

A close-up photograph of a cow's head, showing its eye and a red ear tag. The cow is dark-colored with a white patch on its forehead. It is wearing a grey collar with a red tag. The background is green grass.

# AgriSearch

## Annual Report 2011

The Northern Ireland Agricultural Research & Development Council Annual Report for the year ended 31 March 2011

Trustees & Advisers during the year to 31 March 2011

---

## Trustees

James Campbell (Chairman)  
David Workman (Vice Chairman)  
Nigel McLaughlin  
Douglas Rowe  
Phelim O'Neill  
Mary McCormack  
Mervyn King  
Ian Marshall  
Seamus Haughey  
John Dunlop (Retired 11th October 2010)  
Henry Jordan  
William Hanna (Appointed 11th October 2010)

## Company Secretary

David Mark

## Registered Office

Countryside Services Ltd  
97 Moy Road  
Dungannon  
Co Tyrone, BT71 7DX

## Solicitors

J McKee & Sons  
The Linenhall  
32-38 Linenhall Street  
Belfast, BT2 8GB

## Bankers

Northern Bank Limited  
471-473 Antrim Road  
Belfast, BT15 3BP

## Registered Auditors

FGS McClure Watters  
1 Lanyon Quay  
Belfast, BT1 3LG

## Dairy Advisory Committee

Gary McHenry- Chairman  
Albert Foster  
Jonathan Moore  
Roger McCracken  
Dr Alan McIlmoyle  
Harper Doupe  
Drew McConnell  
Peter Conway  
David Stewart  
Ian McCluggage (non-voting  
CAFRE liaison)

## Beef Advisory Committee

Harry Sinclair - Chairman  
Edward Carson  
Derek Shaw  
Karl Mullan  
Liam McCarthy  
Ian Stevenson  
James Taylor  
Dr Raymond Steen  
John Sheridan  
Dr Steven Johnston (non-voting  
CAFRE liaison)

## Sheep Advisory Committee

Ian Buchanan (Chairman)  
David Chambers  
Isaac Crilly  
Samuel Wharry  
Dr Jonathan Birnie  
Barry Brogan  
Dr Raymond Steen  
Dr Steven Johnston (non-voting  
CAFRE liaison)

## Committee Secretary

Lynsay Alcorn (Retired 31st March 2011)  
Jason Rankin (Appointed 1st April 2011)



## AgriSearch Chairman's Report

---

Like other funders of research, the Northern Ireland Agricultural Research and Development Council (AgriSearch) wants to see the maximum benefit achieved from its investments in research projects. So it is vital to make known the results of research work and to advise farmers of the merits of putting recommendations into practice on their farms. To this end, AgriSearch has been increasingly engaged in collaboration with the College of Agriculture, Food and Rural Enterprise (CAFRE) and the Agri-Food and Biosciences Institute (AFBI) on 'knowledge and technology transfer' related to research findings. This is work in progress, with a planned programme being developed for the period to the end of 2012.

Examples of knowledge transfer efforts during the year under review ranged from an afternoon and evening event in July 2010 at Glenwherry on 'Building an efficient suckler herd' to a series of meetings and on-farm 'workshops' in September featuring US beef heifer rearing specialist Dr Patsy Houghton. The latter were run in conjunction with farmers' organisations and CAFRE.

Along with AFBI, in June and October, we were involved in presenting two seminars at Hillsborough for dairy specialists. These were primarily targeted at people who are in contact with farmers on a regular basis and in a position to communicate knowledge to them. We are also involved with AFBI and CAFRE in the organisation of a conference scheduled for October this year, on the use of Profitable Lifetime Index (PLI) in dairy cattle breeding.

At farm level, we had events hosted by farmers who are 'co-researchers' partnering AFBI in some innovative work being done on sheep farms. In May 2011 the first of a series of on-farm meetings hosted by three of our beef farm 'co-researchers' took place and another three are planned for October. In August 2011, a sheep farm 'co-researcher' hosted a meeting of the Ulster Grassland Society. We anticipate further events in conjunction with the UGS and other organisations, in dairying, beef cattle and sheep production. Details will be posted on our re-constructed website [www.agrisearch.org](http://www.agrisearch.org) and publicised through other media.

