

# 21. Fish Roe

## 1. Definition of Category

Edible fish roe. This does not include fish roe not intended or use as food (HS 0511.91).

HS Numbers	Commodity
0302. 70-010	Hard roes of Nishin ( <i>Clupea spp.</i> ) (fresh, chilled)
70-020	Hard roes of Tara ( <i>Gadus spp.</i> , <i>Theragra spp.</i> and <i>Merluccius spp.</i> ) (fresh, chilled)
70-090	Livers and roes of other s (fresh, chilled)
0303. 80-010	Hard roes of Nishin ( <i>Clupea spp.</i> ) (frozen)
80-020	Hard roes of Tara ( <i>Gadus spp.</i> , <i>Theragra spp.</i> and <i>Merluccius spp.</i> ) (frozen)
80-090	Livers and roes of other s (frozen)
0305. 20-010	Hard roes of Nishin ( <i>Clupea spp.</i> ) (but not Nishin roes on the tangles) (dried, smoked, salted or in brine)
20-020	Hard roes of Tara ( <i>Gadus spp.</i> , <i>Theragra spp.</i> and <i>Merluccius spp.</i> ) (dried, smoked, salted or in brine)
20-030	Hard roes of Saloniidae (dried, smoked, salted or in brine)
20-040	Nishin roes on the tangles (dried, smoked, salted or in brine)
20-090	Livers and roes of other s (dried, smoked, salted or in brine)
1604. 20-011	Hard roes of Nishin ( <i>Clupea spp.</i> ) (preparations of fish roes, in airtight containers)
20-012	Hard roes of Nishin ( <i>Clupea spp.</i> ) (preparations of fish roes, but not in airtight containers)
20-013	Hard roes of Tara ( <i>Gadus spp.</i> , <i>Theragra spp.</i> and <i>Merluccius spp.</i> ) (preparations of fish roes, in airtight containers)
20-014	Hard roes of Tara ( <i>Gadus spp.</i> , <i>Theragra spp.</i> and <i>Merluccius spp.</i> ) (preparations of fish roes, but not in airtight containers)
20-019	Hard roes of other s ((preparations of fish roes)
30-010	Ikura ((preparations of fish roes)
30-090	Caviar and caviar substitutes

## 2. Import Trends

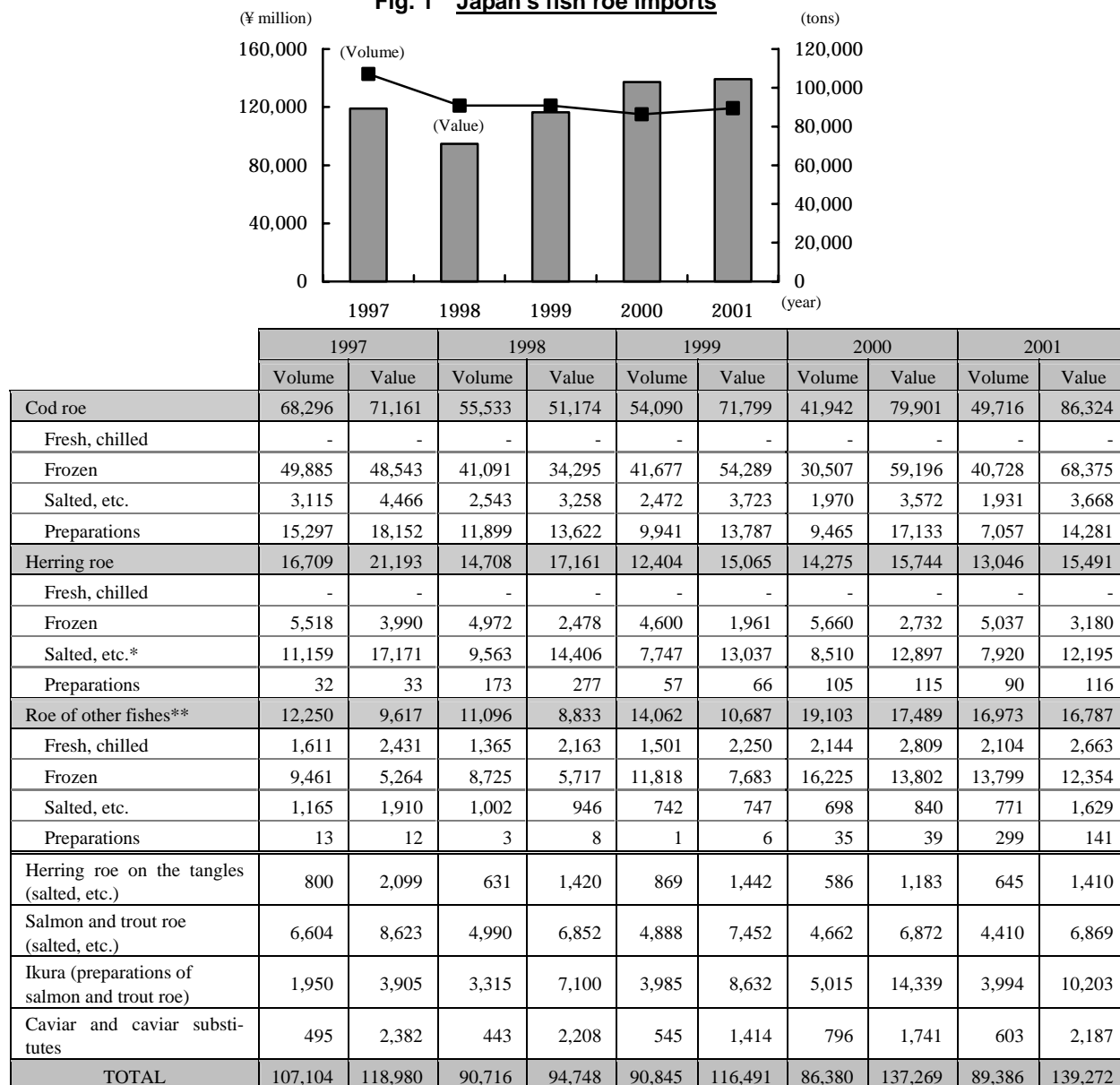
### (1) Recent Trends in Fish Roe Imports

Japan imports many different varieties of fish roe from countries all across the world. Cod roe (hard roe of Tara, so called “*tarako*”) accounts for a sizable portion of fish roe imports on both a volume and value basis. As a result, overall fish roe imports tend to fluctuate with the level of cod roe imports. Imports of frozen cod roe from Russia tumbled dramatically in 2000 due to a poor catch of walleye pollock in the Aleutian Sea. Consequently, Japan imported only 30,507 tons of frozen cod roe overall. The average price per ton has soared from ¥1.363 million in 1999 to ¥1.94 million in 2000.

