## Item: 5

College Management Council Sub-committee: 2 November 2020.

Orkney College Economic Impact Review.

Report by Executive Director of Education, Leisure and Housing.

## 1. Purpose of Report

To present the Economic Impact Report for Orkney College, undertaken as part of a wider economic impact assessment for the University of the Highlands and Islands.

## 2. Recommendations

The Sub-committee is invited to note:

#### 2.1.

That the University of the Highlands and Islands contracted Biggar Economics to undertake an Economic Impact Report for the University and for each Academic partner.

#### 2.2.

The Economic Impact Report relating to Orkney College, attached as Annex 1 to this report.

## 3. Background

## 3.1.

The Economic Impact Report for Orkney College was undertaken as part of a wider economic impact assessment in respect of the value of the University of the Highlands and Islands (UHI) and the Academic Partners. It forms an element of the review being undertaken by UHI for the Court of the University. The University followed their procurement process and policy in selecting Bigger Economics to undertake this work.

### 3.2.

The analysis is based on data provided to Biggar Economics by Orkney College in Spring 2020, together with an interview with the College Principal, Professor Edward Abbott-Halpin, in June 2020.

## 4. Process used for the Review

## 4.1.

The Economic Impact Report, attached as Appendix 1 to this report, undertaken by Biggar Economics, provides analysis of the impact of Orkney College covering regional and national contributions to the economy.

### 4.2.

The analysis measured the impact created by Orkney College, in this case for the period 2018/19 which was the most recently completed academic year for which data was available. Throughout the report this has been referred to as 2019.

### 4.3.

Graduate data relates to students who graduated in 2019. The economic impacts are assessed in terms of two commonly used measures:

- Gross Value Added (GVA), which is a measure of economic output.
- Jobs.

#### 4.4.

GVA impacts are reported to nearest whole £ million and jobs reported to the nearest 100, or nearest 10 depending on the scale of impacts. Student numbers are rounded to the nearest 10.

#### 4.5.

Some of the key findings relating to the impact of Orkney College include:

- Using the above methods, the productivity impact associated with students receiving awards from Orkney College UHI in 2019 was estimated to be £30 million GVA in Orkney and £32 million GVA across Scotland. A breakdown of impact by qualification level is provided on page 6.
- The combined impact of the quantifiable research and knowledge exchange activity at Orkney College UHI was estimated to generate £600,000 GVA and support 15 jobs in Orkney in 2019 (page 7).
- Economic impacts generated by the College's student community, was estimated to have contributed £2 million GVA and supported 50 jobs in Orkney in 2018/19 (page 9).
- There were substantial additional economic benefits, outlined in detail in the report attached as Appendix 1, relating to the work of the Agronomy Institute, the Archaeology Institute, and the Institute of Northern Studies.

#### 4.6.

The Economic Impact Report, at section 2.3.4 on pages 9 and 10, concludes that:

- The College is an essential part of the community's fabric. It is estimated that it generated an economic contribution that was worth £36 million GVA and 180 jobs throughout Orkney in 2018/19.
- Beyond its economic contribution, the College also makes an important contribution to the social, industrial and cultural fabric of life in Orkney.

## 5. Links to Council Plan

### 5.1.

The proposals in this report support and contribute to improved outcomes for communities as outlined in the Council Plan strategic priority theme of Thriving Communities.

#### 5.2.

The proposals in this report relate directly to Priorities 3.1 and 3.5 of the Council Delivery Plan.

## 6. Links to Local Outcomes Improvement Plan

The proposals in this report support and contribute to improved outcomes for communities as outlined in the Local Outcomes Improvement Plan priority of a Vibrant Economy.

## 7. Financial Implications

There are no significant financial implications arising directly from the recommendations to this noting report.

## 8. Legal Aspects

None resulting directly from this report.

## 9. Contact Officers

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## 10. Appendix

Appendix 1: Orkney College Economic Impact Review Report.





## Orkney College UHI Economic Impact Assessment

A final report to UHI 25<sup>th</sup> September 2020





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## 1. Introduction

# This report presents an assessment of the economic impact of Orkney College UHI in 2019.

This report presents an assessment of the economic impact of Orkney College UHI in 2019. This is linked to a wider commission to evaluate the collective economic contribution made by UHI and its academic partners.

