Caring beyond the farm gate

Humane Slaughter Association
Annual Report 2009–2010
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.

Thanks to Bluemoondog Pictures for the use of photos: cattle, cover, p7/8; poultry, p1, 6; sheep, p3; pigs, p10; horse, p14.

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I am very pleased to report another successful year for the HSA with continuing progress in key areas of work, notably, as you will see in the following pages, in education and training activities and in research and development.

The importance of good training in livestock handling and welfare cannot be overstated. HSA training services, often in collaboration with other organisations that enhances the reach and effectiveness of the training, have been successfully delivered to a wide range of audiences and organisations. Opportunities for increasing this area of work overseas are being investigated.

Two collaborative research and development projects of much importance to the welfare of poultry at slaughter were completed during the year. The HSA is funding a further project investigating commercial application of a new poultry shackling method. Such commercially viable developments are as crucial to welfare advances now as they have been throughout the HSA’s history.

We will be celebrating 100 years of this history in 2011 and preparations are well underway for activities to mark this milestone – including a major international symposium with some exciting speakers already on board, the awarding of a Research Training Scholarship to support a three-year programme of research leading to a degree at doctorate level, and a ‘chronicle’ of the work and achievements of the HSA.

I thank most sincerely the members, supporters and staff of the HSA and the many other individuals and organisations in the UK and around the world without whom the HSA’s achievements – past, present and future – would not be possible.
Next year, 2011, is the charity's Centenary. The Council of Justice for Animals, as the organisation was then called, was founded at a meeting held on 17 January 1911. The Duchess of Portland was elected President, Dr Charles Rutland, the Chairman, and premises were rented in Old Burlington Street, London.

The objectives of the Council were to promote more humane methods for the slaughter of food animals and to provide for the painless destruction of cats and dogs when necessary (several years later the charity came to focus exclusively on farmed food animals), and to improve the welfare of food animals in livestock markets and transport facilities.

To mark the Centenary, the HSA is organising various special events and activities. There will be an international symposium (see details opposite), we hope to publish a brief history of the HSA to record the highlights of the charity’s activities during its 100 years, and a Research Scholarship will be offered to enable a suitable candidate to undertake a PhD in an aspect of animal welfare science within the HSA's focus of interests.
Research Training Scholarship

As part of the activities to mark the HSA's Centenary and to promote further advances in the field, the charity will be offering a Research Training Scholarship to a successful applicant to support PhD research in an aspect of animal welfare science within the HSA's objectives (welfare of livestock during transport, marketing and slaughter).

This Scholarship will be advertised in September 2010 and will be open to students registered at UK universities or outside the UK where the university has a UFAW/HSA ‘LINK’ person (see www.ufaw.org.uk(links-news-events.php). Details of the scheme and how to apply will be posted on the HSA website in October. There will be a two-stage application process: following the assessment of initial concept note applications, a shortlist of applicants will be invited to submit full applications. We hope to announce the winner in March 2011.

International Symposium on ‘Recent Advances in the Welfare of Livestock at Slaughter’ 2011

As part of its Centenary celebrations, the HSA is organising an international symposium on ‘Recent Advances in the Welfare of Livestock at Slaughter’, to be held 30 June and 1 July 2011, at the Historic Dockyards, Portsmouth. During the year work began on planning and preparations for this event. The aim of the Symposium is to present and discuss recent scientific and technical advances in the humane slaughter of farmed animals (mammals, birds and fish); the uptake and application of these advances around the world and their relevance to current farming methods; to provide a forum for sharing information and experiences; and to help identify future priorities and consider how these may be tackled.

