Caring beyond the farm gate

Humane Slaughter Association

Annual Report 2011–2012
Caring beyond the farm gate

The Humane Slaughter Association (HSA), established in 1911, is an independent charity that works through scientific and technical advances, education and training towards achieving the highest worldwide standards in food animal welfare at markets, during transport and at slaughter.

To accomplish its aims the HSA provides:

• technical information and advice on all aspects of animal handling, transport and slaughter
• training in humane methods of handling and slaughter of livestock for farmers, vets, abattoir staff, police firearms officers, RSPCA Inspectors, students and others
• educational and technical publications
• independent advice to governments, other welfare organisations and the food industry
• regular visits to markets and slaughterhouses, advising on improvements where appropriate
• funding for research projects
• development and application of scientific advances into industry working practices
• grants towards improvement of animal handling facilities in markets and slaughterhouses

Examples of the HSA’s wide range of activities in these areas are outlined in the following pages.

Photo credits:
cover, turkeys p10 Jade Spence;
sheep p1, cockerel p3 & 14, cow p12 Bluemoondog Pictures;
award p4 University of Bristol;
Jessica Hopkins p9 British Poultry Council.

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The past year was a special one for the HSA as it marked its centenary with various events and activities. These included the international symposium on ‘Recent advances in the Welfare of Livestock at Slaughter’ held in Portsmouth in 2011, the publication of ‘Making a Difference: 100 years of the Humane Slaughter Association’, the launch and award of the HSA Research Training Scholarship, and the reception at the House of Lords on the evening of 16th June 2011.

These have been pursued in various ways since, including the preparation and publication (in May 2012) of the Proceedings of the Portsmouth Symposium, and following the progress of the research being undertaken by HSA Research Training Scholar, Jessica Hopkins, at the Scottish Agricultural College into humane mechanical slaughter methods for poultry.

As the HSA goes into its second century, one of the significant new features of the ‘landscape’ in which it operates, is the coming into force in January 2013 of European Regulation 1099/2009 on the protection of animals at the time of killing. This makes changes to some slaughter methods and places new responsibilities relating to animal welfare on business operators and states. The HSA has been involved in discussions about this legislation and its implementation and, in the coming year, will help in drawing attention to the new rules and advising on meeting the requirements.

One of the challenges facing the HSA, in its efforts to promote good welfare at slaughter throughout the world, is producing and publishing clear guidance on this subject in a way that can be distributed and understood widely by people in many countries. The world wide web offers a route to reach many and, in the coming year, efforts will be focused on developing ways to ‘roll out’ HSA education and training using this.

Many thanks to all those who help support the charity financially or in other ways: the success of its programme depends on this generosity.
HSA Award for significant advances in humane slaughter of farmed livestock 2012

The 2012 HSA award to recognise individuals or organisations who have made significant scientific, technical or other advances that have led to improvements in the humane slaughter of livestock was won by the Stunning and Slaughter Group at the University of Bristol Veterinary School. The members of this Group are Mr Steve Wotton, Dr Mohan Raj, Dr Mike O'Callaghan, Mr Lindsay Wilkins, Dr Toby Knowles and Dr Jeff Lines. The award was presented to the Group at the Veterinary School at Langford on Thursday 19 July 2012.

In the honour and memory of John Ace-Hopkins who won the award in 2011 and who died in November, this year's award is named: The HSA 'John Ace-Hopkins Award' for Significant Advances in Humane Slaughter.

The Stunning and Slaughter Group at Bristol University have made major contributions to the science underpinning humane livestock slaughter over many years. For example, the Group's research into controlled atmosphere methods paved the way for the commercial development of gas killing systems. Although these have advantages over electrical waterbath methods as the birds do not need to be handled or shackled, electrical systems are likely to remain in use and the Group has undertaken key research into assessing the efficacy of electrical stunning and into various welfare refinements for this method.

In addition to its research, the Group has played a major role in training and promoting good practice for welfare through the Masters degree in Meat Science and the Animal Welfare Officer training courses at Bristol, and through its contributions to FAWC and EFSA scientific reviews that have helped shape legislation.

New EU slaughter and killing regulations

The new European Regulation (Council Regulation 1099/2009) on the protection of animals at the time of killing, comes into force throughout the European Union in January 2013. The regulation requires that animals ‘shall be spared any avoidable pain, distress or suffering during their killing and related operations’. It specifies various responsibilities for business operators to ensure this. For example: Business operators shall plan in advance the killing of animals and related operations and shall carry them out in accordance with standard operating procedures.’ It also specifies that personnel must have the appropriate level of competence and that an Animal Welfare Officer is designated by business operators for each slaughterhouse. Among the Member States’ responsibilities specified are that each ‘...shall ensure that sufficient independent scientific support is available to assist the competent authorities' and that they designate a competent authority to ensure that training courses are available, for delivering certificates of competence, and for approving training programmes.