The analysis is based on data provided to BiGGAR Economics by Orkney College in Spring 2020, together with an interview with College Principal, Professor Eddie Abbott-Halpin in June 2020.

## 1.1 Background

Orkney College serves a rural island community of around 22,000 people. The College offers a wide range of courses across the full range of the Scottish Credit and Qualifications Framework. It is an Academic Partner in the University of the Highlands and Islands, offering training and vocational skills, undergraduate and postgraduate courses, up to and including PhD. It is also MCA and RYA certified. The Orkney College campus was built in 2002 on the outskirts of Kirkwall. Scott's House in Kirkwall hosts the Institute for Northern Studies and Maritime Studies are hosted at its second campus in Stromness.

The College works closely with local schools to support its schools provision offering a range of Foundation Apprenticeships, Highers, National 5 and Skills for Work courses for young people to work towards vocational qualifications. It also delivers short courses, modern apprenticeships and CPD modules, designed specifically for local employers and their workforce. The College provides evening classes to meet the training and leisure needs of the local community.

## 1.2 Reference Year and Geography

Our analysis is intended to measure the impact created by the UHI and its academic partners over a given timeframe, in this case it is 2018/19, the most recently completed academic year for which data are available. Throughout the report this has been referred to as 2019. Graduate data relate to students who graduated in 2019.

The impacts are presented for two geographies, the Orkney Islands Council local authority area and Scotland as a whole.

### 1.3 Measurement and Method

The economic impacts are assessed in terms of two commonly used measures:

- Gross Value Added (GVA), which is a measure of economic output; and
- jobs.

GVA impacts are reported to nearest whole £ million and jobs are reported to the nearest 100, or nearest 10 depending on the scale of impacts. Student numbers are rounded to the nearest 10.



A detailed description of the metrics and the methods used to calculate impacts is provided in the Methodological Appendix at the end of the main UHI report.

## 1.4 Report Structure

The remainder of this report is structured as follows:

- Section 2 introduces Orkney College UHI's quantitative economic impacts, which result from supporting students, delivering research, employing staff and running services; and
- Section 3 reflects on the wider benefits of the college, which are the result of research and commercialisation activity, support for the labour market, and links with industry and communities.



## 2. Economic Impacts

## This section presents the economic impact created by Orkney College UHI.

Its impacts are described according to the themes set out in the UHI's strategic plan:

- supporting students;
- · focused research; and
- a university for all the region.

The summary tables at the end of this section show the estimated total economic contribution made by the College. This should be read alongside the wider benefits supported by organisation which are described in section **Error! Reference source not found.** 

A full description of the methodology used to estimate these impacts is contained in an Appendix to the UHI's main report.

## 2.1 Supporting Students

Engaging in education brings an opportunity for people to enhance their earnings potential over the course of their working lives. The sub-section below quantifies the lifetime productivity benefits associated with the qualifications awarded to students at Orkney College UHI.

The College has a total student body of 2,795 across its further and higher education courses. The curriculum offering for students is at the heart of the College and it aims to meet the needs and expectations of a diverse and geographically dispersed student body. Its approach facilitates greater access to a range of courses that offer pathways through tertiary education, delivering qualifications at all 12 SCQF levels from access courses up to and including PhD level. For all students, especially those living in communities where tertiary education was previously limited or non-existent, this represents a step change in the local education offering.

In 2018/19, Orkney College UHI had 1,250 qualifiers from its full-time and part-time courses. In cases where students achieved more than one award in the same year, the productivity premium was applied to the highest level of award received by each qualifier to avoid double counting.

The table below shows the highest qualification achieved by students at Orkney College in 2018/19. Qualified undergraduates were assumed to have achieved Level 10 on the SCQF scale, which assumes they have completed an honours qualification. For those that do not complete honours level, assigning this group to Level 9 does not affect the analysis below.



