

BOOKING REQUEST FORM

	£ Adult	£ Con.	No. at adult	No. at concess	Total £	p
Tuesday 9 September						
Mars - Well, Nearly	£4	£2				
The Greatest Journey	£4	£2				
Distilling - Theory and Practice	£4	£2				
The People of the Isles	£4	£2				
Earl Rognvald of Orkney	£4	£2				
Singalong with Mr Boom	£4	£2				
Festive Cakes & Rowan Fires	£4	£2				
Defending Orkney's Coasts	£4	£2				
And Moreover Defiant	£4	£2				

Wednesday 10 September						
Starting Astronomy	£4	£2				
The Prehistoric Solar Calendar	£4	£2				
Brak it up for Spares	£4	£2				
Diseases and our Genes	£4	£2				
Earl Rognvald & Troubadours	£4	£2				
A World of Whisky	£4	£2				
The Solar System Dance	£4	£2				

£29 Lecturepass - all £4 talks

(except those marked NB
Also please note that admission can
only be guaranteed if passholders
arrive at least 5 mins before start)

Total ticket sum enclosed

Name
Address
Telephone
Email
Please send me information on:
<input type="checkbox"/> Travel to Orkney and accommodation
<input type="checkbox"/> Stronsay programme for 11th & 12th

Please complete in **BLOCK CAPITALS**,
post with remittance & s.a.e. to

Orkney International Science Festival
Tourist Office, Kirkwall, Orkney, KW15 1NX

Please make cheques payable to
Orkney Science Festival Ltd.

Our phone is 01343 540844, our e-mail science@orkney.com

Tuesday 9 September

10.00 - 11.00 am *Pickaquoy Centre, Kirkwall*
MARS WELL, NEARLY

The red planet has provided its share of mishaps and surprises to astronomers over the years. Some once believed that they saw canals, but a space probe landing on the surface showed it was a barren, waterless desert. And that, explains astronomer Bill Leslie from Forbes, is only one example of a series of arguments, mishaps and things just going plain wrong.

11.30 am - 12.30 pm *Pickaquoy Centre, Kirkwall*
THE GREATEST JOURNEY

Changing Arctic sea-ice conditions mean that the North-West Passage is likely to become a shipping route for cargoes between the Atlantic and the Pacific. The final link in its discovery was made by the Orcadian explorer John Rae. Arctic historian Dr Maria Pia Casarini describes how he did it and the scale of his achievement.

Supported by The Scottish Government

2.00 - 5.00 pm *Ayre Hotel, Kirkwall*
DISTILLING THE THEORY AND PRACTICE

Join distillery managers Alan Winchester and Stuart Pirie of Scapa and Russell Anderson of Highland Park for a short introduction to distilling followed by special tours of the two distilleries. See the rare Lomond still and the spirit still windae at Scapa and the floor maltings at Highland Park and get expert insight into the complex processes involved in distilling.

NB Advance booking essential: ticket (for over-18s only) includes bus. Free to IBD members and industry staff.

Organised by the Institute of Brewing and Distilling & sponsored by Highland Park and Scapa Distilleries and Orkney Coaches

2.00 - 3.00 pm *Pickaquoy Centre, Kirkwall*
THE PEOPLE OF THE ISLES

What effect did the Norse have on Orkney? Modern genetics can deduce the origin of a population - and clues are now coming in about the early Norse settlers in Orkney. It's part of a study covering the whole of the British Isles, with blood samples being gathered from volunteers across the country. The work is being carried out at Oxford University. The results will give information about disease susceptibilities, as well as providing insights into history. It's led by the geneticist Sir Walter Bodmer who describes the work and the Orkney conclusions so far.

Sponsored by the Wellcome Trust

3.30 - 4.30 pm *Pickaquoy Centre, Kirkwall*
EARL ROGNVALD OF ORKNEY

The man who gave us St Magnus Cathedral was also a poet and musician who had a big influence on Orkney's cultural history. Dr Donna Heddle of Orkney College UHI marks the 850th anniversary of the death of Earl Rognvald with the story of his remarkable life.

