











HEAD OFFICE: Highfield House, Shinagh, Bandon, Co. Cork, Ireland T:+353 (023) 88 20222 F:+353 (023) 88 20229 E:query@icbf.com

www.icbf.com

## **Table of Contents**

SUMMARY of 2012
MISSION4
Genomics
Genetic Evaluations 6  Common to Beef and Dairy  Dairy Specific  Beef Specific  Interbeef  Best Practice in Cattle Breeding
Cattle Breeding Services
Breeding Schemes
Financials
Resources

Communications	13
Irish Cattle Breeding Statistics	
Industry Presentations	
Web Site	
Weekly Update	
Training	
ICAR 2012 International Conference	
International	14
Support	14
Future Prospects	14
Financial Statements for the Year Ended 31 December 2012	16







## **SUMMARY of 2012**

ICBF exists to achieve the greatest possible genetic improvement in the national cattle herd, for the benefit of Irish Farmers, the Dairy and Beef industries, and Members. 2012 was a very challenging year for farmers in Ireland, with extremely poor weather conditions, and weakened farm gate prices. The poor weather continued into 2013. However, there is a general feeling of optimism for the medium term, and we continue to be focused on providing a breeding infrastructure that will facilitate the achievement of the ambitious Food Harvest 2020 targets.

In 2012 the major contributions ICBF made towards its mission included:

- A dramatic increase in the use of genomic selection (GS) in dairy cattle breeding, with a significant increase in the numbers of females genotyped
- Delivery of the fifth year of the suckler cow welfare scheme (SCWS) to 31,415 suckler herds.
- Further enhancements to the €uro-Star beef genetic evaluations, especially in the areas of calving and beef performance evaluations.
- Growth in the HerdPlus® service to Beef and Dairy herds to 15,500 herds.
- Launch of the new Maternal Beef Breeding Programme, including a change in the role of the Tully Performance test centre to being a progeny test centre.
- Continuation of the roll-out of the Coop Performance Report in collaboration with milk processors.
- Hosting of the highly successful ICAR conference, with over 800 delegates from 50 countries.
   The impact has been significant with Ireland increasingly seen as a leader in cattle breeding, and seeing increased access to international networks and expertise.
- Provision of the background information system to support the voluntary phase of the Animal Health Ireland (<u>www.animalhealthireland.ie</u>) BVD eradication program, with over 500,000 animals tested.

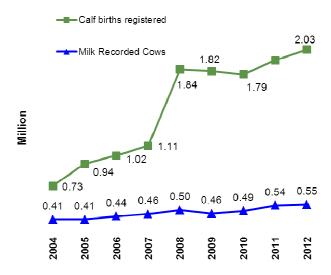


Figure 1

In 2012, 68,476 herds, with 2.03 million calvings representing over ninety percent of the Irish cattle herd (Figure 1) were participating in one or more aspects of the ICBF database. The uptake of milk recording was an all-time high (Figure 1), as was the number of records recorded on AI Handhelds.

The Suckler Cow Welfare Scheme (SCWS), which finished at the end of 2012 (to be succeeded by the Beef Data Programme) has greatly increased the amount of data on beef cattle in Ireland and has enabled substantial further progress in the development our genetic evaluations for traits relevant to dairy and beef.

The ICBF cattle breeding database has dramatically improved the accuracy and scope of both beef and dairy genetic evaluations. As in previous years, 2012 saw these improved evaluations being used to locate Irish bred Holstein Friesian bulls for subsequent progeny testing through the G€N€ IR€LAND® dairy program. They also continued to facilitate the wide use of GS bulls at a young age. The Irish dairy industry is benefiting from more rapid genetic gain giving rise to cows that are more productive, more fertile and more robust. In 2012 beef genetic evaluations for calving, docility, direct weaning weight, carcass, maternal milk and female fertility all benefited significantly from the extra data collected through the SCWS. As beef and dairy breeding decisions are increasingly based on these more accurate genetic evaluations, the profitability of beef and dairy farming is being advanced.

A further benefit of the database is its ability to provide useful information for helping farmers with a

wide range of breeding, reproduction and disease management decisions.

Thanks to continued strong support from DAFM, solid tag income, and robust service income, ICBF's finances remain sound.

The ICBF strategic plan, which is reviewed annually, is focused on increasing farmer uptake of the recording and breeding services that give them the greatest economic returns. ICBF's development effort is increasingly focused on streamlining the flow of data from all sources, while improving the quality of the information returned to farms. Initiatives with industry partners are being undertaken to use the ICBF database to provide better quality information to improve decision-making a farm, industry, research and breeder levels.

As part of ICBF's commitment to facilitate Animal Health Ireland (AHI) there has been a substantial amount of database development work to support AHI's various initiatives. The voluntary phase of the BVD eradication program was very successful in 2012, with ICBF playing a key role in its delivery.

## **MISSION**

ICBF was established with the objective of achieving the greatest possible genetic improvement in the national cattle herd for the benefit of Irish Farmers, the Dairy and Beef industries and Members. Genetic improvement comes about when the parents of the next generation are genetically superior to their contemporaries. Bringing about improvement requires:

- Identification, ancestry and quantitative data on those traits of importance for large numbers of animals in each generation.
- A genetic evaluation system to identify the genetically superior animals in each generation. An essential part of the genetic evaluation system is a scientific knowledge of the objectives and principles of cattle breeding.
- A breeding scheme design that ensures the required data is available, and that farmers use genetically superior animals in each generation.
- Well informed farmers who willingly provide accurate data from their own farms and make full use of the information available in their breeding and farm management decisions.

The ICBF Strategic Plan identifies three main areas – genetic evaluation, uptake & cost of services, and breeding schemes – as the primary focus of ICBF's

activities. For each of these areas a number of strategies are being pursued.

This Annual Report has been prepared for the purpose of providing ICBF shareholders and other stakeholders with a summary of activities and achievements in relation to the objectives of the Society for the 2012 calendar year.

## **Genomics**

Cattle breeding is undergoing a transformation as a result of the use of genomics. This technology is enabling increased rates of gain and reduced costs, in particular those associated with large scale progeny testing.

That Ireland is able to lead Europe in the exploitation of genomic technology is a consequence of a number of key factors.

