

Joint Press Release

July 27th, 2023

On the occasion of the Sixteenth Meeting of the Informal Consultation on International Cooperation for Conservation and Management of Japanese Eel Stock and Other Relevant Eel Species (Informal Consultation),

Fisheries Management and Scientific Research Departments of the People's Republic of China, the Fisheries Agency of Japan, the Ministry of Oceans and Fisheries of the Republic of Korea and the Fisheries Agency of Chinese Taipei (hereinafter referred to as "Participants"),

Recalling that People's Republic of China, Japan, the Republic of Korea and Chinese Taipei are all Asia-Pacific Economic Cooperation (APEC) Economies;

Recognizing that the 2014 Joint Statement issued at the Seventh Meeting serves as a stepping stone towards further cooperation in the East Asian region,

Recalling every effort towards sustainable use of eel species after 2014 including the limit on eel seeds input into aquaculture ponds and proposal on the establishment of the Alliance for Sustainable Eel Aquaculture (ASEA),

Noting the decisions 19.218 to 19.221 of the 19th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES COP19),

Noting also the eel relevant documents (AC32 Sum.2) adopted at the 32nd Meeting of CITES Animal Committee (AC32),

Sharing the view on importance of cooperating towards the 77th meeting of CITES Standing Committee (SC77), the 33rd meeting of the Animals Committee (AC33) and the 20th Meetings of CITES COP,

Mindful that Participants are willing to cooperate under the Framework of APEC Ocean and Fishery Working Group (OFWG);

Have reaffirmed the following common views:

(1) Participants have cooperated on the conservation and management measures of Japanese eel stock and other relevant eel species as follows:

- reviewed input, output and trade statistics of glass eels during the season 2022-2023 and noted input amount of glass eels of Japanese eel into aquaculture ponds in all Participants was lower than the upper limit stated in the 2014 Joint Statement;
- shared information on international and domestic circumstances related to eel species;
- reviewed and endorsed the Summary Report of the 2nd Scientific Meeting on Japanese Eel and Other Relevant Eels (29th-30th May, 2023; hereafter referred to as “the 2nd Scientific Meeting”), including the Draft Roadmap for Scientific Activities and collaborative Research on Japanese eel; and adopted the Terms of Reference for Task Team 1 & 2 of Scientific Activities and Collaborative Research on Japanese Eel Established under the Scientific Meeting.
- shared information on the domestic conservation and management measures that each Participant has taken since 2014 joint statement as follows;

China:

China calls on all localities to further strengthen the export management of glass eel, strengthen law enforcement and supervision, strengthen industry self-discipline, severely crack down on the smuggling of glass eel, and optimize the process and management system of international trade of glass eel. The Yangtze River Estuary and the Yangtze River Basin are the most important producing areas of glass eel in China. In order to conserve the glass eel and other fisheries resources in the Yangtze River, from January 1, 2021, the issuance of special fishing licenses for glass eel in the waters within the fishing ban management area of Yangtze River has been ceased. At the same time, it is stipulated that in the fishable waters, the policies had been issued to limit the scale of eel fry fishing, such as Zhejiang stipulates that the total amount of eel fry fishing should be controlled, and the scale of fishing should not exceed that of the previous year. Shanghai stipulates the number of special fishing licenses for glass eel in 2022 shall not exceed that of 2021, the number of net gear per license shall not exceed 20, and the number of net openings per net gear shall not exceed 1. Besides, China has carried out the stock enhancement and release of Japanese eel. The above measures will help restore the number of parent eel populations and wild glass eel resources, and promote the sustainable development of eel industry.

Japan:

Catch of glass eels is subject to licenses to be issued by the prefectural governments and duration of fishing season is limited. Catch of adult eels using certain fishing gears is subject to licenses to be issued by the prefectural governments. Variety of additional measures, such as gear restriction, upper limit of harvest for individual and time closure, have been introduced and implemented for catch of both glass and adult eels considering unique situation in each Prefecture. In June 2015, the licensing

system was introduced to eel aquaculture, under the Inland Water Fishery Promotion Act. The amount of initial input of eel seeds is restricted by eel species and allocated for each individual farmer under this Act. In April 2020, the total input of eel seeds in Japan getting close to the upper limit, the Fisheries Agency of Japan directed prefectural governments to halt the catch of glass eels. Since 2006, continuous efforts have been made for the purpose of the creation and conservation of a favorable riverine environment, based on the concept of “Nature-oriented river works” representing conservation and regeneration of the environment as habitat, growing and spawning grounds that rivers intrinsically have, which has become a basic idea for management of river.

The number of prefectures which prohibit the catch of silver eel is increasing, bearing in mind the resolution taken by National Federation of Inland Waters Fishing Ground Management Commissions and National Federation of Inland water Fisheries Cooperatives in 2018 take measures for conservation of silver eels in all prefectures as soon as possible. In 2019, the Fisheries Agency of Japan launched a project in order to improve a traceability of Japanese eel from a catch of glass eel through to an input into aquaculture pond as well as a research project including resource trend analysis and spawning migration tracking with the goal of future development of a Japanese eel stock assessment. In April 2022, Japan held the 1st Scientific Meeting with attendance of China, Korea, and Chinese Taipei, inviting European eel experts from the International Council for the Exploration of the Seas (ICES) and Zoological Society of London (ZSL). In accordance with the amendment of the Fishery Act in December 2020, the government of Japan considerably strengthened the penal provisions in order to prevent poaching by giving great disadvantage to offenders. After December 2023, the penalty for catching glass eels without a fishing permit will be an imprisonment of up to 3 years or a fine of not more than 30 million Japanese yen. In December 2020, Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants was enacted to prevent the distribution of illegally harvested, unregulated and unreported aquatic animals and plants by requiring the communication of handling information among distributors and traders, the preparation and preservation of transaction records, and the attachment of documents attesting that the product was harvested legally when it is imported or exported. The distribution of domestically harvested glass eel will also be subject to the obligations under this law from December 2025. Japan implements the Regulations on Export Approvals for Glass Eels to promote the sustainable use of eel species under international cooperation. In accordance with the Regulations, before an export approval, the Fisheries Agency of Japan confirms appropriateness of the export of glass eels for conservation and management of eel species, including all international agreements and arrangements that Japan has participated in are fully complied.

Republic of Korea:

Time closure and size limit of catch were introduced by the government in January 2017 and have been in force since July 2017 for the management of eel stocks. Eel fishery is prohibited from 1 October to 31 March in the following year. And the catch of eels between 15cm and 45cm is prohibited

all year long. Korea also changed the administrative system for eel aquaculture operation from the “reporting system” to a “permission system.” The relevant legislation that provided a legal background for this change was established on August 27, 2019 and took effect as from August 28, 2020.

In 2018, Korea developed and installed “fishway (pathway or ladders)” for eels in some of the artificial structures such as estuary banks and sea walls which prevent or block the natural migration of eels, in order to provide more favorable environments to eels. These pathways have been in good use ever since. Korea plans to install additional fish ladders in the mid-to-long term. Korea will continue this research or initiative in 2023 and remains committed to exploring possible conservation and management options for eels. The medium to long-term plans also include the improvements in relevant systems and designation of specialized research agencies so that eel stock assessments can be undertaken nation-wide, in order to conserve and protect the Japanese eel stock.

Chinese Taipei:

With regard to the glass eel fishing, although the traditional fishing season for glass eel is from October to April, glass eel fishing is only permitted from November to February in accordance with the 2013 Regulations on the Restricted Fishing Seasons for Elvers, subject to adjustment based on annual migrant pattern and/or for scientific purposes. A license system has also been introduced to vessels fishing for glass eel.

With a view to protect the habitats of eels, the catch of young and adult eels is managed by local governments, and the fishing for eels has been prohibited in 41 rivers. For example, Yilan County, the traditional major glass eel harvest region, has prohibited the catch of young and adult eels in all its rivers so as to conserve eel species.

As for the export control, based on the Foreign Trade Act and the regulations established pursuant to this Act, export of glass eels is prohibited from November to March.

With regard to the control of eel farming activities, the Regulations for Input Management of Eel Aquaculture has been promulgated since November 2014 and amended as appropriate to enhance the control of eel farming activities. As per these Regulations, the Fisheries Agency will review the relevant requirements and announce the input amount of glass eels annually, and each eel farmer is subject to the control and management of license system and individual input limit. For Japanese eel and other relevant eel species, the total upper limit for glass eel input are both set at 10 metric tons per year.

For stock enhancement, the release of Japanese eel larvae was from the confiscated glass eels to rivers, and the part of those eels was also used for scientific research.

(2) Participants renewed their commitments to make the utmost efforts as follows;_

- to further strengthen conservation and management measures of Japanese eel stock and other relevant eel species and closely work together in this regard;

- to promote and collaborate on scientific research on Japanese eel in line with Terms of References for Task Team 1 & 2 of Scientific Activities and Collaborative Research on Japanese Eel Established under the Scientific Meeting;
- to hold the 3rd Scientific Meeting in 2024 spring season, in order to share scientific knowledge and experience, as well as to provide scientific advice for conservation and management measures of the species;
- to adopt either of the following measure(s), but not limited to one measure if situation allows: to enhance conservation on key habitat of Japanese eel and/or to decrease the capture and utilization of wild Japanese eel;
- to restrict initial input of glass eels and eel fries of Japanese eel taken from the wild into aquaculture ponds in 2023-2024 input season up to 80% of that of the 2013-2014 input season;
- to take every possible measure not to increase the amount of initial input of seeds of eel species other than Japanese eels from the level stated in the 2014 Joint Statement;
- to consider complementary measures intersessionally for the discussion and the adoption at the next Informal Consultation, possibly taking into account scientific advice from the Scientific Meeting;
- to make continued efforts individually and/or jointly to improve traceability and transparency in domestic and international eel trade, taking into consideration of the outcomes of the CITES-COP 19 and AC32;
- to closely cooperate with other international instruments;
- to consider possible establishment of a legally binding framework, such as regional or subregional fisheries management organization or arrangement;
- to further cooperate towards SC77, AC33, CITES-COP20; and
- to encourage voluntary actions to be taken by the private sector in line with the above-mentioned measures.