Table 2-1 Qualifiers from Orkney College UHI by SCQF Level, 2019

SCQF	Number of Qualifiers	Examples of Awards Included
Level 1	<5	National 1 Awards
Level 2	-	National 2 Awards, National Certificate, National Progression Award
Level 3	-	National 3 Awards, Skills for Work National 3, National Certificate, National Progression Award
Level 4	140	National 4, Skills for Work National 4, National Certificate, National Progression Award, SVQ 1
Level 5	490	National 5 Awards, Skills for Work National 5, Modern Apprenticeships, National Certificate, National Progression Award, SVQ 2
Level 6	490	Higher Awards, Skills for Work Higher, National Certificate, National Progression Award, Foundation Apprenticeships, Professional Development Award, SVQ 3
Level 7	60	Advanced Higher Awards, Scottish Baccalaureate, Modern Apprenticeships, HNC, Professional Development Award, SVQ 3
Level 8	10	Diploma of Higher Education, Technical Apprenticeship, HND, Advanced Diploma, Professional Development Award, SVQ 4
Level 9	<5	Bachelors/ Ordinary Degree, Graduate Diploma, Technical Apprenticeship, Professional Development Award, SVQ 4
Level 10	10	Honours Degree, Graduate Diploma, Graduate Certificate, Graduate Apprenticeships, Professional Development Award
Level 11	30	Masters' Degree, Post Graduate Diploma, Professional Apprenticeship, Professional Development Award, Graduate Apprenticeship, SVQ 5
Level 12	<5	Doctoral Degree, Professional Apprenticeship, Professional Development Award
Foundation Apprenticeships	<5	
Total	1,250	

Source: SCQF (2020); BiGGAR Economics Analysis of Data from UHI

The analysis considers the productivity impacts associated with qualifications at Level 4 and above. Three different methodologies have been used to suit available data on earnings premia associated with different levels of education. The groupings used and a brief description of the methodology applied in each case is described below. A full description of the methodologies used is contained in the methodological appendix in the main UHI report.

### 2.1.1 Qualifiers at SCQF Levels 4 to 6

SCQF Levels 4 to 6 represent qualifications gained in the senior phase of formal education (typically, ages 16-19) and in the initial stages of employment up to



National Certificate and SVQ3 level. Foundation Apprenticeships are included as a Level 6 qualification. Based on the data received from UHI, it was estimated that 1,123 people received Levels 4 to 6 qualifications at Orkney College UHI in 2018/19.

The methodology applied uses data from a study for the Department for Business Innovation and Skills<sup>1</sup> that measured the lifetime productivity impacts realised in England from achieving qualifications that are equivalent to SCQF Levels 4 to 6 in Scotland. The resulting productivity premium applied to qualifiers at these levels is shown in Table 2-2. The economic impact associated with each study area was estimated based on qualifiers' term-time address.

Table 2-2 Earnings Premium Assumptions, SCQF Levels 4 to 6

RQF Level	Equivalent SCQF Level	Productivity Premium
Level 1	Level 4	£8,667
Level 2	Level 5	£22,444
Level 3	Level 6	£29,444

Source: BIS (2011), Measuring the Economic Impact of Further Education and BiGGAR Economics Analysis

#### 2.1.2 Qualifiers at SCQF Levels 7 and 8

SCQF Levels 7 and 8 represent advanced further education, modern apprenticeships, some professional development awards, SVQ Level 3/4, HNCs and HNDs. Based on the data received from UHI and its academic partners, it was estimated that 74 people received qualifications at Levels 7 and 8 from Orkney College UHI in 2018/19.

To estimate the impact for qualifiers at this level, the analysis relied on a study by London Economics on the returns from RQF Level 4 and 5 qualifications for STEM and non-STEM subjects<sup>2</sup>. Based on European Commission guidance, these correspond with SCQF Levels 7 and 8 in Scotland. The study found that the premium realised was different for STEM and non-STEM subjects and also for full-time and part-time qualifiers. This is because many part-time students undertake courses at a later stage in their working lives and have less time in which to realise the benefits.

The premiums applied are shown in Table 2-3. The appropriate rate of return was applied to UHI qualifiers according to courses they graduated from and the mode of study. Impacts were allocated to each area according to where students lived.