Speakers will include:

Jia Zili, Director of the Beijing Chaoyang Anhua Animal Product Safety Research Institute, China – The humane slaughter programme in China

Dr Temple Grandin, Colorado State University, USA – Auditing animal welfare and making practical improvements

Dr Craig Johnson, Massey University, New Zealand – Pain perception at slaughter

Georgina Limon-Vega, Royal Veterinary College, UK – Current methods of livestock slaughter in Bolivia

Dr Andrea Gavinelli, Head of Animal Welfare Unit of the European Commission

We would like to hear from persons who would be interested in contributing oral presentations or posters in the field of the humane slaughter of livestock and from others who would like to attend this symposium.

Further information and details of how to submit abstracts for oral presentations or posters are available at the HSA website (www.hsa.org.uk).
Improving the poultry shackling system

In 2009 a research project investigating and developing modified shackle lines for use in poultry processing was completed. The project was undertaken by Silsoe Livestock Systems Ltd, Paul Berry Technical Ltd, Food Animal Initiative, the University of Oxford, Dave O’Neill Associates and the HSA, and funded by Defra.

A shackling method was developed that avoided the painful compression of birds’ legs associated with conventional shackles without compromising the stunning current passing through the birds. An associated breast support conveyor avoided inverting birds and also reduced pre-stun shocks and wing damage.

Following on from this research and development work, the HSA and the Douglas Bomford Trust have funded a new project in 2010 on ‘Design and testing of compliant shackles for a broiler processing line’. This project, being undertaken by Dr Jeff Lines of Silsoe Livestock Systems Ltd, is a pilot to explore the practical application of the compliant (non-compression) shackles in a commercial setting.

Electrical waterbath stunning of poultry

In late 2009 an 18-month project investigating a novel approach to electrical waterbath stunning of poultry, undertaken under Defra’s Sustainable Livestock ‘LINK’ programme, was completed.

Silsoe Livestock Systems Ltd, the University of Bristol, Cargill Meats and the HSA collaborated to develop a new technique to address the potential conflict between an electric current sufficient to induce immediate and sustained insensibility in all birds, and avoidance of carcase damage. In other words, to prevent the risk of compromising stunning effectiveness when adopting electrical parameters designed to avoid carcase damage.

The new technique involves the use of two currents – one across the head to cause immediate insensibility and a smaller one through the body to suppress involuntary wing flapping. Using this method, carcases were found to be of equal or higher quality to those produced with electrical parameters commonly used by industry in standard waterbaths (that use only one current through the whole bird). The novel method provides a humane stun and a good quality carcase.

The project was funded by Defra and the Scottish Government under the Sustainable Livestock Production LINK Programme whose Management Committee considered it “...an outstanding project”, awarding a score of 9 out of 10 for scientific content and 10 out of 10 for relevance to the industry.

Further studies will investigate how best to implement this approach in a commercial setting.

Association of Meat Inspectors International Seminar

HSA Technical Officer Jade Spence gave a presentation on ‘On-farm slaughter of poultry for disease control’ at the Association of Meat Inspectors (AMI) International Seminar in September 2009. Jade explained the procedures that are currently permitted by the Welfare of Animals (Slaughter or Killing) Regulations 1995 (WASK) as amended, and which culling methods are appropriate depending on the location, the disease, the animal accommodation and the number of birds to be culled.

Also discussed were potential new slaughter methods that are yet to be approved under WASK, including the use of foam, and in particular the recent scientific research carried out by Livetec, the University of Glasgow and Wageningen University (The Netherlands) which examined the use of gas-filled foam. The research teams used nitrogen which is better for poultry welfare than simple air-filled foam (as used in the USA) or whole-house gassing (without foam) using carbon dioxide, which can currently be used under UK law.

As guest speaker at the AMI Midlands Divisional Meeting in March 2010, Jade updated the members on the recent work of the HSA. Jacqueline Pickering, trainee slaughterperson and Meat Hygiene Service employee, was also at the meeting and spoke about her project undertaken as a Dorothy Sidley Memorial Scholar in 2009.