- Establishing, over a number of years, a team of highly skilled and well-motivated experts in ICBF and Teagasc.
- Partnerships with international collaborators that provided access to knowledge, technology and research material.
- The creation of a bank of DNA samples from the bulls used in AI in Ireland.
- The provision of funding, through Teagasc and NDP, to genotype the training population of proven AI bulls.
- Access to the ICBF database and genetic evaluation system, to support the research and, implement the findings.
- Dairy and beef farmers who are convinced of the merits of the EBI and Eurostar Indexes respectively and use them as the main basis for selecting AI sires and stock bulls.
- A forward looking breeding industry that responds quickly to the availability of new technology to help them better meet the needs of Irish farmers.
- One of the significant achievements in this area in 2012 was the design of a custom 'IDB19' chip for Ireland.

#### **IGenoP**

ICBF is leading the development of a database to support the international sharing of genotypes. Operating under the name of IGenoP (short for International **Gen**omics **P**artnership) the goal is to have a database of genotypes hosted by the Interbull Centre

at the Swedish University of Agricultural Science in Uppsala, Sweden and shared by cattle breeding organisations world-wide. In 2012, ICBF enhanced its prototype of this database with the goal of demonstrating the practical benefits of sharing genotypes.

## **Genomic Services**

ICBF continues to develop the infrastructure to enable the Irish cattle breeding industry to fully exploit the benefits of genomic information while at the same time minimising costs. During 2012 the focus continued to be on enhancing the systems and services to support the process from selecting a calf for genotyping through collecting a tissue sample, usually hair, to sending the sample to the lab for testing, to receiving the genotype back into the ICBF database, to incorporating the genomic information in the genetic evaluation for the animal and finally, to the distribution of the results.

This system is at the core of the HerdPlus® genomic evaluation service. In 2012, the service was expanded beyond the AI companies, and provided directly to farmers and Herdbooks.

## **Dairy Genomics**

A major achievement for 2012 has been the on-going roll-out of genomic selection for dairy cattle. In spring 2012, 48% of recorded dairy inseminations were from such bulls. Refer to figure 2 for a summary of the EBI and uptake over the last three years

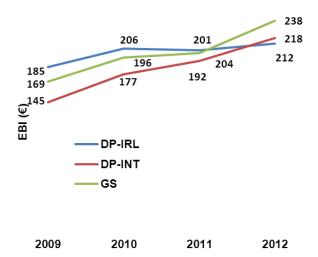


Figure 2a. Average EBI for daughter proven in Ireland (DP-IRL), daughter proven internationally (DP-INT) and genomically selected (GS) bulls

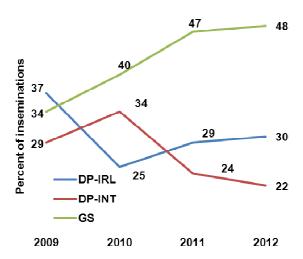


Figure 2b. Percent of inseminations for daughter proven in Ireland (DP-IRL), daughter proven internationally (DP-INT) and genomically selected (GS) bulls

## **Optimal Design – Dairy**

ICBF conducted a review (during 2010) of the dairy breeding scheme for Ireland placing particular emphasis on capitalising on the benefits of genomic selection while also establishing strategies for minimising associated risks. The outcome of the review is a design that places greatly increased emphasis on females in the breeding scheme and incorporates a number of new elements including: Next Generation Research Herds (NGRH) and Bull Breeder & Research Herds. During 2012 the focus has been on implementing these concepts. Teagasc has established the first NGRH and procedures for sourcing bulls for use in artificial insemination from bull breeder herds have been further refined. A project to genotype some 10,000 females was executed successfully in 2012.

#### **Beef**

The development of genomic selection for beef cattle breeding has progressed in 2012 but further genotype data is needed to reach the required levels before genomic evaluations for beef become a reality. At the genomics conference hosted by ICBF in November 2012, the idea of genotyping all pedigree registered male calves was floated, and this is in the process on becoming a reality.

## **Genetic Evaluations**

Our overall goal is to ensure the ready availability of accurate genetic evaluations for all traits, breeds and animals (national & international) of significance to Irish cattle farmers. Open consultation meetings provide a forum where the breeding industry and the development team meet and discuss developments in genetic evaluations.

Our strategy is spread over traits common to beef and dairy, and those specific to dairy or beef.

## **Common to Beef and Dairy**

Our strategy for traits common to beef and dairy is to research, develop, implement and continuously improve across-breed evaluations that make optimal use of all national and international data relevant to calving, fertility, survival, beef production, and sucklercow maternal traits.

In a world-first, starting in 2005, across breed genetic evaluations for a wide range of calving and beef traits are now being routinely provided to the Irish cattle breeding industry. These evaluations enable animals of all breeds (beef and dairy) to be compared with each other for many traits including direct and maternal calving ease, gestation length, calf mortality, carcass weight, carcass grade, carcass fat score and mature cow live weight. These developments have been made possible by the widespread use of the animal events recording system by farmers to report calving details, and by access to slaughter records via DAFM.

## **Dairy Specific**

Our goal for the dairy herd is to continuously enhance the accuracy and relevance of the EBI (Economic Breeding Index) as a guide for breeding dairy replacements. We are also seeking to continuously improve genetic evaluations for milk production traits, udder health traits and dairy specific conformation traits.

The EBI was updated at the end of 2012 with the incorporation of a new Management Index, incorporating milking speed, and milking temperament. The economic values in the EBI were not revised in 2012, but they will again be reviewed in 2013. Enhancements to calving and beef performance evaluations were also implemented late in 2012.

## **Beef Specific**

Our strategy is to research, develop, implement and continuously improve the accuracy and relevance of

the EuroStar index as a guide for beef breeding decisions. Significant developments in 2012 included:

- The establishment of separate maternal and terminal indexes
- Close cooperation with Teagasc Grange in establishment of economic values for the different traits
- A major over-haul of the beef performance and calving performance evaluations.

Throughout 2012, the Suckler Cow Welfare scheme continued to play a key role in building the data set on which genetic evaluations are based.

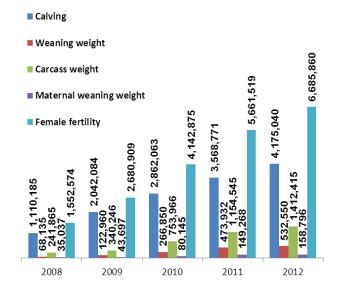


Figure 3a. Number of records used in 2012 genetic evaluations for beef traits

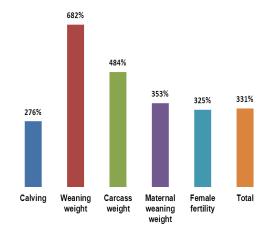


Figure 3b. Numbers of records used in genetic evaluations 2012 expressed as % of numbers in 2008.

