ICES Special Request Advice
Celtic Seas and Bay of Biscay and the Iberian Coast Ecoregions
sr.2017.23

Published 8 December 2017
DOI: 10.17895/ices.pub.3705

EU request on stock unit definition and an increase in inter-area quota flexibility from 2 to 5% for pollack in ICES Subarea 7 and divisions 8.a–b,d–e

Advice summary

ICES advises that, until further information becomes available, the two separate stock assessment units of pollack in Subareas 6–7 and pollack in Subarea 8 and Division 9.a. should be maintained.,

ICES advises that given the two existing stock assessment units and the current TACs in this area, any inter-area quota flexibility would not be consistent with the precautionary approach.

Request

ICES received a request from the EU regarding pollack in subareas 7 and 8abde. The request was accompanied by a document provided by France which is appended in Annex 1. The text of the background and the request from the EU was as follows:

Background

The Celtic Sea (Subarea 7) pollack stock is considered as data-limited stock, classified by ICES as category 4.1.2 stock and assess according to the Depletion-Corrected Average Catch (DCAC) method (latest advice: May 2016). For the Bay of Biscay (Subareas 8) pollack stock, classified as category 5 stock without information on abundance or exploitation, ICES applies a precautionary approach (latest advice: July 2016). The TACs for pollack are set separately for ICES Subareas 7 and 8abde and for 2017 as follows:

Species:	Pollack *Pollachius pollachius*	**Zone:**	VII (POL/07.)
Belgium	378 (1)		
Spain	23 (1)		
France	8 700 (1)		
Ireland	927 (1)		
United Kingdom	2 118 (1)		
Union	12 146 (1)		
TAC	12 146	Precautionary TAC Article 12(1) of this Regulation applies	

(1) Special condition: of which up to 2 % may be fished in: VIIIa, VIIIb, VIIId and VIIIe (POL/*8ABDE).

Species:	Pollack *Pollachius pollachius*	**Zone:**	VIIIa, VIIIb, VIIId and VIIIe (POL/8ABDE.)
Spain	252		
France	1 230		
Union	1 482		
TAC	1 482	Precautionary TAC	

The 2016 report of the ICES WGSCE working group indicates that the genetic studies show a lack of proven biological distinction between the two management units of pollack in subareas 7 and 8abde.

Moreover, during the negotiations process on TACs and quotas for 2017 the Commission noted the recent scientific information brought by France, indicating the possibility of a single stock unit extending from area 7 into 8abde.

Request

To allow the Commission to consider appropriate proposals for pollack in the future TACs and quotas exercises, ICES is requested, based on the document provided by France and any information ICES deems scientifically suited

(a) to assess whether pollack in ICES subareas 7 and 8abde is the same stock, and

(b) to evaluate impact of the an increased inter-area flexibility from 2% to 5%, notably whether such an increase would be in line with the precautionary approach.

Elaboration on the advice

a- Stock definition

ICES considers three units for the purpose of management and advice on fishing opportunities: 1) pollack in Subarea 4 (North Sea) and Division 3.a (North Sea, Skagerrak and Kattegat), 2) pollack in subareas 6–7 (Celtic Seas and the English Channel),and 3) pollack in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters). The advice request concerns the latter two (subareas 6–7; Subarea 8 and Division 9.a), which are delimited by the 48th parallel North, separating ICES subareas 7 and 8.

There are few studies on the stock definition of pollack in the northeast Atlantic and no tagging studies, traditional or with archival tags, have been carried out. It is therefore not possible to draw conclusions on movements, migrations or exchanges between zones for this species to provide a stronger scientific basis for stock delineation..

An early study conducted by Moreau (1964) showed that pollack from the Iberian Peninsula had different morphological characteristics from all of the other areas examined. A genetic study by Charrier *et al*. (2006) showed limited genetic differentiation among samples taken in four locations along the Atlantic French coast and from one location off southern Norway, although weak but significant genetic differentiation was detected between pollack from the Bay of Biscay and from the western English Channel (Division 7.e). The authors noted that small sample sizes and the limited number of microsatellites used might have hampered the detection of population differentiation for pollack. Given these findings, WGNEW 2014 (ICES, 2014) proposed maintaining the three existing stock units.

