Food and Agriculture Organization of the United Nations

Centre for Environment Fisheries & Aquaculture Science

Additional support from the FAO Reference Centre and access to training and resources

Rachel Hartnell

21-23 Février 2023, Sénégal

FAO Reference Centre introductory questionnaire on bivalve mollusc activities – supporting implementation of FAO/WHO Technical guidance for the development of the growing area aspects of Bivalve Mollusc Sanitation Programmes (fao.org)

Requests for specific assistance in the following areas

1. Risk assessment and risk management ☺
2. Sanitation of shellfish production areas ☺
3. Laboratory set up and staff training ☺
4. Proficiency testing and reference materials ☺
5. Quality Management Systems for laboratory analyses (e.g. accreditation) ☺
6. Reference or specialist analysis of test samples ☺
7. Purification ☺
8. Animal health methods – diseases likely to affect bivalve molluscs 😐
9. Training opportunities and secondments at the FAO Reference Centre at Cefas, UK ?
10. Opportunities to work with the FAO Reference Centre at Cefas, UK – grant opportunities and joint projects ?

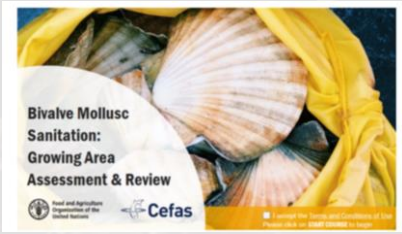
Access to resources – 1. Risk assessment and risk management, 2. Sanitation of shellfish production areas

Technical Guidance

Instructions for meeting Codex Code of Practice for fish and fishery products

French, English and Spanish language versions

eLearning



French and English language versions

English language version only currently

Directly at FAO

Technical guidance for the development of the growing area aspects of bivalve mollusc sanitation programmes, 2nd edition (who.int)

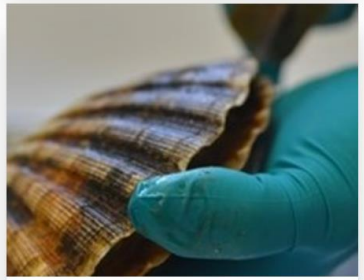
FAO elearning Academy

Or from the FAO Reference Centre website

FAO Reference Centre for Bivalve Mollusc Sanitation - Cefas (Centre for Environment, Fisheries and Aquaculture Science)

Access to resources – 3. Laboratory set up and staff training

FAO Reference Centre website



EXCELLENCE PAGE

Protocols and Technical Guidance

FIND OU

GENERIC PROTOCOLS

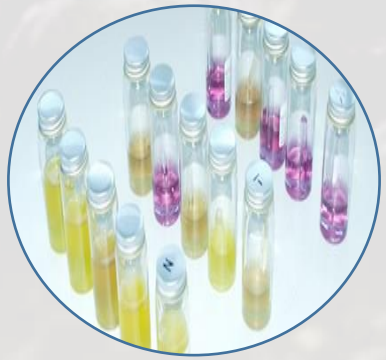
FIND OUT MORE

TECHNICAL GUIDANCE AND CALCULATION SPREADSHEETS

FIN

All bivalve mollusc laboratory methods (microbiology) appropriate for use for trade assurance for all major trading partners are available on the FAO Reference Centre website

Protocols and Technical Guidance - Cefas (Centre for Environment, Fisheries and Aquaculture Science)



https://www.cefas.co.uk/icoe/seafood-safety/designations/fao-reference-centre/protocols-and-guidance/ge...

GENERIC PROTOCOLS

- **Generic Protocol for Enumeration of E. Coli in Bivalve Shellfish using the Most Probable Number Technique (based on ISO 16649-3)** NOTE: to access the Shellfish MPN calculators attached to this document it is necessary to first save a copy onto your computer's hard drive
- **Generic Protocol for Determination of Faecal Coliform Bacteria in Seawater using the Most Probable Number Technique (based on US FDA BAM Chapter 4)**
- **Generic Protocol for Detection of Salmonella spp. in Bivalve Molluscs (based on ISO 6579-1)**
- **Generic Protocol for Detection of Potentially Pathogenic Vibrio spp. in Bivalve Shellfish**
- **Generic Protocol for Quantitative Detection of Norovirus and Hepatitis A Virus in Bivalve Molluscan Shellfish (using ISO 15216-1)**
- **Generic Protocol for Enumeration of FRNA Phage in Bivalve Shellfish**

Access to resources – 4. Proficiency testing and reference materials, 5. Quality Management Systems for laboratory analyses (e.g. accreditation) 6. Reference or specialist analysis of test samples