This scheme continued to be so successful because of a number of factors including farmers' awareness of the value it represents, and the ability of DAFM and ICBF to put in place the required systems and infrastructure. There is also very good industry buyin with the Farmers Journal playing a key role in removing mystique and demonstrating the value of the scheme. The Beef Data Programme, which is scheduled for delivery in 2013 will hopefully maintain the momentum of the SCWS. At this stage Ireland is starting to lead the world in beef cattle breeding infrastructure, while also achieving high welfare standards in beef production.

#### **Interbeef**

ICBF is playing an important leadership role in the development of Interbeef to facilitate the international evaluation of beef breeds and traits. A prototype system for weaning weight in Charolais & Limousin has been developed by INRA, the French research organisation, and at the end of 2010 this system was transferred to the Interbull Centre. In 2011 formal agreements were established for the development of a routine international beef genetic evaluation service, and significant work has taken place in 2012

## **Best Practice in Cattle Breeding**

The Best Practice in Cattle Breeding campaign was continued this year. It played a key role in keeping farmers and the industry updated. This year's campaign featured weekly installments on a dedicated page in the Irish Farmers Journal.

## **Cattle Breeding Services**

The focus in 2012 was on increasing farmer participation in cattle breeding services. The introduction of the SCWS, building on the rapid growth associated with the launch of the AI handhelds, moved overall participation to 90% of all beef and dairy cattle (figure 1 and 4) and a total of 68,476 herds.

The level of participation in cattle breeding services is now at an all-time high. This firstly benefits herd owners who are now using breeding stock that give greater farm profitability. It is also providing a substantial benefit to ICBF's members who are enjoying increased service uptake and in many cases a reduction in the real cost of providing improved information services.

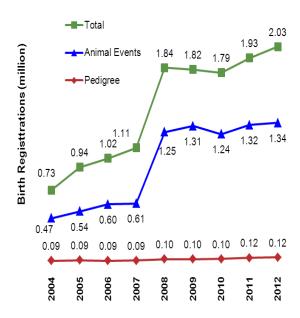


Figure 4. Calf birth registration trends.

### **Services to Herd Books**

There was on-going development in relation to the herdbook processing service in 2012. Updates to the catalogue, new reports, and continued streamlining of the processes ensured that the service provided to herdbook members continued to be improved upon.

## **Milk Recording**

ICBF's strategy is to work closely with its milk recording members, and to make full use of new technology to reduce labour, reduce inconvenience for farmers and to reduce the cost of recording. Our long term goal is to increase usage of milk recording to some 60% of dairy cows.

In 2012 the uptake of milk recording was an all-time record of 0.55 million cows, a 2% increase on milk recording in 2011 and representing 50% of dairy cows.

The EDIY (electronic do-it-yourself) service is proving attractive to farmers because it reduces labour costs, both on-farm and off-farm, through automation and the use of electronic data collection. The cost of the meters, while relatively high on a unit basis, is minimised through achieving high utilisation over many farms. This new service is attracting new herds to milk recording as well as taking the place of the conventional recording service. 34% of cows milk recorded in 2012 were recorded under the EDIY service.

#### **Electronic Data from Farms**

Our strategy is to work closely with serviceproviding members to expand farmer electronic data recording through the introduction of new recording systems and increased usage of farm PC packages. Results for 2012 again show growth in key website usage statistics (figure 5) - user sessions, farmer access, reports accessed and advisor reports. The bull search on the ICBF website was used for over a million searches in 2012, again a significant increase on the 2011 figures. The development of our website to collect data directly from farms, when coupled with the wide range of links to DAFM, and other systems, provides great potential to reduce the cost of animal events recording and processing, while, at the same time, reducing error levels and providing farmers with a more responsive information service.

### **Electronic Data from Technicians**

In close collaboration with AI members and other AI field service licence holders, a handheld computer based system for recording AI technician inseminations was launched in 2006. In 2012 some 678,000 inseminations were recorded through this system, an increase of 4% on 2011 (figure 6).

This system has eliminated delays due to processing dockets while at the same time providing farmers with near real-time information for mating decisions. The facility for avoiding inbred matings has proven to be particularly useful in pedigree matings where comprehensive data is available for bulls and cows.

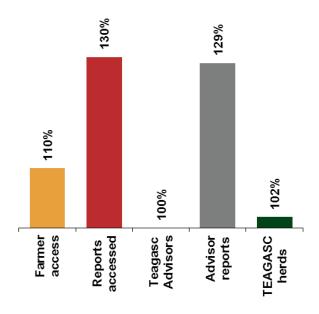


Figure 5. Website usage in 2012 as % of 2011.

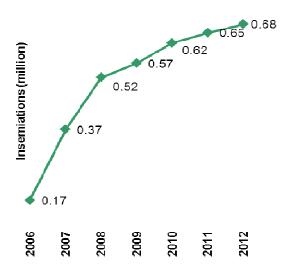


Figure 6. Inseminations recorded via Al Handhelds.

## **Health and Disease Service**

Our strategy is to extend database reports and event recording to meet animal health needs for whole herd health management. This will become an area of increasing focus for ICBF as we move towards better evaluations for all 'Cost of Production' traits. Our alliance with Animal Health Ireland is proving to be particularly constructive. In 2012 this included the provision by ICBF of the key information system infrastructure for the voluntary phase of the National BVD Eradication initiative.

## $\mathbf{HerdPlus}^{\mathbb{B}}$

In September 2006 the HerdPlus® service for dairy herds was launched with the goal of providing dairy herd owners with management information that they would find valuable. In 2007 the service was extended to beef herds. The HerdPlus® service is built around genetic evaluations and reproduction information on a whole-herd basis. By focusing on the needs of farmers, ICBF has been able to design, build and market a service that dairy and beef farmers are finding particularly good value for money.

The HerdPlus® service has enabled ICBF to save on costs associated with providing information (e.g. EBI reports, breeding charts, and cow reports) to farmers who did not require it and to generate income by providing information to those farmers who value it.

