserved for a year or more. Usually the baits are frozen fresh or treated with powdered borax.

**Borax Treatment of Egg Clusters**

Borax is available at most grocery or drug stores. It toughens the eggs, preserves their appearance, and inhibits the growth of bacteria. The tougher clusters stay on the hook longer than fresh ones. Treatment with borax also reduces messiness while handling and using egg baits. Boraxing cluster egg baits can be done in several ways. Two methods are described here. One requires less time and space, but both methods produce a cluster egg bait that will catch steelhead trout, silver salmon, chinook salmon, jack salmon, and trout. The boraxed egg clusters will keep fresh for two or three weeks at normal refrigerator temperatures—and much longer if temperatures are held at 33 to 40° F.

**Softer clusters**

Preparing soft clusters is quick and easy. This method favors the fisherman who does not have the time or place to spread cluster egg baits out to harden. Also, it helps the fisherman prepare a very soft or medium-soft cluster that readily "floats" when in the water. Being soft, the eggs cut into the clusters crush easily and give off odors readily. Some fishermen believe it is easier to hook fish with soft cluster egg baits.

Soft eggs have several disadvantages. They come off the hook easily, requiring more time for handling. Also, more bait will be used. The angler cannot catch steelhead with his hook out of the water.

The soft or medium-soft egg cluster may be prepared as follows:

1. Place a handful of borax in the middle of the paper; spread it out to cover an area about a foot in diameter.
2. Hold the larger end of the skein of eggs in one hand and let the other end dangle.
3. Use a sharp pair of scissors to snip off bait-sized clusters from the dangling end of the skein. Drop the fresh-cut bait clusters onto the boraxed area. Note the tiers or layers of eggs and cut each layer separately. When the tiers become too big for the cluster you want, cut bait-sized pieces from them. Cut the entire tier off and drop to one side for sizing later. Continue until you have cut up the entire skein into bait-sized pieces.
4. Next, put about a cup of powdered borax in a lunch sack, paper bag, or strong plastic bag. Toss the mass of freshly cut egg clusters into the sack or bag.
5. Grasp the top of the bag firmly and shake the contents well. Vigorous shaking will insure thorough dusting of each cluster of eggs.
6. Pour the entire contents of the bag back onto the paper. Stir the cluster baits and borax in the paper. If any clusters are still too big, tear them apart or cut them into smaller pieces.
7. Next, roll the eggs and borax up in the paper. Do this by folding the overlapping edges of the paper back over the cluster for about six times. The fold will prevent the powder of borax from trickling out. Roll the egg clusters in the middle with a string or secure with a rubber band and place in the refrigerator.
8. Store in the refrigerator for one, two, or three days, depending upon how dry and firm you want the eggs. Both the paper and the borax surrounding the eggs will soak up excess moisture. Reducing moisture in the egg clusters helps to toughen the baits and inhibits the growth of decay-causing bacteria. A dry egg cluster will keep fresh longer than a moist one, but some fishermen prefer soft clusters. If soft clusters are desired, limit initial storage to one or two days.
9. At the end of the refrigeration storage, unroll the paper and consolidate the egg clusters and borax into a pile. If clusters are to be used immediately, pack them in suitable containers. If they are to be stored for two or three weeks, sift the clusters from the moist borax and dust again with dry, clean borax before packaging. Sift them through your fingers or with a piece of 1/4-inch hardware cloth. Jars with an airtight seal and large mouth are excellent for storing cluster egg baits. Wax cartons and plastic bags are also good containers. Refrigerator or other storage temperatures between 33 and 40° F are best for keeping cluster eggs.

**Firmer clusters**

Although making a firmer cluster is more complicated and time consuming, it provides the fisherman with an opportunity to make egg clusters with varying degrees...
of toughness, hardness, and efficiency in staying on the hook. This is a favorite method of dedicated drift fishermen. Also, use this method if you plan to freeze cluster baits in the home freezer for future use. The major difference between this method and the one previously described is that here the egg cluster is dried out more thoroughly (this helps to keep the bait on the hook longer). This method requires more time, space, and attention to detail, but produces a very firm and desirable cluster bait. Here are the basic guidelines for preparing firmer clusters:

- Spread out a sheet of plastic or paper large enough to accommodate the scattered bait clusters that come from the skeins of eggs. Place the sheet in a location where it can stay while the egg clusters are being turned and dried. If you use paper, sprinkle a layer of borax on it before you start cutting up the eggs. This reduces adherence of the eggs to the paper. Fresh clusters do not stick to plastic and the borax is not needed.