All of the efforts to communicate require receivers who are 'switched-on' as well as transmitters sending out the messages. This is the challenge for all involved. Much more needs to be done to maximise the pay-off.

As more farmers take an interest in the findings of agricultural research and implement the recommendations, the total return on the investments made by AgriSearch will be multiplied. This can come in the form of profit gained from greater efficiency of farming enterprises, through reduction in costs or increases in output. Apart from the tangible gains, returns also come through better animal welfare, reductions in levels of stress and savings in farm labour. There is also satisfaction to be gained by advisers and researchers – and by the trustees and committee members of AgriSearch – in seeing recommendations put into practice.

Overall, there should be gains for the economy of Northern Ireland. This is one of the reasons that the government is prepared to put some funds into research. In the case of the Department of Agriculture

## AgriSearch Chairman's Report (Cont...)

---

and Rural Development (DARD) the allocation of spending on research is being decided in accordance with the DARD Evidence and Innovation Strategy 2009-13. The implementation of this strategy has changed the way in which AgriSearch committees operate. Research proposals, which previously were science-led, are being decided upon by DARD policy makers. They seek evidence of gaps in knowledge and the aim is to commission research to provide answers that can inform and guide policy decision making in four areas. These are:

- Performance in the market place
- Social and economic structure of rural areas
- Animal, fish and plant health and animal welfare
- Sustainable environment

The government funding available is not sufficient to pay for all the research that would be needed to answer all the questions, so priorities have to be identified. During the past year, DARD has developed its

decision making process and AgriSearch advisory committees have been invited to have an input into that process for the 2012/13 Evidence and Innovation Call to AFBI.

The past year saw a transition to the new strategy. A number of projects that had been approved earlier by AgriSearch, subject to co-funding by DARD, were revised. These projects were reconsidered and approved by the AgriSearch advisory committees. Four were subsequently commissioned as part of the DARD Evidence and Innovation Call to AFBI 2011/12. One previously approved project is not going ahead and this resulted in £130,990 being re-credited in AgriSearch accounts as uncommitted funds.

During the 2010/11 financial year, AgriSearch committed almost £573,000 to fund six new projects, listed on page 6 of this report. This investment was subject to a further £576,000 being provided from other funding sources.

Three of these projects are under the first tranche of the DARD Research Challenge Fund (RCF) – a new programme that

offered 50% co-funding from government for projects that were subject to a competitive bidding process under strictly defined criteria. This was another new procedure for all involved, with DARD inviting bids from organisations in conjunction with research partners.

AgriSearch was the lead partner in three projects submitted for consideration – working with AFBI as research providers. In September 2010, 'letters of offer' were received from DARD for all three of these proposals and we instigated the projects within a tight timetable. The involvement of our vice chairman, David Workman, in overseeing the recruitment of farmers as 'co-researchers' for two of these projects was significant in meeting the deadlines.

The application procedure and ongoing administration needed to draw down funds in line with audit requirements of the RCF brought a new bureaucratic workload for AgriSearch. This is partly responsible for a rise in management and administration costs in 2010/11, taking the figure up near the level of 2008/09 (following a reduction

## AgriSearch Chairman's Report (Cont...)

---

of 24.7% in 2009/10). These costs and the fact that there is just 50/50 co-funding on RCF projects, made the RCF a financially less attractive proposition than many past projects in which AgriSearch has been involved. This is a trend that we must aim to reverse by seeking additional or alternative sources of co-funding to augment the sums AgriSearch has available.

