

# Southern IFCA

## Volunteer Internships 2019



The Southern Inshore Fisheries and Conservation Authority (IFCA) are tasked with the sustainable management of inshore sea fisheries resources in the Dorset, Hampshire and Isle of Wight areas.

Southern IFCA is offering an exciting opportunity for 5 volunteer internship placements during 2019. The successful applicants will lead the delivery of individual projects directly informing inshore fisheries management as part of the ongoing duties of the Authority.

### The Projects

The five projects identified are:

- The Solent Oyster Stock Assessment;
- The Poole Harbour Bivalve Stock Assessment
- The Solent Bivalve Stock Assessment
- Recreational Angling
- Long Term Trends in Crustacean Landings and Potting Effort in the Southern IFCA District

Each internship placement will last for a period of six weeks between April and September, depending on the project, with an approximate commitment of 20 hours per working week. Working hours and location will be flexible; however, volunteers will be required to work from the Southern IFCA office in Poole for a minimum of one day per week. Volunteers will be supported by a project mentor and, as part of the placement, Southern IFCA will provide training opportunities in key areas that enable volunteers to develop their experience and understanding of inshore fisheries management.

Information about the individual project opportunities, together with the experience, knowledge and skills required can be found in the individual project role profiles listed below. The Southern IFCA Policy and Guidance for Engaging Volunteers describes what volunteers should expect from Southern IFCA and how volunteers should conduct themselves whilst involved with the Authority. A copy of this document can be found on the Southern IFCA website, [www.southern-ifca.gov.uk/news](http://www.southern-ifca.gov.uk/news).

### Applying for a Placement

To apply for a placement, applicants are required to submit the following:

- a copy of their CV; *and*
- a letter outlining which project(s) they would be interested in applying for and explaining, in no more than 1000 words, why they would be suitable for the role.

Applications should be sent to the Southern IFCA office titled '**2019 Internships**' by email ([enquiries@southern-ifca.gov.uk](mailto:enquiries@southern-ifca.gov.uk)) or post (64 Ashley Road, Parkstone, Poole, Dorset, BH14 9BN) by **17:00 on Sunday 17<sup>th</sup> March**. Full information on the interview arrangements will be sent to those candidates who have been short listed.

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64 Ashley Road Parkstone Poole Dorset BH14 9BN

T/F: 01202 721373    E: [enquiries@southern-ifca.gov.uk](mailto:enquiries@southern-ifca.gov.uk)    W: [www.southern-ifca.gov.uk](http://www.southern-ifca.gov.uk)

## Southern IFCA Volunteer Internship Placements 2019 – Project Role Profiles

<b>Project Title</b>	<b>Solent Oyster Stock Assessment - 2019</b>
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<b>Evidence theme</b>	Sustainable Fisheries - Species knowledge and assessment
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<b>Project lead</b>	Patrick Cooper		
<b>Reporting officers</b>	<a href="#">Click Here</a>	<a href="#">Click Here</a>	<a href="#">Click Here</a>

<b>Project description and objectives</b>			
<p>The Solent Native Oyster (<i>Ostrea edulis</i>) fishery was historically one of the largest native oyster fisheries in Europe, but over the past decades a decline in stock and the number of vessels who pursue the fishery has been observed. Since the 2013/14 season the Southern IFCA committee has considered that the native oyster beds in the Solent are severely depleted and that management intervention was required. In order to inform these interventions, the Authority has required information on the state of the stock in the Solent.</p> <p>Each year Southern IFCA undertakes an annual stock assessment of the native oysters in the Solent in order to develop its evidence base and inform its management of the fishery.</p> <p>This project will focus on the further development of the stock surveys and the processing of the results as well as assisting to produce a report summarizing the survey's findings. If appropriate the internship may involve the successful applicant being present on oyster surveys with IFCA officers, but would require the successful candidate to have or be able to obtain a sea survival certificate, first aid qualification and a sea farers medical (ENG1 or ML5).</p> <p>The project will require the candidate to:</p> <ul style="list-style-type: none"> <li>- Contribute to and manage existing oyster size class/CPUE datasets</li> <li>- Data analysis and graphical representation of the data sources described above to show trends in CPUE and oyster density observed in surveys.</li> <li>- Assist with the production of a report summarising key trends and comparing data from different data sources and last year's internship report, with recommendations to aid future management.</li> <li>- If appropriate - participate in the collection of new datasets as part of Southern IFCA's 2019 oyster stock surveys.</li> </ul>			

The successful applicant should be competent in report writing, handling data and have some understanding of bivalve survey techniques. Typically the report from these stock assessments has been provided to the Southern IFCA committee as part of a larger information package to assist in decisions relating to the oyster season in the Solent.