Attachment:

- Eel Statistics on catch and input of glass eels and trade of any stages of eels compiled from the Standard Working Formats for statistics of glass eel, eel fry and adult eel on each stage, and
- Summary table of conservation and management measures for eels.

【Revised Standard Working Formats for Eel Statistics (2023)】

Members : China

Format 1 : Data on Catch of Japanese Eel (Data is limited to taken from the wild)

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Catch of glass eel	kg	28000.0	19500.0	55000.0	20500.0	21000.0	26500.0	16000.0	14500.0	50000.0	38000.0	29500.0	40450.0
Catch of eel fry (kuroko)	kg											-	-
Catch of wild adult eel	kg or tons											-	-

【Notes】:

1. The catch data of Japanese eel are entered by glass eel, eel fry and wild adult eel, respectively.
2. Unit for catch of glass eel and eel fry should be weight in kilograms. Unit for adult eel should be weight in metric tons.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (catch of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

Format 2 : Data on Fishing effort on Japanese eel

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fishing effort on glass eel	number of licences (or fishermen, fishing vessels)											-	
Fishing effort on eel fry (kuroko)	number of licences (or fishermen, fishing vessels)											-	-
Fishing effort on wild adult eel	number of licences (or fishermen, fishing vessels)											-	-

【Notes】:

1. The data of fishing effort on Japanese eel are entered by glass eel, eel fry and adult eel, respectively.
2. Examples of unit for fishing effort may include the number of licenses, the number of fishermen or the number of fishing vessels. The unit can be chosen in accordance with each domestic legislation.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (fishing effort on glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

Format 3: Input of eel seeds (glass eels and eel fry (kuroko)) into aquaculture ponds

Species	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	kg	8000.0	7000.0	45000.0	9300.0	8200.0	16500.0	3500.0	3000.0	36000.0	33000.0	18000.0	20000.0
domestic catch	kg				9300.0	8200.0	16500.0	3500.0	3000.0	36000.0	33000.0	18000.0	20000.0
imports	kg											-	-
Other eel species	kg	14500.0	20000.0	32000.0	35500.0	39500.0	36000.0	33000.0	33500.0	35000.0	29000.0	28,000.0	34,000.0
bicolor	kg	5,500.0	7,000.0	13,500.0	3,500.0	8,000.0	3,000.0	0.0	0.0	0.0	0.0	0.0	3,000.0
anguilla	kg	0.0	0.0	0.0	0.0	4,500.0	5,000.0	4,000.0	2,500.0	2,000.0	0.0	0.0	0.0
rostrata	kg	9,000.0	13,000.0	18,500.0	32,000.0	27,000.0	28,000.0	29,000.0	31,000.0	33,000.0	29,000.0	28,000.0	31,000.0
marmorata	kg											-	-
mossambica	kg											-	-
Total	kg	22500.0	27000.0	77000.0	44800.0	47700.0	52500.0	36500.0	36500.0	71000.0	62000.0	46000.0	54000.0

【Notes】:

- Inputs of eel seeds (glass eels and eel fry) into aquaculture ponds are entered by japonica and other eel species, respectively
- The data of japonica are entered by domestical caught seeds and imported seeds, respectively
- However, eel seeds which transferred by other countries and regions are not included in the data of input of eel seeds.
- Unit for catch of glass eel and eel fry should be weight in kilograms.
- When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- The statistic period of the data related to eel seeds (input of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st Novemver, 20XX to 31st October, 20XX+1.).

○Comments by Members :

Format 4: Aquaculture production

Species	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	tons	8,000.0	12,000.0	11,000.0	14,000.0	16,000.0	16,000.0	18,000.0	14,000.0	14,000.0	28,000.0	-	-
Other eel species	tons	32000.0	30000.0	35000.0	42000.0	50000.0	52000.0	57000.0	65000.0	68000.0	64000.0	-	-
bicolor	tons	1,000.0	2,000.0	2,000.0	3,000.0	1,000.0	1,000.0					-	-
anguilla	tons	22,000.0	15,000.0	16,000.0	15,000.0	13,000.0	12,000.0	12,000.0	8,000.0	5,000.0	3,000.0	-	-
rostrata	tons	9,000.0	13,000.0	17,000.0	24,000.0	36,000.0	39,000.0	45,000.0	57,000.0	63,000.0	61,000.0	-	-
marmorata	tons											-	-
mossambica	tons											-	-
Total	tons	40000.0	42000.0	46000.0	56000.0	66000.0	68000.0	75000.0	79000.0	82000.0	92000.0	120000.0	-

【Notes】:

1. The data of aquaculture production are entered by japonica and other eel species, respectively
2. Unit for aquaculture production should be weight (kilograms or metric tons) as far as possible.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Aquaculture production data should be the calendar year.

○Comments by Members :

Format 5: Other data on aquaculture

Item	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Scale of aquaculture industry	number of aquaculture operators	465	558	687	696	772	797	830	868	918	925	1004	1100

【Notes】:

- ①Unit for scale of aquaculture industry may include the number of aquaculture operator or the dimensions of aquaculture ponds.
- ②When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.

○Comments by Members :

Format 6: Import of eel seeds (glass eels and eel fry)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel	kg											-	-
	eel fry (kuroko)	kg											-	-
Total		kg											-	-
Other eel species	glass eel	kg	14,500.0	20,000.0	32,000.0	35,500.0	39,500.0	36,000.0	33,000.0	33,500.0	35,000.0	29,000.0	28,000.0	34,000.0
	eel fry (kuroko)	kg											-	-
Total		kg	14,500.0	20,000.0	32,000.0	35,500.0	39,500.0	36,000.0	33,000.0	33,500.0	35,000.0	29,000.0	28000.0	34000.0

【Notes】:

1. The data of import of eel seeds (glass eels and eel fry) are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (import of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members :

Format 7: Import of eel and eel products

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	live eel	kg or tons												
	broiled eel	kg or tons												
Other eel species		kg or tons												
		kg or tons												
Total		kg or tons												

【Notes】:

- ①The data of import of eel and eel products are entered by japonica and other eel species, respectively
- ②Examples of type/size of import of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
- ③When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- ④Unit for import of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members :

Format 8: Export of eel seeds (glass eels and eel fry)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel	kg	19000.0	14000.0	9500.0	10000.0	11200.0	12800.0	10000.0	11500.0	8000.0	5000.0	12000.0	13300.0
	eel fry (kuroko)	kg											-	-
Total		kg	19000.0	14000.0	9500.0	10000.0	11200.0	12800.0	10000.0	11500.0	8000.0	5000.0	12000.0	13300.0
Other eel species	glass eel	kg												
	eel fry (kuroko)	kg												
Total		kg												

【Notes】:

1. The data of export of eel seeds are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (export of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members :

Format 9: Export of eel and eel products

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	live eel	kg or tons												
	broiled eel	kg or tons												
Other eel species		kg or tons												
		kg or tons												
Total		tons	36,398.0	33,917.0	35,001.0	40,295.0	41,426.0	42,357.0	/	46,732.0	52,432.0	69,917.0	64,200.0	-
japonica/Other eel species (Data on Japanese eel and other eels are indistinguishable)	live eel	tons	3,846.0	5,295.0	5,818.0	5,562.0	6,219.0	6,781.0	/	7,508.0	9,630.0	10,107.0	14,100.0	-
	broiled eel	tons	32,552.0	28,622.0	29,183.0	34,733.0	35,207.0	35,576.0	/	39,224.0	42,802.0	59,810.0	50,100.0	-

【Notes】:

1. The data of export of adult eel and eel products are entered by japonica and other eel species, respectively
2. Examples of type/size of export of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for export of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members :

Format 10. Mean value of wight and length of Japanese eel

	Unit	When catching	when inputing into aquaculture ponds	When importing	When exporting
glass eel	weight (g)				
	body length (cm)				
eel fry	weight (g)				
	body length (cm)				
adult eel	weight (g)				
	body length (cm)				

【Notes】:

1. The data of weight and length of Japanese eel into aquaculture ponds are entered by glass eel, eel fry and adult eel, respectively.
2. The data entered can be either mean value or figures in certain ranges (e.g., XX – YYg or cm). If mean value is available, it should be clearly mentioned in the comments by Members that the mean value of weight and length figures are based on biological or administrative standards or figures obtained from industry associations, etc.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. "Body length" is the length of a fish measured from the tip of the snout to the posterior end of the last vertebra.

○Comments by Members:

●Data Sources and/or Methods to collect or estimate the data

(* Please fill in data sources and/or methods to collect or estimate the data entered in from format 1 to format 14 respectively.)

項目	データの出典・収集又は算出方法
1. Catch of glass eel	The data is estimated in every fishing period (from October to May of next year) by adding the amount of export of glass eels to the amount of input of glass eels into aquaculture ponds by some local eel farming association.
2. Catch of eel fry (kuroko)	-
3. Catch of wild adult eel	There is no commercial fishing aiming to catch adult eels in China.
4. Fishing effort on glass eel	
5. Fishing effort on eel fry (kuroko)	-
6. Fishing effort on wild adult eel	There is no commercial fishing aiming to catch adult eels in China.

7. Input of eel seeds into aquaculture ponds	The data is collected and estimated by local eel farming association of the major eel production provinces.
8. Aquaculture production	The data is collected and estimated by local eel farming association of the major eel production provinces.
9. Scale of aquaculture industry	The data is collected and estimated by local eel farming association of the major eel production provinces.
10. Import of eel seeds	The data is from "China Seafood Imports and Exports" edited and published by the China Society of Fisheries.
11. Import of eel and eel products	The data is from "China Seafood Imports and Exports" edited and published by the China Society of Fisheries.
12. Export of eel seeds	The data is from "China Seafood Imports and Exports" edited and published by the China Society of Fisheries.
13. Export of eel and eel products	The data is from "China Seafood Imports and Exports" edited and published by the China Society of Fisheries.
14. Mean value of weight and length of Japanese eel	

【Revised Standard Working Formats for Eel Statistics (2023)】

Members : Japan

Format 1 : Data on Catch of Japanese Eel (Data is limited to taken from the wild)

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Catch of glass eel	tons(~2014-15), kg(2015-16~)	9.0	5.2	17.4	15.3	13625.2	15442.4	8967.5	3670.1	17112.4	11333.9	10344.7	5644.1(*1)
Catch of eel fry (kuroko)(*2)	kg	-	-	-	-	-	-	-	-	-	-	-	-
Catch of wild adult eel(*3)	tons	165	135	112	70	71	71	69	66	66	63	59	-

【Notes】:

1. The catch data of Japanese eel are entered by glass eel, eel fry and wild adult eel, respectively.
2. Unit for catch of glass eel and eel fry should be weight in kilograms. Unit for adult eel should be weight in metric tons.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (catch of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

*1 The 2022-2023 season data of catch of glass eel is from 1st November to 31st May temporarily.

