

By: Chief Fishery Officer

To: Kent and Essex Inshore Fisheries and Conservation Authority – 12 September 2016

Subject: **Update and Review of Bass Management**

Classification Unrestricted

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**Summary:**

This paper will provide Members with information on the development of bass management at a regional, national and international level and the input provided by KEIFCA since 2014 and the proposals for this management to continue in the future

**Recommendations:**

- support Defra in the review of the Bass Nursery Area Statutory Instrument;
- conduct joint bass enforcement operations with the Marine Management Organisation; and
- engage with Cefas in a C-bass tagging project

**Background:**

At the Authority meeting in May 2016 Authority members requested an extended agenda item discussion regarding the current state of bass stocks and potential future management of this stock. As discussed previously sea bass is widely distributed throughout the lower North Sea, Channel, Celtic Sea and Irish Sea and coordinated international management measures would have the most significant and fairest impact on managing this stock. The primary role of regional management has been to focus on making the current bass nursery area network more robust and potentially extending the network. Initially this was work that KEIFCA had started to scope out and lead on, however DEFRA have taken the lead on this work stream by starting a review of the bass nursery area Statutory Instrument (SI). One of the key roles that KEIFCA can continue to play in the development of bass management measures is to act as a conduit between national and international decision makers and local stakeholders. With the stated EU goal of reaching Maximum Sustainable Yield (MSY) by 2018, and the current advice from ICES that *'there should be zero catch (commercial and recreational) in 2017'* there will inevitably be significant cuts in fisheries effort

over the next two years, which will lead to much tighter regulations. The implications of this could be significant on all sectors and in an extreme scenario could lead to a moratorium on landing bass. It is in this light that the Authority wanted to hold a discussion where the latest ICES advice and CEFAS research could be discussed and presented to interested stakeholders and that local stakeholders views on future management measures could be compiled and passed on (via a letter to the Minister) to decision makers in DEFRA in time for the EU Council of Ministers negotiations in November/December.

#### 1. Development of bass management

Since the ICES advice in July 2014, the development of bass management at a regional, national and international level has gathered pace and significant measures have been taken to try and recover the stock. Table 1 shows the level of debate and input KEIFCA has had in this process. The key starting point from KEIFCA has always been that overall stock management measures are best lead at an international level, however there is benefit in the development of bass nursery areas, which could be led either at a national or regional level.

##### *Scoping out a nursery area review process*

KEIFCA officers developed a strategy paper that reviewed the current bass nursery area provision and laid out a process to assess the key estuaries in the KEIFCA district. The plan was discussed and evaluated by a well-attended technical panel, however the Authority agreed that a review of the current bass nursery area Statutory Instrument (SI), held by DEFRA, was the most efficient and consistent way forward as the bass nursery area network is at a national level.

##### *Supporting DEFRA in reviewing the SI*

KEIFCA held a technical panel with DEFRA, to highlight local issues relating to bass nursery areas and help DEFRA develop their ideas and plans as to the review of the bass nursery area SI. Since this meeting officers have given on going feedback at DEFRA meetings and supplied local information and perspectives to this process.

##### *Working with local fishermen to develop the Medway Nursery Area*

Although KEIFCA are working closely with DEFRA in reviewing the bass nursery area SI, through working with local fishermen the potential to develop collaborative and innovative management in the Medway emerged, that would help bass stocks as well as a number of other key species. The Medway Estuary is an important nursery area for juvenile bass and the legislation developed by KEIFCA as well as ROFF helps protect this key stock with the most comprehensive protection possible. The byelaw increased the previous bass nursery area significantly.

##### *Working collaboratively with the EA to maintain key long-term juvenile bass data sets that help inform ICES advice and future management.*

In 2015 the regional EA team were reviewing their ability to continue to sample the Medway as part of their ongoing Water Framework Directive (WFD) commitments and in all likelihood this survey was going to be dropped. The survey has been undertaken every year since 1999 and not only forms an important long-term regional small fish data set, but also provides key data that can be used to monitor future juvenile bass stocks in our district. Since

April/May 2015 KEIFCA have committed two officers for each of the spring and autumn surveys as well as provided vessel resource on occasion.

*Developing engagement and enforcement tools, approaches and operations, to help enforce EU bass legislation.*

KEIFCA officers have been working with MMO and other IFCA's to try and introduce the 2016 bass legislation in a coordinated manner. The new legislation significantly alters the legislative landscape which fishermen are required to comply with which is why this work stream has been given a significant priority within this year's Annual Plan.