On the income side, it is pleasing to note upturns in the levy receipts for dairy and beef after decreases in the past few years. This is due to increased throughput of milk and cattle in 2010/11 at the processing businesses in Northern Ireland, which collect the levy. In stark contrast, the levy income from sheep dropped sharply following the withdrawal of Foyle Meats from lamb processing in July 2010. The majority of lambs that would have been slaughtered at Foyle ended up going to plants in the Republic of Ireland. Like all other sheep traded through live marketing channels, no levy was collected on the majority of these lambs. The exception was one lamb producer group, which collected and passed the levy over to AgriSearch. Efforts to encourage

similar collection of the levy by other groups and agents involved in the lamb trade have so far failed to achieve the desired effect. We are seeking a resolution of this matter with farming organisations and the Livestock and Meat Commission for Northern Ireland. As it currently stands, the amount of levy collected annually on sheep will fund very little research.

In the longer term, the amount available from the levies on sheep, cattle and milk are all reducing in real terms. The rates of 5pence per sheep, 20pence per bovine and 0.02p/litre of milk have remained unchanged since 1997.

Income from investment of the funds under the stewardship of the trustees has declined markedly during the past two years. For the year to 31 March 2011 the investment income at £33,526 was little more than half the level of 2008/09. This leaves the cost of administration of AgriSearch eating into investment income earned in earlier years.

During 2010/11, there were few changes in personnel involved in AgriSearch. John Dunlop retired from the board

of trustees following his appointment as chairman of United Dairy Farmers and was replaced by William Hanna as the representative of the dairy levy collectors.

Roger McCracken and James Taylor became members of the dairy and beef advisory committees respectively. In August 2010, Gary McHenry was elected chairman of the dairy advisory committee as John Thompson stepped down to concentrate on his role as president of the Ulster Farmers' Union. Ian Stevenson of the Livestock and Meat Commission became a member of the beef advisory committee following the retirement of Dr Mike Tempest in December 2010.

Following promotion within Countryside Services Ltd, Lynsay Alcorn retired from the position of secretary to the committees of AgriSearch at the end of March. During five years of efficient service, Lynsay always had a positive and pleasant approach to the varied workload. I wish to record thanks to Lynsay Alcorn and to David Mark, our company secretary, for their input and advice during 2010/11.

## AgriSearch Chairman's Report (Cont...)

---

I am also pleased to welcome the appointment of Jason Rankin as Project Officer for AgriSearch, under our arrangement with Countryside Services Ltd, and to acknowledge the smooth transfer of the work.

Personal thanks also to the members of the advisory committees and the trustees for their commitment to the work of AgriSearch and for the support they have given to me.

### POST SCRIPT:

AgriSearch seeks to avoid expenditure on agricultural research that has already been commissioned elsewhere. With this in mind, I represented AgriSearch in March at a conference on European collaboration in applied research and development and knowledge transfer, with particular reference to the dairy sector.

It is hoped that this initiative can be developed into a system for exchanges of information across several countries.

Since the Livestock and Meat Commission for NI opted out of the joint committee of UK levy

bodies involved in research on red meat production in March 2010, AgriSearch has participated in that forum. This keeps us in touch with the research currently being funded by the beef and lamb levy organisations in England (EBLEX), Scotland (QMS) and Wales (HCC). AgriSearch also contributed to one project commissioned by the joint committee, a review of the effect of legumes on ewe and cow fertility.

On behalf of AgriSearch, I serve as a 'stakeholder' member of the UK-wide project advisory group for Defra project AC0115, the aim of which is to develop emission factors for livestock for a new UK greenhouse gas inventory.

This is an area of research work which is currently commanding substantial expenditure by e government and which may have major implications for farmers.

## Projects Commissioned by AgriSearch between 1st April 2010 and 31st March 2011

---

A review of the effect of legumes on ewe and cow fertility.

---

Managing dairy cows to reduce the effect of lameness.

---

Effect of three different concentrate build-up strategies in early lactation on production performance, health and fertility of high-yielding dairy cows.

---

Survey to determine prevalence of NI suckler and dairy herds with evidence of current or recent infection with BVD virus.

---

On-farm research to direct low carbon beef production in the Northern Ireland beef industry. The development of management tools and mitigation strategies to reduce greenhouse gas emissions in beef production through improvements in biological efficiency.