More recent studies have examined differences in growth and maturity as well as in catch rates. The maturity parameters defined for pollack caught in Galician inshore waters in the Vigo and Pontevedra rias (Spain) (Alonso-Fernandez *et al*., 2013) are clearly different from those obtained for individuals coming from the English Channel or the Irish Sea (Alemany *et al*., 2017). There are no data collected on the maturity of pollack in the Bay of Biscay, but using a Bayesian hierarchical model, Alemany *et al*. (2017) indicated that the growth and maturity parameters are similar to those of pollack from subareas 7 and 8. Finally, an analysis of CPUE (ICES, 2017) showed that the observed trends in CPUE in the western Channel have been declining strongly for several years, while those in the rest of the Atlantic (Celtic Sea and Bay of Biscay) have been rather stable. This could suggest that there is a different dynamic between western Channel (Division 7.e) pollack and that from other areas, which could be consistent with the preliminary results of genetic analyses by Charrier *et al*. (2006). This would tend to support the current stock assessment unit separation between the western English Channel and other areas (Celtic Sea and Bay of Biscay).

In summary, ICES concludes that the stock definition of pollack in the northeast Atlantic is unclear. The sum of the information on stock delineation is not conclusive and is not sufficient to determine whether or not pollack in ICES subareas 7 and 8.ab,d–e constitute the same stock. Until further information becomes available, there is no basis to change the current stock assessment unit definitions.

b- Inter-area flexibility

The TAC levels for each of these two stocks have been set well above the ICES advice for 2017 which is based on the precautionary approach. Consequently, allowing any inter-area quota flexibility from the pollack stock in Subareas 6-7 to the pollack stock in subarea 8 and 9a would not be consistent with the precautionary approach.

Suggestions

ICES suggests that further studies are required in order to be able to provide updated advice on the stock definition of pollack in the northeast Atlantic.

Basis of the advice

Background

Regarding the two stock assessment units relevant to this request, the advice for 2017 based on the precautionary approach was for catches of 4200 tonnes for pollack in subareas 6–7 (ICES, 2015) and 1414 tonnes for pollack in Subarea 8 and Division 9.a (ICES, 2016a). The advice for 2018 for the two stock assessment units are 4200 tonnes (ICES, 2017a) and 1131 tonnes (ICES, 2017b), respectively.

For subareas 6–7, individual TACs are set for Subarea 6 and Subarea 7 separately. For Subarea 7, the TAC in 2017 was set at 12 146 tonnes, well above the ICES advice for subareas 6–7 combined of 4200 tonnes. A similar situation exists for the Subarea 8 and Division 9.a stock unit. The TAC for divisions 8.a–b,d–e was set at 1482 tonnes compared to the advice of 1414 tonnes for the stock that includes the entire Subarea 8 and Division 9.a.

The request from the EU was addressed jointly by members of the Working Group for the Celtic Seas Ecoregion (WGCSE) and Working Group for the Bay of Biscay and the Iberic Waters Ecoregion (WGBIE).

a) Stock definition

To examine the question of the stock definition, a review of the literature was conducted. The review found that few studies have been conducted and the results of the studies were not sufficient to invalidate or confirm the current stock assessment unit definitions used to provide advice on fishing opportunities. The text contained in the 2016 WGCSE report (ICES, 2016b) referred to a study conducted by Charrier *et al*. (2006). These results were considered in 2014 (ICES, 2014) and it was concluded that the existing stock assessment unit definitions used to provide advice be maintained.

b) Inter area flexibility

ICES currently provides advice for two assessment areas; the first covers subareas 6–7 and the second covers Subarea 8 and Division 9.a. The first assessment area covers two TAC areas:

- Subarea 6; Union and international waters of 5b; international waters of 12 and 14
- Subarea 7

The second assessment area covers three TAC areas:

- Divisions 8.a–b,d–e
- Division 8.c
- Subarea 9 and 10; Union waters of CECAF 34.1.1

The current TAC for Area 7 includes a footnote stating that "Special condition: of which up to 2 % may be fished in: VIIIa, VIIIb, VIIId and VIIIe". ICES examined the impact of this increasing inter-area flexibility from 2% to 5%. The tables below summarize the impact of this flexibility relative to the advice provided for Subarea 8 and Division 9.a. This shows that any flexibility for all countries (Table 1) or for France only (Table 2) between 1 and 5% would result in catches above the precautionary advice provided for 2017.