In 2001, since imports of frozen cod roe recovered to 40,728 tons, overall imports of fish roe totaled 89,386 tons (up 3.5% from the year before), worth ¥139.3 billion (up 1.5%). Cod roe accounted for 55.6% of imports on a volume basis and 62.0% on a value basis. Imports of herring roe, “other fish roe, livers and milt” besides cod and herring, and of salmon roe and caviar (and substitutes) finished down for the year.

In 2001, 66.6% of all fish roe (volume basis) was imported frozen. Nearly all of this fish roe is pickled or prepared after reaching Japan, and is distributed packed in salt. However, since salmon roe does not hold up well after freezing, it is imported salt-packed. Prepared fish roe products come in either sealed containers (cans or bottles) or in other containers (bags, etc.), usually the latter. Boiled cod roe and separated herring roe are used in salads and snacks served with alcoholic beverages.

Fig. 1 Japan's fish roe imports

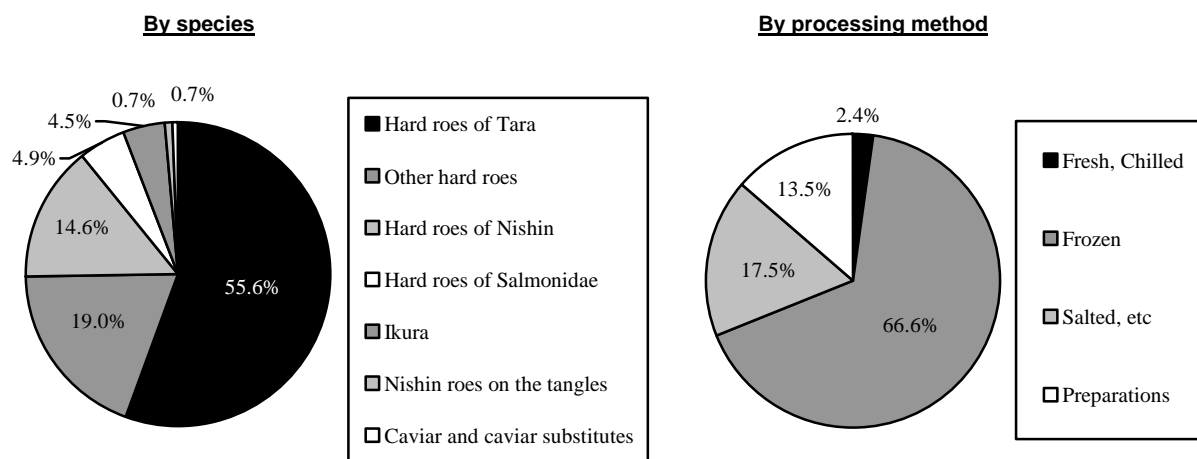


Units: tons, ¥ million

Source: Japan Exports and Imports

\* but not herring roe on the tangles \*\*with livers and milt.

Fig. 2 Percentage by species and processing method (2001, on a volume basis)

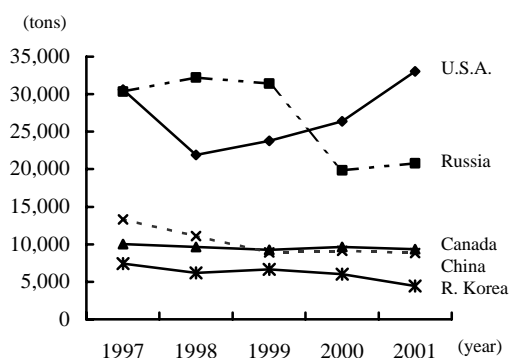


**(2) Imports by Place of Origin**

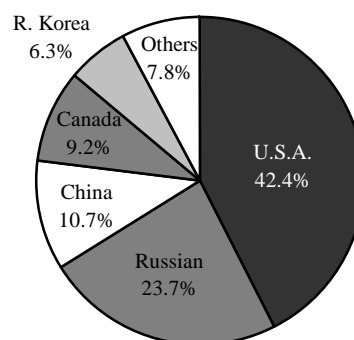
Japan imports fish roe from some 40 different countries, but the leading exporters are the United States (2001 volume basis share: 37.0%), Russia (23.2%), Canada (10.5%) and China (9.9%). Together these four exporters accounted for 80.6% of all imports on a volume basis and 86.0% on a value basis. The United States holds a commanding lead in import share not only of cod roe but also salmon roe (salted and preparations). 2001 saw American exports rise sharply from 26,372 tons to 33,046 tons, putting the United States even farther ahead of Russia in import share. For its part, Canada's exports consist almost entirely of herring roe, whereas China exports a variety of fish roe products to Japan.

**Fig. 3 Principal exporters of fish roe to Japan**

**Trends in import volume by leading exporters**



**Shares of fish roe imports in 2001 (value basis)**



	1997	1998	1999	2000		2001			
	Volume	Volume	Volume	Volume	Value	Volume	Value	Volume	Value
U.S.A.	30,616	21,899	23,756	26,372	53,935	33,046	37.0%	59,081	42.4%
Russia	30,329	32,209	31,427	19,866	34,328	20,766	23.2%	33,017	23.7%
Canada	10,025	9,654	9,270	9,652	12,961	9,356	10.5%	12,770	9.2%
China	13,321	11,116	8,910	9,134	14,199	8,850	9.9%	14,885	10.7%
R. Korea	7,444	6,207	6,674	6,015	11,837	4,426	5.0%	8,723	6.3%
Others	15,368	9,631	10,808	15,340	10,009	12,942	14.5%	10,796	7.8%
<b>TOTAL</b>	<b>107,104</b>	<b>90,716</b>	<b>90,845</b>	<b>86,380</b>	<b>137,269</b>	<b>89,386</b>	<b>100.0%</b>	<b>139,272</b>	<b>100.0%</b>
(E U)	4,909	3,649	3,256	3,839	4,222	3,686	4.1%	4,466	3.2%

