

# Aquaculture & Sports Fisheries

Module (core)

History and  
Development of Sport  
Fishing, the Sport  
Fishing Industry and  
Aquaculture in Europe



**EQF**  
**Level**  
**5**

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## **History and Development of Sport Fishing, the Sport Fishing Industry and Aquaculture in Europe**

**EQF Level 5:**

**Credit value: 10**

### **Unit abstract**

This unit aims to give the learner an understanding of the processes that have shaped the sports fishing industry and aquaculture throughout Europe, as there is a need to improve the management of aquatic ecosystems as environmental awareness as the demand for managed sport fisheries has developed. In addition, learners will develop an understanding of fish species that are managed for exploitation, primarily as sporting quarry and food produce. They will research the commercial exploitation of these species and plan for their long-term management. Learners will also develop the skills required to plan fish management within present economic and legislative frameworks and discuss these plans, in a knowledgeable manner, with practitioners in the field.

The Sports Fishing Industry in conjunction with angling, is widely regarded as one of the largest participation sports. Learners will consider the scope of the industry throughout Europe and research coarse and game angling, including its status and nature. Learners will investigate fishing tackle manufacture and evaluate items of tackle, with an emphasis on the inclusion of the consideration of fish welfare issues. In addition, learners will investigate organisations involved with angling, including government bodies, federated organisations and regional and local clubs and societies.

Learners will consider factors influencing the onset of the sports fishing industry including its history and current status, the management practices of sport fisheries and the skills and knowledge required for coarse and game angling throughout Europe and how these can be applied in practice.

Learners will also investigate the history and current status of aquaculture throughout Europe, including the local geology and climatic conditions which dictate the diversity of regional aquaculture, and the diversity of the aquaculture production systems utilised. In addition, the unit aims to develop learner understanding of fish biology,

aquatic invertebrates and aquatic management, as well as their practical skills in the maintenance of aquatic species both in captivity and in the wild.

Learners will consider the legislation, protection measures and management techniques applicable to a range of different regions, which will lead to a broad understanding and appreciation of the commercial use of land in Europe and the issues that land producers face. Learners will explore the factors that a fish farmer needs to understand, focusing on the work involved in aquaculture, by applying a knowledge of water requirements and health management strategies.

The purpose of this unit is to equip learners with an underpinning scientific knowledge of both the Sports Fishing Industry and Aquaculture, and apply their understanding to the interrelationships between them, prior to their progression in to the aquatic management, sport fisheries and fish farming industries.

## **Learning outcomes**

### **On successful completion of this unit a learner will:**

- 1 Review the history of sports fishing in Europe
- 2 Review the history and development of the sports fishing industry in Europe
- 3 Review the history and development of the aquaculture industry in Europe

## **Unit content**

### **1 Review the history of sports fishing in Europe:**

*Status and nature in sports fishing:* species fished for in coarse and game angling in Europe; history and trends of sports fishing in Europe; sport fishing's environmental, social and economic importance; the value of sport fishing to national and regional economies; employment opportunities; types of venue for sport fishing within an area (commercial, non-commercial); types, location and roles of organisations associated with sport fishing in Europe (Environment Agency, National Fisherman's Association, National Anglers' Association), relevant current legislation and codes of practice (National rod-licence, State-issued fishing licence, National permit); threats to angling (anti-field sports groups, diseases; animal welfare and health and safety issues).

## **2 Review the history and development of the sports fishing industry in Europe**

*Major changes:* introduction of new technologies, materials, equipment; employment opportunities; participant numbers

*Tackle manufacture and design:* major manufacturers; distribution networks; economic status of retail trade; uses, design, construction, repair and modification of major sport fishing items; development of major tackle items (materials used, construction, durability and limitations); comparison between similar products; critical analysis of products

and suitability for purpose; animal welfare issues relating to tackle use, design and manufacture; employment opportunities

*Diversification in sports fishing:* river fishing, lake fishing, reasons for diversification (including specimen, match, pleasure, food)

*Development of fisheries:* salmonid, cyprinid, catch rates, utilisation of aquatic resources, recreation

*Development of sport fishing equipment:* techniques, equipment, production, imports/exports, retail/wholesale, tourism, employment opportunities