In addition to these new requirements regarding the framework for the slaughter industry, there are some changes regarding the details of permitted killing methods. For example, (i) in slaughter, both carotid arteries must be cut (the present law permits severing only one) (ii) the new regulation limits the numbers of birds that a person may kill by manual cervical dislocation (breaking the neck) to 70 per day (previously there was no limit) and permits this method only for birds of up to 3kg bodyweight, and (iii) killing by blunt trauma to the head will be permitted only for animals of less than 5kg. The HSA has been involved in discussions about various aspects including the development of training programmes. The UK's Welfare of Animals (Slaughter or Killing) Regulations are to be updated to implement the new provisions of the European Regulation and the HSA aims then to provide information at the HSA website about the changes.
Education & Training

The HSA’s comprehensive range of training services in livestock handling and welfare, built on its long experience and expertise, is a key element in establishing and maintaining high standards of welfare. Below are some examples of the way the HSA helps promote best practice.

During the year, HSA training activities have included

Provision of:

- eleven emergency slaughter courses to pig producers arranged with the British Pig Executive and the East of England Pig Training Group;
- four courses on animal welfare at slaughter for meat industry staff;
- two specialist courses on humane destruction of injured horses to Deck Officers working for Irish Ferries out of Holyhead;
- a bespoke course on the safe operation and maintenance of captive-bolt equipment for the humane killing of sheep to a research establishment in the Midlands;
- a bespoke course on unloading, penning and emergency slaughter of sheep.

Presentations to:

- animal science students and trainee livestock auctioneers at Harper Adams;
- veterinary undergraduates at Cambridge University;
- the Norfolk and Suffolk Poultry Association in Diss on the implications of the new slaughter regulation;
- the Sussex Smallholder Group near East Grinstead on on-farm slaughter of livestock for consumption;
- students of the MSc Applied Animal Behaviour and Animal Welfare course at the University of Edinburgh, on animal welfare at the time of killing, covering birds, mammals, fish and crustacea;
- third year veterinary medicine students at Liverpool University on the welfare of farmed fish at harvest;
- officials from the Croatian government on culling poultry in disease control emergencies;
- British government veterinary staff on killing poultry on-farm for human consumption;
- staff at a research facility on killing sick or injured poultry on-farm and killing poultry in a slaughterhouse.

Also this year, the HSA provided funding for a project being run by Mr Peter Kettlewell to produce a training DVD for the Fire and Rescue Services (FRS). This will give insight and instruction into the workings of modern livestock containers in order to facilitate safer, quicker and easier access to livestock in need of urgent attention following road traffic accidents. At the time of writing, we understand that most of the filming has been completed and the project is on target for completion in the autumn.

Through the years: HSA training courses for smallholders who slaughter poultry on-farm

In December 1995 the HSA offered its first poultry slaughter service to shoppers at Melton Mowbray’s Christmas Poultry Sales. When customers bought live turkeys at the market, the HSA offered to humanely stun and slaughter the birds free-of-charge. This reduced the risk of purchasers further transporting live birds and/or killing them without suitable tools or training. In the following three years the HSA extended the service to Henley-in-Arden and Leek markets and approximately 200 birds were humanely killed at these events. The popularity of the service increased such that by the year 2000 the HSA slaughtered in excess of 400 birds in total. Whilst at these markets, HSA staff also trained some people so that they could apply for slaughter licences and ensure good welfare practice on their farms throughout the year.

Since then there has been growing interest in small-scale poultry rearing and in on-farm killing for sale of meat ‘at the farm gate’. In response the HSA began to develop courses to provide training. In November 2006, the HSA ran its first practical training course for smallholders, providing the opportunity for participants to be assessed for a slaughter licence to enable them to slaughter birds on-farm for sale. In June 2007, the first of what have become regular training events was held at Plumpton College, where HSA Technical Officer Jade Spence received her poultry slaughter licence. Since 2008, the HSA has run at least three such courses each year and has trained 197 smallholders at nine different venues. The captive-bolt stunning component of the course has been increased and it is recommended, in preference to other stunning methods, for all species of poultry for routine small-scale slaughter as well as for culling birds in emergencies.

These courses have been found to be very valuable by participants:

“...the course is very relevant to all of us keeping poultry and trying to uphold good husbandry standards...We would not hesitate to recommend this course and your society to our members.”

