



Food and Agriculture
Organization of the
United Nations



General Fisheries
Commission for
the Mediterranean



FEDERATION OF
EUROPEAN
AQUACULTURE
PRODUCERS



Promoting sustainable aquaculture activities in Greece

1. Implementation Spatial Planning for aquaculture (AZAs)
2. Use of non-indigenous species already present in aquaculture

Yannis Pelekanakis

Head of EU Affairs

Hellenic Aquaculture Producers Association

Workshop for Promoting Sustainable Aquaculture Practices in the
Mediterranean and Black Sea Regions: the Producers' perspective

Rome, 18 January 2024



Implementation of a Special Spatial Planning framework for aquaculture (ADAs)

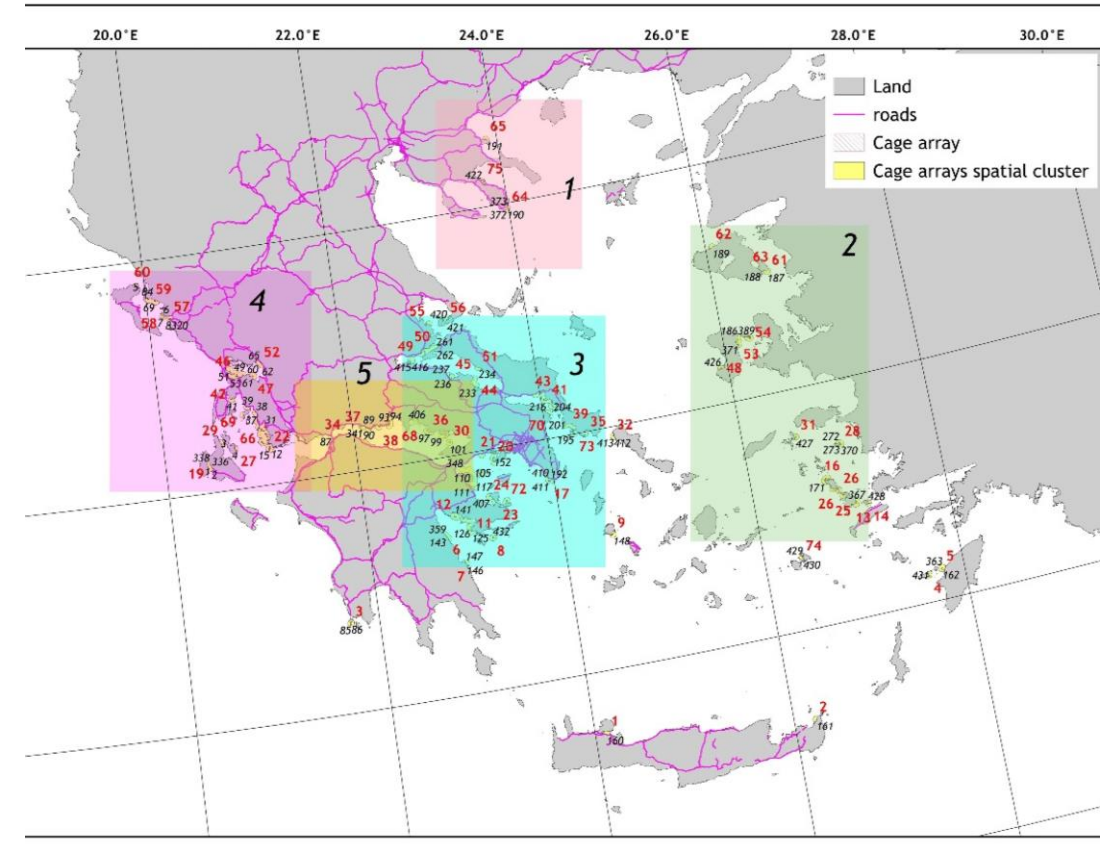


GUIDELINES FOR streamlining aquaculture licensing and leasing processes



2011: “Approval of a Special Spatial Planning Framework and Sustainable Development for aquaculture and its Strategic Environmental Impact Assessment”

- Introduced integrated spatial planning for aquaculture and:
 - ✓ Avoid conflict with other users
 - ✓ Avoid irreversible impacts on the environment
 - ✓ Enhance competitiveness





Implementation of a Special Spatial Planning framework for aquaculture (ADAs)

