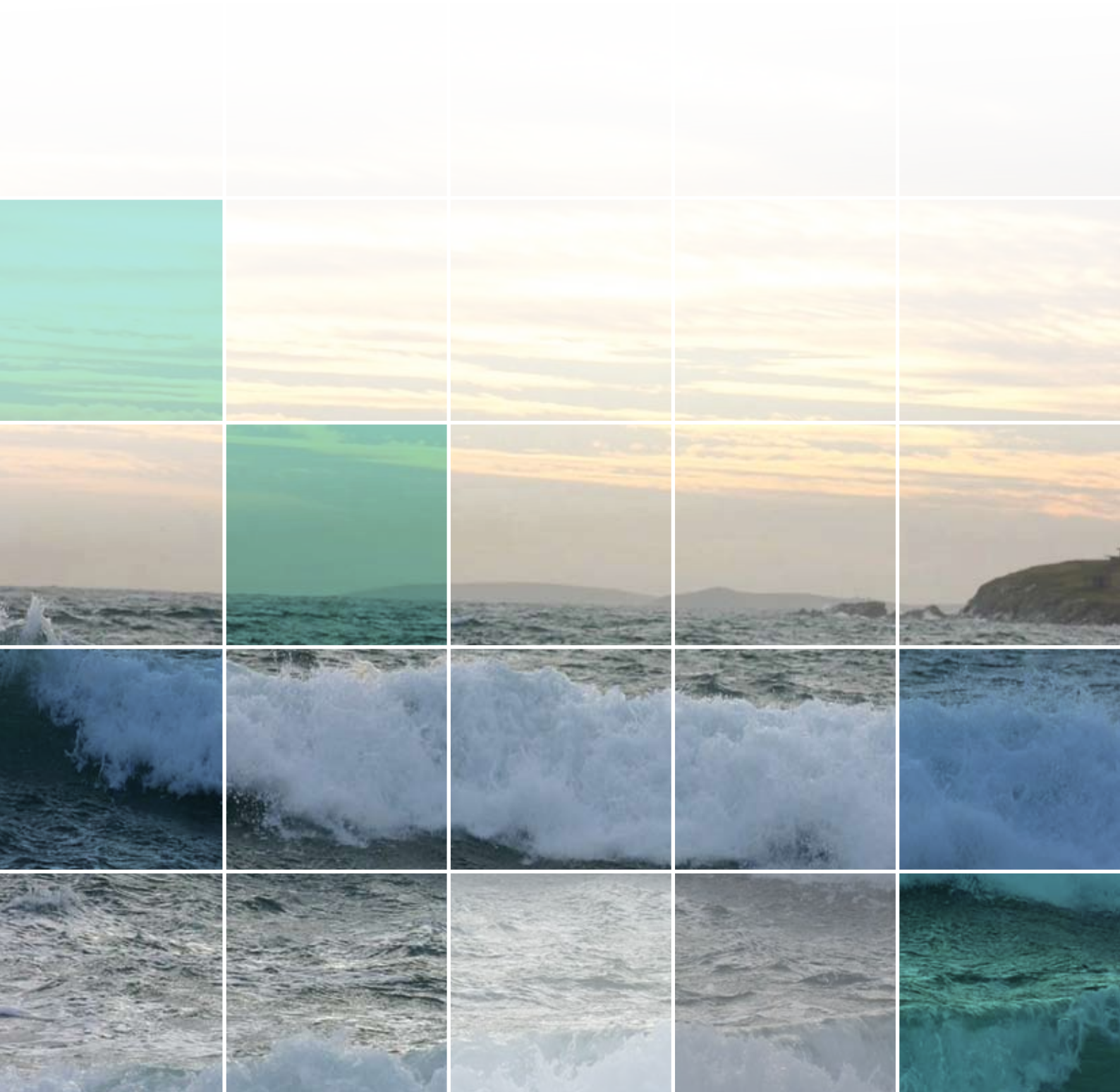




NAFC

# Marine Centre

Shetland Fisheries Training Centre Trust  
Annual Review 2008/09



## Welcome

The North Atlantic Fisheries College (NAFC), which opened in 1992, was established by the Shetland Islands Council as part of its forward-thinking and innovative strategy to support Shetland's fishing industries, including fish catching, aquaculture and fish processing.