Units: tons, ¥ million

Source: Japan Exports and Imports

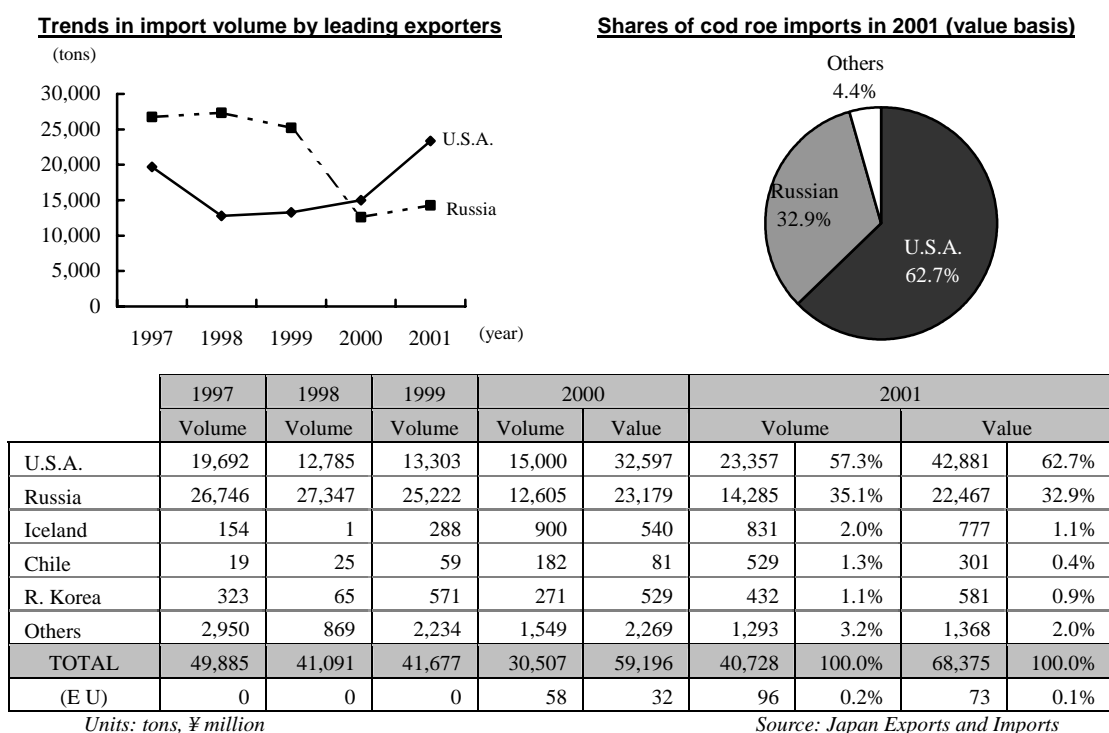
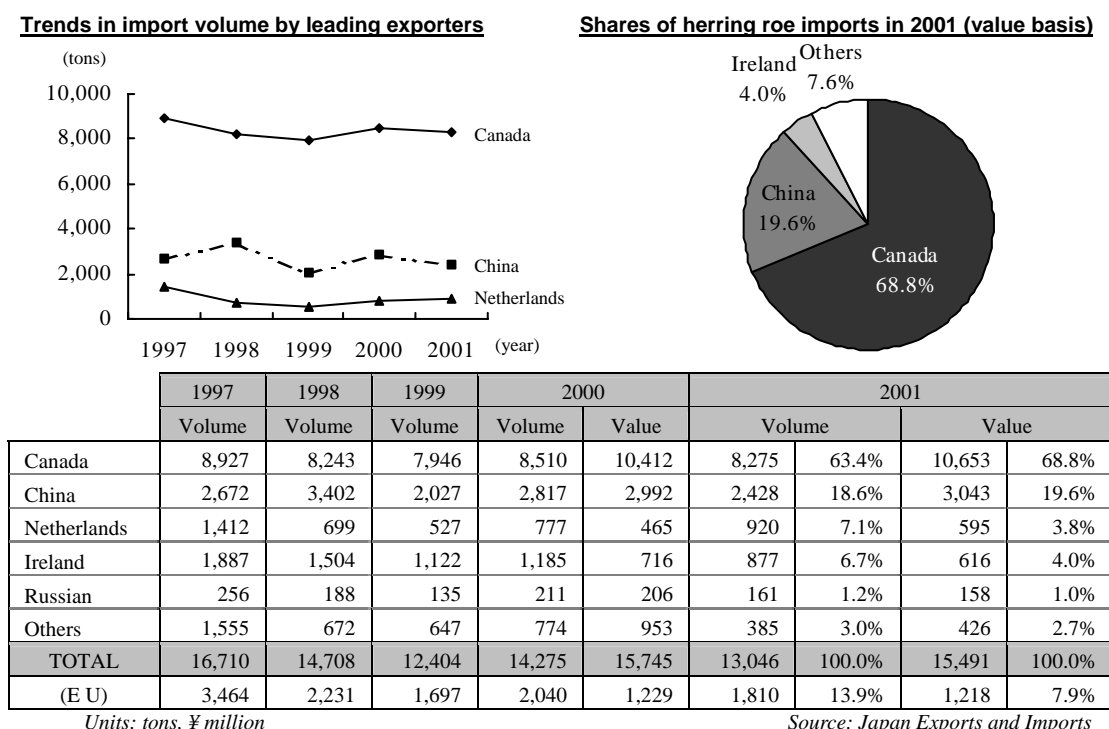
**<Cod Roe>**

Most cod roe is imported frozen from the United States and Russia. Imports fell dramatically from Russia in 2000, dropping Russia below the United States for the first time. 2001 saw American exports rise sharply, putting the United States (57.3%) even farther ahead of Russia (35.1%) in import share. About half of all cod roe is pickled in Japan and sold as salted cod roe. The other half is used as raw material for spiced cod roe products (so-called "karashi-mentaiko"), a food made by marinating salted cod roe in cayenne pepper and other flavorings.

Frozen and salted cod roe is subject to import quotas. However, there are no quotas when the cod roe is imported in prepared form as spiced cod roe. As a result, Japanese spiced cod roe product makers started shifting production offshore, seeking lower wages and lower costs generally. However, difficulties in obtaining raw materials have tended to depress imports of spiced cod roe products, declining from 15,297 tons to 7,057 tons in recent five years. Main suppliers are the Republic of Korea and China.