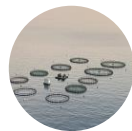
The framework:

- Specifies broad **Areas** suitable for **Development of Aquaculture** (ADA)
- Minimum area of 100 hectares or min. 5 farms
- Operates under a management body
- Includes one or more AZAs.
- Existing individual farms can remain under prerequisites
- Aquaculture development based on a zoning principle



Category A

Highly developed aquaculture areas



Category B

Areas with significant potential for further development



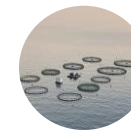
Category C

Inaccessible areas with high potential of development



Category D

Areas with great sensitivity (MPAs)



Category E

Areas suitable for aquaculture but with peculiarities, (inaccessible, small islands, urban touristic)

Timetable:

2017: deadline to submit ADAs applications (23 files submitted)

2019: deadline to approve all applications (postponed)



Establishment of ADAs: main challenges

Process

Application

- Assessment of file
- Applications with various approaches
- Coordination of competent authorities

Consultation

- Local / regional authorities / stakeholders

Approval

- Spatial planning of aquaculture of the ADA

Completion

- Legally binding establishment of the ADA / AZAs

- ☹ Lack of experience (admin.)
- ☹ *Different approach / standards (investors)*
- ☹ *Social Acceptability (local communities)*
- ☹ Lack of political will (earlier years)

- *Significant administrative delays*
- *Cost to revise applications*
- *Investment risk*





Establishment of ADAs: main challenges

Social Acceptability (local/regional stakeholders)

Initiatives against Aquaculture

- Mass meetings at local level
- Negative media coverage
 - Environmental impact
 - Impact on tourism
 - Conflict with fishermen
 - Poor regulatory complinace
 - Limited public access to coastal areas



Ενημερωτική Ημερίδα

Θέμα: Περιοχή Οργανωμένης Ανάπτυξης Υδατοκαλλιέργειών (Π.Ο.Α.Υ.) στις Εχινάδες Νήσους και στις Αντικτές Αιτωλίας και στη Νήσο Κάλαμο.

Κυριακή 13 Μαρτίου 2022
Ξενοδοχείο CARAVEL
 (Λεωφόρος Βασιλέως Αλεξάνδρου 2 - Αθήνα)
ΩΡΑ 10:30 - 14:30

Διοργάνωση:
 ΕΠΙΤΡΟΠΗ ΑΓΩΝΑ ΔΗΜΟΥ ΞΗΡΟΜΕΡΟΥ
 ΚΑΛΑΜΟΥ - ΚΑΣΤΟΥ
 ΕΝΑΝΤΙΑ ΣΤΗΝ Π.Ο.Α.Υ
 ΕΧΙΝΑΔΩΝ ΝΗΣΩΝ ΚΑΙ ΑΙΤΩΛΙΑΣ

Με την υποστήριξη: Δήμου Ξηρομέρου
 Πανεπιστημιακής Ομάδας Συναρμοστικής (ΠΑΝ.ΣΥ.)
 Ομοσπονδίας Πολιτιστικών Συλλόγων Ξηρομέρου (Ο.Π.Σ.Υ.Ε.)
 Επικοινωνία: e-mail:epitrona2020@gmail.com



Χωροθέτηση υπερντιστικών ιχθυοκαλλιέργειων δίπλα και εντός προστατευόμενων περιοχών.

→ Επιβάρυνση των οικοσυστημάτων και ειδών της περιοχής



Σήμερα ζούμε σε αυτό...
 γιατί να το στερήσουμε από τα παιδιά μας ;



Ζητάμε την έμπρακτη στήριξή σας ώστε να ανατρέψουμε τον παράλογο σχεδιασμό και να πετύχουμε νέο, δίκαιο με πραγματική οργάνωση και συγκέντρωση των ιχθυοκαλλιέργειών σε ένα μέρος ανοιχτά του πελάγου και όχι στην παράκτια ζώνη από Αστακό - Μύτικα - Κάλαμο. Ένα σχεδιασμό που να μη συγκρούεται με άλλες δραστηριότητες, που θα εξυπηρετεί τα συμφέροντα των ήδη εργαζομένων στον κλάδο αλλά και των κατοίκων και των παιδιών μας στο μέλλον και θα επιτρέπει την απόρροπη ανάπτυξη και άλλων δραστηριοτήτων, όπως τουρισμός, εμπόριο, αναψυχή, ελεύθερα επαγόμενα και παράκτια Αλιεία.

