

Notification of the confirmation of Bonamiosis in Kilkieran Bay, Co Galway, Ireland.

Marine Institute

January 12th, 2017.

DATE: A sample of native flat oysters (*Ostrea edulis*) was collected on December 2nd 2016 for routine *Bonamia ostreae* screening in accordance with Directive 2006/88/EC. Cellular imprints were read at the Marine Institute on December 7th 2016 and cross checked by a second analyst on December 8th. Three out of thirty oysters were identified as suspect positive for *Bonamia ostreae*. Confirmatory testing using PCR / sequencing was completed on December 13th at the National Reference Laboratory (Marine Institute, Rinville, Oranmore, Co. Galway), and the presence of *Bonamia ostreae* was confirmed.

AFFECTED ANIMALS: Native flat oysters (*Ostrea edulis*) located in wild beds in Kilkieran.

CLINICAL SIGNS: Not reported to the Marine Institute.

DIAGNOSTIC TESTS USED: Cytological examination (heart imprints), as specified in Commission Implementing Decision (EU) 2015/1554 laying down rules for the application of Directive 2006/88/EC as regards requirements for surveillance and diagnostic methods. Real time SYBR Green PCR for the detection of *Bonamia ostreae* and *Bonamia exitiosa* (Ramilo *et al*, 2013) and conventional PCR with sequencing based on the method laid down by Cochenec *et al* (2000)

LABORATORIES USED: Marine Institute, Galway, Ireland (NRL).

DATE OF SUSPICION BY NRL: 8th December 2016

DATE OF CONFIRMATION BY NRL: 13th December 2016

NOTIFICATION: The NRL notified the Competent Authority of the suspicion of *B.ostreae* on the 8th December 2016 as per Article 26 of Commission Decision 2006/88/EC. The competent authority notified the EU Commission of the finding on the 8th December 2016. On December 13th, the NRL notified the competent authority that the presence of *B. ostreae* had been confirmed. This final result was notified to the EU Commission on the same day.

EPIDEMIOLOGY: Kilkieran Bay is a Category I (disease free area) with respect to *Bonamia ostreae* and *Marteilia refringens* according to Commission Decision 2009/177/EC. Screening for *B.ostreae* was carried out twice per year between 1994 and 2008 and once per year from 2009 onwards. All samples taken from this area have been negative for *B. ostreae* up until now.

Movement records held by the Marine Institute indicate that only one consignment of molluscs have been relayed in Kilkieran Bay since the implementation of Directive 2006/88/EC. This was a consignment of *O. edulis* which originated from a *B. ostreae*

free area in the UK and arrived in November 2009. A sample of 30 oysters was collected from the same batch for screening by the UK authorities prior to movement and these oysters tested negative for *Bonamia ostreae*. Over the same time period, four consignments of pacific oysters (*Crassostrea gigas*) were relayed in neighbouring Bertraghboy Bay, two in 2009 and two in 2010. These oysters originated from the same location in the UK and *C. gigas* are of course, listed as non-susceptible to *B. ostreae* and neither are they considered to be vectors of the parasite.

There have been only two movements of stock out for relaying in the last 10 years and both consignments of *O. edulis* were relayed in Galway Bay which is already infected with *Bonamia ostreae*.

All oysters dredged from the beds in Kilkieran Bay are sold for direct human consumption.

Movements of aquaculture animals to and from this bay have been controlled for more than 25 years.

CONTROL MEASURES: Official Movement restrictions were placed on the Bay on the 8th December 2016.

BACKGROUND INFORMATION: There are a number of small islands in Kilkieran Bay which provide ideal shallow grounds for a number of small wild oyster beds. The beds are managed by a fishing cooperative with a fleet of approximately 23 small vessels (predominantly under 10m). Fishing effort on the beds is low with a maximum of 20 days fishing effort permitted per year in respect of 20-23 vessels. Total annual catch is 40-50T of oysters.

The cooperative also manage a wild scallop fishery in Kilkieran Bay and a neighbouring bay, Bertraghboy.

An epidemiological investigation has begun and preliminary interviews have been held. A number of areas were identified for further investigation including:

- an illegal movement of *O.edulis* into the bay from an infected area
- the use of wellboats at fish farms within the bay, which have previously been used elsewhere
- fishing and pleasure boats travelling between Kilkieran Bay and other areas
- the potential involvement of transporters (including Vivier trucks) and agents who collect molluscs from Kilkieran Bay and other areas; prior to their being placed on the market for human consumption
- the local presence of a seaweed processing factory which processes weed from all over the country and discharges effluent into Kilkieran Bay

A full report will be provided to DG Sante once the epidemiological investigation has been completed.

Appendix I: Map of Ireland showing the location of Kilkieran Bay



Appendix II: Map of Kikieran Bay. Designated *Bonamia ostreae* Infected Zone marked in red.