---

Reducing Greenhouse Gas Emissions from the Northern Ireland dairy sector through development of: (1) an on-line management tool, and (2) an on-farm research programme targeted at improving dairy cow health, reproductive efficiency and longevity, via the adoption of improved management strategies during the 'transition period'.

---

## Restructured legacy projects co-funded under DARD Evidence and Innovation Call 2011/12

---

· Identifying the limiting factors in beef and sheep systems and undertaking research to underpin improved biological efficiency and financial performance to support productivity, sustainability and competitiveness.

· Determining the greenhouse gas footprint of dairy and beef production systems in Northern Ireland and the development of feeding and management strategies to mitigate emissions and optimise the credentials of local agri-food practice.

· Development of breeding strategies to reduce greenhouse gas emissions from the NI Sheep Sector.

· GrassCheck 4 – Improving grass utilisation under grazing by monitoring grass growth and through the development of a grass growth prediction model.

· Management strategies for high yielding cows during the summer.

# NI Agricultural Research and Development Council

## Statement of financial activities For the year ended 31 March 2011

	Notes	Unrestricted Funds	
		2011	2010
		£	£
<b>Incoming resources</b>			
<b>Incoming resources from generated funds:</b>			
Milk income		300,173	281,703
Beef income		88,765	74,644
Sheep income		15,024	27,326
Investment income		33,526	52,559
<b>Total incoming resources</b>		<b>437,488</b>	<b>436,232</b>
<b>Resources expended</b>			
<b>Charitable expenditure</b>			
Direct programme expenditure		474,093	497,446
Dissemination costs		19,681	33,275
<b>Governance costs</b>			
Management and administration	2	56,084	42,645
<b>Total resources expended</b>		<b>549,858</b>	<b>573,366</b>
<b>Net outgoing resources for the year</b>	<b>3</b>	<b>(112,370)</b>	<b>(137,135)</b>
<b>Fund balance brought forward at 1 April 2010</b>		<b>298,584</b>	<b>435,719</b>
<b>Fund balance carried forward at 31 March 2011</b>	<b>13</b>	<b>186,214</b>	<b>298,584</b>

All amounts above relate to continuing unrestricted operations of the company.

The company has no recognised gains and losses other than those included in the results above, and therefore no separate statement of total recognised gains and losses has been presented.

There is no material difference between the net outgoing resources and the funds for the financial year stated above and their historical cost equivalents.

# NI Agricultural Research and Development Council

## Balance Sheet As at 31 March 2011

		Unrestricted Funds	
	Notes	2011	2010
		£	£
<b>Fixed assets</b>			
Tangible assets	6	-	-
<b>Investments</b>			
Investments	7	275,432	273,018
<b>Current assets</b>			
Debtors	8	131,588	120,583
Cash at bank	9	1,115,391	1,039,783
		1,246,979	1,160,366
<b>Creditors: amounts falling due within one year</b>	10	(517,132)	(310,396)
<b>Net current assets</b>		729,847	849,970
<b>Total assets less current liabilities</b>		1,005,279	1,122,988
<b>Creditors: amounts falling due after more than one year</b>	11	(819,065)	(824,404)
<b>Net assets</b>		186,214	298,584
<b>Funds</b>			
Unrestricted funds		186,214	298,584
<b>Total funds</b>	13	186,214	298,584

The accounts have been prepared in accordance with the special provisions applicable to companies subject to the small companies' regime.

The financial statements were approved by the Trustees on 6 June 2011 and were signed on their behalf by:

James Campbell  
Director

Company Registration number: NI 35855

# NI Agricultural Research and Development Council

## Notes To The Financial Statements For the Year Ended 31 March 2011

---

### 1. Accounting policies

These financial statements are prepared on the going concern basis under the historical cost convention and in accordance with the Statement of Recommended Practice (SORP) "Accounting and Reporting by Charities" published in March 2005, the Companies Act 2006 and applicable accounting standards. The principal accounting policies are set out below.

#### Tangible fixed assets

Tangible fixed assets are stated at cost less accumulated depreciation.