EXCELLENCE PAGE

Annual PT Programme

DOWNLOAD —

EXCELLENCE PAGE

PT Reports

DOWNLOAD —

EXCELLENCE PAGE

Troubleshooting Guidance for PT

DOWNLOAD —

Annual Proficiency Testing (PT) available on the FAO Reference Centre website. Annual free PT to Official Laboratories wishing to develop and implement bivalve mollusc production through our FAO programme Proficiency Testing and Quality Assurance - Cefas (Centre for Environment, Fisheries and Aquaculture Science)

PT REPORTS

- PT79 Final Report - Norovirus (Genogroup I and II) and Hepatitis A virus
- PT80 Final Report - Enumeration of Escherichia coli and the Detection of Salmonella spp. in Bivalve Molluscan Shellfish
- PT82 Final Report - Norovirus (Genogroup I and II) and Hepatitis A virus
- PT83 Final Report - Enumeration of Escherichia coli and the Detection of Salmonella spp. in Bivalve Molluscan Shellfish
- PT88 Final Report - Detection of Escherichia coli in Shellfish and the Detection of Faecal Coliforms in Water (Pilot)
- PT89 Final Report - Norovirus (Genogroup I and II) and Hepatitis A virus
- PT90 Final Report - Enumeration of Escherichia coli and the Detection of Salmonella spp. in Bivalve Molluscan Shellfish

FAO Reference Centre website

Seafood Safety - Cefas (Centre for Environment, Fisheries and Aquaculture Science)

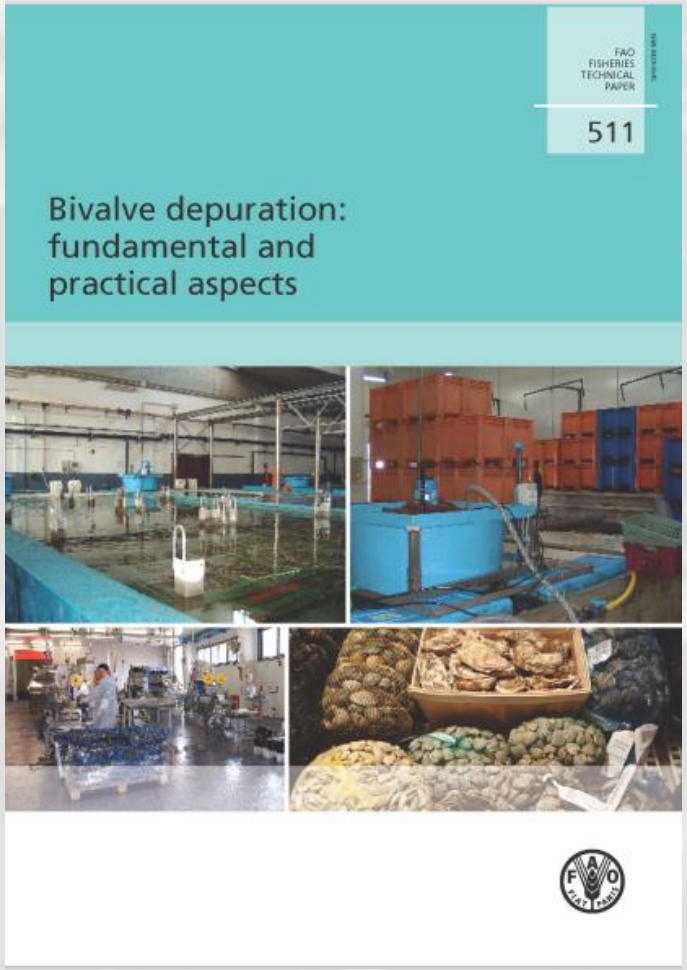
Louise Stockley

Senior Scientist - Microbiology

FIND OUT MORE —

Louise Stockley - Cefas (Centre for Environment, Fisheries and Aquaculture Science)

Access to resources – 7. Depuration



[Seafood Safety - Cefas (Centre for Environment, Fisheries and Aquaculture Science)]

Andrew Younger

Principal Scientist - Shellfish Hygiene

FIND OUT MORE —

[Andrew Younger - Cefas (Centre for Environment, Fisheries and Aquaculture Science)]

The Reference Centre can provide advice and guidance on the operation, effective running and conditions of approval of bivalve purification (depuration) systems, and undertake research on conditions and different species

[Bivalve depuration: fundamental and practical aspects (fao.org)]

Access to resources 8. Animal health methods – diseases likely to affect bivalve molluscs [Aquatic Animal Health - Cefas (Centre for Environment, Fisheries and Aquaculture Science)]

WORLD ORGANISATION FOR ANIMAL HEALTH

Collaborating Centre for Emerging Aquatic Animal Diseases

Food and Agriculture Organization of the United Nations

Reference Centre for Antimicrobial Resistance (AMR)

