

The Truth Behind the Claim That “Japanese Eel Populations Are Increasing”: Japan’s Fisheries Agency Must Stop Concealing Inconvenient Truths

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<https://wedge.ismedia.jp/articles/-/39465>

The international community is in a flurry over eels. This is because the European Union (EU) has submitted a proposal to the Conference of the Parties (CoP) to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to be held in Uzbekistan starting late November, to add all eel species, including Japanese eels, to Appendix II, placing them under the Convention’s regulatory umbrella.

In response, Japan’s Fisheries Agency (JFA) and the eel industry are making every effort to block the proposal. The representative of the Japan Eel Farming Cooperative declared, “We will act as one, government and private sector, to prevent this.” At the annual meeting of the All-Japan Sustainable Eel Farming Organization—an industry group chaired by a former JFA official—a representative from the JFA stated, “The entire government is undertaking every possible measure to prevent the adoption of the listing proposal.”

The Japanese government lobbied countries to oppose the proposal at meetings such as the Tokyo International Conference on African Development (TICAD), held in Yokohama in August, and the ASEAN Agriculture Ministers’ Meeting, held in Manila, as well as by visiting embassies in Tokyo. Among their arguments was the claim that “Japanese eel populations are increasing.”

The decline in Japanese eel populations, even acknowledged by the JFA

Statistics show that eel catches have plummeted. Catches in inland waters, which stood at 3,387 tons in 1961, recorded a decline of over 98% to just 55 metric tons in 2023.

The technology for fully commercial-scale aquaculture of eels has yet to be established. Eel farming currently involves capturing juvenile eels (known as glass eels) and raising them to market size in aquaculture ponds. Due to the drastic decline in wild eel catches, nearly all eels

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served on Japanese dining tables are farmed. However, the catch of juvenile eels has also declined significantly.

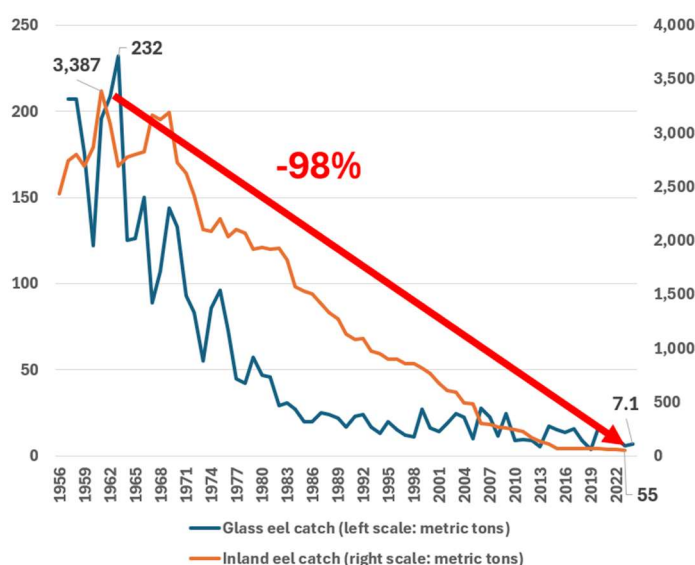


Fig. 1: Catches of glass eels and adult eels in inland waters
(Ministry of Agriculture, Forestry and Fisheries (MAFF) statistics)

It is rare to hear eel fishers say “eel populations are increasing,” which is supported by academic research. According to a paper published in 2019,² a questionnaire survey of fishery cooperatives in 37 prefectures found that 93.4% of the 227 cooperatives responded that eel resources are declining.

Furthermore, an analysis of wild eel catch data from six fishing cooperatives between 2003 and 2018 revealed a significant decline in catch per unit effort (CPUE; see explanation below) in four of these cooperatives (Kanagawa, Aichi, Hyogo, and Okayama). The International Union for Conservation of Nature (IUCN) has also listed the Japanese eel on its Red List due to its declining population.

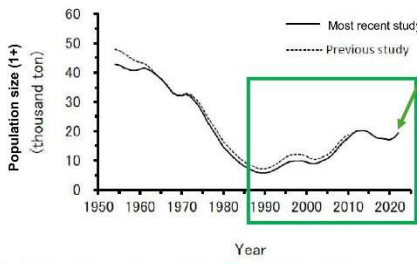
The JFA itself acknowledged that “eel stocks are declining.” According to resource assessments commissioned by the JFA to the Fisheries Research and Education Agency (FRA), “Although the catch of glass eels shows fluctuations, these data for Japan indicate that the population has been experiencing a long-term decrease and now remains low.”³

² Kenzo Kaifu and Kazuki Yokouchi (2019), “Increasing or decreasing? - Current status of the Japanese eel stock,” *Fisheries Research*, Vol. 220, <https://doi.org/10.1016/j.fishres.2019.105348>.

