

(Provisional Translation)

NDF Guidelines for Aquatic Species
by the Fisheries Agency of Japan

COP16 of CITES adopted a resolution on Non Detriment Finding (NDF) including non-binding guidelines. NDF issued by a scientific authority is a requirement when issuing export permits or introducing specimen from the Sea for a species listed in CITES Appendix I or II. Accordingly, the Fisheries Agency of Japan has established NDF guidelines for aquatic species for which the Agency is a scientific authority. NDF will be made in accordance with these guidelines.

1. NDF should be considered as much as possible by each genetically independent stock (hereinafter referred to as a species).
2. NDF can be made when the specimen is:
 - i) collected before the listing in Appendix
 - ii) not a nature origin such as:
 - a) Bred from parents collected before listing in Appendix
 - b) Bred from parents which were imported under the CITES procedures
 - c) Bred from parents which met the requirement of NDF
 - d) Others (Bred under a robust technique which was proved to be able to make F2.)
 - iii) collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on)
 - iv) collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. A by-caught individual is excluded from this category.
3. When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:
 - i) Biological characteristic and life history of the species
 - ii) Distribution range of the species (historical and present)
 - iii) Stock structure, status and trend of the species
 - iv) Threats to the species
 - v) Historical and present fishing situation and mortality rate of the species
 - vi) Introduced and proposed management measures for the species
 - vii) Compliance situation of the management measures
 - viii) Monitoring of the species status
 - ix) Conservation of the species
 - x) Continuity of the role of the species in the ecosystem

- xi) Effects of illegal trade on the survival of the species
4. In collecting the information of paragraph 3 above, the following items should be examined. An applicant may be requested to submit relevant information as necessary.
- i) Relevant scientific papers
 - ii) Ecological risk assessment
 - iii) Results of surveys at fishing grounds and markets
 - iv) Knowledge and expertise of local people involved
 - v) Views of experts
 - vi) Trade data
5. When NDF is considered based on the information in paragraph 3 above, as a first step, items iii), v) and vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 should be considered to judge whether NDF can be made.
- i) When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.
 - ii) In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)
 - iii) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered:
 - a) Protected areas are effectively established.
 - b) Time closure is effectively established.
 - c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period.
 - d) Regulation of fishing gear is effectively established.
 - e) Individuals smaller than a certain size are protected.
 - f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established.
 - g) Combination of above mentioned measures brings the same conservation effect.
 - iv) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size,

the minimum stock size should be estimated, taking into account, *inter alia*, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The “negligible level” should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < T \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < T \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level ¹ (Recovery Index(Fr)=0.1)	0.7%	1.2.% ²	1.8% ³

- v) The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species
6. When the species does not meet any of the criteria above, NDF should not be made unless there are special reasons.
7. For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)~(iv), and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.

¹ "negligible level" can be calculated as $R \cdot Fr / 2$ by the method of Wade 1998.

² Median value of R is used as there are ranges.

³ 0.35 is used as R