“Tutor Jade was a delight. She was totally professional, extremely knowledgeable, very helpful, reassuring and encouraging on what is a very daunting course for such a mixture of experienced poultry keepers.”

and, as Christmas 2012 approaches, the HSA expects to receive more bookings.
In May 2012 students and staff from Iowa State University visited the HSA, also to hear about the work of our sister charity, UFAW. Technical Director Charlie Mason described the work of the HSA to the students and Jade Spence discussed the welfare of birds, mammals and fish when they are killed for human consumption and provided an update on animal welfare during transport and in livestock markets.
Dorothy Sidley Memorial Scholars

These Memorial Scholarships, named after the late Dorothy Sidley MBE who was General Secretary of the HSA for many years, are awarded to students to enable them to develop their knowledge and interests within the HSA’s scope by undertaking research projects.

Congratulations to the winners of the 2012 Dorothy Sidley Memorial Scholarships:

• Helen Braid, a Veterinary Medicine student at the Royal Veterinary College (RVC). For her fourth year project she is visiting a selection of UK sheep abattoirs and recording electric current profiles during head-only application of electrical stunning. The data will be used to assess the performance of electrical stunning under working conditions and identify if any improvements can be made either to the equipment or in the technique, and further raise standards of sheep welfare. Helen will work under the supervision of Dr Troy Gibson.

• Josephine Hart, also a student of Veterinary Medicine at the RVC, investigated the efficiency of manual neck-cutting methods in small to medium scale turkey processing plants, under the supervision of Professor Neville Gregory and Dr Troy Gibson. The HSA looks forward to receiving her final report.

• Kristi Kerner is studying for a PhD through her investigation of animal welfare and meat quality at the Estonian University of Life Sciences, under the supervision of Dr Imbi Veermäe and Dr David Arney. In the HSA-funded component of her work, Kristi plans to review and compare the welfare of pigs in the UK with pigs in Estonia, during pre-slaughter processes and the slaughtering techniques. She plans to use the information gathered to advise the Estonian industry how to improve practices for welfare at slaughter.

• Tanya Stafford-Jones of the University of Edinburgh will review the welfare of pigs during on-farm euthanasia and plans to produce guidance for pig keepers about appropriate killing methods. Tanya is studying for a veterinary medicine and surgery degree and is supervised by Professor Vince Molony.

Eduardo Santurtun Oliveros of the University of Queensland who was awarded a Dorothy Sidley Memorial Scholarship in 2011 for research into the effects on sheep behaviour and welfare, of motions that simulate roll, heave and pitch movement during sea transport, is due to complete the HSA-funded part of his PhD study this year, and the HSA looks forward to receiving his report.

A bumper year!

The HSA is pleased that more of these Dorothy Sidley Memorial Scholarships have been awarded this year than ever before and that, since opening these up to students at universities outside the UK with which we have a UFAW/HSA LINK (see www.ufaw.org.uk/links-news-events.php), we have received increasing numbers of applications from overseas.

Since the scheme began in 1986, 46 people have been awarded scholarships.

The HSA encourages Scholars to try to publish the results of their research projects. Congratulations to 2010 Scholar Marin Anastasov for his 2012 paper published in Animal Welfare on behavioural reflexes in electrically stunned broiler chickens.

The Scholarships can provide a step towards a career in tackling animal welfare problems through science. Past HSA Dorothy Sidley scholars include:

Daniel Mills (Professor of Veterinary Behavioural Medicine, University of Lincoln);
Marc Bracke (animal welfare scientist at Wageningen UR Livestock Research, Netherlands);
Russell Parker (Lecturer in Equine Surgery, University of Edinburgh);
Jade Spence (HSA Technical Officer and organiser of the Dorothy Sidley Memorial Scholarships since 2007);
Georgina Limon-Vega (Research Associate at the Royal Veterinary College);
Helen Fielding (veterinarian in farm animal practice).
Dorothy Sidley Memorial Scholars research a wide range of topics. In 2008, Georgina Limon-Vega investigated the welfare of llamas and sheep before and during slaughter in Bolivia.

Scholars are invited to present their work at an annual joint meeting with UFAW Animal Welfare Student Scholars. In 2010 Bernard Mwakifuna spoke about his investigation of aspects of waterbath stunning of poultry.

Scholars brave the wintry conditions for the annual meeting held in Glasgow in 2010.

2009 Dorothy Sidley Memorial Scholars (left to right): Jacqueline Pickering, Helen Fielding and Asif Muhammad Rao.
Research

A collaborative project with the Royal Veterinary College, looking at the suitability of captive-bolt instruments for killing sheep during disease control operations was completed in March 2012 and the results are being prepared for publication.