Table 2-3 Earnings Premium Assumptions, SCQF Levels 7 and 8

Study Mode	STEM Subjects	Non-STEM Subjects
Full-time	£78,500	£28,500
Part-time	£45,200	£13,500

Source: London Economics (2017), Assessing the economic returns to Level 4 and 5 STEM-based qualifications

#### 2.1.3 Qualifiers at SCQF Levels 9 to 12

SCQF Levels 9-12 represents higher education awards, Bachelors' degrees, Masters' degrees, PhDs and other equivalent qualifications such as Professional Development Awards. Based on the data received from UHI and its academic

<sup>&</sup>lt;sup>1</sup> BIS (2011), Measuring the Economic Impact of Further Education and BiGGAR Economics Analysis

<sup>&</sup>lt;sup>2</sup> London Economics (2017), Assessing the economic returns to Level 4 and 5 STEM-based qualifications.



partners, it was estimated that there were 53 qualifiers from Orkney College UHI at Levels 9 to 12 in 2018/19.

The approach towards estimating the productivity premium associated with higher education graduates is based on research carried out by the Department for Business Innovation and Skills (BIS)<sup>3</sup>. This considers the lifetime earnings premium accruing to a graduate compared with others whose highest formal qualification is an A-level or equivalent qualification. This study also gives a breakdown of graduate premia by subject studied and highlights the considerable variation in the returns from different degree subjects. Their research implies that the average graduate premium for all first-degree qualifiers is estimated to be £108,100 over their working lives. The study also estimates the returns from postgraduate and research degrees.

The total productivity impact associated with the students who achieved Level 9 to 12 qualifications was estimated by multiplying the returns associated with each degree type and subject by the number of graduates who qualified in that subject and degree type in 2019.

To estimate the economic impact generated in each study area, a distinction was made between UK qualifiers and non-UK qualifiers, as graduates from outside the UK are less likely to remain in the UK after achieving their degrees. Based on the Destination of Leavers from Higher Education Survey<sup>4</sup>, it is estimated that around 84% of graduates from Scottish institutions remain in Scotland on completion of their course. The graduate premium impact for UK-domiciled qualifiers in the Highlands and Islands was then estimated based on data provided by UHI for students' postcodes. Based on research from BIS, it is further assumed that only 20% of non-UK qualifiers remain in the UK following graduation. The total graduate premium across the Highlands and Islands and Scotland was then estimated by summing up these impacts.

#### 2.1.4 Summary Productivity Impacts of Qualifications

Using these methods, the productivity impact associated with students receiving awards from Orkney College UHI in 2019 is estimated to be £30 million GVA in the Orkney Islands and £32 million GVA across Scotland. A breakdown of impact by qualification level is provided in the figure below.

Table 2-4 Earnings Premium by Level of Qualification – Orkney College UHI

GVA (£ million		
	Orkney Islands	Scotland
SCQF Levels 4-6 (Further Education)	26	27
SCQF Levels 7-8 (Higher Education)	2	3
SCQF Levels 9-12 (Higher Education)	1	2
Total	30	32

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

## 2.2 Focused Research and Knowledge Exchange

The growing slate of research and knowledge exchange activity at UHI and its academic partners differentiates it as a University and supports its original purpose of

<sup>&</sup>lt;sup>3</sup> Department for Business Innovation & Skills (BIS) (2011), The Returns to Higher Education Qualifications

<sup>&</sup>lt;sup>4</sup> Higher Education Statistics Agency (HESA) (2018), Destination of Leavers from Higher Education 2016/17.



creating a transformational impact on the economy and communities of the Highlands and Islands.

Research at Orkney College UHI is conducted on **several** topics. The College hosts three institutes that contribute internationally significant research in their fields: the Agronomy Institute; Archaeology Institute; and Institute for Northern Studies. The college's research activity directly delivers economic impacts. The additional role of these in driving wider benefits is described in more detail in Section 3.

The College offers a range of services to businesses which also generate economic contributions for the local economy. These include contract research and consultancy services. This slate of services improves business performance, resulting in increased productivity through interaction with the College.