<b>Timeline and outputs</b>	
The internship will last 6 weeks and the successful applicant will be required to work approximately 20 hours a week.	July/August
At the end of the project a report may be required. This may need to meet strict deadlines for committee meetings and may be required by mid-August.	Mid-August

<b>Resources required</b>	<ul style="list-style-type: none"> <li>• Access to Southern IFCA historic datasets for native oysters in the Solent.</li> <li>• Charter of vessel for stock survey.</li> <li>• Officer time assisting with survey.</li> </ul>
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<b>Criteria for Candidates</b>	<p>Applicants for this project should give consideration to the following desirable attributes:</p> <ul style="list-style-type: none"> <li>• Ability to use computer programs like Microsoft Word and Excel</li> <li>• Good report writing skills</li> <li>• An understanding of biological statistics</li> <li>• Would be comfortable to engage with the fishing industry</li> </ul>
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<b>Project Title</b>	<b>Poole Harbour Bivalve stock assessment</b>
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<b>Evidence theme</b>	Sustainable Fisheries - Species knowledge and assessment
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<b>Project lead</b>	Sarah Birchenough		
<b>Reporting officers</b>	<a href="#">Click Here</a>	<a href="#">Click Here</a>	<a href="#">Click Here</a>

<b>Project description and objectives</b>			
<p>Poole Harbour holds commercially important populations of clam (<i>Ruditapes philippinarum</i>, <i>Ruditapes decussatus</i>, <i>Mercenaria mercenaria</i>) and cockle (<i>Cerastoderma edule</i>) species. These species are fished through hand collection and by the use of pump-scoop shellfish dredges.</p>			
<p>The commercial wild fishery in the Harbour is regulated through the Poole Harbour Dredge Permit byelaw which issues 45 permits annually, permitting the use of the pump-scoop dredge to collect shellfish. The accompanying permit conditions set out restrictions on gear type, seasonal and temporal closures and a requirement to submit catch data. The permit is reviewed annually prior to the opening of the dredge season with an accompanying Habitats Regulations Assessment to ensure that the fishery does not have an adverse impact on the Poole Harbour European Marine Site.</p>			
<p>In 2018 the fishery achieved a global first by being certified under the Marine Stewardship Council Sustainability Standard and the Seafish Responsible Fishing Scheme. These certifications provide an independent and international recognition of the achievements made toward sustainability in the fishery both in terms of the marine environment and socio-economics.</p>			
<p>The Poole Harbour bivalve stock assessment has taken place since 2003. Data collected through this survey provides an important insight for fisheries managers into the population structure of these fisheries and informs the annual review of the permit byelaw and associated assessments. The methodology for the stock assessment was revised in 2016 to give a more detailed picture of the clam and cockle populations both in terms of the proportion available to the commercial fishery and the juvenile population with the aim in the future to collect sufficient data to quantify the sustainability of the fishery in terms of Maximum Sustainable Yield (MSY). This will both inform the management of the fishery going forward and contribute to data required as part of the MSC sustainability certification.</p>			
<p>The successful intern for this project will be involved in the processing of samples from the juvenile part of the stock assessment which will involve sorting out clam and cockle species from sediment samples in the lab, identifying the species and taking measurements using HD photography and the computer program ImageJ.</p>			

The internship will also involve the analysis of the data from the survey on both the commercially available and juvenile populations of clam and cockle carrying out statistical analysis and comparing results to data from previous years. There may be the potential for survey work during the collection of samples for the stock assessment prior to the start of the internship however this is not guaranteed and depends on the successful candidate being available prior to the main internship for the survey work in April.

The intern will be required to produce a written report at the end of the internship showing the results from the 2019 stock assessment, any useful comparisons with previous years' data and an indication of the significance of any results to the management of the fishery.

### Timeline and outputs

<b>Timeline and outputs</b>	
6-week student project	<b>Commence Summer 2019</b>
Processing of juvenile stock assessment samples at National Oceanography Centre, Southampton	
Collation and analysis of data from 2019 survey	
Comparisons of results between surveys 2016-19	
Production of a report detailing results and findings	