Sponsored by Tods of Orkney Ltd

3.45 - 4.45 pm *Quayside, Pickaquoy Centre, Kirkwall*
SINGALONG WITH MR BOOM

Switch on musical engines with the man from the Moon!

Sponsored by Pentland Ferries

5.15 - 6.15 pm *St Magnus Centre, Kirkwall*
FESTIVE CAKES AND ROWAN FIRES

The story of the writer and folklorist F. Marian McNeill, born in Holm in 1885, author of *The Silver Bough* and *The Scots Kitchen* (1929). Her life and works are described by Morag MacInnes, with readings by Sarah Jane Gibbon, and some of her recipes are recreated by Liz Ashworth for sampling. The talk is introduced by Rose Pipes, co-ordinating editor of *The Biographical Dictionary of Scottish Women*.

Sponsored by Crantit Dairy

7.30 - 8.30 pm *St Magnus Centre, Kirkwall*
OPEN SEAS: DEFENDING ORKNEY'S COASTS 1914-45

Orkney's coast defences played a vital national role in two world wars in protecting the Scapa Flow fleet anchorage from U-boats and surface raiders. Historian Geoffrey Stell tells the story of the guns and the gunners and much else besides. Admission free.

Organised by the Orkney Open Doors Events Programme

9.00 - 10.00 pm *King Street Hall, Kirkwall*
**The Grimond Lecture
AND MOREOVER DEFIANT**

World conditions look increasingly uncertain. But why do some societies remain stable while others break down? Dr Stanko Blatnik from Slovenia describes his experiences in work and education in Bosnia and Slovenia, through the break-up of former Yugoslavia and the Soviet Union, and on to a later period in technology in California. He looks at life in Tuzla and Tomsk, Sarajevo and Silicon Valley to show the different ways in which people and societies cope with crisis.

Sponsored by the IET

Wednesday 10 September

10.00 - 11.00 am *Pickaquoy Centre, Kirkwall*
STARTING ASTRONOMY

Orkney's dark skies are a big stimulus to an interest in the stars and planets, and new technology is now bringing professional equipment into the budget for amateurs. Bill Leslie of Moray's astronomy club Sigma provides practical advice for getting under way with observing and photographing. Andrew Elliott shows how video can be used to provide remarkable images of events like meteor showers.

11.30 am - 12.30 pm *Pickaquoy Centre, Kirkwall*
THE PREHISTORIC SOLAR CALENDAR

Debate continues on solar and lunar alignments of stone circles and chambered cairns. Some actual artefacts also seem to depict images of sun, moon or stars. These include the Nebra Sky disc and the Bush Barrow gold lozenge, both Bronze Age, and the early Neolithic carving on the Knowth calendar stone. Archaeologist Dr Euan MacKie looks at the emerging new perspectives of ancient astronomy.

Sponsored by Tods of Orkney Ltd

2.00 - 3.00 pm *Pickaquoy Centre, Kirkwall*
BRAK IT UP FOR SPARES

For every technology till now, it's been an island tradition to re-use and recycle wood from wrecked ships, engines of old cars. Why can't we do more with old computers and IT equipment? Tim Dawes of Nineveh Computing describes the material and energy in computers and the benefits of saving it. Dr Sue Struthers of Orkney ZeroWaste outlines a possible way to recycle locally and create job opportunities.

3.30 - 4.30 pm *Pickaquoy Centre, Kirkwall*
DISEASES AND OUR GENES

Dr Jim Wilson of Edinburgh University present the first results of the ongoing ORCADES study which seeks to find the genes influencing the risk of many common killer diseases such as stroke, diabetes, heart disease and osteoporosis. A considerable number of new genes have been identified, often in collaboration with other isolated population studies across Europe.

Sponsored by the Medical Research Council

7.00 - 8.00 pm *King Street Hall, Kirkwall*
EARL ROGNVALD AND THE TROUBADOURS

The story of the medieval poets who took to the road on a great springtime quest for knowledge and the Orkney earl who put aside the cares of state to join them. Howie Firth goes in search of the real Ermengarde of Narbonne, with the music of Three in a Bar Lesley MacLeod (fiddle), Fran Gray (accordion) and Hamish Bayne (concertina) and pictures of light and sea by Selena Kuzman.