The combined impact of the quantifiable research and knowledge exchange activity at Orkney College UHI is estimated to generate £600,000 GVA and support 15 jobs in the Orkney Islands in 2019.

Table 2-5 Quantifiable Research & Knowledge Exchange Activity Impact

GVA (		GVA (£)
	Orkney Islands	Scotland
Total	600,000	800,000
		Employment
Total	15	18

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

## 2.3 A University for All of the Region

There are several aspects to this impact that arise from the College's operational activities as an employer that spends money on staff, capital projects, goods and services and attracts a student community that spends in the local economy. Other impacts are created through the visitors that it brings to the area. These are collectively reported as operational impacts in the summary table at the end of this section.

#### 2.3.1 Core Impact

The core impact of an organisation is the economic contribution it makes through its main activities. The core impacts associated with Orkney College UHI include:

- direct impact –the value that it adds to the economy through its own operations which can be estimated as the difference between total income and total supply spending. In 2018/19, the College had a total income of £5 million and spent almost £2 million on supplies;
- **supply spending impact** which measures the contribution made throughout the organisation's supply chain by its expenditure on goods and services. This amounted to over £1 million in 2018/19;
- staff spending impact staff at the College create an impact on the economy by spending their wages and salaries in the areas where they live. In 2018/19 staff at Orkney College UHI received almost £4 million in salaries and wages; and
- capital spending impact this contributes to economic activity by supporting
  businesses in the construction sector and the amount spent can fluctuate from
  year to year. Based on spending over the past five years and taking future plans



into account for the next five years, it is estimated that Orkney College UHI spends around £0.2 million per year on capital investment

Summing up the economic impact generated by core activities, it is estimated that, in 2018/19, Orkney College supported £5 million GVA and 130 jobs in the Orkney Islands. Across Scotland, the College created an economic impact of £6 million GVA and 150 jobs. A summary of impact by source is provided in Table 2-6.

Table 2-6 Summary of Core Impact – Orkney College UHI

		GVA (£ million)
	Orkney Islands	Scotland
Direct Impact	4	4
Supply Spending Impact	<1	1
Staff Spending Impact	1	1
Capital Spending Impact	<1	<1
Total	5	6
		Employment
Direct Impact	110	110
Supply Spending Impact	10	20
Staff Spending Impact	10	20
Capital Spending Impact	0	<10
Total	130	150

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

#### 2.3.2 Student Community

In 2018/19, there were 244 full-time students enrolled at the College on all further and higher education courses. The student community at the College creates an economic contribution in four ways: through their spending patterns, through working part-time in their local communities, through placements and through voluntary work. Each of these impacts is explained below:

- Student spending students' spending habits during term time supports turnover and employment in the businesses where purchases are made. Student spending is estimated based on where they live and on their spending patterns which are informed by the "Student Income and Expenditure Survey 2014 to 2015" published by the Department for Education (DfE). It is estimated that all full-time students at Orkney College UHI spend £3 million each year in the local economy.
- Student part-time work students also make an economic contribution by
  working part-time during their studies, most commonly in the hospitality and retail
  sectors. Based on national data it was estimated that around 33% of full-time
  students worked during term time<sup>6</sup> for around 14 hours each week.
- Student placements students at the College contribute to local employment by carrying out work placements. As well as giving students valuable experience, they also support the activities of businesses and organisations where they are placed. Data provided by the College indicate that 16 students took part in placements in 2018/19.
- Student volunteering this makes an economic contribution to a range of organisations and helps to make services possible that may not happen

<sup>&</sup>lt;sup>5</sup> Department for Education (2018), Student Income and Expenditure Survey 2014 to 2015.

<sup>&</sup>lt;sup>6</sup> Office for National Statistics (2019), Labour Force Survey.



otherwise. Based on the evidence from a study by the National Union of Students<sup>7</sup> (NUS), it was estimated that around 31% of students take part in volunteering activities and that each volunteer spends around 44 hours volunteering per year.

By summing the economic impacts generated by the College's student community, it is estimated that it contributed £2 million GVA and supported 50 jobs in the Orkney Islands in 2018/19.