The cost of tangible fixed assets is their purchase cost, together with any incidental costs of acquisition. Depreciation is calculated so as to write off the cost, [or valuation], of tangible fixed assets, less their estimated residual values, on a straight line basis over the expected useful economic lives of the assets concerned. The principal annual rates used are as follows:

Computer equipment - 20% straight line

#### Investments

Investments are valued at Open Market Value as at 31 March 2011

### Incoming resources

Income represents all monies, on an accruals basis, collected on behalf of the Company by its agents. The levy rates charged to producers are as follows:-

- Milk - 0.02p per litre
- Beef - 20p per head
- Sheep - 5p per head

### Resources expended

All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to the category.

### Direct programme expenditure

Direct programme expenditure represents research and development grants approved for payment. These are charged as expenditure in the year in which the commitment is made and are carried forward as a liability until paid.

### Management and administration expenditure

These represent costs incurred in the management of the company's assets, organisational administration and compliance with constitutional and statutory requirements and other support functions.

### Value Added Tax

The Company is not registered for VAT purposes; therefore expenditure in total is shown gross of VAT.

### Unrestricted Funds

Unrestricted funds are amounts received or generated and which are expendable at the discretion of the Company in furtherance of its objectives.

### Investment Income

Investment income is recognised on a receivable basis and arises from interest bearing deposit accounts.

# NI Agricultural Research and Development Council

## Notes To The Financial Statements For The Year Ended 31 March 2011(Cont...)

	2011	2010
	£	£
<b>2 Management and Administration</b>		
Promotion, publications and advertising	5,467	2,900
Administrative costs	50,617	39,745
	56,084	42,645

### 3 Net outgoing resources

This is stated after charging:

Auditors' remuneration	2,705	1,775
Depreciation of tangible fixed assets		
- on owned assets	-	2,541

### 4 Trustees' emoluments

The Trustees received no emoluments during the year (2010: Nil) and no other pension costs were accruing to trustees in either year.

### 5 Taxation

The company is a registered charity, and as such is entitled to certain tax exemptions on income and profits from investments, and surpluses on any trading activities carried on in furtherance of the charity's primary objectives, if these profits and surpluses are applied solely for charitable purposes.

6 Fixed assets	Computer Equipment
	£
Cost	
At 1 April 2010 and 31 March 2011	12,713
Accumulated depreciation	
At 1 April 2010	12,713
Charge for year	-
At 31 March 2011	12,713
Net book value	
At 31 March 2011	-
At 31 March 2010	-

# NI Agricultural Research and Development Council

## Notes To The Financial Statements For The Year Ended 31 March 2011(Cont...)

	2011	2010
	£	£
<b>7 Investments</b>		
Investments purchased during the year are primarily held to provide an investment return for the charity. The movements in investments in the year were		
Market Value at 1 April 2010	273,018	
Additions	-	
Change in market Value	2,414	
Market Value at 31 March 2011	275,432	
<b>8 Debtors</b>		
Levy debtors	107,679	93,214
Prepayments and accrued income	23,909	27,369
	131,588	120,583
<b>9 Cash at bank</b>		
Cash at bank	1,115,391	1,039,783
<b>10 Creditors: amounts falling due within one year</b>		
Trade creditors	-	3,124
Other creditors - committed expenditure (note 12)	482,148	304,590
Accruals and deferred income	34,984	2,682
At 31 March	517,132	310,396

# NI Agricultural Research and Development Council

## Notes To The Financial Statements For The Year Ended 31 March 2011(Cont...)

	2011	2010
	£	£
<b>11 Creditors: amounts falling due after one year</b>		
Other creditors — committed expenditure (note 12)	819,065	824,404
<b>12 Committed Grant Expenditure</b>		
Committed expenditure at 1 April	1,128,994	983,078
Further commitments during the year	572,967	497,446
Cancelled project	(130,990)	-
Paid during the year	(269,758)	(351,530)
At 31 March	1,301,213	1,128,994
<b>13 Reconciliation of movement in accumulated funds</b>		
At 1 April	298,584	435,719
Net outgoing resources for the year	(112,370)	(137,135)
At 31 March	186,214	298,584

### **14 Share capital limited by guarantee**

The Northern Ireland Agricultural Research & Development Council is a company limited by guarantee. The liability of the members is limited to an amount not exceeding £1.

