
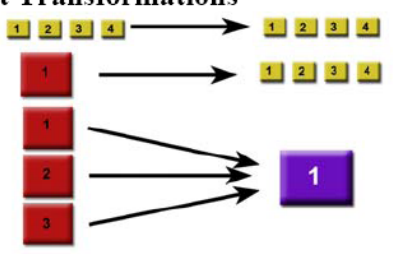


<p>Fishery:</p> <h2 style="text-align: center;"><i>Herring Spawn on Kelp</i></h2>	<p>State of Readiness Assessment:</p> <p style="text-align: center;">Total Score = A-</p>
<p>Fishery Overview:</p> <ul style="list-style-type: none"> • Individual quota system for harvested product. • Fishing occurs in the spring when herring are ready to spawn. Fish are caught and held in pens with kelp for spawning. • Fishing and ponding occurs in specific DFO harvest areas of the BC coast. • Herring are captured or directed to ponds for spawning and then released. <i>Macrocystis</i> kelp is harvested and placed in ponds. No bycatch issues. • Pooling of product is infrequent. • Price determined by market demand and product quality. • Batch =shipment, Trade unit=totes of SOK, Logistic unit=totes of SOK. • Spawn on Kelp Operators Association (SOKOA) represents industry. • Fishery operation is somewhat similar to finfish aquaculture in that product inputs (fish and kelp quantity, quality, environmental conditions) can be traced. 	
<p>Supply Chain Pathways</p> 	<p>Unit Transformations</p> 
<p>Markets:</p> <ul style="list-style-type: none"> • Market is primarily for brined spawn on kelp to Japan. Domestic market is extremely small. • Fresh brined spawn on kelp is delivered to buyers. • Product quality concerns are based on temperature, salinity, kelp quality, size, texture and colour of eggs. • Japanese traceability regulations are not yet developed although some chain retailers in Japan are increasing their traceability requirements. 	

<p>Data Availability from Fisheries Monitoring Programs: Traceability data is currently collected through the following processes.</p> <table border="1"> <tr> <td> <p>Harvester/Operator Harvest Log – operator/MSP Validation Record - MSP Quality checklist – MSP/buyer</p> </td> <td> <p>Transporter Validation Record – MSP Bill of Lading – transporter</p> </td> <td> <p>Buyer Validation Record – MSP Bill of Lading – transporter Delivery Record – buyer Processing Records – buyer Sales Records - buyer</p> </td> </tr> </table> <p>What product or business data is missing? Transport firm, data access contact persons (data responsible party) for the harvester/operator, transporter and buyer.</p> <p>Is the data electronically accessible to the supply chain? No. Paper validation records are maintained by the harvester. A confidential electronic database is maintained by the MSP. Standardized export containers and validation labels linking product to the specific pond are used for export of product.</p> <p>Is the data verifiable? Yes, through 100% dockside validation.</p>		<p>Harvester/Operator Harvest Log – operator/MSP Validation Record - MSP Quality checklist – MSP/buyer</p>	<p>Transporter Validation Record – MSP Bill of Lading – transporter</p>	<p>Buyer Validation Record – MSP Bill of Lading – transporter Delivery Record – buyer Processing Records – buyer Sales Records - buyer</p>	<p>Score = 1.5</p>
<p>Harvester/Operator Harvest Log – operator/MSP Validation Record - MSP Quality checklist – MSP/buyer</p>	<p>Transporter Validation Record – MSP Bill of Lading – transporter</p>	<p>Buyer Validation Record – MSP Bill of Lading – transporter Delivery Record – buyer Processing Records – buyer Sales Records - buyer</p>			
<p>Product Identifiers: Tote numbers and shipment numbers are used.</p>		<p>Score = 1</p>			
<p>Data Transfer and Information Mapping: Current data systems are paper based with validation records accompanying deliveries to the buyer.</p>		<p>Score = 1.5</p>			
<p>Industry Leadership: One association represents industry.</p>		<p>Score = 1</p>			
<p>Processor Level Constraints: Occasional pooling of product for trimming, grading and packing after validation.</p>		<p>Score = 1.5</p>			
<p>Factors impeding ability to meet traceability:</p> <ul style="list-style-type: none"> Alaskan product landed and processed in BC. 	<p>Factors aiding ability to meet traceability:</p> <ul style="list-style-type: none"> An industry wide landings data system is in place through 100% dockside validation. Most of the required information is collected on paper and stored electronically. Japanese market is very quality oriented. Canada brands its product. Operators are paid based on quality. Tote labels with shipment number and tote number are mandatory (some form of batch numbering and trade unit identifier system already exists). 				
<p>Opportunities: Goal 1 – Traceability to a container level that provides data electronically to the supply chain. Goal 2 – Good candidate fishery for a pilot project.</p> <ul style="list-style-type: none"> Use of unique and digitally recognized product identifiers. Integrate existing data systems and streamline data transfer through the supply chain for more efficient and timely data communication. 					

MSP = Monitoring Service Provider