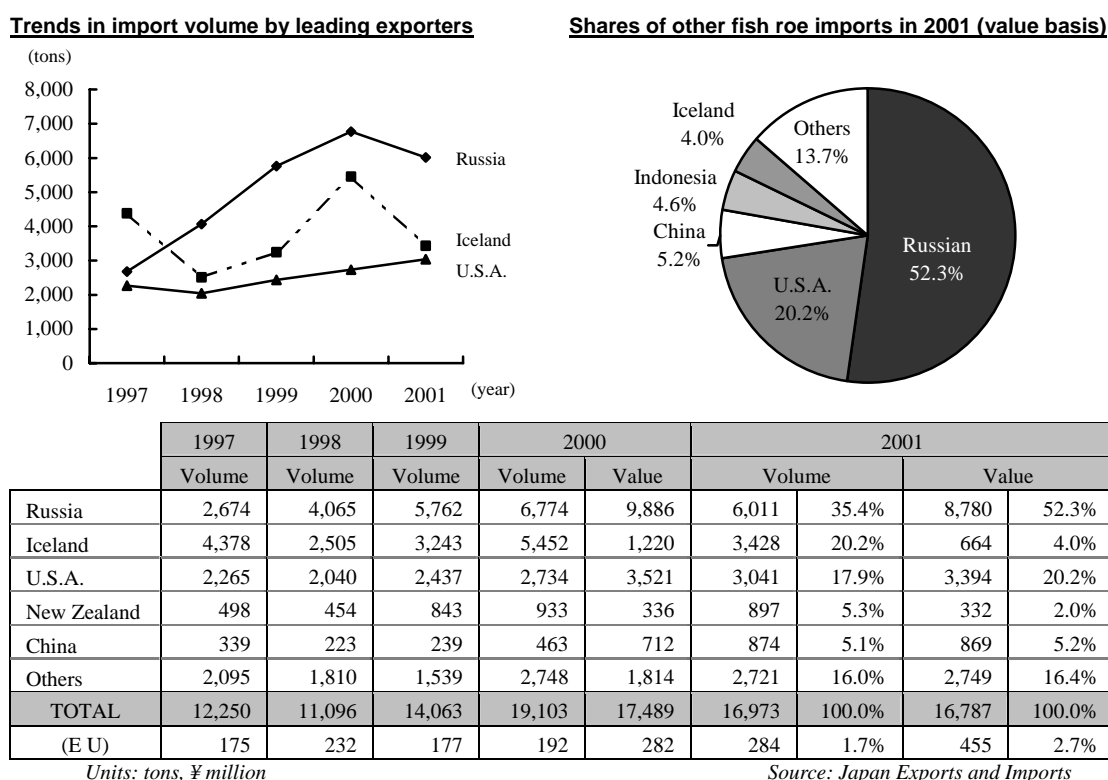
**<Herring Roe>**

Canada has consistently been the leading exporter of herring roe to Japan. This was also true in 2001, when Canada accounted for 63.4% of Japan's imports on a volume basis and 68.8% on a value basis. The next leading exporters are China (18.6%, mainly salt-packed), the Netherlands (7.1%) and Ireland (6.7%, both mainly frozen). (see Fig. 5)

Fig. 4 Principal exporters of cod roe to JapanFig. 5 Principal exporters of herring roe to Japan**<Other Fish Roe, Livers and Milt>**

Imports of other fish roe in 2001 finished with 16,973 tons (down 11.2% from the year before), and this may have been a reaction to the strong growth posted in 2000. While no precise breakdown is available, this category may include not only gray mullet and kite roe but also other kinds of fish livers and roe. Low prices and abundant variety are the reasons for their popularity. The leading exporters of other fish roe are Russia, Iceland and the United States. (see Fig. 6)

**Fig. 6 Principal exporters of other fish roe to Japan**



**Fig. 7 Leading exporters of fish roe to Japan (2001, volume basis)**

		Total volume	First	Share	Second	Share
Cod roe	frozen	40,728	U.S.A.	57.3%	Russian	35.1%
	preparation	7,057	China	51.0%	R. Korea	44.9%
	salted, etc.	1,931	China	68.9%	R. Korea	27.5%
Herring roe	salted, etc.	7,920	Canada	53.8%	China	29.8%
	frozen	5,037	Canada	79.6%	Iceland	17.4%
Other fish roe (including livers and milt)	frozen	13,799	Russian	43.6%	Iceland	24.8%
	fresh, chilled	2,104	U.S.A.	80.6%	China	17.2%
<i>Ikura</i> (preparation of salmon roe)	preparation	3,994	U.S.A.	82.1%	Canada	8.1%
Salted salmon roe	salted, etc.	4,410	U.S.A.	70.4%	Denmark	15.1%
Caviar and caviar substitutes	preparation	603	Denmark	66.6%	Vietnam	8.6%
Herring roe on the tangles	salted, etc.	645	Canada	78.6%	U.S.A.	9.8%

Unit: tons

(Note) On a value basis, leading exporters of caviar to Japan are Iran and Russia.

Source: Japan Exports and Imports

### (3) Imports' Market Share in Japan

Most fish roe distributed in Japan consists of processed food products packed in salt. Frozen fish roe is used as a raw material for these products. Since product categories are classified differently in official import statistics than they are for domestic production (post-import processing), it is impossible to accurately determine imports' share of the Japanese market for fish roe. Fig. 8 below presents imports' market share for salt-packed fish roe and prepared fish roe for which domestic production volume can be clearly differentiated. In 2000, the product category in which imports had the largest domestic market share was salted salmon roe (so-called "sujiko"), with 54.7%. Prepared salmon roe (so-called "ikura") is also the product category in which imports have gained the most market share in recent years, to 40.0%.