<b>Partners</b>	Poole Harbour Dredge Permit Holders
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<b>Resources required</b>	<ul style="list-style-type: none"> <li>• Access to laboratory at National Oceanography Centre, Southampton</li> <li>• Digital Camera and Image J software</li> <li>• PC (inc MS Office and GIS)</li> <li>• PPE</li> <li>• Risk Assessment</li> </ul>
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<b>Criteria for Candidates</b>	<p>Applicants for this project should give consideration to the following desirable attributes:</p> <ul style="list-style-type: none"> <li>• Ability to use computer programs like Microsoft Word and Excel</li> <li>• An understanding of biological statistics</li> <li>• Good report writing skills</li> <li>• Comfortable working outdoors</li> <li>• Would be comfortable to engage with the fishing industry</li> </ul> <p>Should the applicant be available to participate in the survey work then the following desirable attributes should also be considered:</p> <ul style="list-style-type: none"> <li>• Sea survival certificate</li> <li>• ML5 medical certificate</li> </ul>
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<b>Project Title</b>	<b>Solent Bivalve Stock Assessment</b>
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<b>Evidence theme</b>	Sustainable Fisheries - Species knowledge and assessment
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<b>Project lead</b>	Sarah Birchenough		
<b>Reporting officers</b>	<a href="#">Click Here</a>	<a href="#">Click Here</a>	<a href="#">Click Here</a>

<b>Project description and objectives</b>			
<p>The Solent is an important area for fishing for shellfish using a dredge. The dredge fishery operates year-round, subject to seasonal restrictions, mainly within the areas of Southampton Water, Portsmouth Harbour and Langstone Harbour. The main commercial species fished for using this gear type is the Manila clam (<i>Ruditapes philippinarum</i>) with other species also taken when in suitable quantities, such as the common cockle (<i>Cerastoderma edule</i>), the American hard-shelled clam (<i>Mercenaria mercenaria</i>) and, occasionally, the Grooved Carpet Shell or native clam (<i>Ruditapes decussatus</i>).</p>			
<p>There are a number of management measures currently in place to regulate dredge fishing within the Solent including the Solent Dredge Fishing Byelaw 2016 which defines a season for dredging within Southampton Water, Portsmouth Harbour and Langstone Harbour and a daily curfew; and the Bottom Towed Fishing Gear 2016 Byelaw which prohibits the use of any bottom towed fishing gear within certain defined areas. The Southern IFCA is currently developing a new management scheme for the Solent in the form of the Solent Dredge Permit byelaw under which the use of dredge gear will be permitted within the Solent area.</p>			
<p>The Southern IFCA carries out a bi-annual survey in Southampton Water, Portsmouth Harbour and Langstone Harbour during March and October each year to assess the distribution and abundance of the main bivalve species. The survey was first started in October 2017 concentrating on Southampton Water and was then expanded in 2018 to include the other two harbours. Data for the survey is collected using local fishing vessels employing the same dredge gear which is used in the fishery across a number of defined shellfish beds. The survey allows data to be gathered on the stocks of commercially important shellfish species across the three main areas of importance for the fishery. In addition, the outcomes from the survey provide data which will be used as a baseline on which to monitor future trends and potential changes to populations which will feed into the development and monitoring of local management measures.</p>			
<p>The successful intern for this project will be involved in the collation of data from the survey carried out in March 2019 and in the analysis of data from both the March 2019 and October 2018 surveys. This will require statistical analysis of the data from both surveys and a comparison between the two. The intern will be required to produce a written report at the end of the internship detailing the results from the analysis and an indication of the significance of the results to the management of the fishery.</p>			

<b>Timeline and outputs</b>	
<p>6-week student project</p> <p>Collation of data from spring 2019 survey</p> <p>Analysis of data from spring 2019 and autumn 2018 surveys</p> <p>Production of a report detailing results and findings</p>	<p>Commence Summer 2019</p>

<b>Resources required</b>	<ul style="list-style-type: none"> <li>• PC (inc MS Office and GIS)</li> </ul>
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<b>Criteria for Candidates</b>	<p>Applicants for this project should give consideration to the following desirable attributes:</p> <ul style="list-style-type: none"> <li>• Ability to use computer programs like Microsoft Word and Excel</li> <li>• An understanding of biological statistics</li> <li>• Good report writing skills</li> </ul>
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<b>Project Title</b>	<b>Recreational Angling Internship – 2019</b>
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<b>Evidence theme</b>	Communication - Community awareness and engagement
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<b>Project lead</b>	Patrick Cooper		
<b>Reporting officers</b>	<a href="#">Click Here</a>	<a href="#">Click Here</a>	<a href="#">Click Here</a>

<b>Project description and objectives</b>
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Recreational sea angling (RSA) is one of the country’s most popular sports, its participants contributing significantly to local economies and businesses. Sea Angling in the Southern IFCA district of Hampshire, Dorset and the Isle of Wight is highly prized and the region is rightly seen as a very important destination for participants in the sport.