The establishment of the College reflected the importance of these industries to Shetland's economy, and their growing need for a well trained and qualified workforce. Since it opened, the range of training and other activities undertaken by the NAFC has expanded dramatically in response to the needs of industry. Quite simply, everyone who is a part of the Shetland community depends on the sea in one way or another, through fishing, aquaculture, marine manufacturing and fabrication, or transport.

Merchant Navy training was added at an early stage for the crews of Shetland's inter-island ferries, and this led to the launch in 2004 of a Merchant Navy Officer Cadet Programme. An active research and development programme has also been developed, focusing on projects that will bring benefit to the local maritime industries.

The NAFC has also taken on a range of functions for Shetland Islands Council, including the administration of its aquaculture management system, and the provision of advice and guidance on fisheries and aquaculture issues. The NAFC regularly responds to consultation documents from both Westminster and Brussels on behalf of the Shetland community.

The growing range of college activities, and the numbers of students being taught, resulted in a significant expansion of college facilities, starting with the addition of a marine hatchery in 1999. This was followed by Port Arthur House in 2000, which provides self-catering en-suite accommodation for students and visitors, and the John Goodlad Centre in 2001, which provided additional offices, laboratories and classrooms, as well as a new state-of-the-art library.

In view of the increasing range and scope of the work being undertaken by the NAFC, the decision was taken in September 2005 to change the institution's name from the North Atlantic Fisheries College to the NAFC Marine Centre.

Although training and education remain important, they now only account for about one third of the Centre's activities: being balanced by an increasing amount of research, commercial and other activities: something that it was felt the title 'College' did not adequately reflect. At the same time it was recognised that it was important to not lose the brand identity and reputation that 'NAFC' had achieved over the years, for which reason it was decided to retain NAFC in the new title.

The NAFC Marine Centre's core mission 17 years on, however, remains unchanged: to support Shetland's marine industries. These industries remain key components of Shetland's economy, and in the present challenging times that support is more vital than ever. It is crucial that the whole of the Shetland community understands our role and the breadth of what we are able to offer.

**Councillor Iris Hawkins  
Chair of the Trustees**

## Director's Introduction



Professor David Gray

### Marine Science and Technology

Shetland is a leader in marine science and technology, and in marine spatial planning. In April 2008, the first consultation on the Shetland Marine Spatial Plan was held and, after incorporating the feedback and suggestions from this exercise, an Interim Draft Marine Spatial Plan was ready in January 2009 to be formally tested before being finalised.

The initiative is one of four pilot projects falling under the umbrella of the Scottish Sustainable Marine Environment Initiative, which was launched by the Scottish Government to inform future marine policy and test new management framework options for Scotland's marine and coastal environment. The Government will be evaluating the success of all four pilots when it considers the new Scottish Marine Bill.

In May 2008, we welcomed a group of delegates from the School of Marine Science and Technology at Newcastle University who were here to explore the potential for collaborative educational programmes and research projects between the two institutions. This relationship was cemented by our reciprocal visit in February 2009 to finalise preparations for the collaborative delivery of a Masters degree in Aquaculture Enterprise and Technology in September – a truly innovative venture with both organisations playing key roles. It is exactly these kinds of relationships that we are keen to build on.

We announced in June 2008 that the Centre, in partnership with Shetland Fishermen's Association, had secured funding through the Scottish Industry Science Partnership to undertake a six-month pilot study to collect fisheries and biological data on the commercially important species, megrim.

**This has been another successful year for the Centre, a resource that is fortunate to have some real hidden gems in the shape of a quality, committed and dedicated staff team, and first class equipment and resources.**

We were delighted to be able to undertake this work in partnership with industry.

We are also running a new three-year research studentship on the history of Shetland's fishing history. Bobby Gear was appointed to study the post-war development of the pelagic fishing industry leading to the award of a PhD degree. This marked a new departure for us and is the first of its kind in Shetland.