**Fig. 8 Imports' share in the Japanese market**

		1998	1999	2000
Salted cod roe	Domestic production	30,805	29,352	24,189
	Imports	2,543	2,472	1,970
	Domestic market total	33,348	31,824	26,159
	Imports' share	7.6%	7.8%	7.5%
Spiced cod roe preparations	Domestic production	27,427	24,447	21,470
	Imports	11,898	9,941	9,465
	Domestic market total	39,325	34,388	30,935
	Imports' share	30.3%	28.9%	30.6%
Salted herring roe	Domestic production	13,323	12,660	12,200
	Imports	9,563	7,747	8,510
	Domestic market total	22,886	20,407	20,710
	Imports' share	41.8%	38.0%	41.1%
Salted salmon roe ( <i>sujiko</i> )	Domestic production	4,019	3,576	3,854
	Imports	4,990	4,888	4,662
	Domestic market total	9,009	8,464	8,516
	Imports' share	55.4%	57.8%	54.7%
Salmon roe preparations ( <i>ikura</i> )	Domestic production	9,652	7,806	7,536
	Imports	3,315	3,985	5,015
	Domestic market total	12,967	11,791	12,551
	Imports' share	25.6%	33.8%	40.0%

Unit: tons

Source: Annual Statistics on Fishery and Aqua Culture Production, Japan Exports and Imports

### 3. Key Considerations related to Importing

#### (1) Regulations and Procedural Requirements at the Time of Importation

All imported fish roe, irrespective of variety, is subject to regulation under the Food Sanitation Law. Under provisions of the Foreign Exchange and Foreign Trade Law (Import Trade Control Order), cod roe is subject to import quotas, while salmon roe imported from China, North Korea and Taiwan is subject to import approval requirements. Caviar (sturgeon roe) is subject to import controls under the Washington Convention. In addition, the fish catch of foreign vessels is subject to regulation under the Law for Regulation of Fishing Operation by Foreign Nationals.

##### 1) Foreign Exchange and Foreign Trade Law (Import Trade Control Order)

Cod roe is subject to import quotas under the Import Trade Control Order, except for prepared food products. Importers must obtain an import quota allocation in advance from the Minister of Economy, Trade and Industry and also be granted an import license. New applications for import quota allocation are handled on a first-come, first-served basis. Applicants must have cleared at least US\$100,000 in food products through customs in the preceding fiscal year. They must already have concluded an import contract for at least 10 tons of fish roe, and they must clear the cargo through customs within 9 months of the date of the import quota grant. Every year in October the application method for import quotas for the succeeding fiscal year is published in official publications of the Ministry of Economy, Trade and Industry, and JETRO, along with the numerical quota limits.

Moreover, as sturgeon is covered by Appendix II of the Washington Convention (designating animal species in danger of extinction without strict controls on international trade), importers of caviar (sturgeon roe) must present to customs for confirmation an export permit issued by the competent authority of the exporter nation government with respect to matters related to the Washington Convention. For more details, please contact the Trade Licensing Division, Trade and Economic Cooperation Bureau, Ministry of Economy, Trade and Industry.

##### 2) Food Sanitation Law Procedures

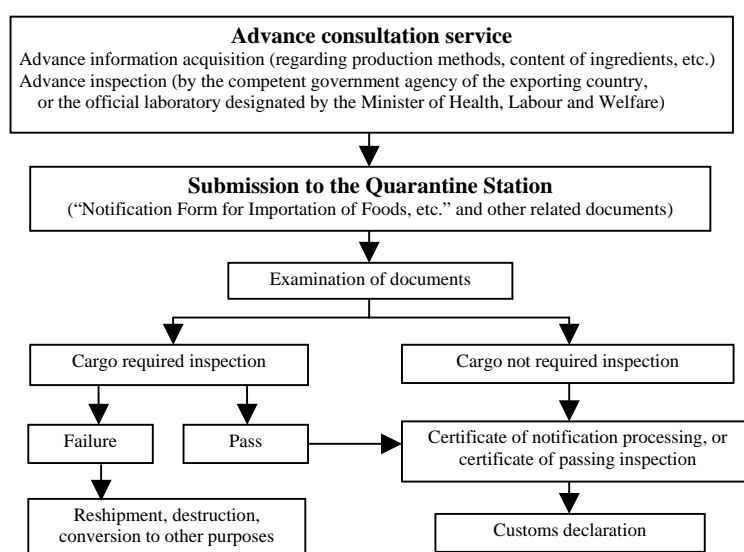
Under provisions of the Food Sanitation Law, an import notification is required for all fish roe being imported for the purpose of sale or for other commercial purposes. Importers are required to submit the completed "Notification Form for Importation of Foods, etc." to the Quarantine Station at the port of entry. A determination is made based on the document examination whether or not an inspection at the bonded area is required.

The Food Sanitation Law mandates inspections of frozen fish and shellfish intended for use as fresh food, in accordance with the Standards for Frozen Fish and Shellfish for Use as Fresh Food. The Standards require a bacteria count of no more than 100,000 per gram of the test piece, and they require that any E. coli present be dormant. Also, sodium nitrite is authorized for use as a coloring agent with salmon roe and cod roe, but the quantity must not exceed 0.005 grams per kilogram.

Prior to importing, the importer may take a sample of forthcoming imports to official laboratories designated by the Minister of Health, Labour and Welfare in Japan or in exporting countries. Those test results may be substituted for the corresponding inspection at the port of entry, which expedites the quarantine clearance process.

The Food Automated Import Inspection and Notification System (FAINS) provides computer-based import notifications. To make use of this system, importers must install FAINS software on a Windows-capable computer system, notify the Minister of Health, Labour and Welfare, and verify their passwords.

**Fig. 9 Procedures required under the Food Sanitation Law**



### 3) Law for Regulation of Fishing Operation by Foreign Nationals

When foreign fishing vessels land directly in Japan with fishing products caught on the sea, permission is required by the Minister of Agriculture, Forestry and Fisheries in accordance with the Law for Regulation of Fishing Operation by Foreign Nationals. When fishing products are shipped from a foreign country and land in Japan, permission is not required. However, a certificate of shipment issued by the government agency of the shipping country must be attached.

## (2) Regulations and Procedural Requirements at the Time of Sale

The sale of fish roe is subject to the Food Sanitation Law, the JAS Law, the Measurement Law, the Act Against Unjustifiable Premiums and Misleading Representations, the Containers and Packaging Recycling Law, and the Law for Promotion of Effective Utilization of Resources.

### 1) Food Sanitation Law

The Food Sanitation Law prohibits the sale of foods containing toxic or harmful substances and foods that are unsafe for human health. When selling fish roe sealed in wrapping or containers, it must be labeled in accordance with provisions of the Food Sanitation Law. (see 4. Labeling)

In order to establish a store and sell fresh fisheries to consumers and retailers, they must apply for and obtain a business license. For more details on applications for licenses for selling fish, required facilities, etc. please contact the health center with jurisdiction over the intended sales area.