³ JFA/FRA, “Reiwa 6 Nendo Kokusai Gyogyo Shigen no Genkyo: Nihon Unagi (Current Status of International Fishery Resources in 2024: Japanese Eel)” https://kokushi.fra.go.jp/R06/R06_82_ELJ.pdf

Notes for the English Edition: The English translation of the above stock assessment report⁴ was referenced in the FAO Expert panel's assessment of Japanese eel.⁵ However, **the sentence quoted above was mysteriously omitted from the English translation.** After Professor Kenzo Kaifu of Chuo University, who is also a member of the IUCN Eel Specialist Group, pointed this out, the JFA suddenly made corrections to add the above sentence.⁶ **If the FAO expert panel had based its assessment on the version prior to this correction, it would have been reviewing the stock based on an inaccurate English translation.** The fact that this sentence has consistently existed since the 2020 stock assessment and was accurately reflected in the English translation⁷ highlights the “mystery” of its deletion in the English translation of the 2025 assessment report.

Factual Information of the Japanese eel (Population size)

EU proposal	- Population has significantly decreased. It is still in decline. - Assessed in 2018 as Endangered in IUCN Red List
Factual Information	● Japanese eel is sufficiently abundant and not endangered. ① The population size has recovered since 1990 (Tanaka, 2025).  Approx. 21,000 tons of adult population size = 28% of Baseline, larger than CITES Appendix II criteria (5-20 %) = 84 million fish, increasing trend Estimated trajectories of size of stock (1 year and older) Source: Updated Stock Assessment of Japanese Eels Using Japanese Abundance Indices (Tanaka, 2025, in press) ② Not categorized as Endangered : Extinction risk is negligible Re-evaluated by quantitative analysis: : Less than 0.02% of extinction probability (IUCN Criterion: 20 %) <i>*Source: Confidence Interval for Extinction Risk: Revisiting the Misconception that the Interval is too Imprecise to Be Useful (Hakoyama, in preparation)</i>

Document by the Japanese government for briefings to foreign governments

⁴ Hakoyama, H., Faulks, L., Kodama, S., Okamoto, C., Fujimori, H. & Sekino, M. (2025), “Japanese Eel, *Anguilla japonica*,” Fisheries Agency of Japan & Japan Fisheries Research and Education Agency. https://kokushi.fra.go.jp/R06/R06_82_ELJ_English.pdf

⁵ FAO (2025), “Report of the Eighth FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-Exploited Aquatic Species – Bangkok, 7–11 July 2025 and Rome, 21–25 July 2025 (FAO Fisheries and Aquaculture Report, No. 1482),” pp. 113-115. <https://doi.org/10.4060/cd6542en>

⁶ Kenzo Kaifu (2025), “Washington Jyōyaku ni yoru unagi boueki kisei teian ni kansuru kaisetsu (Explanation of the CITES Proposal to Regulate Eel Trade).” <https://kaifu-lab.r.chuo-u.ac.jp/wp/%E3%83%AF%E3%82%B7%E3%83%B3%E3%83%88%E3%83%B3%E6%9D%A1%E7%B4%84%E3%81%AB%E3%82%88%E3%82%8B%E3%82%A6%E3%83%8A%E3%82%AE%E8%B2%BF%E6%98%93%E8%A6%8F%E5%88%B6%E6%8F%90%E6%A1%88%E3%81%AB%E9%96%A2%E3%81%99/#3-2>

⁷ *Ibid.*

“Japanese eel are increasing”?

However, as soon as the proposal to list eels under CITES emerged, the JFA made a complete about-face, now alleging that “eel populations are increasing and not endangered.” The author recently obtained a document used by the Japanese government in lobbying various governments to block the eel proposal. It states that the “population size has recovered since 1990,” with a figure that shows an upward trend in stock levels since that year.

The basis for this allegation is the paper cited in the document as “(Tanaka, 2025)”.⁸ This paper is a revised version of a paper written by the same author in 2014,⁹ which includes the data used for the stock assessment as supplementary material.

Notes for the English Edition: The author of the above papers, Mr. Eiji Tanaka, Professor Emeritus at Tokyo University of Marine Science and Technology, served as a member of the IWC Scientific Committee from 1990 to 2007. The aforementioned paper on eels was published in “Fisheries Science,” the journal of the Japanese Society of Fisheries Science, of which he was a leading member.

It should be noted that the FAO Expert Panel cites these two papers as the basis for the conclusion that the Japanese eel does not meet the biological criteria for listing in Appendix II, praising it as “robust, regionally integrated stock assessment” (emphasis added).¹⁰ The other paper cited as (Hokoyama et al 2025) as evidence that Japanese eel does not meet the biological criteria for listing in Appendix II as “publicly available and more recent information,”¹¹ has not yet passed peer review at this stage and is therefore not even worthy of consideration.