In March 2009, we entered into a joint agreement with Fisheries Research Services (FRS) to combine both organisations' skills in the area of aquatic resource management. As a result, the Shetland Fisheries Research Fund (SFRF) will be set up to make joint funding available for marine research and development topics deemed scientifically valuable by both partners. The first project under SFRF will look at how best to sample Shetland demersal, pelagic and shellfish fisheries.

### Education and Training

Our education and training provision continues to shine, with an ever-increasing reputation for high quality Fisheries and Merchant Navy training outwith Shetland. Over the last year, candidates from Ireland and Orkney, as well as Shetland, undertook a six-day MCA Oral Examination Preparation course in July, which took them one step away from attaining their Fishing Vessel Engineer Class 2 Certificate of Competency or Merchant Navy Officer of the Watch qualification.

A new intake of cadets joined the three-year cadet training programme in October 2008, as the class of 2005 successfully graduated.

We have also seen the first fisherman in Shetland awarded the Under 16.5 metre Skippers ticket, while Shetland's youngest fisherman achieved his gold standard Under 16 metre ticket.

As we continue to meet the education needs of the maritime sector, we help people learn and give them the skills to go into the workplace and make the most of their career – a very rewarding contribution to make.

### A 'Centre of Specialised Excellence'

We began work on the draft of the new Strategic Plan for 2009 to 2014 in March 2009. Based on feedback obtained from all major stakeholders, it identifies the vision for the Centre, its key strategic aims and objectives, and the critical success factors against which we will measure our performance. This helps us to evaluate where we are at present and where we want to be in the years to come.

Simultaneously, we have been involved in adopting a new quality system, the 'European Framework for Quality Management', which will help us to identify our strengths and the areas where we need to focus our attention if we wish to excel in the services we provide. This system will be rolled out across the whole organisation and, each year, we will carry out a comprehensive self assessment review.

Our aspiration to be 'excellent' is a sincere one. In some areas we already are but, in many, we are good but not yet exceptional, and in one or two we do still have some real work to do. However, recognising this is half the battle and our goal to be a 'Centre of Specialised Excellence' may take time and involve a continual process of enhancement. But we have taken the first step in the journey.



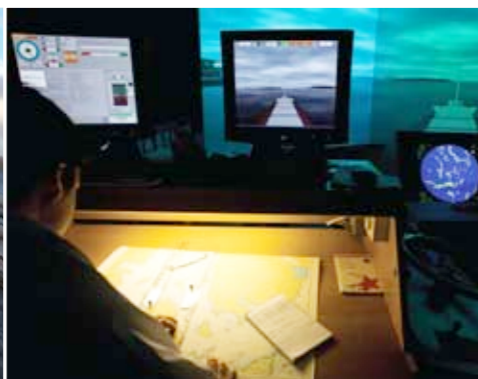
## EDUCATION AND TRAINING

Benefiting the people of Shetland through:



Aquaculture Training

At the end of the year, the team began a sweeping appraisal of all teaching material for the Scottish Vocational Qualification in Aquaculture and the National Progression Award in Aquaculture. The review will ensure that all aspects of the qualifications are reviewed in keeping with the growth of, and change in, the industry.



Deck and Engineering

738 students passed through the doors of the Shetland School of Nautical Studies this year to undertake specialist training in a variety of courses, including:

### Merchant Navy Cadet programme

A full complement of 24 cadets joined the training programme at the Shetland School of Nautical Studies in September – 12 deck cadets and 12 engineer cadets.

The three-year programme offers students the opportunity to undertake their training in Shetland; working towards professional qualifications in order to serve as officers on merchant vessels.

This year, six deck officers and six engineer officers joined the Merchant Navy after successfully completing the cadet programme and passing their examinations.

### Engineering

A full range of courses is provided for Shetland's maritime and general engineering industries, including National Certificate and Modern Apprenticeship programmes.

