

# Agrisearch

Annual Report 2012

The Northern Ireland Agricultural Research & Development Council. A company limited by guarantee. Annual report for the year ended 31 March 2012



REFERENCE AND ADMINISTRATIVE DETAILS OF THE CHARITY, ITS TRUSTEES AND ADVISORS  
Year to 31 March 2012

---

**Trustees**

James Campbell (Chairman)  
David Workman (Vice Chairman)  
William Hanna  
Seamus Haughey (Deceased 21st July 2012)  
Henry Jordan  
Mervyn King  
Ian Marshall  
Mary McCormack  
Nigel McLaughlin  
Phelim O'Neill  
Douglas Rowe

**Name by which charity makes itself known**

AgriSearch

**Registered Office**

Countryside Services Limited  
97 Moy Road  
Dungannon  
Co Tyrone  
BT71 7DX

**Company Secretary\***

David Mark

**Project Manager (Senior staff member delegated day to day management)\***

Jason Rankin

**Charity Number**

XR 23492

**Registered Number**

NI 35855

**Bankers**

Northern Bank Limited  
471 – 473 Antrim Road  
Belfast  
BT15 3BP

**Solicitors**

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

**Registered Auditors**

RSM McClure Watters  
1 Lanyon Quay  
Belfast  
BT1 3LG

\*Secretariat services provided by Countryside Services Limited

---

**Advisers**

**Dairy Advisory Committee**

Gary McHenry	-Chairman	
Drew McConnell	-Vice Chairman	
Peter Conway		
Harper Doupe		
Albert Foster		
Andrew Magowan		(appointed 1 April 2012)
Jonathan Moore		
Ian McCluggage	(Non-voting CAFRE liaison)	
Roger McCracken		
Dr Alan McIlmoyle		
David Stewart		

**Beef Advisory Committee**

Harry Sinclair	-Chairman	(retired 31 March 2012)
James Taylor	-Vice Chairman	
Edward Carson		(retired 31 March 2012)
Sam Chesney		(appointed 1 April 2012)
Ray Elkin		(appointed 1 April 2012)
Dr Steven Johnston	(Non-voting CAFRE liaison)	
George McAuley		(appointed 1 April 2012)
Liam McCarthy		
William McIlroy		(appointed 1 April 2012)
Karl Mullan		(retired 31 March 2012)
Derek Shaw		
John Sheridan		
Dr Raymond Steen		
Ian Stevenson		
Maurice Watson		(appointed 1 April 2012)

**Sheep Advisory Committee**

Ian Buchanan	-Chairman	
Samuel Wharry	-Vice Chairman	
Edward Adamson		(appointed 1 April 2012)
Dr Jonathan Birnie		
Barry Brogan		
David Chambers		(retired 31 March 2012)
Crosby Cleland		(appointed 1 April 2012)
Isaac Crilly		
Dr Steven Johnston	(Non-voting CAFRE liaison)	
Seamus Maginn		(appointed 1 April 2012)
Dr Raymond Steen		
David Wallace		(appointed 1 April 2012)

**Committee Secretary**

Jason Rankin



## AgriSearch Chairman's Report

---

Some noteworthy changes have occurred during the past year in the operation of the Northern Ireland Agricultural Research and Development Council (AgriSearch).

This is most immediately apparent in the income figures for the year to the end of March 2012, where the sum of £302,576 is reported as 'grant income' from the DARD Research Challenge Fund. This was a substantial addition to the 'cash flow' administered by AgriSearch and it put the organisation into a different category for accounting and reporting in accordance with legislation on charities.

AgriSearch is the 'lead' organisation through which grant aid from the DARD Fund is claimed. This involves administration that was not traditionally part of the operation of AgriSearch.

Also, as part of the Research Challenge, we have stepped up our efforts to communicate the results of ongoing research work to farmers in Northern Ireland. These additional undertakings pushed the management and administration costs during 2011/12 to almost £66,000, some of which is offset by the claims made under the Research Challenge Fund projects. I believe that AgriSearch is getting good value for this additional expenditure.