HerdPlus® (refer to figure 7):

- has grown significantly in 2012 as the DAFM supported BTAP scheme had the use of genetic evaluation information as a core element
- beef herds are now 60% of service customers,

#### Sire Advice

To ensure farmers have ready access to breeding advice, ICBF's strategy is to ensure a sire advice facility is available to all cattle farmers to guide the selection of the most suitable sires for use in their herds, and to ensure that cows are mated to those sires that give the best economic returns in the future.

The service, first introduced in spring 2007, has been progressively enhanced on the basis of farmer feedback and the service for spring 2012 incorporated the most recent suggestions.

Criteria used in the advice include; avoidance of inbreeding, minimization of risk from lethal genes and maximization of future profits from the resulting progeny. The information is provided to the farmer, the farmer's breeding adviser(s) and is downloaded to the handheld computers used by AI technicians.

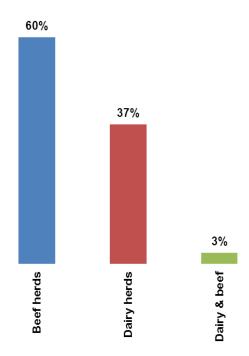


Figure 7. HerdPlus® percentages in 2012.

### Grow®

The Grow® service was launched in 2002 as part of an initiative to improve services to beef breeders.

The service enables beef breeders to obtain linear scoring and weight data on weanling age cattle. Compared with 2007 the percentage of all pedigree and non-pedigree animals scored and weighed increased from 55% to 99% (figure 8). The service is also used in non-pedigree herds, mainly those associated with the  $G \in \mathbb{N} \in \mathbb{R} \in \mathbb{N}$ 

Year	Total	% Weighed	% Pedigree
2007	14,496	55	75
2008	16,805	85	71
2009	14,727	94	60
2010	14,611	97	63
2011	14,287	99	62
2012	13,289	99	61

Figure 8. GROW® service uptake.

## **Advisory Service**

ICBF is providing an information service to Teagasc advisors, private advisors and Veterinarians. The service provides advisors with access to herd reports (with herd owners' permission) along with discussion group information and analyses of herd performance statistics. This service reduces the amount of time advisors need to spend on gathering and analysing data, thus freeing up time for focusing on farm management decisions.

### **Milk Processors**

The Coop Performance Report, which has been developed in partnership with milk processors, continued to be very popular in 2012. This service makes use of data held in the respective databases (ICBF and processor) to provide herd owners with information that allows them to assess the performance of their herd on a number of key performance indicators. A further 6 cooperatives were involved in the initiative in 2012.

### **OptiMIR**

ICBF has joined a successful application for EU funding in partnership with Teagasc and fifteen Milk Recording and Research organisations in other EU countries. The OptiMIR (<a href="www.optimir.eu">www.optimir.eu</a>) project is focused on improving the sustainability of milk production by providing improved management information to herds. While in 2012 we did not make as much progress as we would have liked in terms of getting spectral data flowing to the ICBF database,

ICBF was central to the development of some key functional specifications for the project.

## **Breeding Schemes**

ICBF's strategy is to ensure that the cattle breeding industry achieves optimal economic returns for Irish cattle farmers. This requires a clear understanding of both optimal breeding scheme design and the currently operating design for each breed of cattle in Ireland. Further, it implies that ICBF will then seek to ensure the industry moves towards the optimal design. This approach is most advanced for the Holstein Friesian breed.

### **Disease Free Status**

In order to operate an efficient breeding scheme in Ireland our strategy has been to ensure that all herds providing seed stock material are free of TB, Brucellosis, IBR, Johnes, BVD and EBL.

This strategy is being pursued in close co-operation with the animal health industry and AHI.

ICBF is strongly supporting AHI by providing the required information infrastructure as an extension of the ICBF database.

## **G€N€ IR€LAND® Dairy and Beef**

Our strategy is to work closely with NCBC, Dovea and other AI organisations to provide support for bull selection and progeny testing, in tightly targeted herds, in order to achieve the optimal design for dairy and beef breeds in Ireland.

In 2005 and 2007 respectively for dairy and beef, the  $G \in \mathbb{N} \in \mathbb{R} \in \mathbb{L} \times \mathbb{R} = \mathbb{R} = \mathbb{R} \times \mathbb{R} \times \mathbb{R} = \mathbb{R} \times \mathbb{R} \times \mathbb{R} = \mathbb{R} \times \mathbb{R} \times \mathbb{R} \times \mathbb{R} = \mathbb{R} \times \mathbb{R} \times \mathbb{R} \times \mathbb{R} \times \mathbb{R} = \mathbb{R} \times \mathbb{R}$ 

## Genetic Gain - Dairy

The genetic trends in dairy bulls on the Active Bull list relative to the dairy replacements born each year are shown in figure 11. The strong rate of increase seen over the past few years has been maintained due to the continued use of genomic selection.

The net impact on the future national dairy herd is improved profitability from increased milk production (increased protein, increased fat and no increase in water), and improved fertility (shorter calving intervals) from more robust cows (greater survival).

These improved trends are a direct result of ICBF's efforts and demonstrate that ICBF is delivering, in conjunction with the cattle breeding industry, on its mission of increasing the rate of genetic gain in Irish dairy cattle.

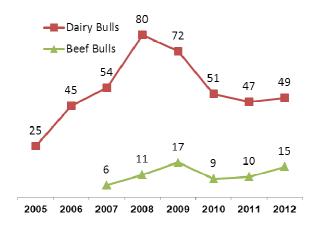


Figure 9. Bulls tested in G€N€ IR€LAND® dairy and beef Progeny test programs.

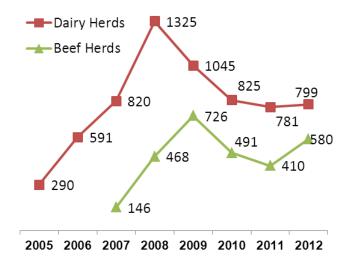


Figure 10. Herds participating in G€N€ IR€LAND® dairy and beef progeny test programs.

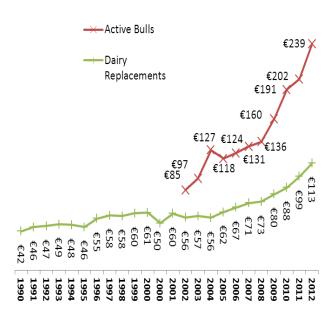


Figure 11. EBI averages by birth year for females and for bulls on active bull list in each year. Estimates are given for 2012.