Food and Agriculture Organization of the United Nations

Reference Centre for Bivalve Shellfish Sanitation

OCEAN COUNTRY PARTNERSHIP PROGRAMME

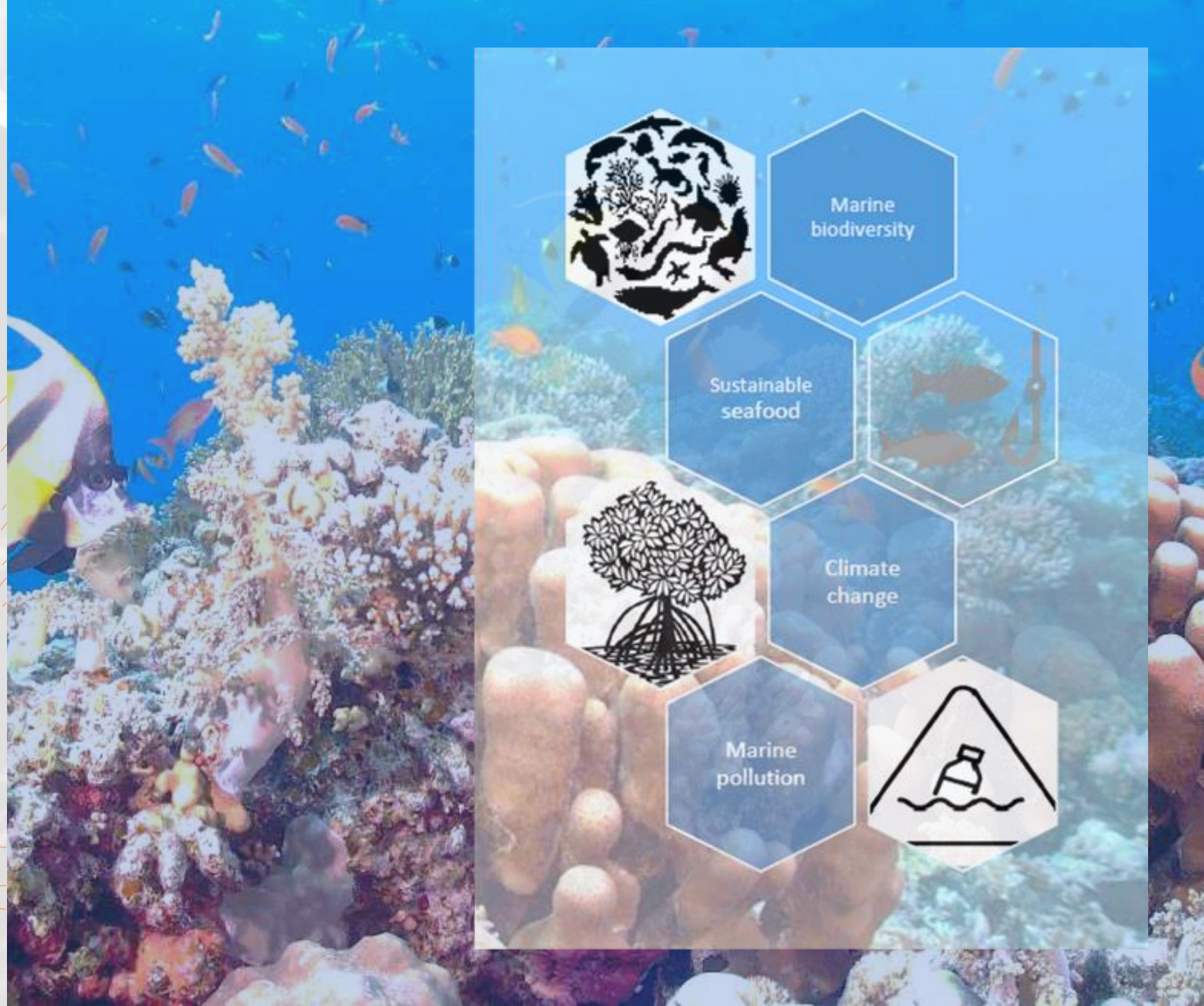
Part of a large UK GOV fund ‘The Blue Planet’

Integrated approach to biodiversity, marine pollution and sustainable seafood

Enabling more focused activity in target countries

Launched in February 2023 in Senegal, runs for 2 years

Development assistance in Senegal becomes part of this programme, providing additional funding for training on development of bivalve production



9. Training opportunities and secondments at the FAO Reference Centre at Cefas, UK ☺
10. Opportunities to work with the FAO Reference Centre at Cefas, UK – grant opportunities and joint projects ☺

Suggested outcome focused steps –

1. **Practical**, **time limited training visits/secondments** to the Cefas laboratory

2. Implementation of **methods** in **Official Control laboratories**

3. **Expansion** of assistance to cover **animal health** and **marine biotoxins** and **chemical contaminations**