One of the Japanese members of the FAO Expert Panel, which cites this not-yet-peer-reviewed paper as a basis of the conclusion that the Japanese eel does not meet the biological criteria for inclusion in the appendices, is Mr. Hakoyama, the author of this document.¹² Furthermore, Mr. Tanaka also participated in the Panel’s assessment.¹³ This raises grave concern about the impartiality of the FAO Expert Panel, which receives funding from the government of Japan.¹⁴

⁸ Eiji Tanaka (2025), “Updated stock assessment of Japanese eels using Japanese abundance indices,” *Fisheries Science*. <https://doi.org/10.1007/s12562-025-01912-3>

⁹ Eiji Tanaka (2014), “Stock assessment of Japanese eels using Japanese abundance indices,” *Fisheries Science*, Vol. 80, pp. 1129-1144. <https://doi.org/10.1007/s12562-014-0807-x>

¹⁰ FAO (2025), “Report of the Eighth FAO Expert Advisory Panel,” p. 113.

¹¹ *Ibid.*

¹² See Appendix B (List of Expert Panel members) of FAO (2025) “Report of the Eighth FAO Expert Advisory Panel.”

¹³ *Ibid.*

¹⁴ Regarding the fact that the FAO expert panel receives funding from the Japanese government, see FAO (2025), “Report of the Eighth FAO Expert Advisory Panel,” p. iii.

Looking at the data in the supplementary material, we find that the assessment that “eel populations are increasing” as for adult eels is contingent on statistics from the Ministry of Agriculture, Forestry and Fisheries (MAFF)’s “Fisheries and Aquaculture Production Statistics” and “Fisheries Census” for Lake Kasumigaura (the second largest lake in Japan) and Lake Kitaura (the lake adjacent to the north of Lake Kasumigaura) in Ibaraki Prefecture, as well as 12 lakes nationwide (including Lake Kasumigaura and Lake Kitaura). The eel catch volumes in these lakes are shown in the figure below, revealing a steep and continuous decline.

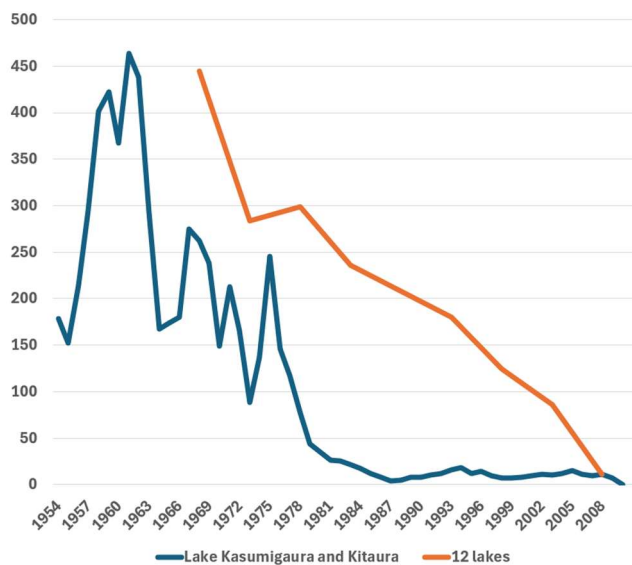


Fig. 2: Catches of eels in Lake Kasumigaura, Lake Kitaura, and 12 lakes nationwide
(The figure was plotted using statistics from the MAFF included in the supplementary material of Tanaka 2014.)

However, the papers (Tanaka 2014) and (Tanaka 2025) conclude that the catch per unit effort (CPUE) in these lakes has *increased* since 1990.

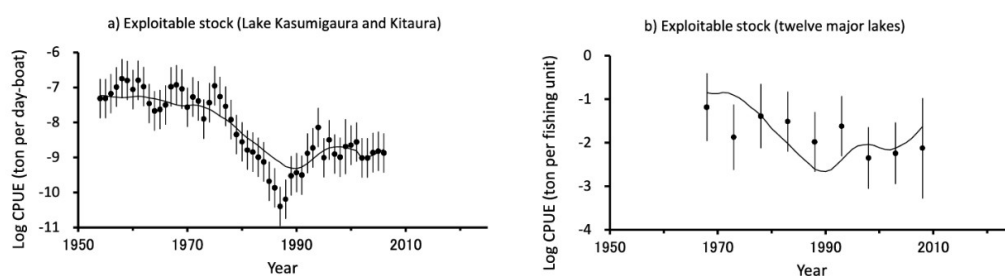


Fig. 3: CPUE of eel in Lake Kasumigaura and Lake Kitaura (left) and 12 lakes (right) in Tanaka (2014).¹⁵ Note that Lake Kasumigaura and Lake Kitaura are included in the 12 lakes.