**2) JAS Law**

The JAS Law establishes quality labeling standard for all food and beverage products sold to ordinary consumers. (see 4. Labeling)

**3) Nutrition Improvement Law**

When employing labeling for nutritional ingredients or calories, labeling must be in accordance with the requirements under the Nutrition Improvement Law. (see 4. Labeling)

**4) Measurement Law**

Fish roe sealed in wrapping or containers is required the labeling of the net content to certain accuracy (range of error specified by Cabinet Ordinance).

**5) Act Against Unjustifiable Premiums and Misleading Representations****<Fair Competition Code for Spiced Cod Roe Preparations>**

The industry has voluntarily adopted these guidelines in order to assure consumer product choice availability and preserve fair competition, based on the Act Against Unjustifiable Premiums and Misleading Representations.

**6) Containers and Packaging Recycling Law (Law for Promotion of Sorted Collection and Recycling of Containers and Packaging)**

The Containers and Packaging Recycling Law was enacted to promote recycling of container and packaging waste materials. It provides for sorting by consumers, sorted collection by municipalities, and product reuse (recycling) by product makers and distributors for glass bottles, PET bottles, paper and plastic containers and packaging. Consequently, fish roe importers incur the obligation for recycling of containers and packaging (although stipulated small-scale importers are exempt). Please consult the competent government agencies listed below for more information.

**7) Law for Promotion of Effective Utilization of Resources**

As of April of 2001, new identifier labeling requirements apply to paper (not including beverage containers not containing aluminum) and plastic container materials, in addition to previously existing labeling requirements for steel and aluminum cans. (see 4. Labeling)

**(3) Competent Agencies**

- Foreign Exchange and Foreign Trade Law  
Trade Licensing Division, Trade Control Department, Trade and Economic Cooperation Bureau,  
Ministry of Economy, Trade and Industry  
TEL: 03-3501-1511 <http://www.meti.go.jp>
- Law for Regulation of Fishing Operations by Foreign Nationals  
Resources Management Division, Resources Management Department, Fisheries Agency, Ministry of Agriculture,  
Forestry and Fisheries  
TEL: 03-3502-8111 <http://www.maff.go.jp>
- Food Sanitation Law  
Policy Planning Division, Department of Food Sanitation, Pharmaceutical and Medical Safety Bureau,  
Ministry of Health, Labour and Welfare  
TEL: 03-5253-1111 <http://www.mhlw.go.jp>
- JAS Law  
Standards and Labeling Division, General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries  
TEL: 03-3502-8111 <http://www.maff.go.jp>
- Nutrition Improvement Law  
Department of Food Sanitation, Pharmaceutical and Medical Safety Bureau, Ministry of Health, Labour and Welfare  
TEL: 03-5253-1111 <http://www.mhlw.go.jp>
- Measurement Law  
Measurement and Intellectual Infrastructure Division, Industrial Science and Technology Policy and Environment  
Bureau, Ministry of Economy, Trade and Industry  
TEL: 03-3501-1511 <http://www.meti.go.jp>
- Act Against Unjustifiable Premiums and Misleading Representations (Fair Competition Code)  
Consumer Related Trade Division, Trade Practices Department, Fair Trade Commission of Japan  
TEL: 03-3581-5471 <http://www.jftc.go.jp>



- Containers and Packaging Recycling / Law for Promotion of Effective Utilization of Resources  
 Recycling Promotion Division, Industrial Science and Technology Policy and Environment Bureau,  
 Ministry of Economy, Trade and Industry  
 TEL: 03-3501-1511 http://www.meti.go.jp
  
- Recycling Promotion Division, Waste Management and Recycling Department, Ministry of the Environment  
 TEL: 03-3581-3351 http://www.env.go.jp
- Food Industry Policy Division, General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries  
 TEL: 03-3502-8111 http://www.maff.go.jp

## 4. Labeling

### (1) Legally Required Labeling

#### <Fresh or frozen fish roe>

The JAS Law establishes the Fresh Food Product Quality Labeling Standards and the Marine Product Quality Labeling Standards, requiring quality labeling for fresh fishery products (including chilled or frozen) sold to ordinary consumers. The Law requires to include the following labeling items, and to place labeling on the container or packaging in a readily visible location, or to display it in a readily visible location adjacent to the applicable fresh fishery products.

- Name of product
- Country of origin (names of capturing areas or processing regions for domestic products)
- Description of “thawed” if it corresponds
- Description of “cultivated” if it corresponds

#### <Fish roe preparations>

When selling salted fish roe and fish roe preparations sealed in wrapping or containers, it is subject to labeling requirements under the Food Sanitation Law, and the Processed Food Product Quality Labeling Standards by the JAS Law.

- Name of product
- List of ingredients
- Food additives (if it is added)
- Net contents
- Date of minimum durability (or best-before date)
- Preservation method
- Country of origin
- Name and address of importer

#### <Labeling under the Law for Promotion of Effective Utilization of Resources>

When paper or plastic is used as a packaging material for wrapping of individual product items, or for labels, external packaging or elsewhere, a material identifier mark must be displayed with information where the material is used.

< Example >



External packaging



Individual packaging

### (2) Voluntary Labeling based on Provisions of Law

#### <Labeling under the Nutrition Improvement Law>

When employing labeling for nutritional ingredients or calories in Japanese, either on the packaging or in accompanying documentation, labeling must be in accordance with the requirements under the Nutrition Improvement Law.

<Example> Labeling must contain the quantities of calories, proteins, fats, carbohydrates, sodium, and other nutritional ingredients present, in descending order by content volume.

### (3) Voluntary Industry Labeling

There is no voluntary industry labeling for fish roe.

## 5. Taxes

### (1) Customs Duties

Customs duties on fish roe are shown below. Japan started lowering its tariff rates on fish roe (except cod roe) in stages starting April 1, 1995 as pledged at the Uruguay Round.