ΕΛΕΥΘΕΡΕΣ ΠΑΡΑΛΙΕΣ ΚΑΙ ΑΚΤΕΣ

ΑΠΟΣΥΡΣΗ ΤΟΥ ΦΑΚΕΛΟΥ ΤΗΣ Π.Ο.Α.Υ ΕΧΙΝΑΔΩΝ ΝΗΣΩΝ ΚΑΙ ΑΙΤΩΛΙΑΣ
ΟΧΙ Π.Ο.Α.Υ Η ΠΑΡΑΛΙΑΚΗ ΖΩΝΗ ΑΣΤΑΚΟΥ-ΜΥΤΙΚΑ - ΚΑΛΑΜΟΥ



ΣΥΝΤΑΓΜΑΤΙΚΟ ΔΙΚΑΙΩΜΑ ΤΩΝ ΠΟΛΙΤΩΝ
Η ΕΛΕΥΘΕΡΗ ΧΡΗΣΗ ΤΩΝ ΑΚΤΩΝ
ΔΙΚΑΙΩΜΑ ΤΟΥ ΔΗΜΟΥ, Ο ΣΧΕΔΙΑΣΜΟΣ ΤΗΣ ΑΝΑΠΤΥΞΗΣ ΤΟΥ ΠΑΡΑΛΙΑΚΟΥ ΜΕΤΩΠΟΥ





Establishment of ADAs: HAPO activities

HAPO:

- ADAs - strategic priority
 - twofold strategy to promote spatial planning
- 2017 Established the “ADA coordination committee”
1. Encoded the establishment process
 2. Identified admin. problems per stage
 3. Provided technical assistance
 4. Producers / consultants / administration agreed on the same technical standards / methodology (harmonization of applications)
 5. project management to monitor the progress of each application



ΠΟΡΕΙΑ ΜΕΛΕΤΩΝ ΠΟΥ

1. ΣΤΑΔΙΟ ΟΛΟΚΛΗΡΩΣΗΣ			
1.A. ΠΕΡΙΟΧΕΣ ΣΤΙΣ ΟΠΟΙΕΣ ΕΚΔΟΘΗΚΕ ΚΑΝΟΝΙΣΜΟΣ & ΑΠΟΦΑΣΗ			
ΠΕΡΙΟΧΕΣ		ΦΟΡΕΑΣ ΔΙΑΧΕΙΡΙΣΗΣ	
ΧΑΛΚΙΔΙΚΗ	ΠΟΥ ΧΑΛΚΙΔΙΚΗΣ ΙΚΕ	ΝΑΥΣ	
ΚΕΦΑΛΛΟΝΙΑ	ΚΕΦΑΛΟΣ ΑΕ	ΝΑΥΣ	
ΟΣΕΙΑ	ΔΕΛΤΑ ΑΧΕΛΩΟΥ ΙΚΕ	ΝΑΥΣ	
ΜΕΓΑΡΑ	ΕΤΑΙΡΙΑ ΑΝΑΠΤΥΞΗΣ ΥΔΑΤΟΚΑΛΛΙΕΡΓΕΙΩΝ ΣΚΙΡΩΝΙΔΑ ΙΚΕ	ΑΡΚ	
Α ΘΕΣΠΡΩΤΙΑ	ΘΕΣΠΟΥ ΑΕ	ΑΡΚ	
Α ΕΧΙΝΑΔΕΣ	ΑΝΑΠΤΥΣΙΑΚΗ ΕΧΙΝΑΔΩΝ ΚΑΙ ΑΙΤΩΛΟΑΚΑΡΝΑΝΙΑΣ Α.Ε.	ΑΜΒΙΟ	
1.B. ΠΕΡΙΟΧΕΣ ΣΤΙΣ ΟΠΟΙΕΣ ΕΚΔΟΘΗΚΑΝ Π.Δ.			
ΠΕΡΙΟΧΕΣ		ΦΟΡΕΑΣ ΔΙΑΧΕΙΡΙΣΗΣ	
1.Γ. ΜΕΛΕΤΕΣ ΠΟΥ ΕΙΝΑΙ ΣΤΟ ΤΕΛΙΚΟ ΣΤΑΔΙΟ ΓΙΑ ΤΗΝ ΕΓΚΡΙΣΗ ΤΟΥ Π.Δ. (ΜΕΛΕΤΕΣ ΠΟΥ ΕΧΟΥΝ ΣΤΑΛΕΙ ΣΤΟ ΣΥΜΒΟΥΛΙΟ ΤΗΣ ΕΠΙΚΡΑΤΕΙΑΣ (ΣτΕ) & ΕΙΝΑΙ ΠΡΟΣ ΕΠΕΞΕΡΓΑΣΙΑΣ)			
ΠΟΥ		ΦΟΡΕΑΣ ΔΙΑΧΕΙΡΙΣΗΣ	
Α	ΕΥΒΟΙΑ	ΕΥΒΕΤΑΝΥ ΑΕ	ΝΑΥΣ
1.Δ. ΜΕΛΕΤΕΣ ΠΟΥ ΠΡΟΚΕΙΤΑΙ ΝΑ ΕΙΝΑΙ ΣΤΟ ΣτΕ ΓΙΑ ΕΛΕΓΧΟ			
ΠΕΡΙΟΧΕΣ		ΦΟΡΕΑΣ ΔΙΑΧΕΙΡΙΣΗΣ	
Α	ΣΑΛΑΜΙΝΑ (ΔΙΑΠΟΡΙΑ)	Π.Ο.Α.Υ. ΔΙΑΠΟΡΙΩΝ ΝΗΣΩΝ ΣΑΡΩΝΙΚΟΥ ΚΟΛΠΟΥ, ΣΑΛΑΜΙΝΟΣ ΚΑΙ ΕΥΡΥΤΕΡΗΣ ΠΕΡΙΟΧΗΣ ΙΚΕ	ΝΑΥΣ
Β	ΒΟΙΩΤΙΑ	ΠΟΥ ΒΟΙΩΤΙΑΣ ΜΟΝ. ΙΚΕ	ΑΜΒΙΟ
2. ΣΤΑΔΙΟ ΚΕΣΥΠΟΘΑ - ΚΕΣΥΧΩΘΑ			