## **Tully**

The role of Tully was significantly changed in 2012. Its role is now as a progeny test centre and the first 77 commercial bulls tested through the new regime were slaughtered in December of 2012.

It has proved to be a very worthwhile exercise with excellent cooperation between ICBF, Teagasc, and the meat processors to ensure that the maximum amount of data is captured from those animals.

The future role of Tully is as an integral element of  $G \in \mathbb{N} \in IR \in LAND^{\oplus}$ .

#### **Genetic Gain – Beef**

Genetic progress in the suckler herd is illustrated in figure 12. While gain is positive on the Terminal index, it is declining on the Maternal Index. The slight overall gains are slow relative to the optimal rates that are achievable from well designed and well executed beef breeding programs. Ireland faces a major challenge addressing the decline in the Maternal Index, and the on-going profitability the suckler industry is largely dependent on this. That is the focus of the revised Beef Gene Ireland Programme.

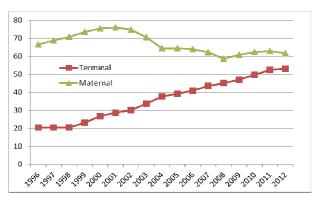


Figure 12. Genetic gain in (€) for beef cattle.

## **Beef Breeding Review**

The findings of the 2011 review of Beef Breeding, including Beef Gene Ireland resulted in series of recommendations whose implementation began in 2012. The initiatives are as follows:

- Data quality. The key elements of the index are measures of timeliness, completeness and departures from normality of the data provide by each herd. We believe this index will provide a tool for helping bull breeders and commercial suckler herds to provide the high quality data that is essential for an effective beef cattle breeding program.
- Weight recording. A National Weight Recording Service was launched in 2012, and with a network of 29 technicians established throughout the country. This puts the industry in a good position for 2013 to greatly increase the levels of on-farm weight recording taking place.
- G€N€ IR€LAND® Beef. We have developed a new focus for beef breeding by engaging with bull breeder herds to help them produce the stock bulls required by commercial producers and to supply a relatively small number per year for use through AI. The bulls used in AI will all be progeny tested and ultimately supply the sires of the next generation of stock bulls. This is a significantly different model to that previously operated. This is one of the reasons that we have moved Tully's role to that of being a progeny test for feed intake, for meat quality and potentially for disease susceptibility.
- Genomics. Genomics in beef is not as advanced as in dairy. However, working with the Beef Herdbooks, we currently have a major initiative in place to increase the number of genotypes available to the training population for the different breeds.

## **Financials**

The initial funding model for ICBF continues to serve ICBF well. It is based on having solid sources of funding from DAFM (grant and NDP), Farmers (Tag contribution), and Service income. The use of a 'Contribution Model' to ensure that services are broadly covering their costs continues to be a very useful tool in ensuring the sustainability of the ICBF finances.

#### 2012 Results

The final audited result for 2012 is a surplus of  $\in$ 129,103 which compares with a surplus of  $\in$ 124.393 for 2011 (figure 13).

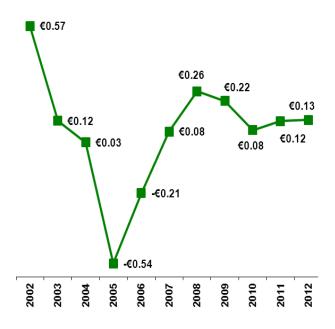


Figure 13. Financial outcome 2002 to 2012 in € million.

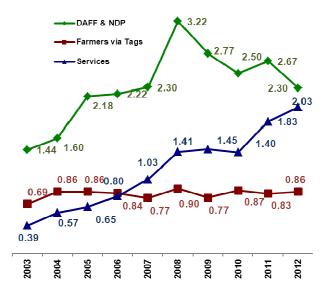


Figure 14. Income trends in € million.

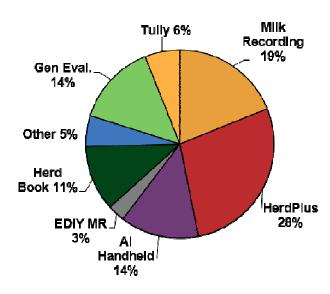


Figure 15. Breakdown of services income

In 2012 ICBF cash income (figures 14, 15) included contributions from the following sources:

- DAFM in the form of a Grant, Suckler Scheme costs, and NDP contributions to infrastructure projects. NDP made contributions towards G€N€ IR€LAND<sup>®</sup>, and projects for the development of genetic evaluations and the development of systems for collecting data and reporting information to farmers.
- Cattle farmers through the Tag Contributions and

• The cattle breeding industry and farmers through service fees. The income from this source has grown to 39% of total revenue in 2012 from 15% in 2003.

These funds cover the cost of on-going operations and the cattle breeding infrastructure projects undertaken in 2012 as outlined in the audited accounts.

#### Resources

ICBF is using a number of resources in pursuit of its mission. These include:

## **People**

In terms of the internal ICBF organisation, 2012 was a significant year, with Brian Wickham completing his term as Chief Executive of ICBF. His contribution to Irish agriculture will never be forgotten.

Of course, with Brian leaving ICBF, we had to recalibrate and restructure the organisation to meet the challenges ahead. With that in mind, a number of structural changes were made within the organisation. Dr. Andrew Cromie has become Director of Innovation and Industry Services. We have also created a 'Technical Leadership Team' that will maximise the output from the available resources at ICBF's disposal, while maintaining a lean, flat organisation structure.

ICBF is a small organisation employing a total of 35 people - 22 full time staff, and 13 contractors. During 2012, as in previous years, staff and contractors put in a magnificent effort in achieving the many goals established under ICBF's strategic plan.

## **Offices**

ICBF's main office and database computers are based at Highfield House which is a property owned by Shinagh Estates Limited (SEL) near Bandon, Co. Cork. The accommodation is rented from SEL. In 2009 these offices were renovated to provide extra and improved accommodation as required by ICBF.

## **Tully**

The Bull Performance Test Centre at Tully. Co. Kildare is leased from DAFM. These facilities are in good condition, albeit of an older design standard, and have required some modification and routine maintenance to meet ICBF's requirements.