Key actions taken:

- Enforcement patrols land & sea
- Letter and information for charter boat skippers
- Stickers and notices for anglers (inc. non-english speaking)
- IUU launch by the MMO
- Joint working with the MMO

Table 1

Date	Lead	Action
2014		
July 2014	ICES	<u>ICES Advice</u> Current advice from ICES is that the level of fishing mortality for bass is above target and that as a result "ICES advises that a management plan is urgently needed to develop and implement measures to substantially reduce fishing mortality throughout the range of the stock".
September	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management • Introduction to sea bass management and advice • Options as to KEIFCA role in developing management
November	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management • Presentation by Steve Colclough Institute of Fisheries Managers • KEIFCA review Bass nursery area provision and instruct officers to develop a nursery area review program.
2015		
January	EU	Pelagic trawling ban until the end of April 2015
22 January	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management • Officers present papers that review bass management and develop an approach develop a nursery area review program. • Authority agree to recommendation and agree to

		technical panel to discuss.
6 March	KEIFCA	<u>KEIFCA Technical panel</u> <ul style="list-style-type: none"> <li>• Considered the issue of management measures to control the over exploitation of Bass stocks.</li> <li>• KEIFCA approach to nursery area review was discussed.</li> <li>• Medway identified and agreed as priority site</li> </ul>
25 March	EU	EU set a catch limit of three fish per day per angler
May	KEIFCA	Officers help EA undertake Medway Small fish survey. The small fish survey which has been running in the Medway since 1999 was likely to be dropped without KEIFCA commitment and involvement. The survey helps record juvenile bass numbers are used to inform the bass ICES stock advice.
May	DEFRA	Defra makes a commitment to review and update the current bass nursery area Statutory Instrument (SI).
19 May	KEIFCA	<u>KEIFCA Authority Agenda Item</u> <ul style="list-style-type: none"> <li>- Update on Sea Bass management</li> <li>• Authority agreed to prioritise the Medway nursery area work</li> <li>• To work with Defra to develop an evidence base and consultation material for any bass nursery area Statutory Instrument (SI) review.</li> </ul>
19 June	EU	EU set catch limits for particular fishing gears in order to protect sea bass for the remainder of 2015.
20 June	ROFF	After ongoing discussion with KEIFCA and a commitment to joint working, ROFF Admiralty Court agree to use their powers to stop netting, trawling and oyster dredging on the Medway Nursery Area site. Dramatically increasing the size of the Bass Nursery Area in the Medway.
2 July	EU	EU increased the minimum size for northern sea bass from 36cm to 42 cm. The rule applies to both commercial and recreational fishermen.
July	KEIFCA	Officers consult with local stakeholders regarding fishery management in the Medway and the development of the Medway Nursery Area.
July	ICES	<u>ICES Advice</u> ICES advises that when the MSY approach is applied, total landings (commercial and recreational) in 2016 should be no more than 541 tonnes. ICES advises that a management plan is urgently needed to develop and implement measures to substantially reduce fishing mortality throughout the range of the stock.
27 July	KEIFCA	<u>KEIFCA Technical panel</u> <ul style="list-style-type: none"> <li>• Held to support Defra, discussing and scoping the Bass nursery area SI review.</li> <li>• Technical panel agreed wording of Medway Nursery</li> </ul>

		Area Byelaw.
4 September	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management  • A draft byelaw and impact assessment for Medway Nursery Area byelaw
October	KEIFCA	Officers help EA undertake Medway Small fish survey.
6 November	KEIFCA	Authority makes Medway Nursery Area byelaw
2016		
January	EU	<u>EU bring in suite of new bass management measures</u> <b>For commercial fisheries:</b> • From 1st January to 30th June 2016 there is a Prohibition on commercial vessels fishing for bass except for; demersal trawls and seines which are permitted a 1% bass by-catch; fixed gill nets (not including drift nets) which are permitted 1,300kg per vessel in January, April, May and June. The fixed net fishery is closed in February and March. • From 1st July to 31st December 2016 monthly catch limits apply to all vessels. 1,300kg per vessel per month for fixed gill nets (not including drift nets) and 1,000kg per vessel per month for all other gears.  <b>For recreational fisheries:</b> • From 1st January to 30th June 2016 catch and release only permitted. • From 1st July to 31st December 2016 one bass per fisherman per day.
22 January	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management  • Authority agree to prioritise both education and enforcement, of the 2016 EU (agreed as a priory in KEIFCA 2016-17 Annual plan).
April/May	KEIFCA	Officers help EA undertake Medway Small fish survey.
10 May		A group of local Essex anglers supported by the Essex Wildlife Trust and CEFAS developed and launched a local bass tagging project.
20 May	KEIFCA	<u>KEIFCA Authority Agenda Item</u> - Update on Sea Bass management  • Enforcement patrols land & sea  • Letter and information for charter boat skippers  • Stickers and notices for anglers (inc. non-english speaking)  • IUU launch by the MMO