The HSA is regularly invited to events of the AMI, an organisation which provides slaughterhouses with welfare advice as well as meat hygiene controls. The HSA thanks AMI for their kind financial donation.
HSA visits

The HSA is often asked to visit processing plants and other operations to provide an assessment of systems used and methods of operation. For example, recently HSA staff have visited two fish farms in the UK to provide the operators with assessments of their electrical stunning machines for rainbow trout.

Two UK poultry farms were also visited recently to assess catching of chickens for transport to slaughter, including with an automated catching machine. HSA staff have also visited a poultry farm and poultry processing plant in northern Spain and provided advice to the company on its catching operation and its stunning and slaughter procedures. Company managers were advised on how their systems will be affected by the new European legislation for animal welfare at killing, which is due to take effect from 2013. Staff have also visited a Scottish poultry processing plant and an English livestock market.
Education & Training

Dorothy Sidley Memorial Scholars

The HSA awarded scholarships in 2010 to two students at the University of Bristol for projects on the slaughter of poultry. Marin Anastasov and Bernard Mwakifuna are studying for their MSc Meat Science and Technology degrees and both are supervised by Steve Wotton.

Marin is assessing the incidence of post-stun behavioural reflexes in electrically stunned broiler chickens. He will look for any correlations between these behaviours and the applied electrical waterbath parameters. The behaviours appear to vary with different electrical parameters, and this project will hopefully clarify which behaviours are indicative of an effective stun. This information can then be applied in industry and used by slaughterhouse employees as part of their routine checks on animal welfare.

Bernard is investigating the variations in bird electrical impedance due to depth of immersion, bird size or sex in a constant-voltage, electrical waterbath stunner – variations which may lead to ineffective stunning and/or compromised carcase quality. We hope this work will encourage the development of constant-current waterbath systems and help persuade the European Parliament and Council that constant-current stunners are preferable to constant-voltage stunners. Efforts will be made to see this reflected in future amendments to the European legislation on the protection of animals at the time of killing.

Forthcoming Annual Animal Science Conference
University of Glasgow, 8 December

This year the annual scholars meeting (where the students will present their findings) will take place at Glasgow’s Faculty of Veterinary Medicine. The conferences are held in conjunction with UFAW’s Animal Welfare Student Scholarships. HSA members and supporters and others are welcome to attend. Lunch and refreshments will be provided. We would like to thank Dr Dorothy McRae for her arrangements for this meeting.

Anyone wishing to attend or seek further information should contact Stephen Wickens, UFAW/HSA ‘LINK’ Officer (wickens@ufaw.org.uk).
Scholars Meeting, November 2010

A meeting (at which those scholars present at the University of Medicine. These free with sister charity scholars, and we invite others interested to attend. We Keegan, Glasgow’s very helpful in making.

Looking further details.

UFAW Development
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.

HSA teams up with MVP Training

The HSA visited one of the UK’s leading farmers and processors of ducks to provide training for culling sick and injured birds on-farm. The course was organised by MVP Training, a subsidiary of Minster Veterinary Practice in Yorkshire, and part-funded by the Rural Development Programme for England (RDPE) Landskills scheme. The course was attended by managers and stockmen from both breeder and grower farms and the company veterinarian also observed the training. The HSA provided theory and practical training in the use of culling methods, including mechanical percussive devices designed for the humane on-farm culling of poultry.

Courses for slaughterhouse personnel

In collaboration with FCCA, in the autumn of 2009 the HSA provided training to a fully integrated poultry processor in Thailand, including welfare in the hatchery, on-farm and at slaughter. A UK turkey processor also received training at a two-day course held at Easton College, Norwich in partnership with Stephen Lister of Crowshill Veterinary Services.

Training in animal handling in the lairage has also been provided for a major retailer at two of its red meat processing sites, and in humane handling and slaughter skills for a pig processor.