We have found good synergy in working with the College of Agriculture Food and Rural Enterprise (CAFRE) and with the Agri-Food and Biosciences Institute (AFBI) to disseminate the results of research work to farmers. Other knowledge transfer efforts during the year under review included a conference on the use of Profitable Lifetime Index (PLI) in dairy cattle breeding and two meetings about the eradication of Bovine Viral Diarrhoea (BVD), which is the subject of one of the Research Challenge Fund projects.

We also launched the AgriSearch ezine, with ten editions issued during the year to convey information by email to a growing list of recipients. The ezine and the website [www.agrisearch.org](http://www.agrisearch.org) provide a comprehensive report of our activities in addition to the ongoing supply of articles to the farming press and other media.

AgriSearch also published four booklets during the year summarising the results of research projects. A list of booklets is on page 18 & 19. These are available on request.

During the 12 months to the end of March 2012, AgriSearch was involved in the organisation of six farm walks. The farm based events have continued in the current

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

---

year with two in April featuring ‘dairy origin’ cattle for beef production and four in July on the farms of suckler beef ‘co-researchers’.

I wish to express thanks to the farmers who hosted these events and to the staff from CAFRE who took part and who made the events known to their clients. I especially want to commend the staff of AFBI for the efficient way in which they set up the display boards and other aspects of these events and cleared up afterwards.

In August 2012, one of our beef farm ‘co-researchers’ hosted a meeting of the Ulster Grassland Society and National Beef Association. It is good to see the focus

by such organisations on research. We would encourage more activities by other organisations to promote the research messages on farms, in dairying, beef cattle and sheep production. Where possible, details will be posted on our website and publicised through our ezine and other media.

The nominal charge for the dairy breeding conference brought another new line into our accounts this year, dissemination income, which partly offset the costs. That conference in October 2011 was held in partnership with AFBI and CAFRE and followed an initiative to set up a Dairy Breeding Stakeholder Group.



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

---

More recently we have initiated a Dairy Nutrition Stakeholder Group through which AFBI researchers and AgriSearch can engage with technical advisers in the feeding and nutrition of dairy cattle.

There is always more that we could do and we are being invited to do more than our resources can take on. The immediate future calls for AgriSearch to look hard at how best we can use our finite resources. For the longer term, good research can make a strong case for additional resources. The levies which form the bulk of AgriSearch's income have been unchanged since the formation of the organisation in 1997. The rates of 5pence per sheep, 20pence per bovine and 0.02p/litre of milk have effectively declined by around 50 per cent due to inflation.

Considerable voluntary effort and time is put into AgriSearch by members of the advisory committees and by trustees. The committees are active and keen, following the addition of some 'young blood' in recent years. They identified gaps under the DARD Evidence and Innovation Strategy and presented proposals to guide decisions on research priorities for DARD funding at AFBI in 2012/13.

Ultimately six projects were approved by DARD shortly after the end of the financial

year under review (these are in the list on page 10). The timing of the approvals is such that the funds committed (£168,000) by AgriSearch to these projects are not included in the expenditure for 2011/12.

During the financial year 2011/12, AgriSearch committed £451,261 to fund two new projects (listed on page 9). Added to that investment was co-funding from DARD amounting to £717,782. Including other sources of funding over the years, the total expenditure on the research and development supported by AgriSearch since its formation in 1997 is over £17.4m.

Throughout 2011/12, AgriSearch has continued its involvement with the UK Red Meat Joint R&D Committee. This gives us a valuable insight into research work being commissioned by the levy bodies in Great Britain. AgriSearch has provisionally agreed to co-fund a major new study on liver fluke in cattle, subject to a grant application to BBSRC (Biotechnology and Biological Science Research Council). By joining forces with the GB organisations (EBLEX, DairyCo, QMS and HCC) AgriSearch can add weight to the case for major projects, while making a relatively small investment of funds.

On a similar theme, AgriSearch has signed a Memorandum of Understanding

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

---

through which member organisations of the recently formed European Cattle Innovation Partnership intend to co-operate in research matters to minimise unnecessary duplication of expenditure and to share information. These efforts to engage with similar bodies in other regions should bring benefits to all.

### FUNDS

The dairy levy income for 2011/12 at £315,101 was up by 5% over 2010/11 thanks to increased production of milk. Income from beef cattle was down by 12.5% to £77,559 and sheep income down marginally at £14,892. This is due to lower numbers of cattle and sheep slaughtered at the processing businesses which collect the levy.