		<ul style="list-style-type: none"> <li>• Joint working with the MMO</li> </ul>
22 June	KEIFCA	Medway Nursery Area Byelaw signed by DEFRA.
July	ICES	<p><u>ICES Advice</u></p> <p>ICES advises that when the precautionary approach is applied, there should be zero catch (commercial and recreational) in 2017.</p>

## 2. Scientific advice and evidence

### 2.1 Biology of bass

Sea bass grow slowly; do not mature until 4 to 7 years of age. Males mature at a length of 31 to 35 cm and Females 40 to 45 cm (source fishbase). Juvenile bass up to three years of age occupy nursery areas in estuaries whilst adults undertake seasonal migrations from inshore habitats to offshore spawning sites. Young fish form schools, but adults appear to be less gregarious (Frimodt, 1995). They enter coastal waters and river mouths in summer, but migrate offshore in colder weather and occur in deep water during winter in the northern range. After spawning, sea bass tend to return to the same coastal sites each year and tagging studies show site fidelity (Pawson et al, 2008). The combination of slow growth, late maturity, spawning aggregation, and strong site fidelity increases the vulnerability of sea bass to overexploitation and localized depletion.

Sea bass are now found further north into the North Sea due to ocean warming. Above-average sea temperatures are expected to be favourable for survival of young bass in estuarine nursery areas. The increase in sea temperature may also have been responsible for adult sea bass remaining for a longer period of the year in the near-shore areas.

### 2.2 Scientific advice

ICES advises that when the precautionary approach is applied, there should be zero catch (commercial and recreational) in 2017.

SSB peaked in 2010 and has been declining since. The fishing mortality shows an increasing trend but has declined slightly in recent years. Recruitment has been very poor since 2008; however, the 2013 estimate shows above-average recruitment.



### 3. Next steps

#### *Continue to help DEFRA in bass SI review*

DEFRA remain committed to long-term sustainable bass management and see that reviewing the bass nursery area SI is a key component of this management approach. IFCAs remain committed to helping DEFRA deliver this objective in a timely manner. The introduction of a new SI legislation updating bass nursery areas need to be practically enforceable and treat all the sectors fishing for bass equally.

#### *Continue to work with MMO on joint enforcement*

KEIFCA and MMO officers have carried out several joint bass operations this year and will continue to do so, targeting high-risk sites and vessels. Further opportunities for this work have already been identified and officers will continue to respond to information as it is received.

#### *Engaging in the C-bass tagging project*

The proposed project would engage a cross-section of active UK stakeholders to build on methods successfully established by the DEFRA-funded C-Bass project (MF1233 - Population studies in support of the conservation of the European seabass, 2013-2017), to support the recovery of bass stocks and the subsequent development of regional management plans for sustainable bass fisheries. Planning for regional management and fisher-led sampling will draw on similar Cefas-led initiatives based around shark, skate and ray (elasmobranch) fisheries (EFF funded Shark By-Watch UK 2, 2014-2015). Cefas, working closely with regional IFCAs will coordinate a programme of stakeholder-led data gathering using a variety of fishing vessels and gears, that will initially survey bass by-catch to help provide information on local bass stock status, and to determine regional spatial and temporal movements. As well as establishing local priorities for bass management, the project will include outreach activity, with the establishment of local bass tagging schemes. Anglers and commercial fishers will be trained in mark-recapture methodology, enhancing stakeholder involvement and buy-in, and extending the available information on fish movements for

relatively little additional cost. Local knowledge and existing data will be used to map out bass vulnerability to fishing.

Victoria Bendall is attending the meeting from CEFAS and will present on the proposed scheme.

**Recommendations:**

Members are asked to approve the following:

- support Defra in the review of the Bass Nursery Area Statutory Instrument;
- conduct joint bass enforcement operations with the Marine Management Organisation; and
- engage with Cefas in a C-bass tagging project