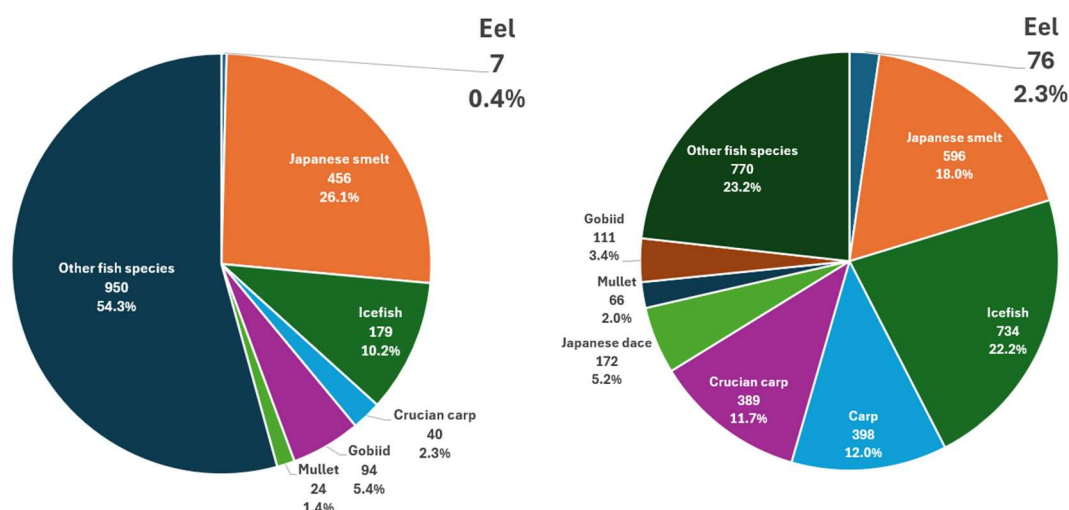
CPUE is used as an indicator of fish stock abundance, calculated by dividing the catch by the effort expended to obtain that catch (number of times the net hauled, days at sea, etc.). When

¹⁵ Eiji Tanaka (2014), “Stock assessment of Japanese eels using Japanese abundance indices,” Fig. 4.

applied to eel, this means dividing the “eel catch” by the “fishing effort expended to catch eel” (such as the number of days fished to catch eels).

However, the papers cited as evidence for “eel populations are increasing” (Tanaka 2014, Tanaka 2025), divides “eel catch” by “the total number of fishing days for all fishing methods” when calculating CPUE for Lake Kasumigaura and Lake Kitaura.¹⁶

Meanwhile, fishers in these lakes do not catch only eels. The following figures show the catch volume by fish species for Lake Kasumigaura and Lake Kitaura, based on the MAFF’s “Fisheries and Aquaculture Production Statistics,” as well as the proportion of eels within this total. The eel catches account for only 0.4% of the total fishery production.



[Fig. 4] Left: Fisheries production by species in Lake Kasumigaura and Lake Kitaura in 2009 (metric tons). Right: 7 lakes (excluding Lake Kasumigaura/Kitaura and lakes with no eel catch records) among the 12 lakes used as one basis for calculating eel CPUE in Tanaka (2014): Lake Ogawara, Lake Hinuma, Lake Imbanuma, Lake Teganuma, Lake Togoike, Lake Shinjiko, and Lake Jinzaiko in 2003 (metric tons). In Tanaka (2014), the latest data used for CPUE calculation for Lake Kasumigaura and Lake Kitaura were from 2009. For the nationwide lakes, the last year with statistically recorded eel catches for lakes other than Lake Kasumigaura and Lake Kitaura was 2003. Therefore, the figures show fisheries production in 2009 for Lake Kasumigaura and Lake Kitaura, as well as fisheries production in 2003 for the nationwide lakes.

Furthermore, in some lakes where eels migrate upstream, the stocking of adult eels is actively

¹⁶ Kenzo Kaifu (2025) “Nihon no unagi shigen kanri (Eel resource management in Japan),” document distributed at the international symposium “Conservation and Sustainable Use of Eels in East Asia” held at Center for Northeast Asian Studies, Tohoku University (September 7, 2025) p. 9.

practiced. For example, research indicates that nearly half of the eels in Lake Kasumigaura were stocked individuals.¹⁷ However, the stock assessment model used in the reports, which concludes that “eel populations are increasing,”¹⁸ assumes wild eels. It must be said that the premise itself is highly problematic.

Notes for the English Edition: The data used by Tanaka (2014) as fishing effort in Lake Kasumigaura and Lake Kitaura is as follows (the numbers for 2006 are highlighted in red).