*2 There are no relevant data of "Catch of eel fry (kuroko)".

*3 The latest data available for "Catch of wild adult eel" is 2021-2022 season.

Format 2 : Data on Fishing effort on Japanese eel

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fishing effort on glass eel(*4)	number of licences (or fishermen, fishing vessels)	6,669	6,781	6,617	4,698	4,398	4,790	5,874	5,898	5,762	5,723	4,467	-
Fishing effort on eel fry (kuroko)(*5)	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-
Fishing effort on wild adult eel(*6)	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

1. The data of fishing effort on Japanese eel are entered by glass eel, eel fry and adult eel, respectively.
2. Examples of unit for fishing effort may include the number of licenses, the number of fishermen or the number of fishing vessels. The unit can be chosen in accordance with each domestic legislations.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (fishing effort on glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

*4 The latest data available for "Fishing effort on glass eel" is 2021-2022 season.

*5 There are no relevant data of "Fishing effort on eel fry (kuroko)".

*6 There are no relevant data of "Fishing effort on wild adult eel".

Format 3: Input of eel seeds (glass eels and eel fry (kuroko)) into aquaculture ponds

Species	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	tons(~2014-15), kg(2015-16~)	15.9	12.6	27.1	18.3	19716.2	19590.4	14178.5	15175.1	20131.4	18285.9	16187.7	16188.1
domestic catch	tons(~2014-15), kg(2015-16~)	9.0	5.2	17.4	15.3	13625.2	15442.4	8967.5	3670.1	17112.4	11333.9	10344.7	5644.1
imports	tons(~2014-15), kg(2015-16~)	6.9	7.4	9.7	3.0	6091	4148	5211	11505	3019	6952	5843	10544
Other eel species(*7)													
bicolor													
anguilla	tons(~2014-15), kg(2015-16~)	0.43	1.30	3.50	0.05	175.4	94.8	34.9	51.6	58.5	59.9	74.6	40.6
rostrata													
marmorata													
mossambica													
Total	tons(~2014-15), kg(2015-16~)	16.3	13.9	30.6	18.3	19891.6	19685.2	14213.4	15226.7	20189.9	18345.8	16262.3	16228.7

【Notes】:

1. Inputs of eel seeds (glass eels and eel fry) into aquaculture ponds are entered by japonica and other eel species, respectively
2. The data of japonica are entered by domestical caught seeds and imported seeds, respectively
3. However, eel seeds which transferred by other countries and regions are not included in the data of input of eel seeds.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.
5. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
6. The statistic period of the data related to eel seeds (input of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st Novemver, 20XX to 31st October, 20XX+1.).

○Comments by Members :

*7 While it is not possible to provide species-specific data about "Other eel species" up to 2021-22 season, the data is expected to be available after the 2022-2023 season.

Format 4: Aquaculture production(*8,9)

Species	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	tons	17,377	14,204	17,627	20,119	18,907	20,979	15,111	17,071	16,806	20,673	19,155	-
Other eel species	tons												
bicolor	tons												
anguilla	tons												
rostrata	tons												
marmorata	tons												
mossambica	tons												
Total	tons	17,377	14,204	17,627	20,119	18,907	20,979	15,111	17,071	16,806	20,673	19,155	-

【Notes】:

1. The data of aquaculture production are entered by japonica and other eel species, respectively
2. Unit for aquaculture production should be weight (kilograms or metric tons) as far as possible.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Aquaculture production data should be the calendar year.

○Comments by Members:

*8 Total data of aquaculture production is entered, as it is not possible to provide species-specific data.

*9 The latest data available for "Aquaculture production" is 2022 temporarily.

Format 5: Other data on aquaculture

Item	Unit	2012(*10)	2013	2014(*10)	2015	2016	2017	2018	2019	2020	2021	2022	2023
Scale of aquaculture industry	number of aquaculture operators	-	384	-	439	441	463	460	456	442	436	433	431

【Notes】:

- ①Unit for scale of aquaculture industry may include the number of aquaculture operator or the dimensions of aquaculture ponds.
- ②When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.

○Comments by Members:

*10 The data source for 2013 is "Census of Fisheries" published by the Ministry of Agriculture, Forestry and Fisheries every five years. The data from 2015 to 2022 are the total number of japonica-farming operators who are granted licenses issued by the Ministry of Agriculture, Forestry and Fisheries under the licensing system in accordance with the Inland Water Fishery Promotion Act, which entered into force in June 2015. There are no relevant data of 2012 and 2014.

Format 6: Import of eel seeds (glass eels and eel fry)(*11)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23(*12)
japonica	glass eel	tons(~2014-15), kg(2015-16~)	9.2	10.7	12.5	3.6	7,585	4,827	5,303	12,563	3,999	10,177	8,193	12,043
	eel fry (kuroko)													
Other eel species	glass eel	tons(~2014-15), kg(2015-16~)	9.2	10.7	12.5	3.6	7,585	4,827	5,303	12,563	3,999	10,177	8,193	12,043
	eel fry (kuroko)													
Total		tons(~2014-15), kg(2015-16~)	9.2	10.7	12.5	3.6	7,585	4,827	5,303	12,563	3,999	10,177	8,193	12,043

【Notes】:

1. The data of import of eel seeds (glass eels and eel fry) are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (import of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members:

*11 It is not possible to provide type/size-specific and species-specific data. Therefore, a new row "Grand Total" was inserted for the total data of import of eel seeds (glass eels and eel fries) for all the species.

*12 The 2022-2023 season data of import of eel seeds (glass eels and eel fries) is from 1st November to 31st May temporarily.

Format 7: Import of eel and eel products

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023(*14)
japonica	live eel	tons												
	broiled eel	tons												
Other eel species		tons												
		tons												
Total		tons	19,660.9	18,257.7	20,213.7	31,156.1	31,469.3	32,293.5	33,236.3	31,409.8	34,342.8	42,366.8	38,580.6	20,430.5
japonica/Other eel species (*13)	live eel	tons	4,677.6	4,789.2	4,781.1	7,066.7	7,276.1	6,815.7	8,812.7	6,733.2	5,441.1	7,034.5	8,267.4	3,392.7
	broiled eel	tons	14,983.3	13,468.5	15,432.7	24,089.4	24,193.2	25,477.8	24,423.6	24,676.6	28,901.7	35,332.3	30,313.2	17,037.8

【Notes】:

- ①The data of import of eel and eel products are entered by japonica and other eel species, respectively
- ②Examples of type/size of import of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
- ③When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- ④Unit for import of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*13 It is not possible to provide species-specific data. Therefore, a new row "japonica/Other eel species" was inserted for the data of import of all the species in live and broiled types separately.

*14 The 2023 data of import of eel and eel products is from 1st January to 31st May temporarily.

Format 8: Export of eel seeds (glass eels and eel fry)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel(*15)	tons(~2020-21), kg(2021-22)	-	-	-	-	-	-	-	-	-	0.1	20.0	-
	eel fry (kuroko)(*16)	tons(~2020-21), kg(2021-22)	5.7	1.6	6.7	1.3	0.4	0.9	2.6	10.1	23.6	9.1	4818.8	-
Total		tons(~2020-21), kg(2021-22)	5.7	1.6	6.7	1.3	0.4	0.9	2.6	10.1	23.6	9.2	-	-
Other eel species	glass eel(*15)	kg	-	-	-	-	-	-	-	-	-	0.0	-	-
	eel fry (kuroko)(*16)	kg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Total		kg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-

【Notes】:

1. The data of export of eel seeds are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (export of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st December, 20XX to 30th November, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members:

*15 The "glass eel" is the eels in 13g or less that have never been farmed in domestic aquaculture ponds. It is not possible to provide the data up to 2019-20, as the export of such "glass eel" was prohibited. The latest data available for glass eel is 2021-2022 season.

*16 The "eel fry (kuroko)" is the eels in 13g or less that have been farmed in domestic aquaculture ponds. The latest data available for eel fry (kuroko) is 2021-2022 season.

Format 9: Export of eel and eel products(*17)

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023(*18)
japonica	live eel	kg or tons												
	broiled eel	kg or tons												
Other eel species		kg or tons												
		kg or tons												
Total		kg or tons	31.6	32.1	69.6	59.6	71.0	112.2	66.5	80.4	135.2	85.9	16.5	15.4
japonica/Other eel species (*17)	live eel	tons	10.4	2.2	38.8	20.7	25.8	45.6	7.4	17.8	44.8	17.0	9.3	1.6
	broiled eel	tons	21.2	30.0	30.9	38.9	45.2	66.6	59.1	62.6	90.4	68.9	7.2	13.8

【Notes】:

1. The data of export of adult eel and eel products are entered by japonica and other eel species, respectively
2. Examples of type/size of export of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for export of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*17 It is not possible to provide species-specific data. Therefore, a new row "japonica/Other eel species" was inserted for the data of export of all the species in live and boiled types separately.

*18 The 2023 data of export of eel and eel products is from 1st January to 31st May temporarily.

Format 10. Mean value of wight and length of Japanese eel

	Unit	When catching(*19)	When inputing into aquaculture ponds(*20)	When importing(*21)	When exporting(*22)
glass eel	weight (g)	0.2g	-	-	~ 13g
	body length (cm)	6cm	-	-	-
eel fry	weight (g)	0.2g~13g	-	-	~ 13g
	body length (cm)	6cm~20cm	-	-	-
adult eel	weight (g)	300g~	-	-	-
	body length (cm)	50cm~	-	-	-

【Notes】:

1. The data of weight and length of Japanese eel into aquaculture ponds are entered by glass eel, eel fry and adult eel, respectively.
2. The data entered can be either mean value or figures in certain ranges (e.g., XX – YYg or cm). If mean value is available, it should be clearly mentioned in the comments by Members that the mean value of weight and length figures are based on biological or administrative standards or figures obtained from industry associations, etc.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. "Body length" is the length of a fish measured from the tip of the snout to the posterior end of the last vertebra.