Poultry welfare for smallholders

Three poultry welfare courses were held for smallholders during autumn 2009; at the Plumpton College Netherfield Centre for Sustainable Food and Farming, East Sussex; at Sparsholt College, Hampshire; and at Kingston Maurward College, Dorset. Two further courses were held at Plumpton College, a regular venue for the HSA, during 2010. The courses involved theory and practical instruction in the humane culling of poultry on-farm, attendees including, in some cases, college staff seeking poultry slaughter licences.

Training for fish farmers

In September 2009 a one-day training course was delivered by HSA staff, in collaboration with Food Chain Consulting and Auditing (FCCA), to a salmon producer group in Norway. The course incorporated assessment of the company’s harvesting process from food withdrawal and ‘crowding’ through to slaughter.

The HSA and FCCA held a three-day training course in central Scotland in April 2010 for rainbow trout farmers. The delegates came from farms in England, Scotland and Northern Ireland and the training was requested by Dawnfresh Seafoods, a Scottish processing company. The training was partly theory and discussion and partly practical on-farm. This format enabled the HSA to communicate and then demonstrate to the farmers which welfare indicators they needed to look for and how best to ensure fish welfare at harvest. Almost 30 delegates attended the course and the HSA received very positive feedback.

Firearms training

The HSA continues to provide firearms and captive-bolt training for veterinary undergraduates at the University of Cambridge, RSPCA staff, police officers, veterinary surgeons and others.

Following on from a captive-bolt course for pig farm staff, organised by the Eastern Training Alliance and given by the HSA in July 2009, three more courses have now been delivered to East Anglian pig farmers, in addition to two courses for the British Pig Executive (BPEX) producer-group members in the south of England.

In early May 2010 the HSA led the eighth foundation firearms course for Animal Health veterinary and support staff. This was held at the Gloucestershire Constabulary Firearms Training School and 12 trainees from Animal Health Offices across the UK were joined by the HSA’s new Technical Officer, Heather Barker, who attended the course as part of her induction.
Animal welfare in markets

As part of the HSA’s plans to provide animal welfare information in easily-understandable ways, work has commenced on a series of laminated posters for display at appropriate points in livestock markets. The posters will contain information, in words and pictures, highlighting important aspects of animal behaviour and how they relate to effective and considerate handling within the market environment.

The current plan is to produce three posters relating to the movement of livestock at loading/unloading, along raceways and through the sale ring. The HSA is in liaison with the Livestock Auctioneers’ Association (LAA) and will consult with that body on the content of the posters before trialling them. If they prove successful, efforts will be made to have them displayed in all the remaining livestock markets in the UK.

Exhibitions

The HSA had a very successful exhibition at the Pig & Poultry Fair at Stoneleigh Park in May 2010, perhaps one of the best Pig & Poultry Fairs for many years. There was a good deal of interest in HSA training services and in HSA publications, and from many smallholders seeking advice.

The HSA also exhibited at the NSA Sheep Event in August 2010 and will be at the AMI Euroseminar in September 2010.

HSA Technical Officers
Heather Barker (l), Jade Spence (r), and Technical Director Charles Mason at the Pig & Poultry Fair
In March 2010 the HSA welcomed a new Technical Officer, Heather Barker, to the staff. Having grown up in the countryside of Herefordshire, Heather has always been involved in agriculture and is particularly interested in the health and welfare of farm animals. She has a BSc in Agriculture with Animal Science from Harper Adams University College and has worked on numerous farms (mainly dairy) in the UK, New Zealand and Australia. Before joining the HSA, Heather worked as an Animal Health Officer for Animal Health, mainly covering East Yorkshire.

New European Regulation on welfare at slaughter

During the year, the European Commission published its new Regulation on the welfare of livestock at slaughter (Council Regulation EC No 1099/2009 on the protection of animals at the time of killing. Official Journal of the European Union L303, 1-30; 18th November 2009). This will apply from January 2013 and Defra is currently planning its implementation in the UK.