Establishment of ADAs: HAPO activities

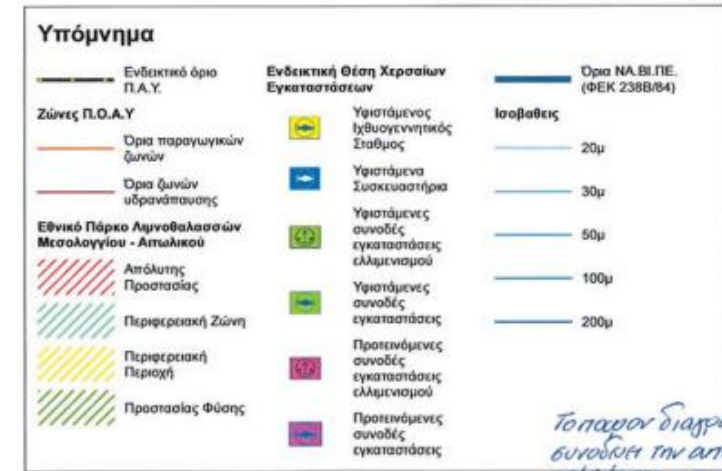
The coordination Committee engaged in activities to improve social acceptability and promote the ADAs and their benefits.

Participatory activities:

- ✓ open days for aquaculture
- ✓ Workshops at local / national level
- ✓ Provided educational material
- ✓ Highlighted the socioeconomic benefits
- Foster transparency
- Built collaborative relationships



Establishment of ADAs: result of participatory process



Το παρόν διαγράμμο συντάχθηκε την 11/10/2019, με τη χρήση Ορισμένων Στοιχείων από το ΠΡΩΤΟ ΣΤΑΔΙΟ ΤΗΣ ΠΡ...

To date: 6 ADAs

- 25 AZAs (fish)
- 8 AZA (following)
- 1 AZA mussels

300% more available space for aquaculture (up to 1.800 hectares)
 200% increase in production capacity (up to 20.000 tonnes more)
 ➤ Production capacity increase based on environmental assessment

Still, a long way to go!!!