○Comments by Members:

*19 The data of each "when catching" is estimated based on actual measurement values of weight and total length at each life stage of Japanese eel.

*20 There are no relevant data of "When inputing into aquaculture ponds".

*21 There are no relevant data of "When importing".

*22 There are no relevant data of total length because the glass eel and eel fry(kuroko) are administrated with "weight" in accordance with Export Trade Control Order when exporting.

●Data Sources and/or Methods to collect or estimate the data

(* Please fill in data sources and/or methods to collect or estimate the data entered in from format 1 to format 14 respectively.)

1. Catch of glass eel	The data is estimated in every fishing period (from November of previous year to May) by deducting the amount of import of glasseels (calculated from the Trade Statistics every fishing period) from the amount of input of glass eels into aquaculture ponds which reported by eel-farming operators.
2. Catch of eel fry (kuroko)	-
3. Catch of wild adult eel	The data is from "Annual Statistics on Fisheries and Aquaculture Production" compiled and published by the Ministry of Agriculture,Forestry and Fisheries. The data contained in this statistics are derived from questionnaires on catch and aquaculture production sentto fisheries cooperatives covering main rivers and lakes as well as aquaculture operators all around the country.
4. Fishing effort on glass eel	The index of fishing effort on glass eels is the total number of licenses submitted by each prefecture which has the mandate to issuelicenses.
5. Fishing effort on eel fry (kuroko)	-
6. Fishing effort on wild adult eel	-
7. Input of eel seeds into aquaculture ponds	The data is from the amount of input of glass eels into aquaculture ponds which reported by eel-farming operators.The data of eel seeds domestically captured is estimated by deducting the amount of input of glass eels into aquaculture ponds which reported by eel-farming operators from the amount of import of glasseels (calculated from the Trade Statistics). .The data of imported eel seeds is calculated from the Trade Statistics every fishing period.
8. Aquaculture production	The data is from "Annual Statistics on Fisheries and Aquaculture Production" compiled and published by the Ministry of Agriculture,Forestry and Fisheries.
9. Scale of aquaculture industry	The index of scale of aquaculture industry is the number of aquaculture operators. The data for 2013 is from "Census of Fisheries" published by the Ministry of Agriculture, Forestry and Fisheries every five years. The data from 2015 is the total number of eel-farming operators who are granted licenses issued by the Ministry of Agriculture, Forestry and Fisheries under the licensing system inaccordance with the Inland Water Fishery Promotion Act, which entered into force in June 2015.
10. Import of eel seeds	The data is from "Trade Statistics" compiled and published by the Ministry of Finance. The statistic code is 03.01.92.100 (live fish -eels (Anguilla spp.) - fry for fish culture).
11. Import of eel and eel products	The data is from "Trade Statistics" compiled and published by the Ministry of Finance. The statistic codes are 03.01.92.000 (live fish-eels (Anguilla spp.)) and 1604.17.000 (prepared or preserved fish, caviar and caviar substitutes prepared from fish eggs - eels).The amount of broiled eel is calculated as body of fish, dividing the amount of products by 0.6.
12. Export of eel seeds	The data is from the custom records and the reports submitted by exporters on eel seeds actually exported.

13. Export of eel and eel products	The data is from "Trade Statistics" compiled and published by the Ministry of Finance. The statistic codes are 03.01.92.000 (live fish-eels (<i>Anguilla</i> spp.)) and 1604.17.000 (prepared or preserved fish, caviar and caviar substitutes prepared from fish eggs - eels).The amount of broiled eel is calculated as body of fish, dividing the amount of products by 0.6.
14. Mean value of wight and length of Japanese eel	The value of weight of glass eel and eel fry(kuroko) when exporting are from Export Trade Control Order.The data of weight and total length of glass eel, eel fry(kuroko) and adult eel are estimated based on actual measurement values of wight and total length.

Format 1 : Data on Catch of Japanese Eel (Data is limited to taken from the wild)

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Catch of glass eel	kg	1,530	1,002	5,489	4,725	1,830	2,717	973	649	4,500	3,228	2,512	2,165
Catch of eel fry (kuroko)	kg	-	-	-	-	-	-	-	-	-	-	-	-
Catch of wild adult eel	tons	102	73	80	85	70	48	56	60	59	84	9	8

【Notes】:

1. The catch data of Japanese eel are entered by glass eel, eel fry and wild adult eel, respectively.
2. Unit for catch of glass eel and eel fry should be weight in kilograms. Unit for adult eel should be weight in metric tons.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (catch of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

Format 2 : Data on Fishing effort on Japanese eel(*1)

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fishing effort on glass eel	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-
Fishing effort on eel fry (kuroko)	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-
Fishing effort on wild adult eel	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

1. The data of fishing effort on Japanese eel are entered by glass eel, eel fry and adult eel, respectively.
2. Examples of unit for fishing effort may include the number of licenses, the number of fishermen or the number of fishing vessels. The unit can be chosen in accordance with each domestic legislations.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (fishing effort on glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

*1 As number of licences is not managed by species in Korea, relevant data is not available.

Format 3: Input of eel seeds (glass eels and eel fry (kuroko)) into aquaculture ponds

Species	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	kg	3,595	2,992	13,927	6,707	9,380	10,596	5,234	2,524	9,502	8,149	8,185	10,129
domestic catch	kg	1,530	1,002	5,489	4,725	1,830	2,717	973	649	4,500	3,228	2,512	2,165
imports	kg	2,065	1,990	8,438	1,982	7,550	7,879	4,261	1,875	5,002	4,921	5,673	7,964
Other eel species	kg	5,628	13,987	3,166	5,145	3,004	657	3,690	2,959	692	1,297	1,914	948
bicolor	kg	3,508	5,908	2,668	4,986	2,937	590	3,405	393	542	714	880	272
anguilla	kg	75	0	0	0	0	0	0	0	0	0	0	0
rostrata	kg	1,726	5,520	498	159	35	35	168	0	5	8	28	0
marmorata	kg	294	439	0	0	32	32	117	2,566	145	575	1,006	676
mossambica	kg	25	2,120	0	0	0	0	0	0	0	0	0	0
Total	kg	9,223	16,979	17,093	11,852	12,384	11,253	8,924	5,483	10,194	9,446	10,099	11,077

【Notes】:

1. Inputs of eel seeds (glass eels and eel fry) into aquaculture ponds are entered by japonica and other eel species, respectively
2. The data of japonica are entered by domestical caught seeds and imported seeds, respectively
3. However, eel seeds which transferred by other countries and regions are not included in the data of input of eel seeds.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.
5. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
6. The statistic period of the data related to eel seeds (input of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).

○Comments by Members :

Format 4: Aquaculture production(*2)

Species	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
Other eel species	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
bicolor	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
anguilla	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
rostrata	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
marmorata	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
mossambica	kg or tons	-	-	-	-	-	-	-	-	-	-	-	-
Total	tons	4,259	5,149	5,631	9,009	9,836	11,095	10,530	10,885	9,724	15,678	18,131	6,383

【Notes】:

1. The data of aquaculture production are entered by japonica and other eel species, respectively
2. Unit for aquaculture production should be weight (kilograms or metric tons) as far as possible.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Aquaculture production data should be the calendar year.

○Comments by Members:

*2 The data is based on 'Survey of recent trends in fishery production' which is official statistics designated by national statistics law.

Format 5: Other data on aquaculture

Item	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Scale of aquaculture industry	number of aquaculture operators	524	532	536	564	542	555	558	572	592	616	589	589

【Notes】:

- ①Unit for scale of aquaculture industry may include the number of aquaculture operator or the dimensions of aquaculture ponds.
- ②When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.

○Comments by Members:

Format 6: Import of eel seeds (glass eels and eel fry)(*3)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel	kg	2,065	1,990	8,438	1,982	7,550	7,879	4,261	1,875	5,002	4,921	5,673	7,964
	eel fry (kuroko)	kg	0	225	5,605	4,499	2,523	2,309	9,062	8,361	2,077	23,120	8,136	1,566
Total		kg	2,065	2,215	14,043	6,481	10,073	10,188	13,323	10,236	7,079	28,041	13,809	9,530
Other eel species	glass eel	kg	5,628	13,987	3,166	5,145	3,004	657	3,690	2,959	692	1,297	1,914	686
	eel fry (kuroko)	kg	1,208	37,717	1,842	10,223	19,078	4,751	14,631	12,727	3,601	4,267	981	408
Total		kg	6,836	51,704	5,008	15,368	22,082	5,408	18,321	15,686	4,293	5,564	2,895	1,094

【Notes】:

1. The data of import of eel seeds (glass eels and eel fry) are entered by japonica and other eel species, respectively
 2. The statistic period of the data related to eel seeds (import of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st Novemver, 20XX to 31st October, 20XX+1.).
 3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
 4. Unit for catch of glass eel and eel fry should be weight in kilograms.
- Comments by Members: *3 glass eel 0.3g, 0.3g<eel fry 30g, 0.3g<eel fry(japonica) 15g

Format 7: Import of eel and eel products(*4)

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	live eel	kg or tons												
	broiled eel	kg or tons												
Other eel species		kg or tons												
		kg or tons												
Total		kg or tons												
<i>Anguilla</i> sp.	live eel	tons	137.7	837.0	1,358.8	799.2	615.9	740.6	1,011.9	574.7	2,539.2	1,337.4	2,891	1,782
	freeze	tons	26.9	43.2	38.3	26.1	63.7	42.1	71.8	55.5	25.3	25.3	125.6	0
	cold storage	tons	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0
	broiled eel	tons	69.2	66.7	69.6	183.9	308.8	583.9	757.8	784.6	906.9	1,257.3	1,441.3	577
	Total	tons	233.9	946.9	1,466.8	1,009.2	988.4	1,366.6	1,841.8	1,414.8	3,471.4	2,620.0	4,457.9	2,359.4

【Notes】:

- ①The data of import of eel and eel products are entered by japonica and other eel species, respectively
- ②Examples of type/size of import of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
- ③When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- ④Unit for import of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*4 Relevant data is not available by species.