Following the sharp fall in AgriSearch funding for research in the sheep sector since 2010, I am pleased to report that the Livestock and Meat Commission for Northern Ireland has agreed to assign some of its levy income for this purpose to be administered through AgriSearch during 2012/13.

When it comes to the stewardship of the funds held by AgriSearch, the investment policy is low risk. The majority of funds are held in bank deposits in more than one

institution as agreed by the Trustees. Cash flow and reallocation of funds between accounts has been managed to maximize the limited returns available on deposit accounts.

A portion of funds not required in the short term is invested within an investment portfolio managed by the Northern Bank with low risk instructions. This has performed satisfactorily with an average return of 7.5% per annum. This boosted investment income in 2011/12 to £39,256, an increase of 17% over 2010/11.

### GOVERNANCE

A review of the corporate governance of the organisation has been initiated and thanks are due to Dr Christine Kennedy for her assistance and advice on these matters. AgriSearch enjoyed a year of continued service by most of the trustees and committee members during 2011/12. Several new members of committees were nominated to take up their positions from 1 April 2012 (listed on page 1). All are welcome additions to the band of volunteers. I offer sincere thanks to those who retired on 31 March, in particular to the long serving members – David Chambers from the sheep committee, Edward Carson and Harry Sinclair from the beef committee.

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

---

In July 2012 the Board of Trustees was shocked by the untimely death of Seamus Haughey, a very sad loss to AgriSearch and the wider agricultural community as well as his family and many friends.

Another extremely sad loss occurred in January, the passing at a young age of Dr Lynne Dawson. Lynne was a dedicated beef research specialist, who was held in high esteem by colleagues at AFBI Hillsborough and by AgriSearch trustees and committee members who had met her.

On behalf of AgriSearch, I wish to record appreciation of the input of Lynne and Seamus to our work.

My thanks are also due to Countryside Services Ltd for the efficient way in which the administration of AgriSearch has been carried on through a change of personnel and to its managing director David Mark for his advice and support. I want to record a special thanks to Jason Rankin who has taken to the role of AgriSearch Project Manager with tremendous enthusiasm since his appointment on 1 April 2011. Jason's ability, dedication and genuine interest in what AgriSearch is doing have combined with his phenomenal work rate to make 2011/12 the year of noteworthy change that I referred to at the beginning of this report.

Finally I wish to thank the trustees, committee chairmen and members who continue to serve so enthusiastically – with particular mention of AgriSearch vice chairman, David Workman, for his unseen and very useful input to this organisation.

Projects commissioned by  
AgriSearch between 1st April  
2011 and 31st March 2012



---

Improving the efficiency of feed resource use within the diets of confined dairy cows through precision feeding and improved concentrate allocation strategies.

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.

### Projects affected by decisions on co-funding

---

Environmental implications of livestock grazing on a range of differing LFA environments – Co-funding not available, project cancelled.

Managing dairy cows to reduce the development of lameness – Co-funding not available, project withdrawn.

\*Developing sustainable systems of beef production from the suckler herd

\*Investigation of the relationship between carcass characteristics and lean meat yield and meat quality from a range of sheep breeds - Part 1

\*Investigation of the relationship between carcass characteristics and lean meat yield and meat quality from a range of sheep breeds - part 2

***\* These projects were restructured into the new beef and sheep project listed above***

## Projects commissioned shortly after the end of the financial year

---

Effect of early lactation nutritional strategies on the health, reproductive performance and milk production performance of lactating dairy cows.

Pilot study on breeding management (synchronisation) of replacement suckler heifers

Development of beef and sheep systems for improved sustainability, biodiversity and delivery of ecosystem services within hill areas of Northern Ireland.

An evaluation of mid and late pregnancy feeding strategies for managing condition score of spring calving suckler cows and their subsequent reproductive performance and progeny performance.

Identifying key drivers of production efficiency through the establishment and analysis of a database for the AFBI Hillsborough dairy herd.

The extent and impact of colostrum quality variability on calf health and performance on Northern Ireland dairy farms and an exploration of strategies to improve calf survival.

Investigation of the relationship between genotype, trace element status and gastrointestinal parasite infections in lambs, and the development of nutritional and management strategies to increase lamb output from grazed grass.