Streamlining aquaculture licensing within the ADA

Consultation with HAPO

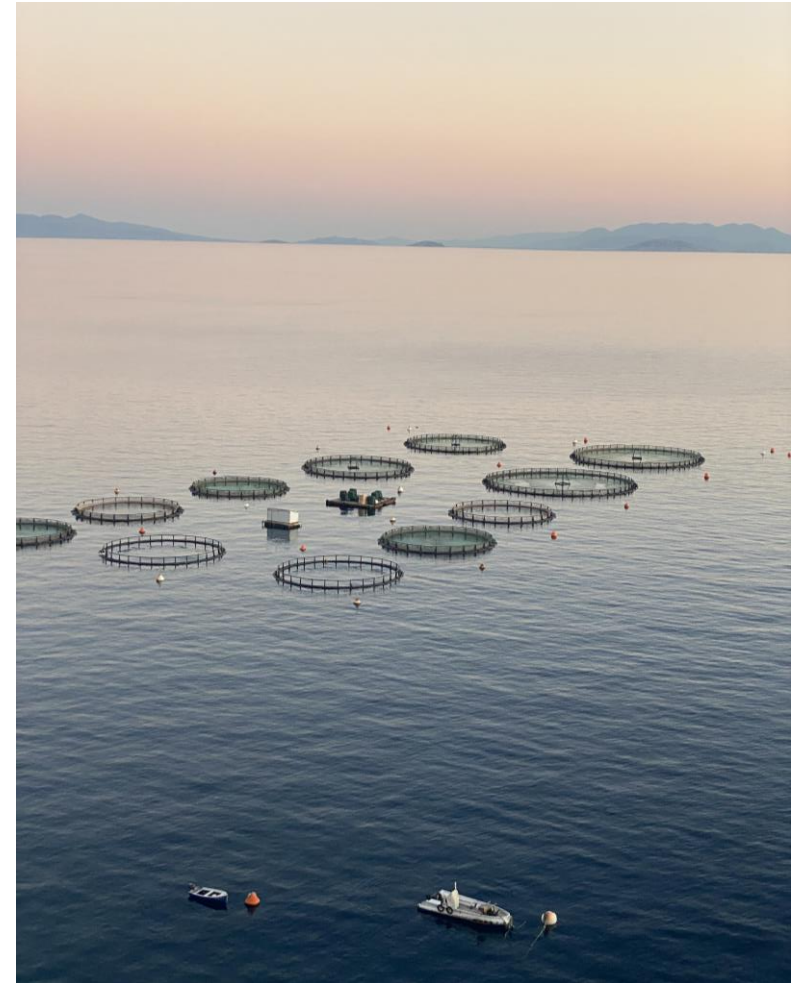
Law 4282/2014: Aquaculture development and other provisions
(*simplification of administrative procedures*)

In general:

- Decentralized Authorities were designated as one-stop-shop services
- Time spend from 24-25 months to 12-14 months
- Average cost remained the same (same environmental provisions)

Licencing within the ADA:

- Criteria (scoring system) to obtain new licenses (inactive/withdrawn etc.)
- Promote a level playing field between the producers
- Safeguard the sustainable development of aquaculture



Use of non-indigenous species that are already present in aquaculture



GUIDELINES ON
assessing and minimizing the
possible impacts from the use of
non-indigenous species in aquaculture



Amending Annex IV to Council Regulation (EC) No 708/2007 concerning use of alien and locally absent species in aquaculture: *Pagrus Major*





Use of non-indigenous species that are already present in aquaculture

Legal requirements: Application for permit and ERA

Application for a permit
(Annex I, EC No 708/2007)

1. Introduction
2. Life history information of the species to be introduced -
for each life stage
3. Interaction with other species
4. Receiving environment and contiguous waters
5. Monitoring
6. Management plan
7. Business data
8. References



Ευρωπαϊκή
Επιτροπή

28.6.2007

EN

Official Journal of the European Union

L 168/1

I

(Acts adopted under the EC Treaty/Euratom Treaty whose publication is obligatory)

REGULATIONS

COUNCIL REGULATION (EC) No 708/2007

of 11 June 2007

concerning use of alien and locally absent species in aquaculture

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 37 and Article 299(2) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the European Economic and Social Committee ⁽¹⁾

Whereas:

(1) In accordance with Article 6 of the Treaty, environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities, in particular with a view to promoting sustainable development.