## **Database Computers**

ICBF's database runs on computers located in Highfield House and Shinagh House. The ICBF da-

tabase is constantly undergoing development and upgrades in order to keep on top of the ever growing requirements associated with increased volumes of data, especially in the new era of genomics.

## **EDIY Calibration Laboratory**

This laboratory, located at Teagasc, Moorepark, houses specialist equipment, which is used to ensure the EDIY electronic milk meters used by the industry are performing according to specification. We are grateful for the support that Teagasc have provided in the establishment and operation of this facility.

## Communications

ICBF is involved in communicating on a wide range of subjects to a large national and international audience involved in all aspects of cattle breeding. Irish achievements in cattle breeding are being noticed internationally as the national infrastructure moves closer to the leading edge.

Our communications include:

## **Irish Cattle Breeding Statistics**

Irish Cattle Breeding Statistics were published on the ICBF website for the twelfth time in April of 2012. This publication brings together statistical information on all aspects of cattle breeding.

## **Industry Presentations**

ICBF continues to be heavily involved in presenting information to the Irish cattle breeding industry through a wide range of meetings and conferences. ICBF is typically involved in three to five meetings per week with farmers and industry staff. ICBF also participates in a number of international conferences presenting papers and playing an active role in leading the development of cattle breeding internationally.

### **Web Site**

The ICBF web site (www.icbf.com) provides a wide range of information to Irish farmers and the cattle breeding industry. A major step forward has been the routine availability of all herd reports for access by herd owners (using a sign-on and password) and designated advisors. The growth in usage is illustrated in figure 5.

The publications section of the website is a repository for copies of the many presentations made by members of the ICBF team in 2012 and previous years.

## **Weekly Update**

Every Friday ICBF provides via its website an Update covering its activities. This has become well established as a source of the latest information on a wide range of issues of interest to ICBF stakeholders.

## **Training**

ICBF is increasingly involved in providing training and support for the provision of cattle breeding field services.

In 2012 training was provided for farmers, farmertrainers and to weighing technicians in the use of handheld computers, for use in conjunction with the national weight recording service.

### **ICAR 2012 International Conference**

Our role in the international community of animal recording and animal breeding saw us hosting the ICAR & Interbull meetings in 2012.

The event was an outstanding success, with over 800 delegates attending from over 50 countries. This was a great opportunity to show case the developments which the Irish breeding industry has made over the past number of years in the areas of dairy, beef and sheep breeding.

The integrated nature of our data recording and evaluation systems gives us significant advantages, and we need to continue to exploit those.

### International

ICBF maintains a number of importance international linkages including:

- providing leadership for the development of international beef genetic evaluations through the ICAR Interbeef Working Group,
- participation in international research forums including EAAP, and
- participation in international research collaborations including the EU funded OptiMIR project.

This international network enables ICBF to keep up to date with scientific developments relevant to Irish cattle breeding.

## **Support**

ICBF wishes to acknowledge and express its appreciation for the support and co-operation received from a large number of individuals and organisations. The collaborative nature of ICBF's activities depends to a large extent on the goodwill of its membership, the wider agricultural community and cattle farmers.

This goodwill has been expressed in a number of specific ways in 2012 including: provision of sponsorship by the FBD Trust for G€N€ IR€LAND<sup>®</sup> and HerdPlus<sup>®</sup> beef and dairy.

The leadership and support provided by DAFM has been a key to the success of ICBF. DAFM has long recognised the value that can be created through the availability of a well-integrated cattle breeding database.

The financial support provided through the NDP towards the creation of an efficient cattle breeding infrastructure is now delivering benefits to farmers, to the cattle breeding industry and to the wider community. We wish to acknowledge this support and express our appreciation for the leadership and vision that DAFM provides to our industry and cattle breeding in particular.

These many and substantial acts of financial goodwill have been accompanied by a great deal of moral support which the team working for ICBF really appreciates

## **Future Prospects**

2012 has been a year where we have continued to exploit the new cattle breeding technologies for the benefit of Irish farmers.

While there have been personnel changes at ICBF, the key to ICBF's success remains the same - the application of good science, a focus on the needs of farmers, working closely with our stakeholders and a 100% commitment to delivering by a talented and dedicated team.

We are most fortunate to operate in an environment where ICBF's vision is shared by our Board, our members, DAFM, our sponsors, Teagasc, and, most importantly, Irish Farmers.

Sean Coughlan John O'Sullivan

Chief Executive Chairman









Figure 17. Sponsors of major cattle breeding initiatives in Ireland.

## Financial Statements for the Year Ended 31 December 2012

## **Society Information**

### COMMITTEE OF MANAGEMENT

Mr. J. O'Sullivan (Chairman) Mr. D. Beehan

Mr. J. Brady
Mr. G. Brickley (appointed 28 June 2012)
Mr. J. Comer
Dr. D. Corridan (resigned 28 June 2012)

Mr. M. Doran
Dr. B. Eivers
Mr. V. Gorman
Mr. K. Kiersey
Mr. K. Kinsella
Mr. J. Lynch
Mr. P. Mulvehill
Mr. M. J. O'Donovan
Mr. G. Ryan
Mr. R. Whelan

Mr. T. Wilson

SECRETARY Mr. J. Carty

Department of Agriculture, Food and the Marine

Pavilion A

Grattan Business Park

Portlaoise Co. Laois

CHIEF EXECUTIVE Mr. S. Coughlan

SOCIETY'S ADDRESS AND Highfield House REGISTERED OFFICE Shinagh

Bandon
Co. Cork

SOLICITORS P. J. O'Driscoll & Sons

Solicitors

South Main Street

Bandon Co. Cork

BANKERS AIB Bank

South Main Street

Bandon Co. Cork

Ulster Bank

77/78 South Main Street

Bandon Co. Cork

AUDITORS Ernst & Young

**Chartered Accountants** 

City Quarter Lapps Quay Cork

## STATEMENT OF COMMITTEE OF MANAGEMENT'S RESPONSIBILITIES

for the year ended 31 December 2012

The committee of management are responsible for the preparation of the financial statements in accordance with applicable Irish law and Generally Accepted Accounting Practice in Ireland including the accounting standards issued by the Accounting Standards Board and promulgated by the Institute of Chartered Accountants in Ireland.

The Industrial and Provident Societies Acts, 1893 to 1978 require the committee to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the society and of the income and expenditure of the society for that year. In preparing those financial statements, the committee is required to:

- select suitable accounting policies and then apply them consistently;
- · make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the society will continue in business.