The 'Skills for Work' engineering skills course has now developed into a two-year course for Secondary 3 and 4 school pupils following the successful pilot programme last year. Pupils from all over Shetland, including Out Skerries, have been attending workshops at the Centre once per fortnight – providing a very useful bridge between school and the world of work and further education.

The Merchant Navy and Fishing Vessel Professional CoC courses once again produced well above national average results in the MCA Oral exams in July, with some students from Orkney and the Mainland choosing the Centre to take advantage of its staff expertise and excellent facilities.



Fishermen

During 2008/09, the first Under 16.5 metre Skippers ticket certificates were awarded to local fishermen who had completed the full range of mandatory short courses at the NAFC Marine Centre. The Centre continues to offer training at all levels to the fish catching sector, including the Class 1 and Class 2 Certificates of Competency in Deck and Engineering.

This year has seen the majority of the local pelagic and white fish fleet achieve accreditation into the Responsible Fishing Scheme with coaching provided by Centre staff and auditing services by Shetland Seafood Quality Control (SSQC) Ltd. This initiative is fully supported by Shetland Fish Producers' Organisation and is an excellent example of team working leading to national recognition of the quality of local product.

Staff at the Centre, in partnership with Banff and Buchan College, are also involved in the development of a new entrant programme and a proposed Modern Apprenticeship scheme for new entrants to the fishing industry. This will replace the existing SVQ qualification, which will expire shortly.

The nautical staff are involved in the final drafting of a PDA/HNC in Sea Fishing, which will underpin Deck Officer Certificates of Competency in the fishing industry in the future.

## MARINE SCIENCE

Benefiting the people of Shetland through:



Marine Policy Advice

The main work of this section is to monitor maritime policy developments at Scottish, UK and European levels that have the potential to affect Shetland's fishing industry.

Relevant information, advice and support is provided to the Shetland fishing industry, Shetland Islands Council and other interested local parties. The section also supports the work of the Shetland Oceans Alliance (SHOAL), which exists to promote the sustainable future of Shetland's fishing industry.

During 2008/09, the section has prepared responses on behalf of SHOAL to consultations from a number of bodies, including the Scottish Government (the future of quota management and licensing in Scotland), European Commission (proposals to modernise and reform the control system of the Common Fisheries Policy) and the Food Standards Agency (review of consumer advice on fish consumption). The section also prepared a response on behalf of Shetland Islands Council to the consultation on the UK Marine Bill.

Throughout the year, the department also produced a series of information notes for industry representatives, Council members, trustees and others on topics including: government reports and consultations; scientific advice on the state of fish stocks; the Scottish Marine Bill; fish landings in Shetland; and the annual end of year fisheries negotiations.

Since the beginning of 2009, a considerable amount of time has also been spent working with Shetland Fishermen's Association to evaluate the potential effects of new Scottish and European fisheries management measures on the Shetland fishing fleet and assisting them in responding to these. This has included analyses of the potential economic impacts of these measures on local fishing vessels.



Fisheries Science

Fisheries research within the department comprises both shellfish and finfish. Shellfish research is based around ongoing work such as the annual shellfish stock assessment – carried out on behalf of the Shetland Shellfish Management Organisation – and specific research projects aimed at industry, species biology and conservation.

Two recent projects examined ways of improving local crab stocks through better understanding of their movements and moulting patterns. Potential habitats were identified with an ultimate aim of re-stocking a native species to a sustainable level for potential future harvesting. An ongoing project aims to help industry to maximise yield by testing shellfish flesh quality after prolonged periods of 'in situ' storage.

The main finfish research activity during the past year collected biological data on megrim in the northern North Sea, using a tally book scheme and observed fishing trips. The aim was to: judge likely levels of participation in a larger tally book scheme; provide information on fishing effort and catch; and to provide biological information on the species. The team has also begun collecting data for the three-year study into the biology and ecology of megrim.

In addition, the team carries out routine sampling at markets and factories for finfish and shellfish species, takes water and biological samples to monitor algal blooms and undertakes shellfish sampling to monitor harmful toxins. All are fundamentally important areas supporting industry and local businesses.