Format 8: Export of eel seeds (glass eels and eel fry)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel	kg												
	eel fry (kuroko)	kg												
Total		kg												
Other eel species	glass eel	kg												
	eel fry (kuroko)	kg												
Total		kg												
<i>Anguilla</i> sp.(*5)	glass eel(*6)	kg	0	0	50	0	0	0	0	0	4,560	3,072	0	0
	eel fry (kuroko)(*7)	kg	0	0	3,262	0	138	0	0	0	0	0	0	0
	Total	kg	0	0	3,312	0	138	0	0	0	4,560	3,072	0	0

【Notes】:

1. The data of export of eel seeds are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (export of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members :

- *5 Relevant data is not available by species.
- *6 Glass eel: below 0.3g & for aquaculture.
- *7 Eel fry : between 0.3g to 50g & for aquaculture

Format 9: Export of eel and eel products

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
japonica	live eel	kg or tons												
	broiled eel	kg or tons												
Other eel species		kg or tons												
		kg or tons												
Total		kg or tons												
<i>Anguilla</i> sp.(*8)	live eel	tons	79.9	2.3	0.1	0.4	0.0	19.4	0.2	0.0	5.2	3.1	0.0	0
	freeze	tons	11.1	1.1	0.0	0.1	2.1	23.8	25.2	0.3	1.0	1.0	0.3	0.1
	cold storage	tons	0.1	0.0	0.0	0.1	0.0	0.0	0.6	0.0	0.2	1.0	0.1	0.0
	broiled eel	tons	0.1	7.3	0.3	1.4	3.3	1.1	4.2	5.9	4.7	42.3	89.2	16.7
	Total	tons	91.2	10.7	0.4	2.0	5.4	44.3	30.2	6.2	11.1	47.4	89.6	16.8

【Notes】:

1. The data of export of adult eel and eel products are entered by japonica and other eel species, respectively
2. Examples of type/size of export of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for export of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*8 Relevant data is not available by species.

Format 10. Mean value of wight and length of Japanese eel

	Unit	When catching(*9)	When inputing into aquaculture ponds(*9)	When importing	When exporting
glass eel	weight (g)	0.2g	0.2g	below 0.3g	below 0.3g
	body length (cm)	5~7cm	5~7cm	-	-
eel fry	weight (g)	0.3g~199g	-	between 0.3g to 50g	between 0.3g to 50g
	body length (cm)	8~59cm	-	-	-
adult eel	weight (g)	above 200g	-	-	-
	body length (cm)	above 60cm	-	-	-

【Notes】:

1. The data of weight and length of Japanese eel into aquaculture ponds are entered by glass eel, eel fry and adult eel, respectively.
2. The data entered can be either mean value or figures in certain ranges (e.g., XX – YYg or cm). If mean value is available, it should be clearly mentioned in the comments by Members that the mean value of weight and length figures are based on biological or administrative standards or figures obtained from industry associations, etc.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. "Body length" is the length of a fish measured from the tip of the snout to the posterior end of the last vertebra.

○Comments by Members:

*9 The data is calculated based on materials submitted by Fresh Water Eel Culture Fisheries Cooperative, not stipulated in national laws.

●Data Sources and/or Methods to collect or estimate the data

(* Please fill in data sources and/or methods to collect or estimate the data entered in from format 1 to format 14 respectively.)

1. Catch of glass eel	Fresh Water Eel Culture Fisheries Cooperative and Fisheries Monitoring Center of Korea Maritime Institute
2. Catch of eel fry (kuroko)	Not Applicable
3. Catch of wild adult eel	Survey of recent trends in fishery production' by Statistics Korea
4. Fishing effort on glass eel	Not Applicable
5. Fishing effort on eel fry (kuroko)	Not Applicable
6. Fishing effort on wild adult eel	Not Applicable
7. Input of eel seeds into aquaculture ponds	Fresh Water Eel Culture Fisheries Cooperative and Fisheries Monitoring Center of Korea Maritime Institute
8. Aquaculture production	Survey of recent trends in fishery production' by Statistics Korea (not managed by species)
9. Scale of aquaculture industry	Local government
10. Import of eel seeds	National Fishery Products Quality Management Service (NFQS)
11. Import of eel and eel products	수산정보포탈시스템(www.fips.go.kr)
12. Export of eel seeds	수산정보포탈시스템(www.fips.go.kr)

13. Export of eel and eel products	수산정보포탈시스템(www.fips.go.kr)
14. Mean value of wight and length of Japanese eel	Fresh Water Eel Culture Fisheries Cooperative and Fisheries Monotoring Center of Korea Maritime Institute

【Revised Standard Working Formats for Eel Statistics (2023)】

Members : Chinese Taipei

Format 1 : Data on Catch of Japanese Eel (Data is limited to taken from the wild)

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Catch of glass eel	kg	1,912	960	8,250	1,100	3,060	4,500	1,100	2,750	5,240	6,005	1,600	1850(*1)
Catch of eel fry (kuroko)(*2)	kg	-	-	-	-	-	-	-	-	-	-	-	-
Catch of wild adult eel(*2)	tons	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

1. The catch data of Japanese eel are entered by glass eel, eel fry and wild adult eel, respectively.
2. Unit for catch of glass eel and eel fry should be weight in kilograms. Unit for adult eel should be weight in metric tons.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (catch of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

*1 The catch of glass eel 2022-2023 season is preliminary data.

*2 There are no available statistics for eel fry and wild adult eel fishing fisheries in Chinese Taipei.

Format 2 : Data on Fishing effort on Japanese eel

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fishing effort on glass eel	number of licences (or fishermen, fishing vessels)	-	213	232	250	245	251	272	311	363	374	364	322
Fishing effort on eel fry (kuroko)(*3)	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-
Fishing effort on wild adult eel(*3)	number of licences (or fishermen, fishing vessels)	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

1. The data of fishing effort on Japanese eel are entered by glass eel, eel fry and adult eel, respectively.
2. Examples of unit for fishing effort may include the number of licenses, the number of fishermen or the number of fishing vessels. The unit can be chosen in accordance with each domestic legislations.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. The statistic period of the data related to glass eel and eel fry (fishing effort on glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.), while that for "wild adult eel data" should be the calendar year.

○Comments by Members :

*3 There are no available statistics for eel fry and wild adult eel fishing fisheries in Chinese Taipei.

Format 3 : Input of eel seeds (glass eels and eel fry (kuroko)) into aquaculture ponds(*4)

Species	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23(*5)
japonica	kg	2,210	1,510	12,500	2,800	3,600	7,300	1,030	834	8,144	4,558	887	526
domestic catch	kg	-	-	-	-	-	-	-	-	-	-	-	-
imports	kg	-	-	-	-	-	-	-	-	-	-	-	-
Other eel species	kg	5,500	10,000	1,450	200	80	100	50	141	124	114	70	13
bicolor	kg	-	-	-	-	-	-	-	-	-	-	-	-
anguilla	kg	-	-	-	-	-	-	-	-	-	-	-	-
rostrata	kg	-	-	-	-	-	-	-	-	-	-	-	-
marmorata	kg	-	-	-	-	-	-	-	-	-	-	-	-
mossambica	kg	-	-	-	-	-	-	-	-	-	-	-	-
Total	kg	7,710	11,510	13,950	3,000	3,680	7,400	1,080	975	8,267	4,672	957	539

【Notes】:

1. Inputs of eel seeds (glass eels and eel fry) into aquaculture ponds are entered by japonica and other eel species, respectively
2. The data of japonica are entered by domestical caught seeds and imported seeds, respectively
3. However, eel seeds which transferred by other countries and regions are not included in the data of input of eel seeds.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.
5. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
6. The statistic period of the data related to eel seeds (input of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st Novemver, 20XX to 31st October, 20XX+1.).

○Comments by Members :

*4 Because the eel culture industry in Chinese Taipei has some characteristics, such as several breeding stages and longer seed stocking time, the data would be expressed in total statistics.

*5 The input of glass eel into aquaculture ponds 2022-2023 season is preliminary data from 1st November to 30th April.

Format 4: Aquaculture production(*6)

Species	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022(*7)	2023
japonica	tons	2,244	1,500	1,675	5,187	4,658	3,665	4,204	3,521	1,693	5,044	3,331	-
Other eel species	tons	-	404	228	394	154	81	106	142	155	219	121	-
bicolor	tons	-	-	-	-	-	-	-	-	-	-	-	-
anguilla	tons	-	-	-	-	-	-	-	-	-	-	-	-
rostrata	tons	-	-	-	-	-	-	-	-	-	-	-	-
marmorata	tons	-	-	-	-	-	-	-	-	-	-	-	-
mossambica	tons	-	-	-	-	-	-	-	-	-	-	-	-
Total	tons	2,244	1,904	1,903	5,581	4,812	3,746	4,310	3,663	1,848	5,263	3,452	-

【Notes】:

1. The data of aquaculture production are entered by japonica and other eel species, respectively
2. Unit for aquaculture production should be weight (kilograms or metric tons) as far as possible.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Aquaculture production data should be the calendar year.

○Comments by Members:

*6 The eel aquaculture production statistics in Chinese Taipei, which are divided into two categories 'Japanese eel' and 'other eel species', are reported by local governments. Thus, the data would be expressed in total statistics.

*7 The aquaculture production in 2022 is preliminary data.

Format 5: Other data on aquaculture

Item	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022(*8)	2023
Scale of aquaculture industry	hectares of aquaculture area	449	305	456	391	392	409	341	241	317	391	351	

【Notes】:

- ①Unit for scale of aquaculture industry may include the number of aquaculture operator or the dimensions of aquaculture ponds.
- ②When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.

○Comments by Members:

*8 The hectares of aquaculture area in 2022 is preliminary data.

Format 6: Import of eel seeds (glass eels and eel fry)(*9)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23(*10)
japonica	glass eel	kg	1,319	664	2,044	631	352	688	2,270	127	2,232	518	433	423
	eel fry (kuroko)	kg	508	708	4,286	60	764	1,950	91	55	7,853	1,273	563	345
Total		kg	1,827	1,372	6,330	691	1,116	2,638	2,361	182	10,085	1,791	996	768
Other eel species(*11)	glass eel	kg	-	-	-	-	-	-	-	-	-	-	-	-
	eel fry (kuroko)	kg	-	-	-	-	-	-	-	-	-	-	-	-
Total		kg	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

- The data of import of eel seeds (glass eels and eel fry) are entered by japonica and other eel species, respectively
- The statistic period of the data related to eel seeds (import of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
- When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members:

*9 The CCC(Import and Export Commodity Classification of Chinese Taipei) codes are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].