Table 1 Allowable catches for pollack in subarea 6 – 7 (pol27.67) and pollack in Subarea 8 and Division 9.a (pol27.89) in 2017 resulting from applying different scenarios of inter-area flexibility for TAC in Subarea 7 for all countries. Comparison of allowable catches with scientific advice is provided in tonnes and percentage of change.

	pol27.67	pol27.89
Scientific advice for 2017, precautionary approach	4200	1414
TAC 2017	12543	1995
Allowable catches 2017 with flexibility for all countries in Sub7 (France, United Kingdom, Ireland, Belgium, Spain)		
1%	12025	2513
2%	11903	2635
3%	11782	2756
4%	11660	2878
5%	11539	2999
Excess scientific advice		
TAC	8343	581
TAC + 1% flexibility	7825	1099
TAC + 2%	7703	1221
TAC + 3%	7582	1342
TAC + 4%	7460	1464
TAC + 5%	7339	1585
Excess scientific advice (%)		
TAC	199%	41%
TAC + 1% flexibility	186%	78%
TAC + 2%	183%	86%
TAC + 3%	181%	95%
TAC + 4%	178%	104%
TAC + 5%	175%	112%

Table 2 Allowable catches for pollack in subareas 6–7 (pol27.67) and pollack in Subarea 8 and Division 9.a (pol27.89) in 2017 resulting from applying different scenarios of inter-area flexibility for TAC in Subarea 7 for France. Comparison of allowable catches with scientific advice is provided in tonnes and percentage of change.

	pol27.67	pol27.89
Scientific advice for 2017, precautionary approach	4200	1414
TAC 2017	12543	1995
Allowable catches 2017 with flexibility for France quota in Sub7:		
1%	12456	2082
2%	12369	2169
3%	12282	2256
4%	12195	2343
5%	12108	2430
Excess scientific advice:		
TAC	8343	581
TAC + 1% flexibility	8256	668
TAC + 2%	8169	755
TAC + 3%	8082	842
TAC + 4%	7995	929
TAC + 5%	7908	1016
Excess scientific advice (%):		
TAC	199%	41%
TAC + 1% flexibility	197%	47%
TAC + 2%	195%	53%
TAC + 3%	192%	60%
TAC + 4%	190%	66%
TAC + 5%	188%	72%

Sources and references

Alemany J., Foucher E., Rivot E., Vigneau J., and J-P. Robin, 2017. Update of the life-history parameters of Pollack (*Pollachius pollachius*) using a Bayesian hierarchical model, 160-178. In Alemany J., 2017. Développement d'un cadre Bayésien pour l'évaluation de stocks à données limitées et élaboration de scenarios de gestion, cas particuliers de la seiche (*Sepia officinalis*) et du lieu jaune (*Pollachius pollachius*), PhD thesis, University of Caen Normandie, 238p.

Alonso-Fernandez A., Villegas-Rios D., Valdes-Lopez M., Oliveira-Dominguez B., and Saborido-Rey F., 2013. Reproductive biology of Pollack (*Pollachius pollachius*) from the Galician shelf (north-west Spain). Journal of the Marine Biological Association of the United Kingdom, 93(07), 1951-1963.

Charrier G., Durand J-D., Quiniou L., and J. Laroche, 2006. An investigation of the population genetic structure of Pollack (*Pollachius pollachius*) based on microsatellite markers. ICES Journal of Marine Science, 63: 1705-1709.

ICES. 2014. Report of the Working Group on Assessment of New MoU Species (WGNEW), 24–28 March 2014, Copenhagen, Denmark. ICES CM 2014/ACOM:21. 162pp.

ICES. 2015. Pollack (*Pollachius pollachius*) in Subareas VI–VII (Celtic Seas and the English Channel). In Report of the ICES Advisory Committee, 2015. ICES Advice 2015, Book 5, Section 5.3.

ICES. 2016a. Pollack (*Pollachius pollachius*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters). In Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 7, Section 7.3.advice for pollack in 8 and 9.a for 2017

ICES. 2016b. Report of the Working Group for the Celtic Seas Ecoregion (WGCSE), 04–13 May 2016, ICES Headquarters, Copenhagen, Denmark. ICES CM 2016/ACOM:13.

ICES. 2017a. Pollack (*Pollachius pollachius*) in subareas 6–7 (Celtic Seas and the English Channel). In Report of the ICES Advisory Committee, 2017. ICES Advice 2017, pol.27.67. doi: 10.17895/ices.pub.3209.

ICES. 2017b. Pollack (*Pollachius pollachius*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)- In Report of the ICES Advisory Committee, 2017. ICES Advice 2017, pol.27.89a. DOI:10.17895/ices.pub.321.

Moreau J., 1964. Contribution à l'étude du lieu jaune (*Gadus pollachius* L.). Revue des Travaux de l'Institut des Pêches Maritimes, 28(3), 238-255.