The Regulation covers some aspects that were not addressed in the old Directive. For example, it requires that member states ensure that sufficient independent scientific support is available to assist the competent authorities – by providing, among other things:

(a) scientific and technical expertise relating to the approval of slaughterhouses... and the development of new stunning methods; (b) scientific opinions on the instructions provided by manufacturers on the use and maintenance of restraining and stunning equipment, (c) scientific opinions on guides to good practice developed within its territory...'

So there is more flexibility built into the new Regulation than there was in the old Directive. This has some advantages but much will depend upon independent scientific and technical advice and the HSA will follow developments in how this is to be achieved across Europe with interest.

Students from the United States visit the HSA

In June 2010 the HSA hosted a visit by students of an Animal Science degree program and PhD students from Iowa State University. They were accompanied by Dr Anna Butters-Johnson, Professor Lee Kilmer and by Sherrie Niekamp of The National Pork Board. The visit was part of a three-week tour of UK farm animal welfare organisations, retailers and research scientists.

A presentation was made on the objectives of the HSA and how the charity works to achieve improvements in livestock welfare, together with an overview of the UK slaughter industry and examples of the HSA’s achievements over recent years. With no prior knowledge of the HSA, the students found this of great interest and particularly appreciated the HSA range of publications and training videos, the latter apparently having no equivalent in the USA. We wish the students well in their future careers which hopefully will include welfare during transport, marketing and slaughter.

Iowa State University has a UFAW/HSA University ‘LINK’ person; if you would like to know more about the University ‘LINK’ scheme or are interested in becoming a ‘LINK’ person at your university or college, please see www.ufaw.org.uk/links-news-events.php or contact the HSA.

Overseas training opportunities

Following two successful training courses in late 2009 in collaboration with Food Chain Consulting and Auditing (FCCA) – one covering humane harvesting for a salmon producer group in Norway, and one in Thailand covering welfare in the hatchery, on-farm and at slaughter for an integrated poultry producer – the HSA’s Technical Director, Charles Mason, attended the Commonwealth Agricultural Conference in Edinburgh in June 2010. Organized by the Royal Agricultural Society of the Commonwealth (RASC), this is a biennial event, traditionally taking place alternately in the northern and southern hemispheres. The 2008 conference was in New Zealand and the 2012 conference is currently being planned for Zambia. With the prospect of global food shortages and environmental issues to the fore, the current emphasis is very much on the developing countries within the Commonwealth – it is said that Zambia, with its climate and fertile soils, could become the bread basket of Africa. During the conference contacts were made with, and HSA materials distributed to, agricultural and livestock organisations from Botswana, Kenya, Malawi and Zambia. It is hoped that training opportunities will arise from this. The Technical Director is visiting Zambia in late August 2010, during which time he hopes to visit two abattoirs processing pigs and cattle, and spread the word a little wider.
Administration & Finance

General Meeting 2009

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 2008 and resolved to receive the Accounts and Auditor’s Report for the year ended 31 March 2009. 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.

There were three new candidates for election and in accordance with UFAW’s Articles of Association, Ms B Cooper, Dr J Bradshaw and Professor N Gregory were elected.

Notice of General Meeting 2010

The General Meeting of the HSA will be held at 2.00pm on Wednesday, 13 October 2010, 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 section 43 of the Charities Act 1993, which were approved by the Trustees and signed on its behalf on 8 July 2010.

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 13 October, 2010. Full accounts, and the audit report can be obtained from the HSA Secretary, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.
The summarised accounts were approved by the Trustees and signed on their behalf on 8 July 2010

The summarised accounts set out above have been extracted from the full accounts and have been prepared in accordance with section 43 of the Charities Act 1993. 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 13 October 2010. 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 8 July 2010.

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 2010.

John H Pratt BVM&S DVSM FRCVS
Chairman

Michael T Bird FCA
Hon Treasurer
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and Council of Justice to Animals
(Registered in England Charity No. 209563)

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