*Organisational changes:* state waters, private fisheries, local organisations, national associations, governments, fishing licences, angling examinations

## **3 Review the history and development of the aquaculture industry in Europe**

*Historical evidence of land use:* records and maps; place names

*Past regional land use:* agricultural enterprise; woodland management; mining/quarrying activity; transport systems; local rural skills; records; maps

*Current evidence of land use:* records and maps; aerial photographs; place names

*Land-use issues:* types and scale of forestry; types and scale of extraction (eg mineral, organic, fossil fuel); contribution to the economy (eg profitability, employment, recreation); factors affecting extraction industries (eg planning and legislation, public concerns, pressure groups waste management post extraction); industry organisations; environmental policy issues (eg sustainability, leisure and recreation, soil management, bio diversity, waste management)

*Local / National Government support measures:* historical perspective; effects of current EU support measures (eg production quotas, environmental subsidies); issues facing the countryside (eg urban pressures, population trends and movements, employment, housing, climate change policies)

*Production systems:* range of fish species; main production systems (eg intensive, extensive, organic, marginal); factors affecting aquaculture production in marginal areas (eg profitability, subsidies, use of land, type of soil, recreation)

*Welfare and legislation:* animal welfare issues (codes of practice, transport of fish, waste management); effects of legislation on aquaculture; health and safety; CITES; Import of Live Fish Act; fish health legislation

Learning outcomes and assessment criteria

<b>Learning outcomes</b> <b>On successful completion of this unit a learner will:</b>	<b>Assessment criteria for pass</b> <b>The learner can:</b>
<p>LO1 Review the history of sports fishing in Europe</p>	<p>1.1 discuss the history of sports fishing in a range of European countries</p> <p>1.2 review the principle types of sports fishing in a range of European countries</p> <p>1.3 explain the role of the main national sports fishing organisations in a range of European countries</p> <p>1.4 discuss the current threats to the future of sports fishing in a range of European countries</p>
<p>LO2 Review the history and development of the sports fishing industry in Europe</p>	<p>2.1 discuss the history and development of the sports fishing industry in a range of European countries</p> <p>2.2 review the main manufacturers of sports fishing equipment in a range of European countries</p> <p>2.3 evaluate selected items of sports fishing equipment designed to improve the health and welfare of fish caught by sports fishermen in a range of European countries</p>
<p>LO3 Review the history and development of the aquaculture industry in Europe</p>	<p>3.1 discuss the history and development of the aquaculture industry in a range of European countries</p> <p>3.2 discuss the advantages and disadvantages of aquaculture enterprises in a range of European countries</p>

## **Guidance for tutors**

### **Delivery**

Tutors delivering this unit have opportunities to use as wide a range of techniques as possible. Lectures, discussions, seminar presentations, site visits, supervised practicals, research using the internet and/or library resources and the use of personal and/or industrial experience would all be suitable. Whichever delivery methods are used, it is essential that tutors stress the importance of animal welfare, sound environment management and the need to manage the resource using legal methods.

### **Essential requirements**

Tutors must have good knowledge of the landscape history of their area, a good understanding of local fish and wildlife resources, competent and experienced game and coarse anglers and should show evidence of regular contact with the industry and technical updating.

Regular supervised access to a broad selection of sport fisheries and aquaculture facilities for skills development, routine husbandry and management is essential. A diverse library resource, and access to the internet will increase the opportunity for learner-centred research. Learners will also need access to equipment/consumables.

### **Employer engagement and vocational contexts**

Learners would benefit from visits to a variety of establishments, and lectures from appropriate guest speakers would enhance and contextualise the learning experience and introduce learners to a range of professionals and career opportunities available in the Sports Fisheries and / or Aquaculture sectors. Relating the unit content to the work of organisations will strengthen the vocational context.

Employer links could support delivery and assessment of this unit. Employers could help, for example, with the planning of programmes of learning, or provision of visits, guest speakers and mentors. They could also help in the design and facilitation of assessment activities.

Learners could be encouraged to become student members of relevant professional organisations.

Tutors should consider integrating the delivery, private study and assessment relating to this unit with any other relevant units and assessment instruments learners may also be taking as part of their programme of study.

This unit presents opportunities to demonstrate higher-level skills in application of number, communication, information and communication technology, improving own learning and performance, problem solving and working with others.