*10 The data of import of eel seeds 2022-23 is from 1st January to 31st May.

*11 According to the statistic of Customs Administration, Ministry of Finance and the CCC(Import and Export Commodity Classification of Chinese Taipei) codes, there are no available statistics for other eel species.

Format 7: Import of eel and eel products(*12)

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023(*13)
japonica	live eel	tons	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
	broiled eel	tons	0.0	0.0	0.0	0.0	0.1	6.5	0.0	0.0	188.6	37.7	1.0	0.1
Other eel species(*14)		tons	10.7	7.7	28.3	4.5	0.6	3.3	2.2	4.2	0.0	0.0	0.0	0.0
		tons	-	-	-	-	-	-	-	-	-	-	-	-
Total		tons	12.8	7.7	28.3	4.5	0.9	14.1	2.2	4.2	314.3	62.9	1.7	-

【Notes】:

- The data of import of eel and eel products are entered by japonica and other eel species, respectively
- Examples of type/size of import of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
- When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
- Unit for import of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*12 Since 2016 Taiwan has adopted the general trade system, which includes bonded warehouses, logistics centers, and free trade zones in the commodity trade statistics.

*13 The data of import of eel and eel products 2023 is from 1st January to 31st May.

*14 According to the statistic of Customs Administration, Ministry of Finance and the CCC(Import and Export Commodity Classification of Chinese Taipei) codes, there are no available statistics for broiled eel of other eel species.

Format 8: Export of eel seeds (glass eels and eel fry)(*15)

Species	Type/Size	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
japonica	glass eel	kg	869	93	150	0	0	0	830	0	0	228	168	0
	eel fry (kuroko)	kg	399	21	10	0	101	0	2,886	68	1,062	5,390	974	989
Total		kg	1,268	114	160	0	101	0	3,716	68	1,062	5,618	1,142	989
Other eel species(*16)	glass eel	kg	-	-	-	-	-	-	-	-	-	-	-	-
	eel fry (kuroko)	kg	-	-	-	-	-	-	-	-	-	-	-	-
Total		kg	-	-	-	-	-	-	-	-	-	-	-	-

【Notes】:

1. The data of export of eel seeds are entered by japonica and other eel species, respectively
2. The statistic period of the data related to eel seeds (export of glass eel and eel fry) should be the fishing season of glass eel and eel fry ("20XX-XX+1" means the input season which starts from 1st November, 20XX to 31st October, 20XX+1.).
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for catch of glass eel and eel fry should be weight in kilograms.

○Comments by Members:

*15 The CCC(Import and Export Commodity Classification of Chinese Taipei) codes are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].

*16 According to the statistic of Customs Administration, Ministry of Finance and the CCC(Import and Export Commodity Classification of Chinese Taipei) codes, there are no available statistics for other eel species.

Format 9: Export of eel and eel products

Species	Type/Size	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023(*17)
japonica	live eel	tons	1,362.7	866.8	891.6	2845.1	2544.4	2030.4	2396.4	1862.3	1009.1	1417.3	1654.1	460.4
	broiled eel	tons	370.4	176.0	153.4	561.7	230.2	135.3	162.8	94.4	56.7	449.3	132.3	76.2
Other eel species	live eel	tons	95.0	18.6	19.8	13.6	0.0	18.1	48.0	12.9	0.0	0.0	-	-
	broiled eel(*18)	tons	-	-	-	-	-	-	-	-	-	-	-	-
Total		tons	1,828.1	1,061.4	1,064.8	3,420.4	2,774.6	2,183.8	2,607.2	1,969.7	1,065.9	1,866.6	1,786.4	536.6

【Notes】:

1. The data of export of adult eel and eel products are entered by japonica and other eel species, respectively
2. Examples of type/size of export of eel and eel product may include live eel, frozen eel, chilled eel or broiled eel.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. Unit for export of eel and eel products should be weight (kilograms or metric tons) as far as possible.

○Comments by Members:

*17 The data of Export of eel and eel products 2022 is from 1st January to 31st May.

*18 According to the statistic of Customs Administration, Ministry of Finance and the CCC(Import and Export Commodity Classification of Chinese Taipei) codes, there are no available statistics for broiled eel of other eel species.

Format 10. Mean value of wight and length of Japanese eel(*19,20)

	Unit	When catching	When inputing into aquaculture ponds	When importing	When exporting
glass eel	weight (g)				
	body length (cm)				
eel fry	weight (g)				
	body length (cm)				
adult eel	weight (g)				
	body length (cm)				

【Notes】:

1. The data of weight and length of Japanese eel into aquaculture ponds are entered by glass eel, eel fry and adult eel, respectively.
2. The data entered can be either mean value or figures in certain ranges (e.g., XX – YYg or cm). If mean value is available, it should be clearly mentioned in the comments by Members that the mean value of weight and length figures are based on biological or administrative standards or figures obtained from industry associations, etc.
3. When there are no relevant data or data is not available, "-" should be entered. When data is identified as zero, "0" should be entered.
4. "Body length" is the length of a fish measured from the tip of the snout to the posterior end of the last vertebra.

○Comments by Members:

*19 Because the eel culture industry in Chinese Taipei has some characteristics, such as several breeding stages and longer seeds stocking time, there are no available statistics for mean value of weight and length of Japanese eel.

*20 According to the statistic of Customs Administration, Ministry of Finance, the CCC(Import and Export Commodity Classification of Chinese Taipei) codes are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].

●Data Sources and/or Methods to collect or estimate the data

(* Please fill in data sources and/or methods to collect or estimate the data entered in from format 1 to format 14 respectively.)

1. Catch of glass eel	<p>The data of catch of glass eel originates from the Taiwan Fisheries Statistical Yearbook. The local governments collect the data through regional fisherman's associations and report to Fisheries Agency seasonally. If there is any unreasonable point found, Fisheries Agency will request the local governments recheck and reconfirm. Besides, Japanese eel is the majority of species (<i>Anguilla</i> spp) but it may possibly cover a little of other eel species.</p> <p>The original unit for catch of glass eel is PCs and it has been converted to weight by the rate of 5,000 PCs/ Kg. Besides, the fishing periods year has been adopted from 2011.Hence, it might be difficult to retrace the original condition, so only reasonable data are provided. The data of 2013 is estimated number, which could be adjusted after confirmed.</p>
2. Catch of eel fry (kuroko)	There are no available statistics for eel fry fishing fisheries in Chinese Taipei.
3. Catch of wild adult eel	There are no available statistics for wild adult eel fishing fisheries in Chinese Taipei.
4. Fishing effort on glass eel	The number of fishing vessel, which is authorized to catch glass eel.
5. Fishing effort on eel fry (kuroko)	There are no available statistics for eel fry fishing fisheries in Chinese Taipei.
6. Fishing effort on wild adult eel	There are no available statistics for wild adult eel fishing fisheries in Chinese Taipei.
7. Input of eel seeds into aquaculture ponds	The data of Japanese eel and other eel are compiled by Taiwan eel farming industry development foundation based on the reports from its member on input.
8. Aquaculture production	
9. Scale of aquaculture industry	<p>The scale of aquaculture is measured by aquaculture area (hectare). The data of aquaculture area originate from the Taiwan Fisheries Statistical Yearbook. The local governments collect the data through the oral questionnaire surveyed by the offices of village, town, or district, and report to Fisheries Agency seasonally. If there is any unreasonable point found, Fisheries Agency will request the local governments recheck and reconfirm. The data of 2013 is estimated number, which could be adjusted after confirmed.</p>

10. Import of eel seeds	The data of importation is derived from the statistic of Customs Administration, Ministry of Finance. The CCC(Import and Export Commodity Classification of Chinese Taipei) code are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].
11. Import of eel and eel products	The data of exportation is derived from the statistic of Customs Administration, Ministry of Finance. The CCC(Import and Export Commodity Classification of Chinese Taipei) code are 03019210101(Live Japanese eel), 16041700125(Prepared eel), 16041910130(Roasted eel), 03019210904(Anguilla spp.), 03019929307(Anguilla australis) and 03019210209(Anguilla marmorata). Besides, since 2013, the CCC code of Prepared eel has been changed as 16041700116 and Roasted eel as 16041700125.
12. Export of eel seeds	The data of exportation is derived from the statistic of Customs Administration, Ministry of Finance. The CCC(Import and Export Commodity Classification of Chinese Taipei) code are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].
13. Export of eel and eel products	The data of exportation is derived from the statistic of Customs Administration, Ministry of Finance. The CCC(Import and Export Commodity Classification of Chinese Taipei) code are 03019210101(Live Japanese eel), 16041700125(Prepared eel), 16041910130(Roasted eel), 03019210904(Anguilla spp.), 03019929307(Anguilla australis) and 03019210209(Anguilla marmorata). Besides, since 2013, the CCC code of Prepared eel has been changed as 16041700116 and Roasted eel as 16041700125.
14. Mean value of wight and length of Japanese eel	The data of exportation is derived from the statistic of Customs Administration, Ministry of Finance. The CCC(Import and Export Commodity Classification of Chinese Taipei) codes are 3019220109[Glass eel (over 5,000 pcs per Kg)], 3019220207[Eel fry (501-5,000 pcs per Kg)] and 3019220305[Young eel (11-500 pcs per Kg)].