The HSA is to collaborate with the University of Bristol on a Defra-funded research project, to start later in the year, into the suitability of the use of mechanical, non-penetrative devices for humane killing of lambs, kids and piglets of up to five kilograms in weight. The drivers for this research included the new legislation which lists ‘percussive blow to the head’ as a legitimate killing method for these animals. There has also been recent media concern about on-farm killing methods for injured and diseased piglets. This technology has proved to be very effective for the humane killing of poultry and the research will explore whether it can also be used for the humane killing of these animals.

During the year, Jade Spence completed data collection on the efficacy of manual neck cutting procedures in small- and medium-scale chicken and turkey slaughterhouses, in collaboration with a Defra-funded study at the Royal Veterinary College towards development of a sustainable alternative to waterbath stunning in small-scale abattoirs. She also advised on a literature review and on data collection for a Defra-funded research project awarded to the Scottish Agricultural College. The project is investigating the costs and benefits of novel methods for culling poultry on-farm and is particularly concerned with identifying which methods are reliably humane as well as practical.

HSA Centenary PhD Research Training Scholarship

Jessica Hopkins has almost completed the first year of her HSA-funded PhD study at the Scottish Agricultural College. She is investigating mechanical methods for humanely killing chickens, the development of which may be of use to large- and small-scale producers, particularly with the introduction in 2013 of limitations to the use of cervical dislocation as a method of killing. On 6 December 2011 Jess received the British Poultry Council Poultry Industry Research Scholarship Award at the House of Commons. The BPC Annual Award celebrates promising newcomers to the sector and in this case supports Jess’s efforts in her PhD.

At the same event HSA Vice President Professor Peter Biggs CBE FRS was awarded the BPC Poultry Industry Special Merit Award. Jade Spence attended the ceremony to represent the HSA.

HSA workshop on automated electrical stunning systems for poultry

On 27 October 2011 the HSA organised a workshop in London to discuss some of the welfare issues with electrical waterbath stunning of poultry, including how to improve the shackle line, which electric parameters are most suitable for welfare, and refinements to the design of automated electrical stunning systems for the benefit of poultry. No large-scale electrical systems are currently available which offer industry an alternative to inverting and shackling conscious birds. This is believed to be a major welfare drawback of current systems and one that needs to be solved if electrical methods are to be developed to compete against the welfare advantages of gas methods.

Scientific workshop on head-only electrical stunning of turkeys

The HSA organised a small scientific workshop at the British Veterinary Association in London on 27 April 2012 to discuss the small-scale stunning of turkeys. Hand-held electrical stunning equipment with an output voltage of 110 volts is often used for head-only stunning of turkeys. The purpose of this meeting was to review this method in the light of recent scientific findings. Although some further research would be helpful, it was concluded that, providing a current of 400mA is achieved, this method is likely to stun effectively. However, percussion stunning (using the captive-bolt method specifically designed for poultry) is a generally preferable method as it is more consistently reliable.
New qualification structure for slaughter industry staff responsible for animals

In 2011 the HSA was invited to be a member of a steering group co-ordinated by Improve Ltd, the company tasked with implementing the new qualification structure for certificates of competence to kill animals, as required by EC Regulation 1099/2009. The HSA provided Improve with comments on the proposed Units of Assessment for the birds and mammals training ‘pathways’, and also contributed to discussion about the assessment of trainees for competence in handling and killing of livestock.

Exhibitions 2012

The HSA had a stand at the British Pig and Poultry Fair, which took place at the National Agricultural Centre, Stoneleigh on 15–16 May 2012, and at the NSA Sheep Event at the Three Counties Showground, Malvern on 4 July. On both occasions there was a steady stream of visitors including farmers, processors, vets, scientists, smallholders, breeders, and interested members of the public. Many enquiries this year concerned the implications of the new slaughter regulations that will come into force in January 2013, especially with regard to the on-farm humane killing of pigs (in particular neonates), and the slaughter of sheep without stunning. These events provide opportunities to introduce the HSA and give advice on all aspects of humane slaughter to people previously unfamiliar with the organisation.

Animal welfare assessments and advice

During the year the HSA has visited a number of slaughterhouses that process red meat, chicken, turkey, duck, goose and guinea fowl, and also some hatcheries, to provide advice about animal welfare. For example, Jade Spence was invited to a slaughterhouse that is considering whether to replace its electrical waterbath with a gas killing system. She provided advice on the potential advantages and disadvantages for animal welfare and meat quality of different gas mixtures.