Sponsored by Orkney Car Hire - James D Peace & Co

8.15 - 9.15 pm *Ayre Hotel, Kirkwall*
A WORLD OF WHISKY

Old distilleries are re-opening and new ones being built. It's in response to a growing global demand for Scots whisky. What are the developments to look out for? Alan Winchester of the Chivas group, assisted by Dr Roger Jones, looks at the trends of today, with illustrative samples and a dash of Orkney water!

Over-18s only. Free to IBD members and industry staff.

Organised by the Institute of Brewing and Distilling

8.15 pm - 12.00 midnight *Town Hall, Kirkwall*
THE SOLAR SYSTEM DANCE

A night out for the family with Hullion, Shoot the Piper, traditional dancing and Mr Boom. **Tickets £4 & £2**

In association with Orkney Traditional Dance Association

A Taste of New Orkney: Special banquet menu at Lynnfield Hotel, 6 - 8.45 pm. Details on www.oisf.org. Book from Hotel: 01856 872505.

Special event

Friday 12 September - 'DIFFERENT FROM A WHALE'

Two hundred years ago, a strange creature was washed onto the rocks off Rothiesholm in Stronsay. It was measured as 55 feet long - and its nature is still debated. Scientists of the time investigated, and several tissue samples were sent for preservation. Dr Geoff Swinney of the National Museums of Scotland looks at possible origins. And can modern techniques of DNA and protein analysis shed light on the nature of the so-called Stronsay beast? Geneticist Dr Yvonne Simpson reviews accounts of other sightings and strandings, and reports on new developments.

Afternoon tours of Rothiesholm to the site where it came ashore, along with scenery and bird-life, and evening presentations from 7.30 pm. To be followed by a dance with the Stronsay Band.

Orkney Ferries sail from Kirkwall Thurs 11th at 4 pm, Fri 12th at 4 pm, then from Stronsay 9.20 am Sat 13th morning. Bookings 01856 872044. Kirkwall-Stronsay flights from Loganair, 01856 872494.

Organised by Stronsay Development Trust.

For more information and full Thurs/Fri events programme, contact William Caithness on 01857 616469 or at sdt.ido@bt.connect.com.

Exhibitions

ORKNEY: PEOPLE AND PLACES

Pickaquoy Centre, Kirkwall *Daily*
Orkney Camera Club: Sea scenes, harvest fields, faces old and young

FOCUS ENVIRONMENT 2007

Pickaquoy Centre, Kirkwall *Daily, 1-29 September*
Winning photographs from an environmental photography competition for Scottish secondary schools, sponsored and organised by Chevron Upstream Europe in partnership with BTCV Scotland and SWT.

ORKNEY ENERGY AGENCY: ENERGY EFFICIENCY ADVICE
Bridge Street, Kirkwall *9 am - 5 pm, Monday - Friday*
For domestic and business, on energy-saving and renewables.

ORKNEY MARINE-LIFE AQUARIUM

Turn left to South Cara after 4th Barrier, South Ronaldsay
Daily 10 am - 6 pm
See fish and shellfish, and find out about rearing lobsters. Evening opening by appointment: telephone 01856 831700 to book. Admission £6 & £5, children £4.50. Festival visitors £5 with this programme.

FOSSIL AND HERITAGE CENTRE. BURRAY

Daily 10 am - 6 pm **Admission £3.50 & £2**
Fossils from Lake Orcadie and worldwide, geology, antiques.

ORKNEY WIRELESS MUSEUM

Kiln Corner, Kirkwall *Mon - Sat 10 am - 4.30 pm*
Admission £2 & £1 *Sun 2.30 - 4.30 pm*
Historic wireless equipment, and amateur radio station GB2 OWM.

THE PIER ARTS CENTRE

Victoria Street, Stromness **Mon - Sat 10.30 - 5, Sun 12 - 4**
Modern art in a stunning new harbourside setting. Films from the China Now in Scotland 2008 programme shown throughout the Festival.