Aquaculture Research

During 2008/09, the Aquaculture staff brought the Broodstock section of the marine hatchery back on line and saw work being undertaken in immunology using spurdog, which made good use of the eight 20-cubic-metre capacity tanks. The project has been running very successfully for over a year.

A further six 2m x 2m tanks are being used to house potential Ballan wrasse broodstock as part of a project to investigate the potential of this species – as cleaner fish – to combat sea lice on farmed salmon in a natural and sustainable way.

The trial cages at the NAFC Marine Centre research farm at Clift Sound were used to conduct similar work at sea, with a stock of juvenile Ballan wrasse held in tanks ashore until required.

During 2008, the trials unit also successfully undertook a service project for a salmon feed company investigating salmon maturation morphology using the site at Kallee Ness.

The aim is to expand the research programme in this discipline, once more parts of the hatchery are returned to full operation.

## MARINE MANAGEMENT SERVICES

Benefiting the people of Shetland through:



Marine Spatial Plan

The Marine Spatial Plan for Shetland, developed under the auspices of the Scottish Sustainable Marine Environment Initiative (SSMEI), and the first of its kind in Scotland, was implemented by regulators, planners and developers on a voluntary basis in 2009.

SSMEI was initiated by the Scottish Government to inform future marine policy and test new management framework options for Scotland's marine and coastal environment. Marine environment policy is an important aspect of the current European, UK and Scottish environmental agenda and is undergoing a period of change and development.

The Plan provides guidance for the placement of different marine activities for the betterment of marine management and reflects extensive public involvement, consultation and consensus.

Strategic environmental assessment of the Plan's environmental effects has been in process through 2009. It will play a key part in assessing the effectiveness of Plan policies, which in turn feeds back into its continued development and review.

A second public consultation will take place in late 2009 through to 2010, and a final version of the Plan will then be published for implementation – assuming at this stage as statutory ordinance.



Planning Applications and Works Licences

The number of planning applications received and determined this year was 26 (20 finfish and six shellfish).

During the year, the number of works licence applications received and determined was 55 (38 finfish, 12 shellfish, four constructions and one dredging).



Aquaculture Inspections

In addition to dealing with applications, the team is also required to carry out monitoring and, if necessary, enforcement of the 307 approved aquaculture sites in Shetland's marine waters, and report the findings to Shetland Islands Council's Planning Board.

An inspection of each farm is carried out at least twice annually to check that on-site equipment complies with that permitted. The aim is to increase this to four visits annually over the next year.

## OTHER DEVELOPMENTS IN THE YEAR

Under the spotlight:



Da Haaf Restaurant

With operations transferred back to Shetland Fisheries Centre Ltd, a wholly owned company belonging to Shetland Fisheries Training Centre Trust, a new restaurant manager was appointed in February to revitalise operations.

New plans for the business include building up the conference side of the business to provide a catering service for meetings and events, as well as extending opening hours to offer high quality evening meals in a formal dining ambience.

Open Monday to Friday, the relaxed family friendly restaurant serves a variety of hot meals, prepared using local produce wherever possible. With two fish markets on its doorstep, the team has access to the freshest fish – a key component of its fresh and tasty menu.



Seas Around Us Project

The Centre launched its 2008 'Seas Around Us' project in May to give visiting schools and the general public the opportunity to find out more about marine life in Shetland waters, as well as a better understanding of career opportunities in marine-related industries.

Almost 1,100 people visited the project during the summer, including parties from schools, play groups, nursery and play schemes, as well as the general public.

In addition to the pre-booked visits, three public open days were held; two tying in with RSPB Nature Week and a third marking the final day of the season. Each was very well attended with the final open day attracting over 200 people.

Feedback from the public open days highlighted that many who visited were Shetlanders home on holiday who really appreciated the opportunity for their children to see some of the sea creatures they themselves were familiar with while growing up in Shetland. Many also said the project was better than some of the marine life facilities they had visited on the mainland.

Funding was provided by Shetland Aquaculture Trust to enable the 2007 pilot project to be extended into 2008.