The committee confirms that it has complied with the above requirements in preparing the financial statements. They are also responsible for safeguarding the assets of the society and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

On behalf of the Committee of Management

John O'Sullivan Michael Doran

28 March 2013

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF IRISH CATTLE BREEDING FEDERATION SOCIETY LIMITED

We have audited the financial statements of Irish Cattle Breeding Federation Society Limited for the year ended 31 December 2012 which comprise the Income and Expenditure Account, Balance Sheet, Cash Flow Statement and the related notes 1 to 17. The financial reporting framework that has been applied in their preparation is Irish law and accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

This report is made solely to the society's members, as a body, in accordance with section 13 of the Industrial and Provident Societies Act, 1893. Our audit work has been undertaken so that we might state to the society's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the society and the society's members as a body, for our audit work, for this report, or for the opinions we have formed.

## Respective responsibilities of committee of management and auditors

As explained more fully in the Committee of Management's Responsibilities Statement set out on page 3, the committee are responsible for the preparation of the financial statements giving a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with Irish law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the society's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the committee of management; and the overall presentation of the financial statements.

## **Opinion on financial statements**

In our opinion the financial statements

give a true and fair view of the state of the society's affairs as at 31 December 2012 and of its surplus for the year then ended; and

have been prepared in accordance with Generally Accepted Accounting Practice in Ireland.

As required by Section 13(2) of the Industrial and Provident Societies Act 1893 we examined the balance sheets showing the receipts and expenditure, funds and effects of the society, and verified the same with the books, deeds, documents, accounts and vouchers relating thereto, and found them to be correct, duly vouched, and in accordance with law.

Ernst & Young Chartered Accountants and Registered Auditors Cork

3 April 2013

## INCOME AND EXPENDITURE ACCOUNT

for the year ended 31 December 2012

	Note	2012 €	2011 €
INCOME – continuing operations		4,728,992	4,341,321
OPERATING EXPENSES		(4,607,984)	(4,217,044)
OPERATING SURPLUS – continuing operations		121,008	124,277
Bank interest received		8,095	116
SURPLUS ON ORDINARY ACTIVIES BEFORE TAXATION  Tax on surplus on ordinary activities	3	129,103	124,393
Tax on surplus on ordinary activities	3		
SURPLUS ON ORDINARY ACTIVITIES AFTER TAXATION		129,103	124,393

There are no recognised gains or losses in either year other than the surplus attributable to the shareholders of the society.

## On behalf of the Committee of Management

John O'Sullivan Michael Doran

28 March 2013

## **BALANCE SHEET**

at 31 December 2012

	Note	2012 €	2011 €
FIXED ASSETS Project development expenditure Tangible fixed assets	4 5	4,464,680 101,167	4,359,216 52,985
		4,565,847	4,412,201
CURRENT ASSETS Stock Debtors Cash at bank	6 7	176,600 1,179,201 1,149,271	18,570 876,700 1,107,286
		2,505,072	2,002,556
CREDITORS: amounts falling due within one year	8	(1,340,351)	(933,833)
NET CURRENT ASSETS		1,164,721	1,068,723
TOTAL ASSETS LESS CURRENT LIABILITIES		5,730,568	5,480,924
PROVISIONS FOR LIABILITIES AND CHARGES GOVERNMENT GRANTS	9 10	(114,563) (2,812,319)	(121,651) (2,684,690)
TOTAL ASSETS LESS LIABILITIES		2,803,686	2,674,583
FINANCED BY SHAREHOLDERS' FUNDS Share capital Income and expenditure account	11 12	2,027,022 776,664	2,027,022 647,561
Shareholders' funds	12	2,803,686	2,674,583

On behalf of the Committee of Management

John O'Sullivan Michael Doran

28 March 2013

## CASH FLOW STATEMENT

for the year ended 31 December 2012

	Note	2012 €	2011 €
NET CASH INFLOW FROM OPERATING ACTIVITIES	13	677,700	621,013
RETURNS ON INVESTMENT AND SERVICING OF FINANCE Deposit interest received		8,095	116
CAPITAL EXPENDITURE AND FINANCIAL INVESTMENT Project development expenditure Receipts from sale of EDIY van and meters Payments for tangible fixed assets		(1,584,062) 20,000 (79,748)	(1,724,600)
		(1,643,810)	(1,724,600)
NET CASH OUTFLOW BEFORE FINANCING		(958,015)	(1,103,471)
FINANCING Project development grants received		1,000,000	1,029,919
NET CASH INFLOW FROM FINANCING		1,000,000	1,029,919
INCREASE/(DECREASE) IN CASH	14	41,985	(73,552)

### NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2012

#### 1. ACCOUNTING POLICIES

### Accounting convention

The financial statements are prepared under the historical cost convention. The financial statements are expressed in Euro  $(\mathfrak{C})$ .

#### Fixed assets and depreciation

Fixed assets are stated at cost.

Depreciation is calculated on a straight line basis by reference to the expected useful lives as follows:

Office equipment 5 years Tully machinery 5 years Weighing Equipment 5 years

#### Project development expenditure

Project development expenditure on clearly defined projects whose commercial outcome can be assessed with reasonable certainty is capitalised. When the development of these commercial projects reaches completion the society provides services to its members in return for fee income. This expenditure is amortised over the useful lives of the projects.

### Government grants

Grants for operating expenditure:

Grants received from the Department of Agriculture, Food and the Marine to fund the operations of the society are credited to the income and expenditure account so as to match them with the expenditure to which they relate.

### Grants for project development expenditure:

Grants received towards the cost of project development expenditure are deferred and amortised over the same period in which the related project development expenditure is amortised.

#### Income recognition

Income is recognised on delivery of the service.

#### Leasing

Operating lease costs are charged to the profit and loss account as incurred, normally on a straight line basis over the lease term.

2.	STAFF COSTS	2012	2011
		€	€
	The staff costs, including costs capitalised in project devel- opment, are comprised of:		
	Wages and salaries	1,821,837	1,663,244
	Social welfare costs	184,583	172,423
		2,006,420	1,835,667

The average number of persons employed by the society in the financial year was 34 (2011: 35) and is analysed into the following categories:

	2012	2011
	No.	No.
Management	1	1
Administration	2	2
Technical	17	19
Fixed term subcontractors	14	13
	34	35

The staff numbers and the staff costs exclude fixed term subcontractors which were recharged to Sheep Database Limited (note 16) during the year.