AgriSearch has also agreed to set aside funds to help disseminate information from a new DARD funded study: *“Establishment of nitrogen fertiliser recommendations for grassland and arable land within Northern Ireland, including a critique of RB209 8th Edition recommendations.”*

# The Northern Ireland Agricultural Research and Development Council

## Statement of financial activities (including income and expenditure account) For the year ended 31 March 2012

	Notes	Unrestricted Funds	
		2012	2011
		£	£
<b>Incoming resources</b>			
<b>Incoming resources from generated funds:</b>			
<b>Voluntary Income</b>			
Milk income		315,101	300,173
Beef income		77,559	88,765
Sheep income		14,892	15,024
Grant income (DARD Research Challenge Fund)		302,576	-
Dissemination income		830	-
		710,958	403,962
<b>Investment income</b>		39,256	33,526
<b>Total incoming resources</b>		750,214	437,488
<b>Resources expended</b>			
<b>Costs of charitable activities</b>			
Direct programme expenditure		227,490	474,093
Dissemination costs		35,593	19,681
<b>Governance costs</b>			
Management and administration	2	65,912	56,084
<b>Total resources expended</b>		328,995	549,858
<b>Net movement in funds for the year</b>	3	421,219	(112,370)
Fund balance brought forward at 1 April 2011		186,214	298,584
Fund balance carried forward at 31 March 2012	13	607,433	186,214

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.

# The Northern Ireland Agricultural Research and Development Council

## Balance Sheet As at 31 March 2012

	Notes	2012	2011
		£	£
<b>Fixed assets</b>			
Tangible assets	6	-	-
Investments	7	285,621	275,432
		285,621	275,432
<b>Current assets</b>			
Debtors	8	162,118	131,588
Cash at bank and in hand	9	972,103	1,115,391
		1,134,221	1,246,979
<b>Creditors: amounts falling due within one year</b>	<b>10</b>	<b>(613,408)</b>	<b>(517,132)</b>
<b>Net current assets</b>		<b>520,813</b>	<b>729,847</b>
<b>Total assets less current liabilities</b>		<b>806,434</b>	<b>1,005,279</b>
<b>Creditors: amounts falling due after more than one year</b>	<b>11</b>	<b>(199,001)</b>	<b>(819,065)</b>
<b>Net assets</b>		<b>607,433</b>	<b>186,214</b>
<b>Funds</b>			
Unrestricted funds		607,433	186,214
Total funds	13	607,433	186,214

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

The financial statements were approved by the Trustees on 7th June 2012 and were signed on their behalf by:

James Campbell  
Director

Company Registration number: NI 35855

## Notes To The Financial Statements For The Year Ended 31 March 2012

---

### 1. Accounting policies

These financial statements are prepared on the going concern basis under the historical cost convention and in accordance with applicable United Kingdom accounting standards, the Statement of Recommended Practice (SORP) "Accounting and Reporting by Charities" published in March 2005, the Companies Act 2006 and in accordance with the Financial Reporting Standard for Smaller Entities (effective April 2008). 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 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 2012. Investment income is recognised on a receivable basis and arises from interest bearing deposit accounts.

#### 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

#### Grants receivable

Grants are recognised in the statement of financial activities in the period in which they are receivable. Income is deferred only when the charity has to fulfill conditions before becoming entitled to it, or where the funder has specified that the income is to be expended in a future period.

#### 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.

# The Northern Ireland Agricultural Research and Development Council

## Notes To The Financial Statements (Continued) For The Year Ended 31 March 2012

### Unrestricted Funds

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

	Notes	2012	2011
		£	£
<b>2 Management and Administration</b>			
Promotion, publications and advertising		6,750	5,467
Administrative costs		59,162	50,617
		65,912	56,084

### 3 Net incoming (outgoing) resources

This is stated after charging:

Auditors' remuneration		2,550	2,705
Depreciation of tangible fixed assets			
- on owned assets	-	-	

### 4 Trustees' emoluments and expenses

The Trustees received no emoluments during the year (2011: Nil) and no other pension costs were accruing to trustees in either year.

The Trustees received expenses of £2,142 during the year (2011: £2,934) for travel.