ORKNEY IN THE 12TH CENTURY: Rognvald and his Earldom
Orkney Museum **Mon - Sat 10.30 - 5.00**

SULE SKERRY: West of Stromness

Stromness Museum **Daily 10 - 5**
Admission £3.50 & £2.50, Children £1, Family ticket £7



01343 540844 - 01856 831700

4 sep - 10 sep 2008

18th

Thursday 4 September

5.00 - 5.15 pm *Pickaquoy Centre, Kirkwall*
OFFICIAL OPENING OF FESTIVAL
 by Prof. Anne Glover, Chief Scientific Adviser for Scotland

5.15 - 6.15 pm *Pickaquoy Centre, Kirkwall*
WHY THE TOAST ALWAYS LANDS BUTTER-SIDE DOWN
 And why do all the clothes in the washing machine end up inside the duvet cover? The science of Murphy's Law, with Richard Robinson's cheerful insights for the whole family into the way our minds work.

7.30 - 9.00 pm *St Magnus Church, Birsay*
A COUNTRYWOMAN'S DIARY
 A celebration of the 50th anniversary of the weekly newspaper column by one of Orkney's finest writers, Bessie Skea. Readings, songs and music of the time, from the Birsay and Harray community.
[Admission by donation](#) proceeds to [St Magnus Church Birsay Trust](#).

A Taste of Old Orkney. Special banquet menu at Foveran, St Ola, from 6.30 pm. Seafood, N Ronaldsay sheep, clootie dumpling, cheese. Details on www.oisf.org. Bookings £25 from Hotel: 01856 872389.

Friday 5 September

UHI Science Day in Pickaquoy Centre

10.00 - 11.00 am *Pickaquoy Centre, Kirkwall*
LIFE IN THE DEEP
 Deep below the ocean surface is a dark cold world, under immense pressure of water above. Dr Mark Shields of North Highland College UHI's Environmental Research Institute describes some of the strange creatures who live in the largest and remotest habitat on the planet.

11.30 am - 12.30 pm *Pickaquoy Centre, Kirkwall*
CEREALS IN ORKNEY
 Where they came from and new opportunities from research. Dr Peter Martin of Orkney College UHI's Agronomy Institute, with Keith Johnson and Rae Phillips from the Barony Mills, food specialist Liz Ashworth, and baker Paul Groundwater. To be followed by the launch by Natasha Groundwater of the new range of Groundwater's biscuits and oatcakes featuring Orkney bere, oats and wheat with samples.

2.00 - 3.00 pm *Pickaquoy Centre, Kirkwall*
COPING WITH CLIMATE CHANGE
 Clive Bowman from Perth College UHI tells how several northern communities, from Greenland to the Cairngorms, are sharing experiences in a new international project. The aim is to build the skills and knowledge needed to meet the challenge in fields such as tourism, transport, flood risk, and turning fish waste into energy.

3.30 - 4.30 pm *Pickaquoy Centre, Kirkwall*
HEALTH IN REMOTE COMMUNITIES: CHOOSING THE FUTURE
 How may health services be provided to remote communities in the future? And can communities themselves have an influence? Prof. Jane Farmer of UHI's Centre for Rural Health believes they can and should. She describes how the present pattern has developed and looks at examples from various remote communities in Scotland communities to show some of the choices for the future.

5.00 - 6.00 pm *Pickaquoy Centre, Kirkwall*
SEEING LIFE THROUGH A NEW LIGHT
 How light is applied in medical and biological research, to see cells, treat cancer, and even use lasers as optical 'tweezers' and 'scissors'. A presentation from the frontiers of research by a St Andrews University team: Claire Patterson, Craig McDougall & Joerg Baumgartl.

7.30 - 9.30 pm *St Magnus Cathedral, Kirkwall*
A FLAME IN THE SHADOWS
 A feast of early Renaissance music to mark the 450th anniversary of one of the greatest scholars to live in Orkney. Bishop Robert Reid reformed the Church, repaired the Bishop's Palace, restored the Grammar and Sang Schools, and negotiated the marriage contract for Mary Queen of Scots. The Mayfield Singers and Paisley Abbey organist George McPhee perform music of the time which Reid himself is likely to have been familiar with including much of Robert Carver's Mass *Fera Pessima* for 5 voices. Reid's story is told in excerpts from a play by Olaf Cuthbert. Readers include former Bishop Fred Darwent of Aberdeen and Orkney.
Sponsored by W.H.B. Sutherland Ltd