## 3. TAXATION

Income is exempt from tax as the Society qualifies for charitable status under the provisions of sections 207, 208 and 609 of the Tax Consolidation Act, 1997.

4.	PROJECT DEVELOPMENT EXPENDITURE	€
	Cost:	
	At 1 January 2012	17,840,644
	Additions	1,584,062
	Disposals	(75,468)
	At 31 December 2012	19,349,238
	Amortisation:	
	At 1 January 2012	13,481,428
	Charge for the year	1,478,598
	Disposals	(75,468)
	At 31 December 2012	14,884,558
	Net book value:	
	At 31 December 2012	4,464,680
	At 31 December 2011	4,359,216

Project development expenditure consists of computer hardware, software consultancy, database and other project costs.

## NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2012

5.	TANGIBLE FIXED ASSETS	Office equipment	Tully machinery	Weighing Equipment	Total
	Cart	€	€	€	€
	Cost: At 1 January 2012 Additions	206,746	19,504 1,000	78,748	226,250 79,748
	At 31 December 2012	206,746	20,504	78,748	305,998
	Depreciation:				
	At 1 January 2012	158,007	15,258	-	173,265
	Charge for the year	14,555	1,261	15,750	31,566
	At 31 December 2012	172,562	16,519	15,750	204,831
	Net book value:				
	At 31 December 2012	34,184	3,985	62,998	101,167
	At 31 December 2011	48,739	4,246	-	52,985
6.	STOCKS			2012 €	2011 €
	Livestock			67,850	C
	Stock for resale			90,420	-
	Tully consumables			18,330	18,570
				176,600	18,570

The replacement cost of stocks is not considered to be materially different from the balance sheet value.

7.	DEBTORS	2012	2011
		€	€
	Trade debtors and prepayments	982,099	705,659
	Amounts due from related party (note 16)	140,173	93,752
	VAT	56,929	77,289
		1,179,201	876,700
8.	CREDITORS	2012	2011
		€	€
	Trade creditors	716,922	417,569
	Accruals and other creditors	528,695	430,290
	PAYE/PRSI	94,734	85,974
		1,340,351	933,833

### 9. PROVISION FOR LIABILITIES AND CHARGES

Provision for progeny test scheme

Trovision for progeny test sche	2009 Programme €	2010 Programme €	2011 Programme €	2012 Programme €	Total Programme €
Balance as at 1 January Provided/(paid) during the	48,025 (48,025)	37,238	36,388	-	121,651
year	(40,023)	10,000	4,000	26,937	(7,088)
At 31 December	-	47,238	40,388	26,937	114,563

## Progeny test scheme

This provision relates to an agreement in place with the AI Industry (NCBC, Dovea, Eurogene and Genus-ABS) to establish the GENE IRELAND targeted-herd progeny test scheme for both beef and dairy bulls. The provision is the estimated cost of data collection in respect of 2010, 2011 and 2012 programs.

## NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2012

## 10. GOVERNMENT GRANTS

Government grants comprise of grants received from the Department of Agriculture, Food and the Marine (DAFM).

	€
Received: At 1 January 2012 Received during year	11,106,648 1,000,000
At 31 December 2012	12,106,648
Amortisation: At 1 January 2012 Credited to the income and expenditure account in year	8,421,958 872,371
At 31 December 2012	9,294,329
Net amount:	
At 31 December 2012	2,812,319
At 31 December 2011	2,684,690

## NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2012

11.	SHARE CAPITAL	2012	2011
		€	€
	Authorised:		
	28,768 "A" ordinary shares of €12.697381 each	365,278	365,278
	28,768 "B" ordinary shares of €12.697381 each	365,278	365,278
	28,768 "C" ordinary shares of €12.697381 each	365,278	365,278
	73,696 "D" ordinary shares of €12.697381 each	935,746	935,746
		2,031,580	2,031,580
	Issued and fully paid:		
	28,768 "A" ordinary shares of €12.697381 each	365,278	365,278
	28,768 "B" ordinary shares of €12.697381 each	365,278	365,278
	28,409 "C" ordinary shares of €12.697381 each	360,720	360,720
	73,696 "D" ordinary shares of €12.697381 each	935,746	935,746
		2,027,022	2,027,022
		<del></del>	

All shares rank pari passu in all respects.

# 12. RECONCILIATION OF SHAREHOLDERS' FUNDS AND MOVEMENT ON RESERVES

	Share capital €	Income and expenditure account €	Total €
At 1 January 2011	2,027,022	523,168	2,550,190
Surplus for year	-	124,393	124,393
At 31 December 2011	2,027,022	647,561	2,674,583
Surplus for year	-	129,103	129,103
At 31 December 2012	2,027,022	776,664	2,803,686

### NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2012

13.	CASH INFLOW FROM OPERATING ACTIV	ITIES	2012 €	2011 €
	Operating surplus		121,008	124,277
	Amortisation of project development expenditure		1,478,598	1,707,627
	Project development grants amortised		(872,371)	(1,153,688)
	Depreciation of tangible fixed assets		31,566	15,616
	(Increase)/decrease in debtors		(302,501)	36,556
	Increase in stocks		(158,030)	(2,177)
	Increase/(decrease) in creditors		406,518	(51,929)
	Profit on disposal of EDIY van and meters		(20,000)	-
	Progeny test provisions in year		40,937	84,413
	Progeny test payments in year	_	(48,025)	(139,682)
	Net cash inflow from operating activities	_	677,700	621,013
14.	ANALYSIS OF CHANGES IN NET FUNDS	At 1/1/2012	Cash flows	At 31/12/2012
		€	€	€
	Cash at bank	1,107,286	41,985	1,149,271

## 15. OPERATING LEASE COMMITMENTS

At the balance sheet date the society had annual commitments of €42,500 under operating leases for land and buildings which expire within three years.

## 16. RELATED PARTY TRANSACTIONS

The operations of Sheep Database Limited are administered by Irish Cattle Breeding Federation Society Limited. Staff costs were recharged by the society to that company as set out in note 2. Other costs incurred by the society, on behalf of the company, totalling €170,000, were also recharged during the year. The amount due by the company to the society at the year end is included in debtors.

## 17. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved and authorised for issue by the committee of management on 28 March 2013.