**Fig. 10 Customs duties on fish roe**

HS No.	Description	Rate of Duty (%)			
		General	WTO	Preferential	Temporary
0302.70-010	Hard roes of Nishin ( <i>Clupea</i> spp.) (fresh, chilled)	10%	5.6%		
0302.70-020	Hard roes of Tara ( <i>Gadus</i> spp., <i>Theragra</i> spp. and <i>Merluccius</i> spp) (fresh, chilled)	10%			
0302.70-090	Livers and roes of other s (fresh, chilled)	5%	3.5%		
0303.80-010	Hard roes of Nishin ( <i>Clupea</i> spp.) (frozen)	6%	4%		
0303.80-020	Hard roes of Tara ( <i>Gadus</i> spp., <i>Theragra</i> spp. and <i>Merluccius</i> spp) (frozen)				4.2%
0303.80-090	Livers and roes of other s (frozen)	5%	3.5%		
0305.20-010	Hard roes of Nishin ( <i>Clupea</i> spp.) (but not Nishin roes on the tangles) (dried, smoked, salted or in brine)	12%	8.4%		
0305.20-020	Hard roes of Tara ( <i>Gadus</i> spp., <i>Theragra</i> spp. and <i>Merluccius</i> spp) (dried, smoked, salted or in brine)	15%	7.5%		
0305.20-030	Hard roes of <i>Salonidae</i> (dried, smoked, salted or in brine)	5%	3.5%		
0305.20-040	Nishin roes on the tangles (dried, smoked, salted or in brine)	15%	10%		
0305.20-090	Livers and roes of other s (dried, smoked, salted or in brine)	4%	2.8%	Free	
1604.20-011	Hard roes of Nishin ( <i>Clupea</i> spp.) (preparations of fish roes, in airtight containers)	12.8%	11%	9.6% * Free	
1604.20-012	Hard roes of Nishin ( <i>Clupea</i> spp.) (preparations of fish roes, not in airtight containers)	12.8%	11%		
1604.20-013	Hard roes of Tara ( <i>Gadus</i> spp., <i>Theragra</i> spp. and <i>Merluccius</i> spp) (preparations of fish roes, in airtight containers)	12.8%	9%	* Free	
1604.20-014	Hard roes of Tara ( <i>Gadus</i> spp., <i>Theragra</i> spp. and <i>Merluccius</i> spp) (preparations of fish roes, but not in airtight containers)	12.8%	9%		
1604.20-019	Hard roes of other s ((preparations of fish roes)	6.4%			
1604.30-010	Ikura ((preparations of fish roes)	6.4%		4.8% * Free	
1604.30-090	Caviar and caviar substitutes	6.4%		4.8% * Free	

Note 1: “\*Free” in Preferential Rate is applicable only for Least Less Developed Countries.

Note 2: Refer to “Customs Tariff Schedules of Japan” (published by Japan Tariff Association) etc. for interpretation of tariff table.

### (2) Consumption Tax

(CIF + Customs duty) x 5%

## 6. Product Characteristics

The following section describes the characteristics of various types of fish roe.

### < Cod Roe >

Cod (walleye pollack) is a fish that lives at a depth of 100-400 meters in the northern Sea of Japan, the Ohotsk Sea, the North Pacific Ocean, and the Bering Sea. Because it loses its freshness quickly, it has low value as a fresh fish, and is usually processed into dried fish or ground fish meat. Cod roe is pickled and made into salted cod roe (*tarako*). Then, it is marinated in a mix of flavorings (cayenne pepper, Japanese sake, and other flavorings) and aged and chilled to make the secondary processed food product known as spiced cod roe preparations (*karashi-mentaiko*).

### < Herring Roe >

Herring is a cold-water migratory fish. Varieties include ocean herring, which forms schools and migrates over a large area, and coastal herring, which live near the coastline. In the past, ocean herring would come near the shore of Hokkaido to lay their eggs, and fixed netting would yield 1 million ton catches. However, herring catches have declined dramatically in recent years, and Japan is now almost completely dependent on imports. Herring roe is a traditional New Year's food in Japan, and average families eat it mostly during December and January. Other times of year people only eat it occasionally at *sushi* shops.

### < Salmon and Trout Roe >

Salmon return to the same stream where they were hatched in order to spawn, in four-year cycles. Pickled aged salmon roe is known as “*sujiko*,” while aged eggs that are separated and pickled, are known as “*ikura*” (a Russian loan word that means “fish roe”). There are many different varieties of both *sujiko* and *ikura* salmon roe, but the ones prized as delicacies are those with a lot of fat but soft surfaces. In Japan, production of autumn salmon begins in Hokkaido and the northern Pacific Coast in September, when the ban on salmon fishing is lifted. In recent years, though, imported salmon from the United States (Alaska), Denmark and Finland account for the bulk of the market.

### < Caviar and Substitutes >

Caviar is the common term for sturgeon roe, and it is prized as one of the three great culinary delicacies of the world. Sturgeon return to the same stream where they were hatched in order to spawn, just as do salmon. Females take 8-9 years to mature for the smaller sevruga sturgeon, 12-13 years for the medium-sized osetra sturgeon, and 20 years for the large beluga sturgeon.

The Caspian Sea area produces more than 90% of the world’s caviar, about 900 tons annually. Only about 350-370 tons goes onto the world market, making it a highly prized item. Recent years have seen a decline in the sturgeon population, caused by pollution of the Volga, unfavorable weather, and unauthorized fishing. Caspian Sea nations have all seen their official sturgeon catches fall far below their catch quotas. Russian and three other former Soviet republics received official warnings from the monitoring agency for the Washington Convention, and reports indicate that these nations banned caviar fishing and caviar exports in 2001. The world market thus will inevitably face a caviar shortage.

Imports have been growing of caviar substitutes such as lumpfish caviar and flying fish caviar. These caviar substitutes have smaller-size eggs and differ significantly in taste, but black coloring makes them look the same, and they cost only one-tenth the amount of real caviar. These substitutes are gradually gaining in popularity in Japan.

## 7. Domestic Distribution System and Business Practices

### (1) Domestic Market Conditions

Nearly all the fish roe distributed in wholesale and retail markets is packed in salt. The most widely consumed fish roe product is spiced cod roe, followed by salted cod roe. In the past salted cod roe was mainly popular in eastern Japan, while spiced cod roe was considered a specialty of Fukuoka City in northern Kyushu, close to its route of transmission from the Korean Peninsula. Today spiced cod roe is more popular nationally than salted cod roe. However, consumption of both on a volume basis has been on a downward trend. (see Fig. 8)

Most salted cod roe processors are small and medium-sized companies that have endured a serious blow from the abnormal spike in the price of imported cod roe. Compared with salted cod roe, spiced cod roe has higher added value and a steadier level of consumption. Still, resistance to the spike in cod roe cost has been strong, and processors have found it difficult to absorb the recent cost run-up. The result has been a serious impact on revenues and profits. Cod roe production has shown signs of recovery in 2001 in Russia and the United States, and prices have fallen slightly from previous year levels. Nevertheless, prices are still too high for processors to continue. With consumption depressed, processors cannot recoup the cost in higher retail prices. Instead they have had to raise prices only slightly and reduce package content volume. Many are worried about a long-term shift of consumer preference away from cod roe.