### 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.

# The Northern Ireland Agricultural Research and Development Council

## Notes To The Financial Statements (Continued) For The Year Ended 31 March 2012

<b>6 Fixed assets</b>	<b>Computer Equipment</b>	
	<b>£</b>	
Cost		
At 1 April 2011 and 31 March 2012		12,713
Accumulated depreciation		
At 1 April 2011		12,713
Charge for year		-
At 31 March 2012		12,713
Net book value		
At 31 March 2012		-
At 31 March 2011		-
		<b>2012</b>
		<b>£</b>
<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 2011		275,432
Additions		-
Change in Market Value		10,189
Market Value at 31 March 2012		285,621
<b>8 Debtors</b>	<b>2012</b>	<b>2011</b>
	<b>£</b>	<b>£</b>
Trade debtors – levy debtors	109,677	107,679
Prepayments and accrued income	52,441	23,909
	162,118	131,588
<b>9 Cash at bank and in hand</b>		
Cash at bank	972,103	1,115,391

# The Northern Ireland Agricultural Research and Development Council

## Notes To The Financial Statements (Continued) For The Year Ended 31 March 2012

	2012	2011
	£	£
<b>10 Creditors: amounts falling due within one year</b>		
Trade creditors	123,684	-
Other creditors - committed expenditure (note 12)	487,928	482,148
Accruals and deferred income	1,796	34,984
	613,408	517,132
<b>11 Creditors: amounts falling due after one year</b>		
Other creditors — committed expenditure (note 12)	199,001	819,065
<b>12 Committed Grant Expenditure</b>		
Committed expenditure at 1 April	1,301,213	1,128,994
Further commitments during the year	451,261	572,967
Cancelled projects	(311,060)	(130,990)
Paid during the year	(754,485)	(269,758)
At 31 March	686,929	1,301,213
<b>13 Reconciliation of movement in accumulated funds</b>		
At 1 April	186,214	298,584
Net incoming (outgoing) resources for the year	421,219	(112,370)
At 31 March	607,433	186,214

### 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.

# The Northern Ireland Agricultural Research and Development Council

## Notes To The Financial Statements (Continued) For The Year Ended 31 March 2012

	2012	2011
	£	£
<b>Management and Administration Expenditure</b>		
Annual report publication	899	803
Advisory support costs	5,851	4,664
Management charge: Countryside Services Limited	22,262	20,462
Audit and accountancy fees	2,250	2,250
Insurance	2,523	2,501
Miscellaneous expenses	1,570	402
Web Design and Upkeep	2,450	360
Venue costs	270	-
Computer software support	1,641	736
Chairman's honorarium	6,250	5,106
VAT costs	12,289	9,280
Catering	2,515	4,400
Rental Fee	5,000	5,000
Depreciation	-	-
Bank fees	142	120
	65,912	56,084

# 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 Outputs 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 DAIRY/ BEEF**

Holstein Bull Beef

## **13 DAIRY**

Effective Footbathing of Dairy Cows

**14 DAIRY**

Effects of Feeding Forage Maize and 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 Phosphorous Levels in Dairy Cow Diets

**19 DAIRY**

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

**20 BEEF**

Contribution of Meat (Beef and Lamb) From Grass-Fed

**21 BEEF**

Maximising Returns from Beef Sourced from the Dairy Herd

**22 DAIRY**

A Comparison of the Performance of Holstein-Friesian and Norwegian Red cows on Northern Ireland Dairy Farms

**23 DAIRY**

The Effect of a Number of Novel Supplementation Strategies on Milk Production and Fertility of High Yielding Dairy Cows

**24 DAIRY**

A Comparison of the Performance of Holstein-Friesian and Jersey Crossbred Cows across a Range of Northern Ireland Production Systems

**25 DAIRY**

The Effect of Applying Cattle Slurry as the Sole Source of Nutrients over a Four Year Period on the Yield and Persistency of Seven Perennial Forage Crops



# AgriSearch

Farmer Funded Research

---

97 Moy Road  
Dungannon  
Co. Tyrone  
BT71 7DX

T: 028 8778 9770  
F: 028 8778 8200  
E: [info@agrisearch.org](mailto:info@agrisearch.org)  
W: [www.agrisearch.org](http://www.agrisearch.org)