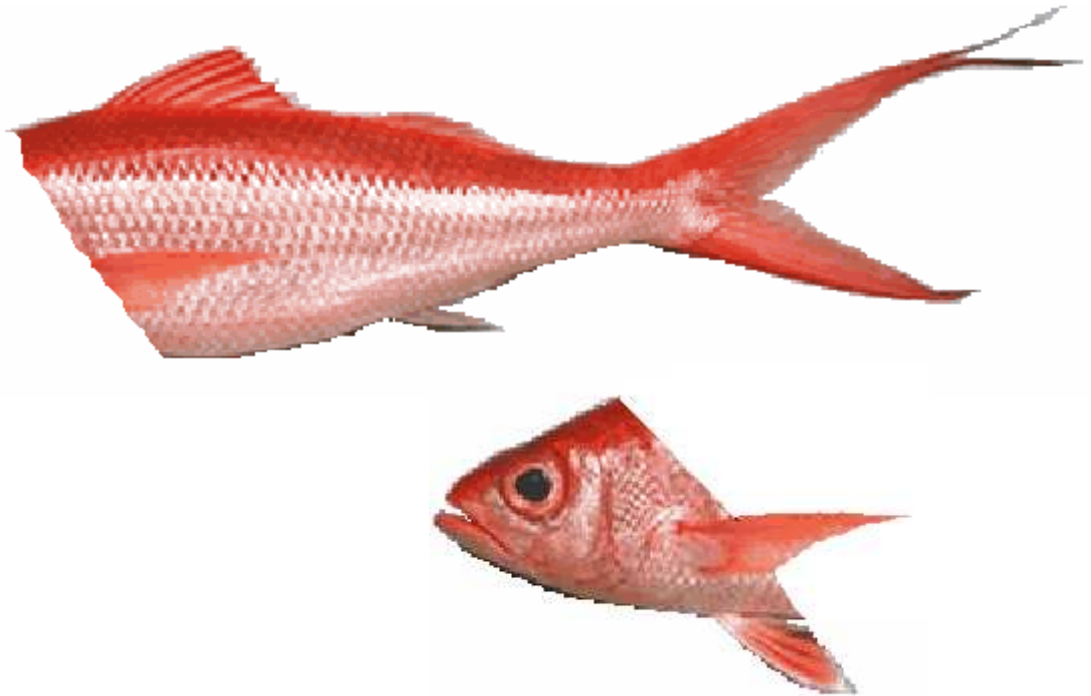


Notes on the Export of Bottom Fish to Hawaii



Head and gutted Onaga. (Collar Off)

1. Purchase of Fish

Fish is purchased whole and ungutted. The Hawaii auction block has always insisted on fish being ungutted as it helps with quality identification. The deep-water fish usually have their stomach contents forced out when the swim bladder expands as water pressure decreases when the fish are being hauled in and the fish does not have enough time to adjust the pressure in the bladder. This forced ejection of the gut contents and the inversion of the stomach helps prevent autolysis.

Autolysis occurs when digestive juices in the gut cavity digest the cavity wall. This can occur when the fish is headed and gutted (H&G) and not scrubbed out properly.

2. Processing and Yield

At present distributors in Hawaii have insisted on H&G fish as they feel it is a waste of money shipping the head and gut taking up space and weight. Savings associated with H&G not only include the cost of shipping charges but the cost of extra cartons.

Caution when using other party's yields calculations and their method of cutting, Verify this all the time.

Cost of whole fish is in local currency and reflects the local demand for the fish. In some cases where a good tourist industry exists the price can become uneconomical to export. Total fish cost is weight of whole fish times the unit cost per kilo.

The fish are then cut and the various components weighed. The yield is calculated.

Weight of whole fish	Weight of H&G fish	Yield
203.18	148.12	73%

3. Selling price

The price paid for the fish in F\$/kg and the exchange rate used is 0.6 US cents to the Fiji dollar. The weight of the fish to be shipped is the weight of whole ungutted fish purchased times the percentage yield. i.e. $250 \times 73\% = 182.81$ Kgs.

4. Cardboard Cartons

The fish is now packed in cardboard cartons. The maximum weight for a carton of fish is allowed by the airlines is 50kg and the carton and packaging weighs 7.7kg-leaving 42Kg for fish. The number of cartons needed is 182.18 divided by 42, which equals 4.34 cartons. The fish is therefore packed into 5 cartons

The total weight of cartons plus packaging and gel pack is then calculated and this comes to 5 times the individual weight of 7.7kgs. ($5 \times 7.7 = 40.15$ kg.)

The total weight of the packed cartons is therefore 182.18 kg fish + 40.15 kg packaging = 220.68 kg.

5. Freight Rate

Freight rate plus fuel surcharge for (+ 100kg) is F\$5.20 / kg.

Total cost of freight is $\$5.20 \times 220.68$ kg = \$1147.54

6. Cost of Shipping

Cost of Shipping is however higher than freight rate as government regulatory costs, transport to the airport, labour, ice, and the cost of the carton and packaging add on to the freight cost. The cost of shipping is therefore \$1580.46 or F\$8.68 / kg.

7. Calculation of Returns

This does not take into account some of the other costs but gives an idea if it is worthwhile shipping out. Sometimes when there is too much fish in the factory and it cannot be sold locally then this figure is the one to consider as the other costs are usually fixed costs and will therefore be incurred even if this whole transaction did not occur.

Net returns for the shipment is therefore gross income less the total costs of export.

$\$2905.77 - \$2580.46 = \$325.3$ or \$1.79 per kilo. In this case a paltry sum and indicative of the stagnant price of fish in Hawaii and the low returns that have crept into this market especially for Lehi and Ehu.

8. Conclusion

The final conclusion as far as exporting bottom fish to Hawaii is concerned is that the cost of shipping is too high when anything lighter than a full LD3 is used. Thought has to be put into carton size for maximum utilization of the container. Larger cartons can be used and therefore packaging weight as well as the cheaper freight rate will enable a profit to be made.

Only high return fish such as Onaga and Ehu are to be exported and other species to be sold locally.