Summary Table of Conservation and Management Measures for Eels (China)

Eel aquaculture		Description
Condition of eel aquaculture business	none/ <input checked="" type="radio"/> license required	
Ground for license, etc. ※	<input checked="" type="radio"/> Legislation/ <input type="radio"/> Other scheme	Name of Legislation/other scheme requiring licenses: Decree of the Ministry of Agriculture of the People's Republic of China "Measures for License Issuance and Registration of Aquaculture in Water Areas and Tidal Flats"
Management body	Fisheries Agency	
Contents of management measures		
① Upper limit for the number of licenses	Central/By local authority/ <input checked="" type="radio"/> None	License holders: company/ <input checked="" type="radio"/> facility/others () Data not available
② Upper limit for scale of facilities	<input checked="" type="radio"/> Yes/ <input type="radio"/> No	
③ Upper limit for input of <i>Anguilla japonica</i>	Central/By local authority/By individual/ <input checked="" type="radio"/> None	This measure will be further considered for future Informal Consultations including complementary measures, possibly taking into account scientific advice from the Scientific Meeting.
④ Upper limit for input of other eels	Central/By local authority/By individual/ <input checked="" type="radio"/> None	This measure will be further considered for future Informal Consultations including complementary measures , possibly taking into account scientific advice from the Scientific Meeting.
⑤ Size limit for input glass eels	Central/By local authority/ <input checked="" type="radio"/> None	Description of regulation:
⑥ Time closure of glass eels input	Central/By local authority/ <input checked="" type="radio"/> None	Description of regulation:
⑦ Other regulation	Central/By local authority/ <input checked="" type="radio"/> None	Description of regulation:
⑧ Body to manage and monitor input of glass eels	Prefectural or provincial eel association	Monitoring measure: Farmers shall report their input amount to the prefectural or provincial eel association by the end of glass eel input.
⑨ Body to manage and monitor production amount	Prefectural or provincial eel association	Monitoring measure: Farmers shall report their production amount to the prefectural or provincial eel association every year.
⑩ Penalty	<input checked="" type="radio"/> Yes/ <input type="radio"/> No	Penalty for aquaculture operation without licenses: Prohibition of aquaculture
Voluntary measures by industry		

Glass eel fishery		Description
Condition of glass eel fishery	none/license required	
Ground for license, etc. ※	Legislation/Other scheme	Name of Legislation/other scheme requiring licenses: Notice on strengthening the management of eel fry fishing in the Yangtze Estuary no catch management zone and adjacent waters in 2022
Management body	Local authority	
Contents of management measures		License holders: individual/association/others (): From January 1, 2021, the issuance of special fishing licenses for eel fry in the waters within the Yangtze River Estuary has been ceased. At the same time, it is stipulated that in the fishable waters, the number of special fishing licenses for glass eel in 2022 shall not exceed that of 2021, the number of net gear per license shall not exceed 100, and the number of net openings per net gear shall not exceed 1.
① Upper limit for the number of licenses	Central/By local authority/None	Description of regulation: From January 1, 2021, the issuance of special fishing licenses for eel fry in the waters within the Yangtze River Estuary has been ceased. At the same time, it is stipulated that in the fishable waters, the number of special fishing licenses for glass eel in 2022 shall not exceed that of 2021.
② Regulation on fishing gear	Yes/No	Description of regulation: The number of net gear per license shall not exceed 100, and the number of net openings per net gear shall not exceed 1.
③ Upper limit for catch	Central/By local authority/By individual/None	Description of limit:
④ Size limit	Central/By local authority/None	Description of limit:
⑤ Time closure of glass eel catch	Central/By local authority/None	Description of regulation: In several coastal fishing provinces, fishing is allowed from the beginning of November to the end of April of the next year.
⑥ Body to manage and monitor catch amount	Local authority	Monitoring measures: Fishers shall report catch data to the local authority and local authorities may report data to the Fishery and Fisheries Administration of the Ministry of Agriculture and Rural Areas.
⑦ Penalty	Yes/No	Penalty for fishing operation without licenses: In case of gross violation (using the net with a mesh size less than 2.5 cm), criminal responsibility will be investigated according to the law, less than 3 years of imprisonment. 根据《浙江省渔业管理条例》和《杭州市渔业资源保护管理规定》，鳗苗属于有重要经济价值的水产苗种，须在取得专项捕捞许可证前提下，方可实施捕捞作业。如未取得专项捕捞许可，擅自进行捕捞鳗苗的，将依照无证捕捞依法予以查处，情节严重的（因捕捞鳗苗涉嫌使用网目尺寸小于2.5厘米的禁用网具，捕捞鳗苗价值超过500元），将依法追究刑事责任。
Voluntary measures by industry		

Adult eel fishery	Description	
Condition of adult eel fishery	none license required	
Ground for license, etc. ※	Legislation/Other scheme	Name of Legislation/other scheme requiring licenses :
Management body	Local authority	
Contents of management measures	Yes/No	License holders: individual/association/others () Total number of licenses issued: Number of fishers:
① Upper limit for the number of licenses	Central/By local authority/None	Description of regulation:
② Regulation on fishing gear	Yes/No	Description of regulation:
③ Upper limit for catch	Central/By local authority/By individual/None	Description of limit:
④ Size limit	Central/By local authority/None	Description of limit:
⑤ Time closure	Central/By local authority/None	Description of regulation:
⑥ Body to manage and monitor catch amount	Monitoring measures:	
⑦ Penalty	Yes/No	Penalty:
Voluntary measures by industry		

Additional information

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Summary Table of Conservation and Management Measures for Eels (Japan)

Eel aquaculture		Description
Condition of eel aquaculture business	none/ license required	
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses : Inland Water Fishery Promotion Act enacted on June 27, 2014 and Order for enforcement of Inland Water Fishery Promotion Act established on October 1st 2014. Establishment date: June 27, 2014
Management body	Fisheries Agency	
Contents of management measures		
① Upper limit for the number of licenses	Central /By local authority/None	License holders: company /facility/others () Total number of Licenses issued: 451 for <i>A. japonica</i> , 103 for eels other than <i>A. japonica</i> (November 2022 - October 2023, as of November 1, 2022)
② Upper limit for scale of facilities	Yes /No	Description of regulation: total area of aquaculture ponds written in a permit.
③ Upper limit for input of <i>Anguilla japonica</i>	Central /By local authority/ By individual /None	The quota for each individual farmer is set within the total upper limit. Total upper limit for <i>A. japonica</i> is 21.7 tons.
④ Upper limit for input of other eels	Central /By local authority/ By individual /None	The quotal is set for each individual farmer within the total upper limit. Total upper limit for eels other than <i>A. japonica</i> is 3.5 tons.
⑤ Size limit for input glass eels	Central/By local authority/ None	Description of regulation:
⑥ Time closure of glass eels input	Central/By local authority/ None	Description of regulation:
⑦ Other regulation	Central /By local authority/None	Description of regulation: - When farmers sell their farmed eels to other farmers' aquaculture operation, sellers shall provide the document about trade records to buyers. - In case farmers conduct aquaculture operation of eels other than <i>A. japonica</i> , they are prohibited to release the eels to waters outside of their facility. The farmers shall take necessary measures to prevent their escape.
⑧ Body to manage and monitor input of glass eels	Fisheries Agency	Monitoring measure: Farmers shall report their input amount to the Fisheries Agency every month.
⑨ Body to manage and monitor production amount	Fisheries Agency	Monitoring measure: Farmers shall report their production amount to the Fisheries Agency every month.
⑩ Penalty	Yes /No	Penalty for aquaculture operation without licenses: Less than 3 years of imprisonment or a penalty of less than 2 million yen
Voluntary measures by industry		

Glass eel fishery		Description
Condition of glass eel fishery	none/ license required	
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses : Prefectural Fisheries Coordination Regulation based on the Fisheries Act and the Act on the Protection of Fisheries Resources
Management body	Local authority	
Contents of management measures		License holder: individual / association /others () Total number of licenses issued: 4,467 Number of fishers: 16,645 (2021-2022 fishing season)
① Upper limit for the number of licenses	Central/ By local authority /None	Description of regulation: License holders are limited to Fisheries Associations, members of Fisheries Associations, eel farmers and so on.
② Regulation on fishing gear	Yes /No	Description of regulation: Limitation of fishing gears and fishing types are introduced in each prefecture.
③ Upper limit for catch	Central/ By local authority / By individual /None	Description of limit: Catch quota is set based on historical catch amount, area of aquaculture pond and so on.
④ Size limit	Central/ By local authority /None	Description of limit: Size limit is introduced in each prefecture.
⑤ Time closure of glass eel catch	Central/ By local authority /None	Description of regulation: In many fishing grounds, fishing is allowed from December to April in the following year.
⑥ Body to manage and monitor catch amount	Local authority	Monitoring measures: Fishers shall report catch data to the local authority and local authorities may report data to the Fisheries Agency.
⑦ Penalty	Yes /No	penalty for fishing operation without licenses. Less than 6 months or imprisonment or a penalty of less than 100,000 yen (After December 2023, the penalty for catching glass eels without a fishing permit will be an imprisonment of up to 3 years or a fine of up to 20 million yen)
Voluntary measures by industry		

Adult eel fishery		Description
Condition of adult eel fishery	none/ license required	
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses : Prefectural Fisheries Coordination Regulation and other regulations based on the Fisheries Act and the Act on the Protection of Fisheries Resources
Management body	Local authority	
Contents of management measures	<input checked="" type="radio"/> Yes/No	License holders: individual /association/others () Total number of licenses issued: Number of fishers:
① Upper limit for the number of licenses	Central/By local authority/ None	Description of regulation:
② Regulation on fishing gear	<input checked="" type="radio"/> Yes/No	Description of regulation: Limitation of fishing gears and fishing types are introduced in each Prefectures.
③ Upper limit for catch	Central/By local authority/By individual/ None	Description of limit:
④ Size limit	Central/ By local authority /None	Description of limit: Size limit is introduced in each prefecture. Lower size limit is 20cm - 30cm in most regions.
⑤ Time closure	Central/ By local authority /None	Description of regulation: Time closure is introduced in each prefecture, mainly from October to March when eels migrate from river to sea for spawning.
⑥ Body to manage and monitor catch amount		Monitoring measures:
⑦ Penalty	<input checked="" type="radio"/> Yes/No	Penalty: Less than 6 months of imprisonment or a penalty of less than 100,000 yen for violation of Regional Fisheries Coordination Regulation. Less than 1 year of imprisonment or a penalty of less than 500,000 yen for violation of Instruction by Fisheries Adjustment Commission.
Voluntary measures by industry		In July 2018, National Federation of Inland Waters Fishing Ground Management Commissions and National Federation of Inlandwater Fisheries Cooperatives jointly adopted the resolution on promoting nationwide conservation of eels migrating from river to sea for spawning.