Table 2-7 Summary of Student Community Impact – Orkney College UHI

		GVA (£ million)
	Orkney Islands	Scotland
Student Spending Impact	1	2
Student Part-Time Work Impact	1	11
Student Placements Impact	<1	<1
Student Volunteering Impact	<1	<1
Total	2	2
		Employment
Student Spending Impact	30	30
Student Part-Time Work Impact	20	30
Student Placements Impact	<5	<5
Total	50	60

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

#### 2.3.3 Tourism from Conferences and Events

The College attracts visitors to its students and staff and through organising conferences, events and graduations. This creates short-term tourist spending impacts in the local economy.

It is estimated that, in 2018/19, the economic impact associated with tourism-related activities at Orkney College UHI was £33,000 GVA and 1 job in the Orkney Islands.

#### 2.3.4 Summary

The College is an essential part of the community's fabric. It is estimated that it generated an economic contribution that was worth £36 million GVA and 180 jobs throughout Orkney Islands is 2018/19.

<sup>&</sup>lt;sup>7</sup> National Union of Students Connect (2014), The Student Volunteering Landscape.



Table 2-8 Total Impact Summary - Orkney College UHI

		GVA (£ million)
	Orkney Islands	Scotland
Student Lifetime Earnings Impact	30	32
Research Impact*	1	1
Operational Impact	6	8
Total	36	40
		Employment
Research Impact*	20	20
Operational Impact	180	220
Total	180	220

Source: BiGGAR Economics Analysis, \* Part of the research impact has been estimated based on the research income received by the College which is also included as part of its core impact. However, this element has only been counted once in the total impact for the College to avoid double counting. (Note, figures may not sum due to rounding).

Beyond its economic contribution, the College also makes an important contribution to the social, industrial and cultural fabric of life in the Orkney Islands. These wider impacts are described in the following section.



## 3. Wider Benefits

In addition to its economic impact, Orkney College UHI brings a suite of wider benefits which support essential services, businesses and communities across the Islands.

There are several ways in which Orkney College UHI creates economic and wider benefits for the communities it serves. Routes to impact include research and commercialisation activity, support for the labour market through skills and other labour market development work, and links that directly support businesses and sectors.

## 3.1 Research and Commercialisation

#### 3.1.1 Agronomy Institute

The Agronomy Institute was opened at Orkney College UHI in 2002. Its mission is "to establish an internationally recognised centre for the research, development and promotion of northern temperate plants and their products which contributes significantly to the sustainable economic, social and environmental well-being of the Highlands and Islands of Scotland".

The research programme focusses on areas that underpin many niche products in the food and drink industry and have met the mission of contributing across the Highlands and Islands and, indeed, beyond. Activity includes identifying and screening crops and plants with potential for commercialisation in the Highlands and Islands, taking into account their potential impact on the environment and biodiversity. There is significant collaboration with growers and end-users, with active development of supply chains and stimulating demand. This breadth of commercialisation activity, which creates innovative products and processes and then supports the wider market to adopt them, drives the creation of new economic activity in Orkney. It is an excellent model of innovation practice.

The benefits created by the Agronomy Institute are distributed over the Highlands and Islands and the rest of Scotland. In addition to the Institute's Orkney links, there are collaborations with commercial organisations in Shetland (Shetland Livestock Marketing Group and Valhalla Brewery), Islay (Bruichladdich Distillery), Arran (Isle of Arran Distillers) and Raasay (R&B Distillers Ltd). Collaborations between the Institute and other research centres (e.g. the James Hutton Institute, the Rowett Institute and Forestry Commission Scotland) help these organisations deliver research projects benefiting remoter parts of the Highlands and Islands.

Examples of projects delivered include:

- Woody Biomass, Short Rotation Forestry (SRF) Project: Since 2011, the Agronomy Institute has been collaborating with Forestry Commission Scotland in a project to investigate the potential of SRF in Orkney.
- Plants For Natural Products, Orkney Botanicals For Flavouring Gin: In 2016,
  Orkney Distilling Ltd (ODL), was established and the company started
  implementing plans for a new distillery and visitor centre at a prime site on the
  Kirkwall waterfront. In collaboration with Strathearn Distillery and with help from
  the Institute, the company developed its first product, Kirkjuvagr gin, later in the
  year. The gin includes a range of locally grown botanicals identified and grown for



it by the Institute. In 2017, the Institute helped ODL establish a botanicals garden which will allow it to produce its own locally grown botanicals. Building on links developed through the Northern Cereals project, collaboration has started with Icelandic researchers in this area of research.