Saturday 6 September

10.00 am - 5.00 pm *Pickaquoy Centre, Kirkwall*
FAMILY DAY
 Make a rocket and launch it. Fly the world's smallest remote-controlled helicopter. Practice landing on Mars. See hot-air balloons in flight. Watch light bend, and perform keyhole surgery on a pepper. Try the electronic recycling workshop. Sample your own DNA. Make your own paper. Master fuzzy logic. Learn to cook salmon the traditional way. See the world's largest ear built on stage. Get a free low-energy lightbulb and a PowerDown plug. And play energy bingo at 12 noon.
Supported by The Scottish Government, The IET, The Medical Research Council, Orkney Islands Council, Orkney Energy Agency, Orkney ZeroWaste, The Wellcome Trust, The Pier Arts Centre

10.00 - 11.00 am *Pickaquoy Centre, Kirkwall*
The John D. Mackay Memorial Lecture
DEMYSTIFYING TECHNOLOGY: THE BAREFOOT APPROACH
 A series of international awards have honoured Bunker Roy's achievement in bringing energy and water to tens of thousands of people through empowering them in technology. He applies Gandhi's philosophy to help India's masses use technology to change their lives. In one of India's driest and poorest states, Rajasthan, he founded Barefoot College, which has trained two generations of villagers to become solar engineers, health-care workers, mechanics and teachers in their communities. His training is reaching out to Afghanistan and Africa and the thinking behind it has applications to the shaping of education and community development across the whole world.

11.30 am - 12.30 pm *Pickaquoy Centre, Kirkwall*
A MORNING STEEPED IN GOLD
 More than 5000 years ago the bones of ancient Orcadians were laid in the Tomb of the Eagles, whose entrance faces the North Sea. Babette Barthelmess has shown that from May to August the rising sun shines through the cairn's passageway to light up its dark interior. What could that mean? In a richly illustrated talk she takes a fresh look at the role of Orkney's chambered cairns in Neolithic cosmology.
Sponsored by W.H.B. Sutherland Ltd

1.00 - 4.00 pm *Broad Street, Kirkwall*
VINTAGE RALLY
 Cars and engines from Orkney Vintage Club, with a tractor run setting off at 1.30 pm; plus the Willowburn Valley Stompers.
2.00 - 4.30 pm *Kirkwall Community Centre*
TRADITIONAL DANCE WORKSHOP
 with Orkney Traditional Dance Association get ready for the Ceilidh! Admission £2 & 50p at door.

2.30 pm - 3.45 pm *Orkney Arts Theatre, Kirkwall*
Wee Stories and the National Theatre of Scotland present ONE GIANT LEAP
 'Simply one of the best theatre companies around' *The Times Educational Supplement*. For their first Orkney visit, Wee Stories turn their own unique brand of story-telling theatre to the mysteries of the universe - and our quest to understand them. From the struggles of Galileo to Neil Armstrong's step on the surface of the Moon a journey through time and space for everyone from age 10+. **Tickets £6 & £4.**
Sponsored by Talisman Energy (UK) Limited

4.00 - 5.00 pm *Pickaquoy Centre, Kirkwall*
EMERGING FROM THE SILENCE
 What do we mean by consciousness? And has it changed from prehistory to the present day? Marita Lück shows that insights come from language and art and from three key thinkers: Jean Gebser, Carl Gustav Jung, and Ken Wilber.

6.00 - 7.00 pm *Pickaquoy Centre, Kirkwall*
SEASHHELLS, SUNFLOWERS AND GREEN SHOOTS OF SPRING
 How did Brodgar's builders see the world? The answer may be linked to radical new ideas on the frontiers of modern science and a picture of growth and form admired by Robert Rendall. Howie Firth describes the emergence of a new science of life and consciousness and its Orkney connections, with musical assistance from Three in a Bar Lesley MacLeod (fiddle), Fran Gray (accordion) and Hamish Bayne (concertina) and a guest appearance by the !Gubi family from the Kalahari, plus images of Orkney in rain and sun from Selena Kuzman.