Year	Total		Lake Kasumigaura		Lake Kitaura	
	Catch (ton)	Effort (day-boat)	Catch (ton)	Effort (day-boat)	Catch (ton)	Effort (day-boat)
2001	9	44,126	7	32,546	2	11,580
2002	11	103,123	7	79,735	4	23,388
2003	10	90,559	7	70,857	3	19,702
2004	12	87,383	9	67,517	3	19,866
2005	15	82,815	13	64,373	2	18,442
2006	11	71,536	9	54,923	2	16,613
2007	9	0	7	0	2	0
2008	11	0	10	0	1	0
2009	7	0	5	0	2	0
2010	0	0				

Source: Eiji Tanaka (2014), “Stock assessment of Japanese eels using Japanese abundance indices,” Supplementary material 1, sheet 2. You can download the original material from the following link.
https://static-content.springer.com/esm/art%3A10.1007%2F978-94-007-014-0807-x/MediaObjects/12562_2014_807_MOESM1_ESM.xls

*The MAFF statistics show that this is **the total number of days of fishing for all fisheries** in Lake Kasumigaura and Lake Kitaura (highlighted in red in the tables below). However, the statistics also show that in 2006, the fishing methods significantly harvesting eel are only “trap net” and “other fishing methods” in Lake Kasumigaura, and “other fishing methods” in Lake Kitaura (see highlighted in yellow in the tables below).*

[illegible]

Catch by fishing method and number of fishing days at Lake Kasumigaura and Lake Kitaura in 2006.

¹⁷ Arai, K., Itakura, H., Yoneta, A. et al. (2019) “Anthropogenic impacts on the distribution of wild and cultured Japanese eels in the Tone River watershed, Japan, from otolith oxygen and carbon stable isotopic composition,” *Environmental Biology of Fishes*. Vol. 102, pp. 1405–1420. <https://doi.org/10.1007/s10641-019-00915-1>

¹⁸ Eiji Tanaka (2014), “Stock assessment of Japanese eels using Japanese abundance indices;” Eiji Tanaka (2025), “Updated stock assessment of Japanese eels using Japanese abundance indices.”

Source: MAFF, Fisheries and Aquaculture Production Statistics in 2006 (Heisei 18).¹⁹

The data used in Tanaka (2014) for catch and fishing effort in 12 lakes is as follows.

Year	Onuma	Kasumigaura	Kizura	Hiruma	Inbauma	Tesaura	Mitake	Kitaetsu	Kozuka	Toukou	Shirai	Enzai	Reference
1980	225	1,157	559	159	159	28	36	111	76	243			Nourinsuisanshou (1980) The 4th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1980	27	140	122	45	25	31	2	3					Nourinsuisanshou (1979) The 5th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1975	29	1054	817	185	270	48	47		65	32	722		Nourinsuisanshou (1975) The 5th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1975	45	49	48	26	35	21	1	1					Nourinsuisanshou (1975) Annual statistics of fisheries and aquaculture production - 1975, Nourin Tokei Kyokai, Tokyo (in Japanese)
1978	536	364	414	137	93	17	33	25	75	24	619		Nourinsuisanshou (1980) The 6th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1978	91	50	27	21	79	26	3	3	2	1	47		Nourinsuisanshou (1980) Annual statistics of fisheries and aquaculture production - 1978, Nourin Tokei Kyokai, Tokyo (in Japanese)
1983	207	761	340	152	66	21	28	23	64	37	473		Nourinsuisanshou (1985) The 7th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1983	35	13	8	25	23	2	5	1	2	7	80		Nourinsuisanshou (1985) Annual statistics of fisheries and aquaculture production - 1983, Nourin Tokei Kyokai, Tokyo (in Japanese)
1988	275	985	270	105	50	12	26	20	44	33	440		Nourinsuisanshou (1990) The 8th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1988	53	4	1	16	20	3	6	1	1	1	28		Nourinsuisanshou (1990) Statistics of fisheries and aquaculture production in 1988, Nourin Tokei Kyokai, Tokyo (in Japanese)
1993	520	380	178	87	20	12	36	17	38	37	386		Nourinsuisanshou (1995) The 9th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1993	76	13	3	32	19	4	2	2		1	24		Nourinsuisanshou (1995) Statistics of fisheries and aquaculture production in 1993, Nourin Tokei Kyokai, Tokyo (in Japanese)
1998	217	469	157	76	21	13	28	14	35	71	267		Nourinsuisanshou (2000) The 10th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
1998	8	5	2	16	9	1	1			1	8		Nourinsuisanshou (2000) Statistics of fisheries and aquaculture production in 1998, Nourin Tokei Kyokai, Tokyo (in Japanese)
2003	20	265	101	75	22	11	26	11	28	49	252		Nourinsuisanshou (2005) The 11th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
2003	37	7	2	14	5	1					17		Nourinsuisanshou (2005) Statistics of fisheries and aquaculture production in 2003, Nourin Tokei Kyokai, Tokyo (in Japanese)
2008	263	313	91	67	18	6	27	9	19	80	359		Nourinsuisanshou (2010) The 12th Fisheries Census, Nourinsuisanshou, Tokyo (in Japanese)
2008	19	1											Nourinsuisanshou (2010) Statistics of fisheries and aquaculture production in 2008, Nourin Tokei Kyokai, Tokyo (in Japanese)