The angling community is diverse, in order to assist in communicating with recreational sea anglers Southern IFCA, in 2015, worked with a number of key representatives of the angling community to set up the Recreational Angling Sector Group. The group, made up of anglers from across the Southern IFCA district is an opportunity to allow for improved communication, consultation and the opportunity for joint working between the Authority and Southern IFCA.

With that in mind, Southern IFCA would like to offer an internship designed to promote best practice within the angling community, focusing particularly on the development of a handling guide for recreational anglers. Many anglers operate a catch and release policy, and in some circumstances depending on the species or size of the fish are required to return fish with minimal harm. It is important that fish which have been released survive their capture and handling, and have the opportunity to go on, grow and spawn.

The successful candidate will explore various methods, techniques and equipment that are designed to minimise mortality and promote survivability. The candidate will also be required to consider the best method/means of communication to the angling community and make suggestions to the IFCA as to how best to collate and distribute the information collected during the project.

The project may also require further work with officers or members of the group to undertake literature searches on topics/species of interest to the angling community. The candidate should therefore be confident in their ability to assess and interpret information, consider the key points and collate into public facing documents. The project will provide an opportunity to work with a diverse group of Southern IFCA's

stakeholders with a detailed knowledge of the varying fish species in the district and their methods of capture.

### Timeline and outputs

6-week student project

Collation of information to develop a handling guide for recreational anglers designed to promote best practice within the angling community

**Commence  
Summer 2019**

### Resources required

- PC (inc MS Office and GIS)
- Access to members of the Recreational Angling Sector Group and other relevant organisations

### Criteria for Candidates

Applicants for this project should give consideration to the following desirable attributes:

- Ability to use computer programs like Microsoft Word and Excel
- An interest in recreational fishing
- An understanding of the biology of fish

<b>Project Title</b>	<b>Long term trends in crustacean landings and potting effort in the Southern IFCA District</b>
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<b>Evidence theme</b>	Sustainable Fisheries - Species knowledge and assessment
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<b>Project leads</b>	Chloe Smith & Simon Pengelly		
<b>Reporting officers</b>	<a href="#">Click Here</a>	<a href="#">Click Here</a>	<a href="#">Click Here</a>

<b>Project description and objectives</b>			
<p>CEFAS currently undertake a stock assessment for the Southeast and South coast of England. The stock assessment is not undertaken yearly and it utilises data with a number of limitations. Southern IFCA would like to further explore the use of alternative datasets with a view to developing an annual stock assessment specifically for the inshore crab and lobster fishery which exists within the Southern IFCA district. This type of assessment will provide a valuable insight into the sustainability of the fishery within the Southern IFCA district by looking at catch per unit effort (CPUE) analysis, landings data and fishing effort.</p> <p>Southern IFCA has access to several sources of data, including Monthly Shellfish Activity Returns (MSARs) and MMO landings data, extending back to 2009. MSARs record the catches and effort data for the vessels under 10 metres with a shellfish entitlement and MMO landings data are derived from seafood merchant sales notes.</p> <p>This project will build upon data analysis completed as part of a previous internship by exploring how reliable and representative these data sources are.</p> <p>The objectives of this project are to:</p> <ul style="list-style-type: none"> <li>- Manage existing databases for stock assessment data</li> <li>- Data analysis and graphical representation of the data sources described above to show trends in CPUE, landings data and fishing effort since 2009 for indicator vessels.</li> <li>- Produce a report summarising key trends and comparing data from different data sources, with recommendations to aid future management.</li> </ul> <p>The successful applicant should be competent in report writing, statistical methods and data analysis.</p>			

The project will run for a period of 6 weeks starting in Summer 2019, the start date for the project is flexible but the successful applicant must be available for a 6-week period from the agreed start date.

<b>Timeline and outputs</b>	
<p>6 weeks – Approx. 20 hours a week</p> <p>Management of existing databases for crustacean landings and potting effort.</p> <p>Data analysis and graphical representation of data from MSARs and MMO landings data for indicator vessels.</p> <p>A report comparing long term trends in crustacean landings, fishing effort and catch per unit effort (CPUE) between indicator vessels and the whole Southern IFCA District.</p>	<p><b>Commence Summer 2019</b></p>

<b>Partners</b>	MMO
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<b>Resources required</b>	Computer (MS Excel, Word etc.)
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<b>Criteria for Candidates</b>	<p>Applicants for this project should give consideration to the following desirable attributes:</p> <ul style="list-style-type: none"> <li>• Ability to use computer programs like Microsoft Word and Excel</li> <li>• Good report writing skills</li> <li>• Would be comfortable to engage with the fishing industry</li> <li>• An understanding of biological statistics</li> </ul>
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