7.00 - 7.30 pm *Broad Street, Kirkwall*
KIRKWALL CITY PIPE BAND
 Final parade of the season.

8.00 - 10.00 pm *Pickaquoy Centre, Kirkwall*
MUSIC OF SAND AND STARS
 The ancient music of the San, or Bushmen, of the Kalahari Desert in Namibia, in a tradition many thousands of years old. The !Gubi family range in age from 18 to 80, and are on their first UK tour. Scintillating film images of their life, dreams and music from the heart of the Kalahari. Haunting melodies, intriguing rhythms a rare opportunity for insight into one of the world's oldest cultures. Tickets from Pickaquoy (01856 879900): £6 Adults, £4 Concessions, £15 Family.
Sponsored by Air Namibia and Pentland Ferries

8.00 pm - 12.00 midnight *Ayre Hotel, Kirkwall*
THE ORKNEY ENERGY CEILIDH
 with Jim Anderson's Band and traditional dancing. **Tickets £4 & £2**
In association with Orkney Traditional Dance Association
Sponsored by Orkney Renewable Energy Forum

Sunday 7 September

11.15 am - 12.15 pm *St Magnus Cathedral*
SCIENCE FESTIVAL SERVICE
 with the Rev. Fraser Macnaughton and St Magnus Cathedral Choir

From 2.30 pm *Breckan, Holm*
GUIDED WALK
 to the Breckan Battery, Holm, with historian Geoffrey Stell. By kind permission of Alistair Foubister. No charge.
Organised by the Orkney Doors Open Doors Events Programme

2.30 - 3.45 pm *Firth School, Finstown*
THE SCIENCE OF THE TOMATO
 Where did it come from? How should we grow it? And what are its uses in Mediterranean cuisine? David Miskin of the Food Innovation Institute is joined by marker gardener Bob Nelson of Birsay Tomatoes and Nadia Trucco of Genoa Science Festival.

4.00 - 6.00 pm *Firth Community Centre, Finstown*
A Taste of Orkney
TRADITIONAL ORKNEY HIGH TEAS
 Orkney fish pie; Orkney mince, tatties and mealie pudding; Grimbister cheese salad; meat salad with local beef, ham and home-made meat loaf; salads with greens and tatties and Orkney tomatoes. Plus bannocks, pancakes with homemade jam, clootie dumpling and homebakes! £8 at door: all proceeds to hall funds.
Organised by Firth Community Association

7.30 - 10.00 pm *Gable End Theatre, Lyness*
STARLIGHT AND MOONSHADOW
 Astronomers Bill Leslie and Andrew Elliott introduce highlights of the dark skies above, with images of planets, stars and galaxies in deep space, and video footage of meteors streaking the atmosphere. An opportunity to find out about the night sky, and ways to study it.

7.30 - 8.30 pm *King Street Hall, Kirkwall*
THE MELTING OF THE ARCTIC ICE
 How is climate change affecting the Arctic? Prof. Peter Wadhams of Cambridge University has been monitoring the changes in recent years, aboard icebreakers and Naval submarines. His underwater observations have led to the most accurate measurements yet of the thinning ice cover and the discovery of the 'chimneys': huge swirling columns of cold sinking water forming a key part of the great global ocean current network. He will provide the latest information on the Arctic ice melt and what it might mean for Orkney, for sea level rise and the future of the warm current from the Gulf Stream.
Supported by The Scottish Government

9.00 - 10.00 pm *King Street Hall, Kirkwall*
COMING TO THE CRUNCH
 Higher oil prices look set to stay. But life and work in Orkney depend on the availability of energy, for transport, heating, and industry so alternatives to oil are needed. How much energy does Orkney consume? And how quickly could alternatives be brought on stream? Dr Tom Stevenson of Edinburgh University looks at the background to the crisis and the options for solution with renewable energy consultant Anne Stevenson.
Sponsored by Clark Thomson Insurance Brokers Ltd