Source: Source: Eiji Tanaka (2014), “Stock assessment of Japanese eels using Japanese abundance indices,” Supplementary material 1, sheet 2.²⁰

Examining the cited sources—“Fisheries and Aquaculture Production Statistics” and “Fisheries Census” from “Nourinsuisanshou” (Japanese name of the MAFF)—reveals that the catch figures represent only eel catches, while the fishing effort figures represent the total number of fishing entities of all fisheries in these 12 lakes. See, MAFF, “Fisheries and Aquaculture Production Statistics” and “Fisheries Census.”²¹

The decline in eel populations shown in the papers JFA relies upon

Upon closer examination, even the papers cited by the JFA reveal conclusions indicating that eel populations are actually declining. The default scenario used by Tanaka (2014) (S1 scenario below) is based on the highly unrealistic assumption that environmental conditions in Japanese eel nursery grounds have remained unchanged since the 1950s, when stock estimates were first conducted. Conversely, this report also examines a more realistic scenario (S6 scenario in the figure below) that takes into account environmental degradation. This scenario indicates a significant decline in the eel resource, showing a reduction of approximately 60% between 1980 and 2010.²²

¹⁹ You can download the original data from the following link:

<https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00500216&tstat=000001015174&cycle=7&year=20060&month=0&tclass1=000001015175&tclass2=000001022526&tclass3val=0>

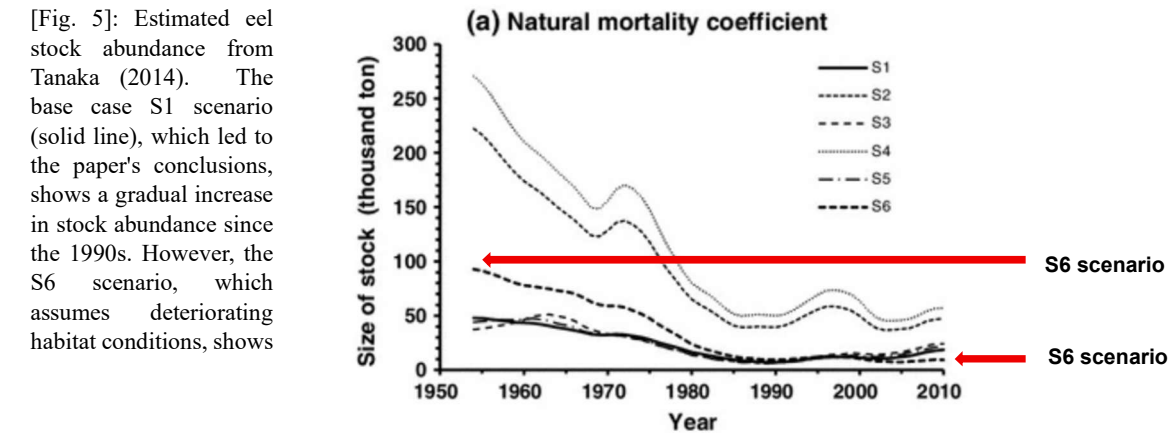
²⁰ You can download the original material from the following link: https://static-content.springer.com/esm/art%3A10.1007%2F12562-014-0807-x/MediaObjects/12562_2014_807_MOESM1_ESM.xls

²¹ You can download the original data from the following links.

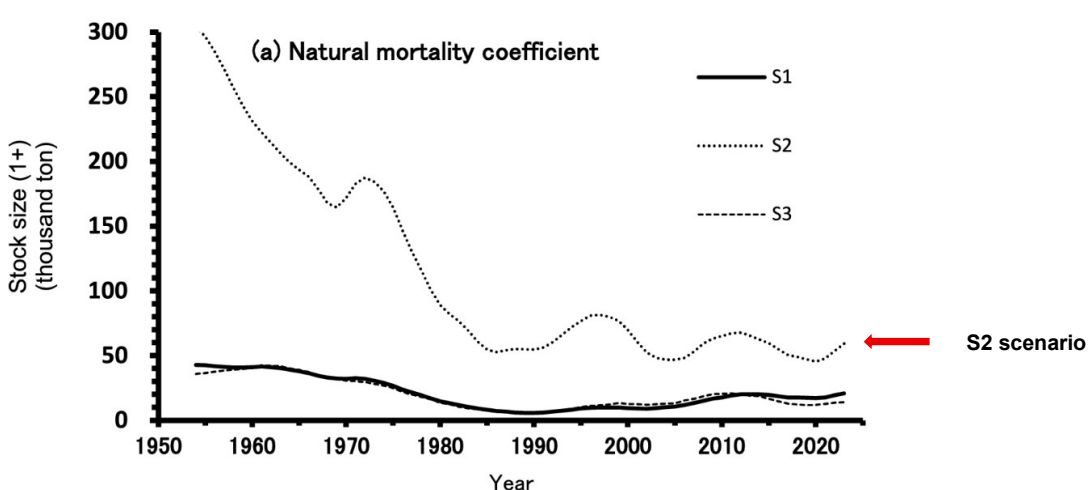
https://www.maff.go.jp/tokei/kouhyou/kaimen_gyosei/ (Fisheries and Aquaculture Production Statistics); <https://www.maff.go.jp/tokei/census/fc/index.html> (Fisheries Census)