Additional information

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Summary Table of Conservation and Management Measures for Eels (Korea)

Eel aquaculture		Description
Condition of eel aquaculture business	none/ license required	Article 43 of the Aquaculture Industry Development Act (Authorization of farming) stipulates that eel farming is subject to authorization (enacted on August 27, 2019 and took effect on August 27, 2020)
Ground for license, etc. ※	Legislation /Other scheme	Article 43 of the Aquaculture Industry Development Act (Authorization of farming) stipulates that eel farming is subject to authorization (enacted on August 27, 2019 and took effect on August 27, 2020)
Management body	System management: Inland Fishery Industry Team, Aquaculture Industry Division, Ministry of oceans and	Acceptance of a report: Local authority
Contents of management measures		
① Upper limit for the number of licenses	Central/By local authority/ None	License holders: company/facility/ others (Individual) Total number of reports: 589 as of 2022
② Upper limit for scale of facilities	Yes/ No	Description of regulation:
③ Upper limit for input of <i>Anguilla japonica</i>	Central/By local authority/ By individual /None	Fresh Water Eel Culture Fisheries Cooperative composed of eel farmers self-regulates the input: Upper limit for <i>A. japonica</i> input is set at 11.1 tons.
④ Upper limit for input of other eels	Central/By local authority/ By individual /None	Fresh Water Eel Culture Fisheries Cooperative composed of eel farmers self-regulates the input: Upper limit for input of eels other than <i>A. japonica</i> is set at 13.2 tons in total.
⑤ Size limit for input glass eels	Central/By local authority/ None	Description of regulation: Fisheries Resource Management Act article 35, Enforcement Decree article 18, Enforcement Regulation article 17 / a glass eel to weigh below 0.3 grams
⑥ Time closure of glass eels input	Central/By local authority/ None	Description of regulation:
⑦ Other regulation	Central/By local authority/ None	Description of regulation:
⑧ Body to manage and monitor input of glass eels	Fresh Water Eel Culture Cooperatives	Monitoring measure: Fresh Water Eel Culture Fisheries Cooperative investigate by farm
⑨ Body to manage and monitor production amount	Fresh Water Eel Culture Cooperatives	Monitoring measure: legislation to be enacted through amendment of "Fishery products distribution management and support Act" (2 Dec 2016) and Enforcement regulations (Jun 2017) to distribute eels at designated locations, Enforcement Regulation article 7.2(2 July 2018)
⑩ Penalty	Yes /No	Penalty for aquaculture operation without license: penalty of maximum 5 million won Penalty for excess of input limit: None If not distributed at the designated place: imprisonment of 2 years or less or fine of 20 million won or less
Voluntary measures by industry		Compliance with the "Joint Statement" agreed by the Informal Eel meeting participants

Glass eel fishery		Description
Condition of glass eel fishery	none/ license required	Approval required/ Inland Water Fishery Act, Fisheries Act
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses : Fisheries Act Article 41.3 (glass eel stow-net fishery), Inland Water Fishery Act Article 9(Inland Water seed harvest approval) Establishment date or estimated date to be established : Fisheries Act enforced 23 Apr 2010, Inland Water Fishery Act enforced 29 Jul 2000 (approval required since Inland Water Fisheries Development Promotion Act(09 Jul 1976))
Management body	System Management: Inland Fishery Industry Team, Aquaculture Industry Division, Ministry of oceans and	Approval: Local authority
Contents of management measures		License holder: individual /association/others () Total number of licenses issued: Number of approval: 517(the total number including not only glass eel but all other seed capture) as of 2022
① Upper limit for the number of licenses	Central/By local authority/ None	Description of regulation:
② Regulation on fishing gear	Yes No	Description of regulation: glass eel stow-net fishery(Enforcement Decree of the Fisheries Act Article 26)
③ Upper limit for catch	Central/By local authority/By individual/ None	Description of limit:
④ Size limit	Central/By local authority/ None	Description of limit:
⑤ Time closure of glass eel catch	Central/By local authority/ None	Description of regulation:
⑥ Body to manage and monitor catch amount	Central and local authority	Monitoring measures: controlling unauthorized captures of glass eels
⑦ Penalty	Yes No	Penalty for fishing operation without licenses: Less than 1 years of imprisonment or a penalty of less than 10 million
Voluntary measures by industry		

※ Attach the legal text, if there is an English version.

Adult eel fishery		Description
Condition of adult eel fishery	none/ license required	Approval required
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses : Inland Water Fishery Act Article 6, 9 and 11 Establishment date or estimated date to be established : Inland Water Fishery Act(29 Jul 2000)
Management body	System Management: Inland Fishery Industry Team, Aquaculture Industry Division, Ministry of oceans and	Approval: Local authority
Contents of management measures		License holder: individual /association/others () Total number of licenses issued: Number of fishers: Approval is issued not by fish species but by type of fishing gears, thus, the exact number cannot be confirmed.
① Upper limit for the number of licenses	Central/By local authority/ None	Description of regulation:
② Regulation on fishing gear	Yes /No	Description of regulation: pound net, longline, fish trap
③ Upper limit for catch	Central/By local authority/By individual/ None	Description of limit:
④ Size limit	Central /By local authority/None	Description of limit: 15cm~45cm
⑤ Time closure	Central /By local authority/None	Description of regulation: six months closure(1 October ~ 31 March)
⑥ Body to manage and monitor catch amount	Central and local authority	Monitoring measures: controlling unauthorized captures of adult eels
⑦ Penalty	Yes /No	Penalty for fishing operation without licenses: Less than 1 years of imprisonment or a penalty of less than 10 million
Voluntary measures by industry		

※ Attach the legal text, if there is an English version.

Additional information

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Summary Table of Conservation and Management Measures for Eels (Chinese Taipei)

Eel aquaculture		Description
Condition of eel aquaculture business	none license required	
Ground for license, etc. ※	Legislation /Other scheme	Name of Legislation/other scheme requiring licenses: Regulations for Input Management of Eel Aquaculture Establishment date or estimated date to be established: November 14, 2014
Management body	Council of Agriculture	
Contents of management measures		
① Upper limit for the number of licenses	Central/By local authority/None	License holders: company/facility/ others (Eel farmer) Total number of Licenses issued: 420 licenses in 2022-
② Upper limit for scale of facilities	Yes/No	Description of regulation:
③ Upper limit for input of <i>Anguilla japonica</i>	Central/By local authority/By individual/None	
④ Upper limit for input of other eels	Central/By local authority/By individual/None	
⑤ Size limit for input glass eels	Central/By local authority/None	Description of regulation:
⑥ Time closure of glass eels input	Central/By local authority/None	Description of regulation:
⑦ Other regulation	Central/By local authority/None	Description of regulation:
⑧ Body to manage and monitor input of glass eels	Fisheries Agency/ Local authority/Taiwan Eel Farming Industry Development Foundation/Local eel	Monitoring measure: The eel farmer should report the input amount of eel within 10 days after inputting eel.
⑨ Body to manage and monitor production	Fisheries Agency/ Local authority/Taiwan Eel Farming Industry Development Foundation/Local eel	Monitoring measure: The eel farmer's production should not exceed the input amount.
⑩ Penalty	Yes/No	Penalty for aquaculture operation without licenses: A fine of between NTD\$ 30,000 and NTD\$ 150,000. Penalty for excess of input limit: A fine of between NTD\$ 30,000 and NTD\$ 150,000.
Voluntary measures by industry		

Glass eel fishery		Description
Condition of glass eel fishery	none/ <u>license required</u>	Most of the catching glass eels are from fishing vessel, so main management measures are for vessel. Vessels approved by
Ground for license, etc. ※	<u>Legislation</u> /Other scheme	Name of Legislation/other scheme requiring licenses: Fisheries Act/Regulations on the Restricted Fishing Seasons for Elvers/ Directions of the coastal Elvers Fishing Establishment date or estimated date to be established: Existing legislation/September 9, 2013/ November 27,
Management body	Council of Agriculture	
Contents of management measures		License holders: individual/association/ <u>others</u> (Vessel) Total number of licenses issued:322 Number of
① Upper limit for the number of licenses	Central/By local authority/ <u>None</u>	Description of regulation:
② Regulation on fishing gear	<u>Yes</u> /No	Description of regulation: Vessel: stow nets driven by vessel, set net etc. Coastal fishing: stow net driven by manpower, set net etc.
③ Upper limit for catch	Central/By local authority/By individual/ <u>None</u>	Description of limit:
④ Size limit	Central/By local authority/ <u>None</u>	Description of limit:
⑤ Time closure of glass eel catch	<u>Central</u> /By local authority/None	Description of regulation:Between March 1 and October 31 every year.
⑥ Body to manage and monitor catch amount	By local authority and local fishermen's association	Monitoring measures:The glass eel fishermen are advised to report the catch amount to local fishermen's association.
⑦ Penalty	<u>Yes</u> /No	Penalty for fishing operation in time closure: A fine of between NTD\$ 30,000 and NTD\$ 150,000.
Voluntary measures by industry		

※ Attach the legal text, if there is an English version.

Adult eel fishery		Description
Condition of adult eel fishery	<u>none</u> /license required	
Ground for license, etc. ※	Legislation/ <u>Other scheme</u>	Name of Legislation/other scheme requiring licenses : "Fishing bans and closed seasons"area Establishment date or estimated date to be established : Since 2013
Management body	Local authority	
Contents of management measures		License holders: individual/association/others () Total number of licenses issued: Number of fishers:
① Upper limit for the number of licenses	Central/By local authority/ <u>None</u>	Description of regulation:
② Regulation on fishing gear	<u>Yes</u> /No	Description of regulation:According to each management measures of "fishing bans and closed seasons" area, it is
③ Upper limit for catch	Central/By local authority/By individual/ <u>None</u>	Description of limit:
④ Size limit	Central/ <u>By local authority</u> /None	Description of limit: Excess of the length of 8cm elver
⑤ Time closure	Central/ <u>By local authority</u> /None	Description of regulation: The entire year in closed eel fishing area.
⑥ Body to manage and monitor catch	By local authority	Monitoring measures: Prohibited the catch of young and adult eels in 41 rivers in Taiwan.
⑦ Penalty	<u>Yes</u> /No	Penalty for fishing operation in "fishing bans and closed seasons" area:A fine of between NTD\$ 30,000 and NTD\$ 150,000.
Voluntary measures by industry		

※ Attach the legal text, if there is an English version.

Additional information

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