Annex 1: Document provided by France regarding the request on stock unit definition for pollack in ICES subareas 7 and 8abde and inter-area quota flexibility

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

Paris, le 17 novembre 2017

NOTE DES AUTORITÉS FRANÇAISES

À LA COMMISSION EUROPÉENNE

Direction générale des affaires maritimes et de la pêche

Direction C – Atlantique, régions ultrapériphériques et Arctique

Unité C1 -à l'attention de Mme Maja Kirchner

Objet : Proposition de règlement du Conseil établissant pour 2018 les possibilités de pêche disponibles pour certains stocks halieutiques et groupes de stocks halieutiques dans les eaux de l'Union, et pour les navires de l'Union dans certaines eaux hors de l'Union - **Demande d'augmentation de la flexibilité du quota de lieu jaune de la zone VII vers la zone VIII a, b, d, e.**

Les autorités françaises sollicitent, à l'occasion de l'établissement des possibilités de pêche pour 2018, **une augmentation modérée de la flexibilité du quota de lieu jaune, qui passerait de 2 à 5%** de la zone VII vers la zone VIII a, b, d, e, dont le quota, plus faible, est consommé chaque année en totalité.

Cette demande se justifie par les considérations suivantes :

- **La distinction biologique entre les différentes unités de gestion du lieu jaune de l'Atlantique Nord-Est n'est pas avérée**. Dans un rapport de septembre 2017 joint à cette note, l'IFREMER indique *« qu'il semble acquis que des échanges existent dans la population de lieux jaunes de la pointe Bretagne, de part et d'autre du parallèle 48°Nord, à défaut d'évidence d'échanges plus larges et plus importants entre zones plus éloignées ».* En se basant sur les études disponibles, il n'est donc pas possible de conclure formellement en l'absence d'unicité du stock de lieu jaune de l'Atlantique Est.

- Le quota de lieu jaune en zone VIII a, b, d, e, alloué à la France en 2016 était de 1 230 tonnes. Les débarquements de lieu jaune ont atteint 1 285 tonnes en 2016, soit **105% du quota national initial (avant échange)**. Cette flexibilité donnera de la souplesse aux pêcheurs ciblant le bar dans le golfe de Gascogne pour adapter leur activité face à la baisse probable des captures de bar autorisées, telle que suggérée par l'avis CIEM du 24 octobre 2017. En effet, le roll-over du TAC de lieu jaune en VIII a, b, d, e, proposé pour l'année 2018 ne permettrait pas un report d'activité aux artisans ligneurs ou fileyeurs.

1

- **La flexibilité représentera des volumes de captures supplémentaires en zone VIII limités**, comme rappelé dans le tableau ci-dessous.

Flexibilité appliquée au quota de lieu jaune de la zone VII alloué à la France en 2017	
1%	87 t
2%	174 t
3%	261 t
4%	348 t
5%	**435 t**

- **L'augmentation du niveau de flexibilité sera bénéfique pour la petite pêche côtière** : ce stock est en effet principalement exploité par les flottilles artisanales côtières. En 2016, en zone VIII a, b, d, e, 584 navires de pêche ont capturé 1 285 tonnes de lieu jaune. L'analyse de ces captures montre que, au total, 523 navires de moins 18 mètres ont capturé 1 132 tonnes de lieu jaune, **soit 88 % des captures.** Parmi ceux-là, les 374 navires de moins de 12 mètres représentent 72% des captures totales de lieu jaune en zone VIII a, b, d, e.

Cette flexibilité bénéficiera aux navires exploitant le bar en zone en zone VIII – sujets à des mesures nationales renforcées en 2017 – et particulièrement aux métiers artisanaux de l'hameçon, dont le chiffre d'affaire peut dépendre jusqu'à plus de 50% des captures de lieu jaune.

Nombre de navires pêchant le lieu jaune en zone VIII a, b, d, e et niveau de leurs captures en 2016

Taille des navires	**Nombre de navires**		**Captures (t)**	
moins de 12m	497	61%	969	76%
12 à 16 m	124	15%	146	11%
16 à 18 m	48	6%	37	3%
18 à 24 m	114	14%	129	10%
plus de 24m	30	4%	4	0%
TOTAL	813	100%	1 285	100%

Par ailleurs, la France souhaite rappeler que cette majoration de la flexibilité permettrait de résoudre une difficulté pratique à laquelle sont confrontées ces flottilles côtières. En effet, le parallèle 48°N séparant les deux zones VII et VIII passe à la pointe de la Bretagne, au milieu de zones de pêche travaillées de part et d'autre par les mêmes navires artisanaux côtiers (cf. Carte en annexe).

Les ports de pêche importants pour le débarquement de lieu jaune (Douarnenez, le Guilvinec, Penmarc'h, Saint Guénolé, Concarneau) se situent de part et d'autre du parallèle 48°N.

Carte illustrant la limite du 48ème parallèle :