(2) Aquaculture is a fast-growing sector where innovation and new outlets are being explored. In order to adapt the production to the conditions of the market, it is important

(4) Invasive alien species have been identified as one of the key causes of loss of native species and harm to bio-diversity. Under Article 8(h) of the Convention on Biological Diversity (CBD), to which the Community is a Party, each Contracting Party is required, as far as possible and as appropriate, to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. In particular, the Conference of the Parties to the CBD has adopted Decision VI/23 on alien species that threaten ecosystems, habitats or species, the annex to which sets out Guiding Principles for the prevention, introduction and mitigation of impacts of such alien species.

(5) The translocation of species within their natural range to areas where they are locally absent for specific biogeographical reasons may also present risks for ecosystems in these areas and should also be covered by this Regulation.



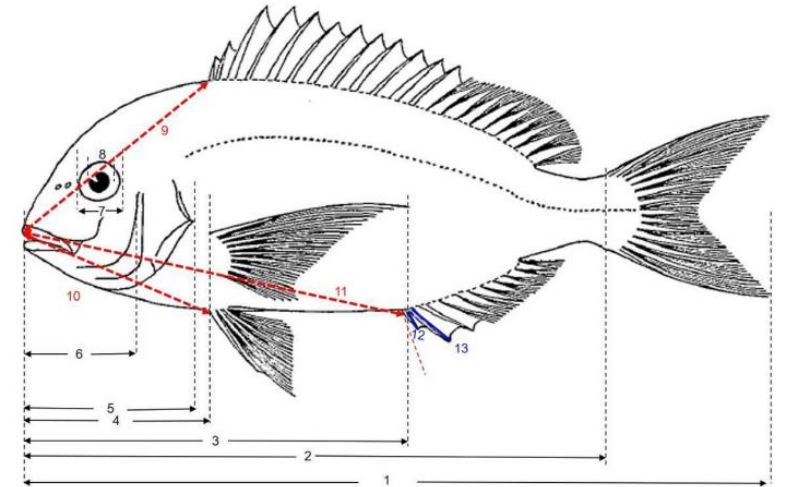
Use of non-indigenous species that are already present in aquaculture

Application / ERA: HAPO worked with the University of Patras and HCMR

- **Pagrus spp. as an object of fish farming in the Mediterranean**
Present since 1985 & farmed in PT, SP, IT, CR, GR, CY, TR, IS
- **Introduction & development in aquaculture of the genus Pagrus spp, in GR**
Farming distribution & pathogen
- **Gather evidence from natural populations through fishery statistics**
- **Collection and identification of samples from wild & farmed individuals**
Morphological measurements / comparison
Genetic analyses (DNA barcoding of 146 "wild" and 80 farmed individuals)
- **Environmental risk assessment (ERA) from production of Pagrus major (Annex II EC 708/2007)**

Know how (as for the other farmed species):

- ✓ Adequate infrastructure at farm level
- ✓ Health & welfare best practices
- ✓ Biosecurity measures at farm and national level
- ✓ There are laboratories with diagnostic capacities of fish diseases
- ✓ Trained staff

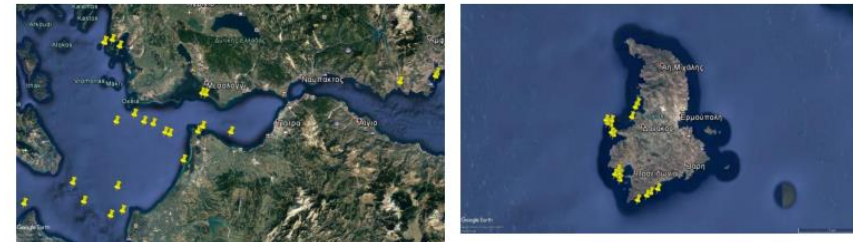


Production of non-indigenous species that are already present in aquaculture

Pagrus species: Already present anywhere from everywhere

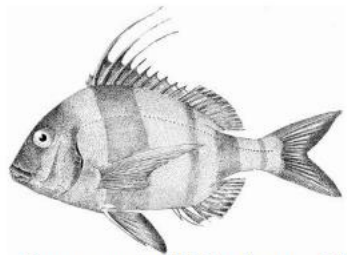
- Recorded in the Mediterranean
- Found in the Greek market from overseas fisheries from Morocco, Oman and Tunisia (listed also on importer's websites)
- From wild fisheries in Greece

Samples of Pagrus species from wild fisheries with reference in the regions of origin, number of individuals and size range