Monday 8 September

10.00 - 11.00 am *Pickaquoy Centre, Kirkwall*
A CREATIVE TRANSITION
 It's clear that with oil shortages and climate change, our way of life is going to change radically. Getting back into balance with the planet will require a transition as drastic and potentially as traumatic as the Industrial Revolution, says Bill Graham, former Technical Director of the TI Group Research Laboratories. But, he shows, we may be able to jump ahead of existing technologies and create novel solutions to some of our key problems and apply them in rural and island areas.
Sponsored by ConocoPhillips (U.K.) Limited

11.30 am - 12.30 pm *Pickaquoy Centre, Kirkwall*
CITY OF THE WIND AND SUN
 The race is on to find new ways for town and city living. China is creating at Dong-tan an eco-city of three villages. It will produce its own energy from wind and sun and recycled waste. People will walk and cycle, and drive hydrogen fuel cell cars. The engineers developing the plans, the UK firm of Arup, explain the thinking.
Organised by the China Now in Scotland 2008 programme

2.00 - 3.00 pm *Pickaquoy Centre, Kirkwall*
REGENERATION THROUGH RENEWABLES
 Biodiesel, biogas, wind turbines, heat pumps, recycling, zero waste targets the island of Westray has it all. How's it able to drive ideas forward? Is this a model that be applied elsewhere? And what are the next steps? Sam Harcus, Colin Risbridger and Willie McEwen from Westray describe progress so far.

3.30 - 4.30 pm *Pickaquoy Centre, Kirkwall*
SETTING YOUR COURSE
 Are the forces of climate change and rising energy costs so strong that there's nothing we can do? Not at all, says Elizabeth Woodcock: they simply act as a positive force to empower us to make changes in our lives. The new Transition Town movement is helping communities act now to choose their way ahead together and make the transition into a sustainable future.
Sponsored by Crantit Dairy

5.15 - 6.15 pm *King Street Hall, Kirkwall*
ROADS TO THE ISLES?
 Every penny on a litre of oil adds tens of thousands of pounds to the annual fuel bill for Orkney's inter-island ferry services. Is it now time to consider fixed links, which would generate power and income rather than burn it? The head of the European Marine Energy Centre, Neil Kermod, looks at the potential for inter-island causeways.
Sponsored by the Institution of Civil Engineers

7.30 - 10.00 pm *King Street Hall, Kirkwall*
ORKNEY AT THE CROSSROADS NEXT STEPS FORWARD
 The world is now changing very quickly, and there may be very little time left for rural and island communities to adapt. So what are the top ten actions that Orkney has to take in the winter ahead? Speakers from local groups and businesses put proposals on the floor: you decide what the priorities are, in discussion along with an expert panel.
Organised by the BA's Moray & Highland Branch with ICIT and Heriot-Watt University, with Scottish Government funding

BOOKING REQUEST FORM

	£ Adult	£ Con.	No. at adult	No. at concess	Total £	p
Thursday 4 September						
Toast Falls Butter-Side Down	£4	£2				
Friday 5 September						
Life in the Deep	£4	£2				
Cereals in Orkney	£4	£2				
Coing with Climate Change	£4	£2				
Health Services Future	£4	£2				
Seeing Life, New Light	£4	£2				
A Flame in the Shadows	£4	£2				
Saturday 6 September						
The Barefoot Approach	£4	£2				
A Morning Steeped in Gold	£4	£2				
One Giant Leap	£6	£4				
Emerging from the Silence	£4	£2				
Seashells & Sunflowers	£4	£2				
The Orkney Energy Ceilidh	£4	£2				
Sunday 7 September						
The Science of the Tomato	£4	£2				
The Melting of the Arctic Ice	£4	£2				
Coming to the Crunch	£4	£2				
Monday 8 September						
A Creative Transition	£4	£2				
City of the Wind and Sun	£4	£2				
Regeneration, Renewables	£4	£2				
Setting Your Course	£4	£2				
Roads to the Isles?	£4	£2				
Orkney at the Crossroads	£4	£2				

continued overleaf

Where no ticket or booking details are entered, advance booking is not necessary, and admission at the door will be £4 Adults & £2 Concessions, unless otherwise specified.

Look out for programme updates on our website
www.oisf.org

Disclaimer:
Orkney International Science Festival reserves the right to alter, amend or cancel the contents of this programme at its discretion or as circumstances may necessitate.