# NI Agricultural Research and Development Council

## Management and administration expenditure for the year ended 31 March 2011

	2011 £	2010 £
<b>Promotions, publications, advertising and educational activities</b>		
Annual Report Publication	803	445
Advisory Support Costs	4,664	2,445
	<b>5,467</b>	<b>2,900</b>
<b>Administrative costs</b>		
Management charge: Countryside Services Limited	20,462	17,281
Audit and accountancy fees	2,250	1,775
Insurance	2,501	2,539
Miscellaneous expenses	402	439
Web Design & Upkeep	360	360
Postage	-	150
Computer software support	736	1,466
Chairman's honorarium	5,106	5,217
VAT costs	9,280	7,847
Catering	4,400	-
Rental Fee	5,000	-
Depreciation	-	2,541
Bank fees	120	130
	<b>50,617</b>	<b>39,745</b>

## AgriSearch Booklets

---

### 1 / SHEEP

The Effects of Genetics of Lowland Cross-Bred Ewes and Terminal Sires on Lamb Output and Carcass Quality

---

### 2 / DAIRY

A Comparison of Four Grassland-Based Systems of Milk Production for Winter Calving High Genetic Merit Dairy Cows

---

### 3 / DAIRY

Dairy Herd Fertility - Examination of Effects of Increasing Genetic Merit and other Herd Factors on Reproductive Performance

---

### 4 / SHEEP

Developing Low Cost 'Natural-Care' Systems of Sheep Production

---

### 5 / BEEF

An Examination of Factors affecting the Cleanliness of Housed Beef Cattle

---

### 6 / BEEF

The Effects of Housing System on Performance, Behaviour and Welfare of Beef Cattle

---

### 7 / DAIRY

Developing Improved Heifer Rearing Systems

---

### 8 / BEEF

The Influence of Suckler Cow Genetics and Terminal Sire on Performance of the Suckler Herd

---

### 9 / DAIRY & BEEF

Reducing Organic Nitrogen Output from Dairy Cows and Beef Cattle in Nitrate Vulnerable Zones

---

### 10 / DAIRY

The Effect of the Type of Dietary Supplement on the Performance of the Grazing Dairy Cow

---

### 11 / DAIRY

Are International Dairy Sire Genetic Evaluations Relevant to Milk Production Systems in Northern Ireland?

---

### 12 / BEEF

Holstein Bull Beef Production

---

### 13 / DAIRY

Effective Footbathing of Dairy Cows

---

### 14 / DAIRY

Effects of Feeding Forage Maize & Whole Crop Silages on the Performance of Dairy Cows Offered Two Qualities of Grass Silage

---

### 15 / BEEF

Maximising Beef Output from the Suckler Herd Through the Production of Heavy Bulls

---

### 16 / DAIRY

The Effect of Reducing the Protein Content of the Diet on the Performance of Dairy Cows

---

### 17 / DAIRY

Comparisons of Dairy Cow Management Strategies which Differ in Labour Inputs

---

### 18 / DAIRY

Reducing Phosphorus Levels in Dairy Cow Diets

---

### 19 / DAIRY, BEEF & SHEEP

The Effect of Applying Slurry During the Grazing Season on Dairy Cow Performance

---

### 20 / DAIRY

Contribution of Meat (Beef and Lamb) from Grass Fed Ruminants to the Total Human Dietary Intake of Long Chain N-3 Polyunsaturated Fatty Acids.

---



---

97 Moy Road    **T:** 028 8778 9770  
Dungannon    **F:** 028 8778 8200  
Co Tyrone    **E:** [info@agrisearch.org](mailto:info@agrisearch.org)  
BT71 7DX    **W:** [www.agrisearch.org](http://www.agrisearch.org)