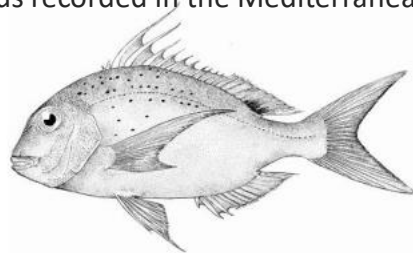


Είδος	Προέλευση	Περιοχή	Αριθμός ατόμων	Εύρος βάρους (g)
<i>Pagrus pagrus</i>	Φυσικός πληθυσμός	Σύρος	6	25,10 - 53,68
<i>Pagrus pagrus</i>	Φυσικός πληθυσμός	Ιόνιο	103	17,68-1099,79
<i>Dentex gibbosus</i>	Φυσικός πληθυσμός	Ιόνιο	2	674,34-7780,00
<i>Pagrus major</i>	Φυσικός πληθυσμός	Εχινάδες, Πρέβεζα	5	107,81-681,21
<i>Pagrus major</i>	Εκτροφής	Αιτωλ/νία	12	234,32-1617,28
<i>Pagrus major</i>	Εκτροφής	Θεσπρωτία	13	167,37-936,48

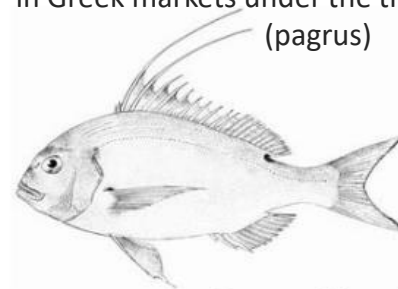
Illustration of species of the genus Dentex found in Greek markets under the trade name "pagri" (pagrus)



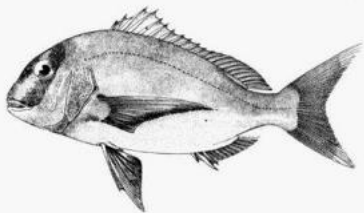
Pagrus auriga (Valenciennes, 1843)



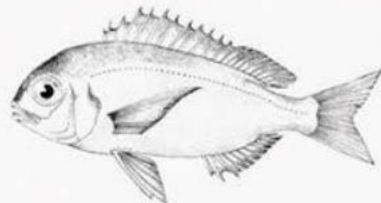
Pagrus caeruleostictus (Valenciennes 1830)



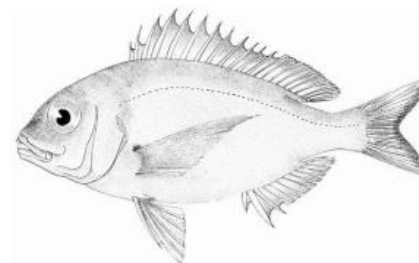
Dentex gibbosus (Rafinesque 1810)



Pagrus pagrus (Linnaeus, 1758)



Pagrus major (Temminck & Schlegel, 1843)



Dentex maroccanus (Valenciennes 1830)