Official Visits

During the year, the Centre welcomed a visit from a representative from DG MARE (the Directorate-General for Maritime Affairs and Fisheries). The purpose of the visit was to hear the Shetland perspective on an Integrated Maritime Policy being considered by the European Union.

The UK Parliamentary Under-Secretary of State (Marine, Landscape and Rural Affairs) visited in September as part of a whistle-stop tour of Shetland. He toured the facility, met staff and was impressed by the range of research and services provided by the Centre.

## Trustees

### Shetland Islands Council/Shetland Oceans Alliance

Iris Hawkins	Shetland Islands Council (Chairperson of the Trust)
Leslie Angus	Shetland Islands Council
Elizabeth L Fullerton	Shetland Islands Council
James H Henry	Shetland Islands Council

Joseph Simpson      Shetland Oceans Alliance (SHOAL)

### Fisheries Industries

Hansen Black	Chief Executive, Shetland Fishermen's Association
Gordon Drummond	Chairperson, Seafood Shetland (appointed April 2009)
David Sandison	General Manager, Shetland Aquaculture

Arthur Nicolson	Independent
Magnus Shearer	Independent (appointed April 2009)

### Other trustees serving during the year

Ruth Henderson	Chief Executive, Seafood Shetland (resigned March 2009)
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## Financial Summary

The Shetland Islands Council (SIC) and the Shetland Development Trust (SDT) provided the largest sources of income for 2008/09.






These grants provide NAFC's core funding to deliver a range of services for the local fisheries industry (including training, monitoring, advice and some research and development). Funding for additional activities has to be sought from external sources.

### SFTCT Income 2008/09

	57%	SIC and SDT Grants
	8%	Other Funders
	11%	Project Income
	11%	Student Fees
	2%	Port Arthur House
	11%	Other Income



### SFTCT Expenditure 2008/09

	59%	Salary and other Staff Costs
	20%	Maintenance and Services
	4%	Professional Fees
	8%	Equipment and Materials
	9%	Depreciation



## Our Staff (as at 31 March 2009)



First Name	Last Name	Job Title	Position	Section
Akbar	Ali	Lecturer in Nautical Studies	Full time	SSNS
Gregg	Arthur	Aquaculture Technician/Scientist	Full time	Marine Science & Technology
Anne	Birnie	Receptionist/Admin Assistant	Full time	Admin & Finance
Alan	Bourhill	Business Development Manager	Full time	Business Development
Muriel	Cheyne	General Operative	Part time	SSQC Ltd
John	Clayton	ICT Technician	Full time	Estates Management
Susan	Davie	Library Assistant	Part time	Estates Management
Brian	Duncan	Analytical Chemist	Full time	SSQC Ltd
Mark	Fullerton	Lecturer in Nautical Studies	Part time	SSNS
Daniel	Gear	Shellfish Research Assistant	Full time	Marine Science & Technology
Mark	Gibson	Aquaculture Instructor/Technician	Full time	Marine Science & Technology
Kenny	Gifford	Aquaculture Development Manager	Full time	Marine Science & Technology
David	Grant	Lecturer in Engineering	Full time	SSNS
David	Gray	Director	Full time	
Lorraine	Gray	SSMEI Project Officer - Shetland	Full time	Marine Development
June	Hamilton	Finance Assistant	Full time	Admin & Finance
Alan	Harpin	Section Leader - Marine Farm Services	Full time	SSQC Ltd
Vicki	Henderson	Marine Surveyor	Full time	SSQC Ltd
Lynne	Henry	Finance Officer	Full time	Admin & Finance
Martin	Holmes	Coastal Zone Manager	Full time	Marine Development
David	Hopwood	Estates Manager	Full time	Estates Management
Sue	Horne	Library Assistant - Maternity Cover	Part time	Estates Management
Lisa	Jamieson	Cook	Full time	Da Haaf
Anna	Johnson	Catering Assistant	Part time	Da Haaf
Arthur	Johnson	Fisheries Technician	Full time	Marine Science & Technology
Isobel	Johnson	Accountant	Full time	Admin & Finance
Caroline	Keith	Liaison Officer	Full time	SSNS
Duncan	Kidson	Section Leader - Engineering	Full time	SSNS
Chevonne	Laurenson	Fisheries Biologist	Full time	Marine Science & Technology
Kenny	Leask	Lecturer in Engineering	Full time	SSNS
Ryan	Leask	Marine Development Officer	Full time	Marine Development
Beth	Leslie	Shellfish Biologist	Full time	Marine Science & Technology
Paul	MacDonald	Fisheries Scientist	Full time	Marine Science & Technology
Louise	Malcolmson	Benthic Lab Technician	Full time	SSQC Ltd
Karen	McKelvie	Benthic Lab Technician	Part time	SSQC Ltd
Vicki	Mordue	Restaurant Manager	Full time	Da Haaf
Susan	Morrison	Laboratory Technician	Full time	SSQC Ltd