²² Kenzo Kaifu (2025), “Briefing on Japan’s Claims Regarding the Japanese Eel.” (unpublished manuscript obtained from Professor Kenzo Kaifu, Chuo University)

Nevertheless, the paper cited by the JFA (Tanaka 2014) provides no sufficient explanation whatsoever for why it excluded this scenario. In the absence of such an explanation, the only conclusion that can be drawn from this paper is that it is unclear whether eel populations are increasing or decreasing. If we adopt the premise that their habitat is deteriorating, it would suggest they are actually declining.



The paper updating the 2014 resource assessment (Tanaka 2025) presents further problems. For some reason, without any justification, the environmental degradation scenario that resulted in a decline in resources was not even considered in the updated paper. Furthermore, even in the new paper (Tanaka 2025), despite the existence of results showing a significant resource decline (S2 scenario), not a single word is mentioned about it in the discussion.²³ If this scenario is not excluded, it would mean that eel populations could be said to be increasing or decreasing.



[Fig. 6] Estimated stock size of Japanese eels aged one year or older from Tanaka (2025) (Tanaka 2025, Fig. 4). Under the default S1 scenario, the stock has gradually increased since the 1990s, while under the S2 scenario, it has remained

²³ Kenzo Kaifu (2025), “Briefing on Japan’s Claims Regarding the Japanese Eel.”

significantly reduced.

To summarize, the papers cited by the JFA to support its claim that “eel populations are increasing” (Tanaka 2014, Tanaka 2025) include scenarios showing “eel populations are *decreasing*,” and no convincing reasons have been presented to rule out these scenarios. Claiming that “eel populations are increasing” based on these papers is far from plausible.

The difficulty in identifying eel species

The proposal to list eels in CITES Appendix II is based not only on the declining population of Japanese eels but also on their similarity to the already listed European eel, making them difficult for customs officials to distinguish. Regarding this point, the JFA stresses that “Glass eels are morphologically identifiable” and that a “DNA identification kit for rapid identification of eel species is being developed.”

Factual Information on Japanese eel (Species Identification)

EU proposal	• Enforcement challenges at customs for species identification (illegal trade of the European eel)
Factual Information	① Glass eels are morphologically identifiable.  Source: Diversity of early life-history traits in freshwater eels and the evolution of their oceanic migrations. (Kuroki et al., 2014) Total length of glass eel significantly differs by species. European eel (<i>A. anguilla</i>) is much larger than the other species. Large glass eels (e.g. approx. 70 mm) declared as other species are likely to be <i>A. anguilla</i>.  Glass eels can be easily identified by the relative positions of base of the dorsal fin and the anus, and by the characteristics of the melanophores. Source: Species composition and seasonal occurrence of recruiting glass eels (<i>Anguilla</i> spp.) in the Hsiukuhan river, Eastern Taiwan. (Leander et al., 2014) and Manual for simple species assessment of glass eels migrating to the Japanese coast and for determining the developmental stage of glass eels (Japanese eels). (Yamamoto et al., 2014. (in Japanese)) ② Emerging technology for rapid species identification of eel products. DNA identification kit for rapid identification of eel species is being developed using DNA amplification reaction leading the color change of the kit by chemical reaction. 

Document by the Japanese government for briefings to foreign governments

However, even experts may find it difficult to distinguish juvenile eel species based on slight external differences. Even the identification kit mentioned by the Japanese government, developed by the Canadian company WildTechDNA, is still in the development stage. According

to a Canadian government report,²⁴ it has a 20% false positive rate. Furthermore, the kit requires a temperature of 18°C or higher for testing, meaning it cannot be used directly on frozen products.

Academic studies attempting to identify the species of processed eel products circulating in the market²⁵ rely on genetic analysis, indicating that it is currently impossible to reliably distinguish species based solely on morphological differences. A recent study, which used genetic analysis to examine eels sold in supermarkets, revealed that nearly 40% were American eels, not Japanese eels.²⁶ Without this research, such facts would likely remain unknown.

Even for us Japanese, who see grilled eel (“*unagi kabayaki*”) at supermarkets every day, it is utterly impossible to distinguish whether it is Japanese eel or American eel based solely on appearance.