Consumption of salted herring roe has also been declining year by year. The association with the New Year’s holiday has been declining, and the recession has cut sharply into corporate and individual gift purchase demand. However, some supermarkets have been selling imported frozen herring roe flavored and parceled into small packages (priced at around ¥500 per 80 grams), and these products have been faring comparatively well.

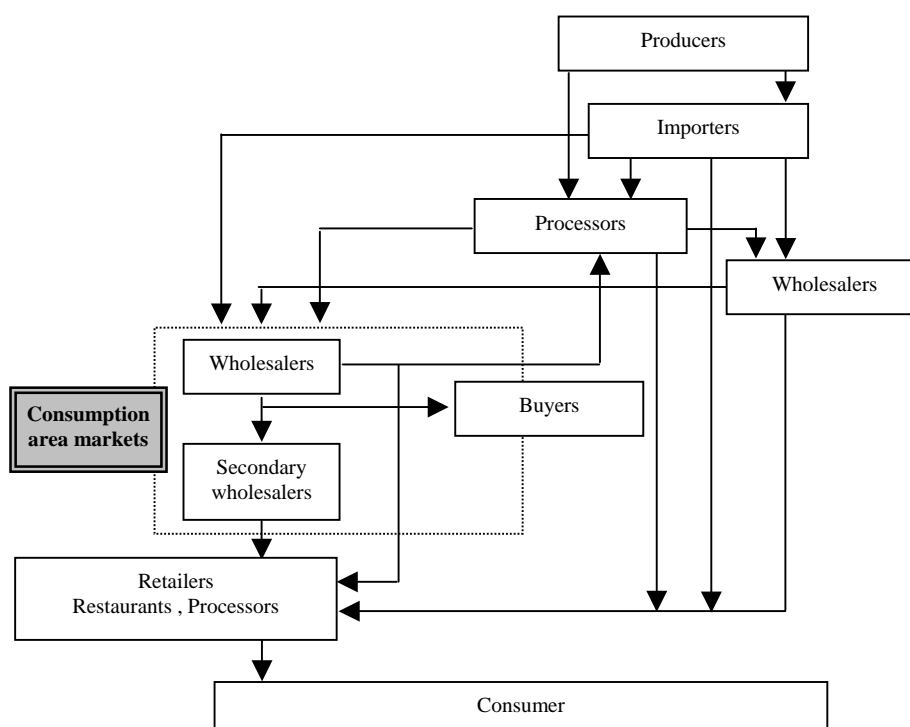
In contrast, annual consumption of “*ikura*” salmon roe has topped the 10,000 ton mark. It has become part of the standard menu at *sushi* shops. Imports have been growing of prepared “*ikura*” salmon roe from the United States (Alaska), Canada and Russia, and they have overwhelmed domestically produced “*ikura*” salmon roe. “*Sujiko*” salmon roe once was consumed mainly in Hokkaido and northern Honshu, but in recent years “*sujiko*” salmon roe marinated in soy sauce has become available in supermarkets around the country, and thus has gained a national following.

## (2) Distribution Channels

Distribution channels for imported processed fishery products containing fish roe may be grossly classified into two types. The first is wholesale market-based distribution, from importers and processors to wholesale markets in the consumption area, with the foods distributed from the wholesale markets to mass merchandisers, retailers and food service establishments. The second is outside-market distribution, from importers and processors to wholesalers who operate outside the wholesale market system, and then on to mass merchandisers, retailers and food service establishments. Imported processed fishery products are more often distributed through the latter channels than the former. (see Fig. 11)

Since frozen fish roe is often processed by marinating in salt, processor distribution channels tend to predominate (processors include both spiced cod roe makers and those who import in bulk and simply repackage fish roe for consumer sale). In the case of cod roe, about half of the total is processed into spiced cod roe, and leading spiced cod roe makers are involved not only in procurement of cod roe but also in wholesaling and in retailing, through direct outlet stores and catalog and Internet sales. Mass merchandisers and restaurant chains are increasingly shifting to imported fishery products that offer consistency in size, product quality and price, and that are consistently available. The same trend holds true for fish roe as well.

**Fig. 11 Imported fish roe distribution channels**



*Notes:*

- 1) Buyers; includes large-scale buyers, food processors, operators from outside the local area, trading company representatives.
- 2) Processors also include companies that import in bulk and simply repackage the merchandise for consumer sale or perform other comparable minor processing.

## (3) Key Considerations for entering the Japanese Market

Prospective fish roe importers need to check thoroughly in advance regarding the different varieties of fish roe in different countries, and for differences in regulations. Also, since the Japanese market is very demanding in regard to product quality and standards compliance, importers must pay careful attention to freshness and size, among other factors. Also, it is difficult to enter the market without securing processing outlets and marketing channels in advance.

## 8. After-Sales Service

Sometimes complaints arise from consumers about sanitation-related issues. In such cases, either the retail store, the processor or the importer is responsible for dealing with the matter.

## 9. Related Product Categories

Fish roe not intended for use as food (HS No. 0511.91) includes 1) fish roe for incubation and 2) fish roe for use as bait. Fish roe for incubation is identified at customs as so intended by the presence of black marks representing eyes of the hatchlings, and is sometimes subject to provisions of the Fishery Resource Protection Law. Salt-packed cod roe and mackerel roe are often used as bait, and are clearly distinguished from roe for use as food by their unpleasant odor. There are no legal or regulatory restrictions on the importation of fish roe for use as bait.

All imports of coastal herring, cod, sardines, mackerel and horse mackerel are subject to import quotas, whether they are imported live, fresh, chilled, frozen, salt-packed, dried, or salt-pickled. Importers must obtain an import quota in advance from the Minister of Economy, Trade and Industry. Also, if the material is imported for resale, it is also subject to provisions of the Food Sanitation Law.

## 10. Direct Imports by Individuals

Individuals may import without restriction quantities of fish roe deemed appropriate to personal consumption.

## 11. Related Organizations

- Japan Fish Traders Association                      TEL: 03-5280-2891                      <http://www.jfta-or.jp>  
*(Name changed as of July 2001, to reflect a dual mission of promoting both exports and imports)*
- Japan Frozen Foods Inspection Corporation                      TEL: 03-3438-1411                      <http://www.jffic.or.jp>