Northern Fruits For Orkney Wine: Orkney Wine Company (OWC) produces a range of fruit wines and liqueurs and since 2012 the Agronomy Institute has been helping source unusual, locally grown ingredients to produce unique wines. Several of the species have been in Institute research trials since 2004. The collaboration has been assisted by chemical analyses of the fruit species and wines, carried out by the James Hutton Institute. During 2015, the Al helped the company establish its own fruit garden so that it can expand production of wines made from local fruit.

The team at the Agronomy Institute has a clear focus on its commercial links and economic influence and has created a model to describe how these flow. The Institute works across a wide range of companies, small and large and across the Highlands and Islands, with a wide range of crops. There is strong evidence of economic impact, with products supplied by the industry directly supporting significant international sales for companies, which in turn rely on the Highlands and Islands for natural and human resources – creating economic, social and environmental benefits.

#### 3.1.2 Archaeology Institute

Orkney College hosts the UHI Archaeology Institute, which has research and teaching staff in Orkney, Shetland and the Western Isles. It has attracted a world class archaeological team producing academic research, teaching, commercial applied research and consultancy.

The Institute creates economic benefits several ways – attracting students and researchers, supporting businesses through commercial consultancy activity, attracting and hosting volunteers and contributing to the Orkney's tourism offer. Research is also delivered in Easter Islands, the Cook Islands, Nepal and Sri Lanka, providing the Highlands and Islands an international profile.

The Orkney Research Centre for Archaeology (ORCA) is the commercial arm of the Institute. It offers terrestrial and marine historic environment services in renewable energy, electricity transmission, oil and gas, infrastructure and other sectors. It provides commercial services, including advice, research and community services.

Wider benefits are created through its education and outreach activities, contributing to outcomes in education, heritage, culture and well-being across the region.





## Heritage Tourism in Orkney

# UHI archaeological research has supported the growth of a valuable tourism market in Orkney

Long-term archaeological research into Orcadian Neolithic sites by UHI Archaeology Institute staff has created the conditions for substantial and broad economic growth supporting the development of heritage tourism and associated infrastructure, goods and cultural impact through a range of media, and locally engaged citizens (educated and enriched local communities' appreciation of their heritage).

UHI archaeological research makes a direct economic contribution to the local economy through the large increase in independent tourists visiting Orkney during the 'impact' period – many of whom come to visit the archaeology, particularly accessible ongoing excavations at the spectacular Ness of Brodgar. The rise in tourist numbers from 142,800 in 2014 through to 174,300 (+113,000 cruise liner passengers) in 2017 comes with increasing economic impact from £31m to £50m between 2013 and 2017.

Overall, this increase has transformed the local economy. The proportional contribution of archaeology has been calculated at around 35% of total spend. In 2017, over half of visitors were 'heritage' tourists (62%), with 40% specifying archaeology as the main reason for visiting, with up to 80% of tourists visiting an archaeological site.

Excavations at the Ness of Brodgar alone were calculated to be worth £750,000 to the local economy in 2016, rising to £1m with an 8 week season the following year. Economic benefits extend to tour guides, accommodation and service providers, and bus companies.

Neolithic archaeology has also been used as a marketing brand for products from Orkney that are sold internationally. For example, in 2019 Highland Park successfully launched a limited edition of 5,000 bottles of Ness of Brodgar malt whisky.

#### 3.1.3 Institute for Northern Studies

This interdisciplinary research centre is focussed on preserving, rediscovering and interpreting the cultural heritage of Scotland and the wider Northern world. It is hosted at Orkney with locations at Shetlands College UHI and Perth College UHI. It has specialisms in archaeology, medieval history, literature and art, placename studies and with the history and culture of the North Atlantic regions.