First Name	Last Name	Job Title	Position	Section
Jane	Mott	Catering Assistant - Maternity Cover	Part time	Da Haaf
Cameron	Mullay	Laboratory Analyst	Full time	SSQC Ltd
Ian	Napier	Fisheries Development Manager	Full time	Marine Science & Technology
Michael	Nisbet	ICT Technician	Full time	Estates Management
Margaret	Nugent	Technical Manager/Microbiologist	Full time	SSQC Ltd
Niall	O'Rourke	Analytical Services Manager	Full time	SSQC Ltd
Roger	Pascal	Lecturer in Engineering	Full time	SSNS
Laurence	Pearson	Trials Unit Manager	Full time	Marine Science & Technology
Jan	Rigden	Head of School of Nautical Studies	Full time	SSNS
John	Rosie	Marine Development Officer	Full time	Marine Development
Sathappan	Saravanan	Marine Broodstock/Hatchery Technician	Full time	Marine Science & Technology
Andrew	Shearer	Admin Assistant - Maternity Cover	Full time	Admin & Finance
Richard	Shelmerdine	Shellfish Scientist	Full time	Marine Science & Technology
Jurij	Sinicyn	Lecturer in Engineering	Full time	SSNS
Marion	Slater	Shellfish Sampling Programme Officer	Part time	Marine Science & Technology
Agnes	Smith	Trainee Benthic Laboratory Analyst	Full time	SSQC Ltd
Lianne	Smith	Catering Assistant	Part time	Da Haaf
Daniel	Stone	Marine Environment Modeller	Full time	SSQC Ltd
Leslie	Tait	Fisheries Technology Manager	Full time	Marine Development
James	Thomas	Lecturer in Engineering	Full time	SSNS
Howard	Thomson	Lecturer in Engineering	Full time	SSNS
Elizabeth	Tulloch	Microbiology Laboratory Analyst	Full time	SSQC Ltd
Fiona	Tulloch	Admin & Finance Manager	Full time	Admin & Finance
Sean	Tulloch	Kitchen Assistant	Full time	Da Haaf
Fazal	Wadood	Lecturer in Nautical Studies	Full time	SSNS
Leslie	Watt	Quality Control Inspector	Full time	SSQC Ltd
George L	Williamson	Shellfish Sampling Programme Officer	Part time	Marine Science & Technology
Margaret	Williamson	Inspectorate Assessor	Full time	SSQC Ltd
Sean	Williamson	Shellfish Sampling Programme Co-ordinator	Full time	Marine Science & Technology
Steven	Williamson	Boatman/Fish Farm Operative	Full time	Marine Science & Technology
Arlene	Willmore	Admin Assistant	Full time	Admin & Finance
Kathryn	Winter	Shellfish Sampling Programme Officer	Part time	Marine Science & Technology
Matthew	Wright	Assessor	Full time	SSQC Ltd
Geoff	Young	Estates Technician	Full time	Estates Management



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NAFC Marine Centre is an academic partner in UHI Millennium Institute

NAFC Marine Centre is the operating name of the Shetland Fisheries Training Centre Trust, Scottish Charity Number SC003715

The Trust is a Management Agent for the Shetland Islands Council