- Hold the large end of the skein in one hand and let the smaller end dangle. Use sharp scissors to snip off clusters of bait-sized eggs. Drop the clusters in separate places and spread out over the sheet.

- After completely cutting the skein into bait-sized clusters, sprinkle more borax on the separate baits or allow them to air dry without the addition of borax. In either case, keep the baits spread out on the plastic or paper to dry, toughen, and firm up. Drying time may be controlled to obtain the proper consistency of the cluster egg baits. Sprinkling borax on each cluster makes them easier to handle.

- Many fishermen who have cut-thru gauges leave the egg clusters out on the sheet all night to dry. You can complete the drying process in a very short time by using an electric fan or blower. Direct the flow of air directly at the eggs and turn the clusters over just after the first glaze forms. Continue turning and rolling the clusters until they reach the desired firmness.

- Next, dust the clusters thoroughly with borax. Put one or two cups of powdered borax in a paper or plastic bag and add the egg clusters, shake the bag until the clusters are thoroughly dusted with borax.

- The egg clusters now are ready to be packaged and used as bait. Air-tight jars, cans, or plastic bags are suitable for storing clusters in the refrigerator and for keeping them. Fishing fishers will keep the clusters refrigerated for two to three weeks.

- If you want the clusters to stay as tough and dry as they were when placed in the container, add some more powdered borax before packaging. The additional borax will absorb any additional juices from the eggs. This is especially important with well-developed eggs that are large and loose on the skein or with eggs you plan to freeze.

- Egg clusters prepared by the above method can be frozen and stored in the home freezer. An additional step will help insure a good home-frozen boraxed cluster bait—either refrigerate the heavily boraxed clusters in an air-tight container for about five to seven days or further air dry them before packaging and freezing. This will reduce the moisture content of the baits.

- Cluster eggs on the dry side will freeze more satisfactorily in the usual 0°F temperature of most home freezers. If the eggs are still moist and soft, freezing and subsequent thawing will result in rupturing of the egg wall membranes; such eggs will collapse and be unusable for bait. Freezing at very low temperatures such as −10 to −30°F results in less ice crystal formation and much less breakdown of cell walls or softening of thawed eggs. Freezing eggs in separate clusters on plastic or paper (before packaging) greatly minimizes this undesirable condition.

### Freezing Fresh Cluster Egg Baits

Quick or fast freezing at −10 to −30°F is an excellent way of preserving fresh cluster eggs. Egg clusters that have been quick frozen may be kept in the home freezer for long periods of time. Properly prepared, the fresh egg clusters closely maintain their original appearance, texture and odor. However, if untreated fresh unfrozen clusters, they come off the hook easily and are messy to handle.

In a controlled experiment, wild steelhead took fresh egg clusters more readily than boraxed or other chemically preserved eggs. It is a popular notion that this would hold true with steelhead trout. This is questionable under field fishing conditions, for steelhead readily take either fresh or boraxed eggs. However, since untreated egg clusters are highly regarded by many steelhead fishermen, a way to preserve them is listed here.

- Spread a piece of plastic large enough to accommodate a quantity of eggs to be cut up.

- Cut the skein of eggs into bait-sized pieces as previously mentioned. Drop the clusters in separate places. Allow these to dry into firm clusters. Turn frequently. The air flow from an electric fan or blower will hasten the drying process. As soon as a glaze forms on the outside of the clusters, turn them over to dry the bottom side. Initial drying may be accomplished in about thirty minutes, after which the clusters should be turned for the first time. Continue turning and drying until the baits have acquired a firm glaze on the outside and still retain most of their natural red color. Excessive drying results in loss of original color.

- A good way to quick freeze clusters is to freeze them separately on a plastic sheet, newspaper, or a piece of regular locker paper before packaging. This favors faster freezing and much less breakdown of cell walls. If you put the clusters in an air-tight jar or can, remove all oxygen from the container before freezing. Do this by placing a piece of waxed paper just under the lid, lighting it, and screwing the lid on. The flame will use up any oxygen remaining in the container.

- Most modern storage plants have facilities for quick freezing and most home freezers may be adjusted for −10 to −20°F temperatures. Quick freezing should be done in temperatures of at least −10°F, with −30°F insuring a fast freeze of clusters in jars or cans. If all air is excluded, the frozen eggs should remain usable for at least a year.

- Fresh egg clusters frozen in cans or jars sometimes stick together when thawed. Work individual clusters free with your fingers or dump them all on a piece of paper before separating.