Illustration of species of the genus Pagrus recorded in the Mediterranean



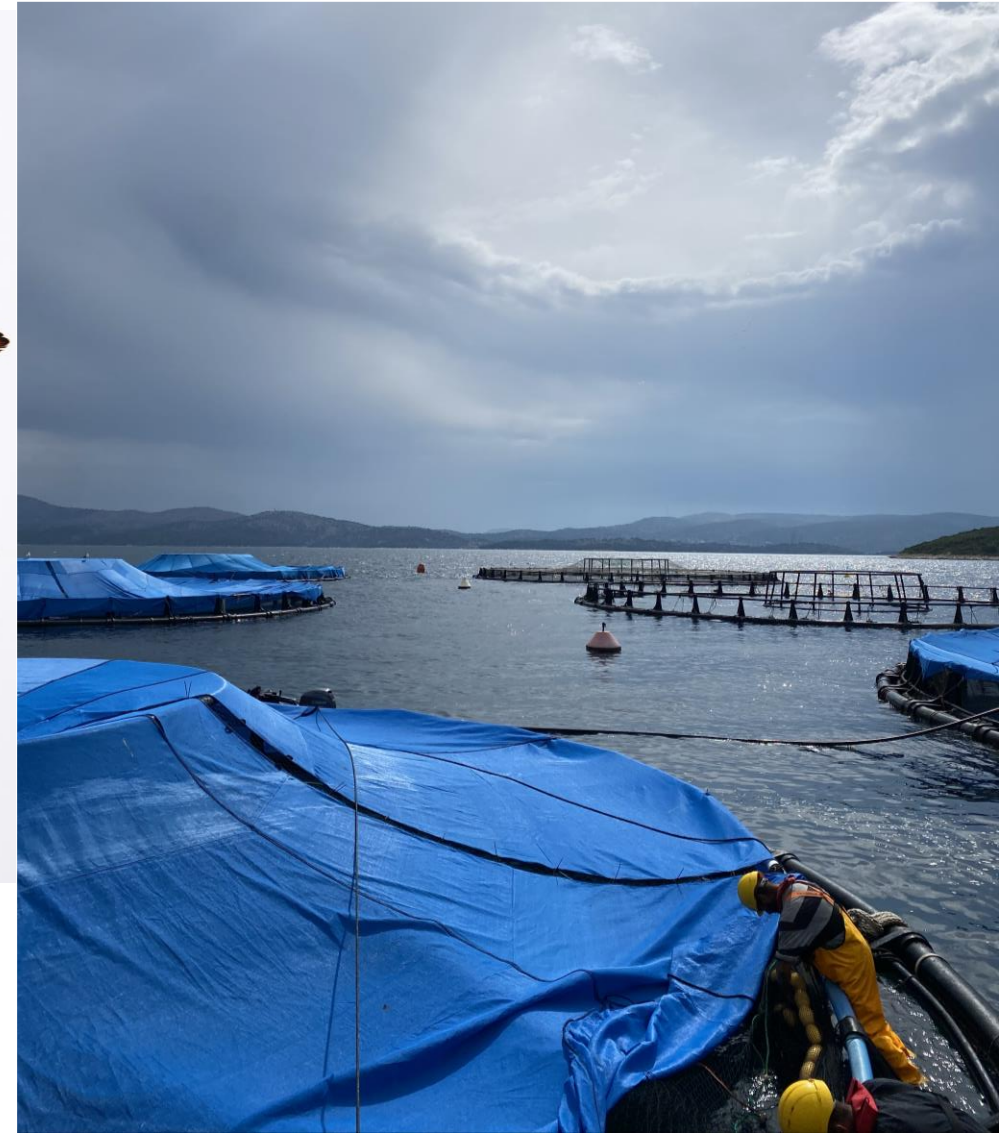
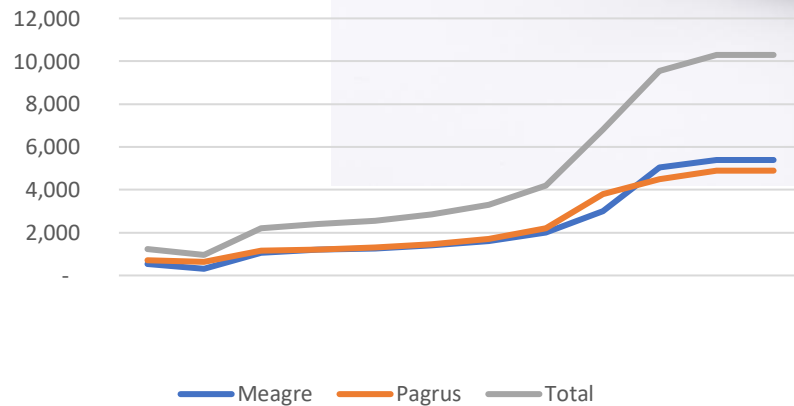
Production of non-indigenous species that are already present in aquaculture

- Pagrus Major was added in the Annex I of the EC 708/2007 in 2021
- Consumer demand for product diversification
- Reduced dependence on single species
- Sustainable development of aquaculture
- Socio economic contribution to local communities



Pagrus Major

Production of "new" Med. species





Andromeda Group
YOUR NEARBY SEA FISHERMAN



DELAVIAS
APOSTOLOS



K.GEORGIU



V. LEONTISIS
TSIPOYRA
AMVRAKIKOU

V. LIONIS

LORIDA



NEW FISH
AMPAKIKOY



skaloma s.a. |
fishforming



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Tel: +30 210 66 41 520

www.fishfromgreece.com