Staff publications

Staff publications during the year included:


Jade Spence also wrote an article for Poultry World magazine in April 2012 highlighting which killing methods will be permitted from January 2013 (by the new EC Regulation 1099/2009 on the protection of animals at the time of killing) and the implications for producers of waterfowl meat. She also wrote a summary piece on catching and handling of ducks and geese, which was based on the HSA workshop held in June 2011.
Administration & Finance

General Meeting 2011

The General Meeting was held at the Old School, Brewhouse Hill, Wheathampstead. As in previous years this was held in conjunction with the AGM of the Universities Federation for Animal Welfare (UFAW). The members of UFAW Council are Trustees of the HSA. Joint meetings are held to save time and money.

The notice convening the meeting had been sent to all subscribers and was taken as read. The meeting agreed the Minutes of the General Meeting of 2010 and resolved to receive the Accounts and Auditor’s Report for the year ended 31 March 2011. There were no questions on the Report of the year’s work and the meeting resolved that the Report and Accounts be received.

It was resolved that Anthony Joseph & Co, Registered Auditors, be appointed as auditors to HSA.

Dr J Anderson and Mr A Sains stood down from the board of trustees. There was one new candidate for election and in accordance with UFAW's Articles of Association Ms Corrie McCann was elected. Professor A Nolan was re-elected.

Notice of General Meeting 2012

The General Meeting of the HSA will be held at 12.30pm on Tuesday 2 October 2012, at The Old School, Wheathampstead, Hertfordshire (HSA’s office premises). The formal notice and agenda have been sent to all members and are available from the Secretary at the registered office.

Finance and Accounts

The summarised accounts set out overleaf have been extracted from the full accounts and have been prepared in accordance with the Charities Act 2011, which were approved by the Trustees and signed on its behalf on 16 July 2012.

The full accounts have been audited and the auditors' opinion was without qualification. The accounts will be filed with the Charity Commission after the general meeting on 2 October 2012. Full accounts, and the audit report can be obtained from the HSA Secretary, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.
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The summarised accounts were approved by the Trustees and signed on their behalf on 16 July 2012.

M Radford OBE LLB
Chairman

Michael T Bird FCA
Hon Treasurer

The summarised accounts set out above have been extracted from the full accounts and have been prepared in accordance with the Charities Act 2011. The full accounts have been audited and the auditors’ opinion was without qualification. The accounts will be filed with the Charity Commission after the General Meeting on 2 October 2012. Full accounts and the audit report can be obtained from the Secretary, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.

Independent Auditors’ Statement to the Trustees of the HSA & CJA

We have examined the summarised financial statements that comprise the summary statement of financial activities and summary balance sheet.

Respective Responsibilities of the Trustees and Auditors

You are responsible as the Trustees for the preparation of the summarised financial statements. We have agreed to report to you our opinion on the summarised financial statements’ consistency with the financial statements, on which we reported to you on 16 July 2012.

Basis of Opinion

We have carried out the procedures we consider necessary to ascertain whether the summarised financial statements are consistent with the full financial statements from which they have been prepared.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements for the year ended 31 March 2012.


SUMMARY OF FINANCIAL ACTIVITY YEAR ENDED 31 MARCH 2012

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<th>2011/12</th>
<th>2010/11</th>
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<td>Charitable activities</td>
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<td>Other resources expended</td>
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<td>Total resources used</td>
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Net incoming resources in year £151,648 £84,709

Other recognised gains and losses:

Net realised gain on investments £79,016 £108,441
Unrealised (loss)/gain on investments (37,135) 140,180

Net movement in funds £193,529 £333,330

Balance brought forward £3,374,725 £3,041,395

Balance carried forward £3,568,254 £3,374,725

BALANCE SHEET AS AT 31 MARCH 2012

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<tr>
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<th>2011/12</th>
<th>2010/11</th>
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<tr>
<td>Fixed assets:</td>
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<tr>
<td>Tangible fixed assets</td>
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<td>Current assets:</td>
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<td>Debtors</td>
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<td>Cash at bank &amp; in hand</td>
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<td>Total current assets</td>
<td>£209,340</td>
<td>£458,529</td>
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Net assets £3,568,254 £3,374,725

Funds:

Unrestricted £3,568,254 £3,374,725

Other recognised gains and losses:

Net realised gain on investments £79,016 £108,441
Unrealised (loss)/gain on investments (37,135) 140,180

Balance carried forward £3,568,254 £3,374,725
The Humane Slaughter Association
and Council of Justice to Animals
(Registered in England Charity No. 209563)

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Office Staff: Samantha Griffin

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