Shocking findings of “Japanese eel decline by up to 99.9%”

So what is the actual status of Japanese eel resources? The latest research findings on this were revealed in a study led by Professor Kenzo Kaifu of Chuo University, a member of the IUCN Eel Expert Group and Japan’s most renowned eel scientist.²⁷ This study examined eel CPUE using data from eight water bodies minimally affected by eel stocking. Results showed a statistically significant decline in eel CPUE at seven of the eight sites. The estimated reduction over three generations (24 years) was concluded to be between 79.2% and 99.9%.

The European eel, currently listed in Appendix II of CITES, is classified in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species as Critically Endangered (CR), the most critical category. Under IUCN criteria, species with population declines exceeding 80% over three generations are classified as “Critically Endangered” when the causes of decline are

²⁴ Government of Canada (2025), “Government of Canada Submission to the CITES Secretariat: EU Proposal to List Eels in Appendix II,” CoP20 Doc. 114.2 Annex 4, p. 8. <https://cites.org/sites/default/files/documents/E-CoP20-114-02-A4.pdf>

²⁵ See, for example, the following papers. Amy Goymer, Kristen Steele, Freddie Jenkins, Gemma Burgess, Lucy Andrews, Nina Baumgartner, Chrysoula Gubili, Andrew Mark Griffiths (2023), “For R-eel?! Investigating international sales of critically endangered species in freshwater eel products with DNA barcoding,” *Food Control*, Vol. 150, <https://doi.org/10.1016/j.foodcont.2023.109752>; Choo, J. S. Y., Rabbani, G., Lim, E. X. Y., & Wainwright, B. J. (2025), “A shift in the trade? An investigation of the eel trade reveals a likely species switch,” *Conservation Science and Practice*, Vol. 7, No. 4. <https://doi.org/10.1111/csp2.70013>

²⁶ Shiraishi, H., Han, YS. & Kaifu, K. (2025), “Eel consumption in Japan: Insights from genetic species identification and trade data,” *Fisheries Science*, Vol. 91, pp. 1053–1062. <https://doi.org/10.1007/s12562-025-01894-2>

²⁷ Kenzo Kaifu, Hikaru Itakura, Tomonari Kotani, Akira Shinoda, Yu-San Han, Tatsuki Yoshinaga, Ryoshiro Wakiya (2025), “A decade after being listed as Endangered: Japanese eel stock inferred from fishery-dependent and independent monitoring records,” *Regional Studies in Marine Science*, Vol. 90. <https://doi.org/10.1016/j.rsma.2025.104456>.

unknown or mitigation is difficult. The three-generation decline rate for Japanese eel is likely comparable to that of European eel.²⁸

The need for advocating eel conservation, not hiding the inconvenient truth

The latest scientific findings clearly show the decline of Japanese eels. As previously noted in my earlier articles, problems like poaching and smuggling are rampant in Japan and East Asia.²⁹

The proposal being put forward at the CITES Conference of the Parties is for listing in Appendix II, which allows trade if it is legal and sustainable, rather than in Appendix I, which would result in a ban on trade. If listed in Appendix II, commercial import and export itself is possible, but it is conditional upon the exporting country submitting an export permit in advance, confirming that: (1) a management authority of the state of export is satisfied that the specimen was not obtained in contravention of the laws of the state for the protection of fauna and flora (LAF), and (2) s scientific authority of the state of export has advised that such export will not be detrimental to the survival of that species (NDF) (Article 4).

If this proposal is adopted, it will become a powerful tool to stop the rampant smuggling of eels. Surely Japan's eel industry and the JFA do not wish to tolerate the widespread smuggling. If that is the case, shouldn't they take the lead and actively support its inclusion?

What we, the Japanese civil society, would really like to see is conservation and sustainable use of eel. By doing so, we can also pass on to future generations the tradition of eel cuisine, a culinary heritage passed down from previous generations.

For this very reason, Japan should now take the lead in eel conservation by actively supporting the eel listing proposal. Let us stop cherry-picking only convenient data and hiding inconvenient truths.

²⁸ *Ibid*, p. 4.

²⁹ Yasuhiro Sanada (2025), "Unagi no mitsuyu o "mokunin" suru Nihon... Kokusai-teki na torishimari kyōka ni mo kangyō de "hantai", kono mama de wa taberarenaku naru (Japan tolerates eel smuggling: Amidst strengthened international regulations, bureaucrats and the eel industry firmly unite to oppose regulations)," *Wedge ONLINE*. <https://wedge.ismedia.jp/articles/-/38751>; Yasuhiro Sanada (2025), "Sūpā ni narabu "Chūgoku-san" unagi no kabayaki wa doko kara? Unagi no torihiki o ōu kuroi yami (Where does the grilled eel (kabayaki) made in China in supermarkets come from? The dark side of the eel trade)," *Wedge ONLINE*. <https://wedge.ismedia.jp/articles/-/38750>