As well as world leading research, the Institute provides consultancy services including translations services, along with course development, training and certification for tourist guides across Scotland, supporting Scotland's tourism sector.

Other economic benefits include attracting international interest in the region, particularly from the United States through post graduate education and attracting investment in Scottish heritage. It is focussed on being "arctic facing", strengthening commercial and cultural links with the Nordic countries in a post Brexit economy.





## Norse Spirits, Highland Park

# Research by the Institute for Northern Studies has helped to create a new range of Viking whiskies

Scotch whisky is now Scotland's largest international export (£4.23bn) ahead of refined petroleum (£3bn) and business services (£2.5bn). In early 2012, the Institute for Northern Studies at Orkney College UHI were approached by the Erdington Group, owners of the Highland Park Distillery on Orkney, to provide research that would become fundamental to the development of a new range of whisky products drawing on the Viking heritage of the Orkney Islands.

The centre provided the company with a short-list of 20 profiles of Viking gods including their nature, defining features and habits and from this they launched an initial slate of three whiskies called Thor, Loki and Freya.

The details prepared by the Institute informed the marketing that accompanied each product. For example, Thor is the guardian of ships and the most popular god for sailors so the whisky was presented in a specially crafted longboat container made of oak. The target area for the Thor product was also identified using the Centre's knowledge of Viking diaspora, leading to marketing efforts in Russia which was founded by the Norse. The product was covered extensively in the press and received excellent reviews. The information provided was also used to create concomitant products such as drinking glasses and to provide the information and character profiles required by the customers, including the supernatural aspects of the featured gods.

The engagement between the company and the staff at the Institute for Northern Studies, has achieved three key impacts:

- Increased sales of Highland Park whisky, safeguarding local jobs in Orkney;
- the development of an authentic and unique new whisky product brand, inspired by the history of the Orkney Islands, and a new market for it in Russia; and
- a strengthened link between cultural heritage and business growth.

The Institute has recently been approached by the Edrington Group to undertake research to develop whisky products inspired by "Mythic Beasts".

## 3.2 Local Labour Market

As Orkney's provider of vocational and higher education, Orkney College UHI is fundamentally important to the island's labour market, with specialist areas that support a wider regional labour market.

As well as meeting demand from the community for teaching in a wide range of subjects across the SCQF, the college has a substantial training relationship with businesses and organisations across the economy. The quantitative economic impact of this commercial training activity can be seen in the returns to training experienced by companies (described in Section 2). However, there are wider labour market impacts that should also be highlighted.



Like many of UHI's partners, Orkney College teaches small cohorts of students, which may not be considered financially viable were decisions being made on a purely commercial basis. This is fundamental to the survival of some sectors. For example, without the small number of construction industry workers being trained at the college, Orkney's construction industry would suffer because of skills shortages. Orkney based construction businesses bring their own economic benefits to the Islands, and the college has a strong role to play in supporting these.

The college provides skills which are fundamental to the well-being of Orkney's communities, including in childcare and health and social care. Labour supply in these areas are critical to the social and economic health of the islands and the college provides a vital service in maintaining these sectors.

Orkney College UHI works closely with Orkney Islands Council and Skills Development Scotland, creating pathways for students from age 11 in a range of areas. As well as working with young people that might struggle with a mainstream school environment, the college provides alternative routes through Higher National qualifications and Foundation Apprenticeships, along with other vocational qualifications. There are a variety of programmes that make up The Orkney Offer, which allow students to personalise their learning during the senior phase of school. It is possible to combine time in school, college and the workplace.

This supports young people to enter the labour market, supporting labour market participation, reducing the number of young people leaving Orkney or being unemployed, and supporting businesses by providing local labour.

## 3.3 Industry and Community

The college is actively engaged with industry. A third of the college's Management Council is from the business community and every subject area has links to industry, ensuring provision is relevant to the needs of Orkney businesses. The college has an increasing network of industrial relationships, including with business and sector representative organisations, awarding bodies and individual businesses.

The college has strong community relationships, including community representatives on the Management Council, community engagement activity, community education and education provision focussed on Orkney culture and heritage. It is a fundamental part of the social fabric of the Orkney Islands.



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